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1

The Mystery of Fu-lin.—By FRIEDRICH HIRTH, Professor
in Columbia University, New York City.

THE several accounts we possess in Chinese literature of that mysterious country in the extreme west called Fu-lin declare it to be identical with the country known in ancient times as Ta-ts'in. The texts of the T'ang dynasty speak of "Fu-lin, that is the ancient Ta-ts'in," or of "Tats'in, also called Fu-lin," and it appears that the two names were interchangeable. From the Chinese point of view the question would, therefore, be simple enough. If Ta-ts'in is Syria, Fu-lin must be Syria. I am nevertheless disinclined to be guided by this kind of logic and fully admit the difficulty of the Fu-lin problem.

My present view, which in its main features has undergone little change from the one expressed twenty-five years ago in my first study of the subject,¹ is briefly this: Ta-ts'in is the Roman empire with all its grandeur emanating from Rome, its capital; but the detail placed on record in the contemporaneous Chinese texts is confined to its Asiatic provinces, for which reason not Rome, but Antioch is described as the capital city. Its relations to China were of a commercial kind. Fu-lin is the Eastern empire of Byzantium, but as in the case of Ta-ts'in, the Chinese accounts are confined to certain Asiatic portions of it, and its relations to China were chiefly ecclesiastical. This at least is the impression I have received from the study of the Fu-lin chapters in the Chinese standard histories. I admit that Chinese literature contains a few passages, to which I hope to revert on some future occasion, which seem to involve that, besides the countries described in the standard accounts, a Greater Ta-ts'in and a Greater Fu-lin were not unknown in China.

¹ *China and the Roman Orient: Researches into their Ancient and Mediaeval Relations as represented in old Chinese records.* Shanghai, 1885. I shall in the course of these notes refer to this book by the letters *R. O.*

This view has been recently abandoned by my esteemed friend Professor Éd. Chavannes, who thinks that Fu-lin is after all Constantinople and not Syria.¹ His arguments are briefly these.

1. The name Fu-lin represents the Greek accusative πόλιν in εἰς τὴν πόλιν, Istan-polin, according to Mas'udi the origin of the name Istantbul.

2. The name Fu-lin appears in Chinese literature previous to the arrival of the Nestorians in China.

3. It may have been brought to China during the Sui period by the Western Turks, who had been visited by Byzantine ambassadors in 568 and 576 A. D.

4. The king of Fu-lin who sent ambassadors to China in 643 was called *Po-to-li* (波多力). By substituting 悉 for 多, the name would appear as *Po-si-li*, which may stand for βασιλεύς.

5. The Arab general *Mo-i*, who was sent to effect the siege of Fu-lin, may be identical with Muawia's son "Yézid ben Muawia," one of three emirs who attacked Constantinople.

6. The king of Fu-lin who sent an embassy to China in 1081 *Mié-li-i-ling-kai-sa* may have been identical with the pretender Nicephorus Melissenus, the character 伊 *i* in that name being a mistake for 俟 *ssï*.

Professor Chavannes justifies the changes he suggests in connection with such names as *Po-to-li* and *Mié-li-i* by the frequency of errors in the tradition of Chinese texts. I quite admit this argument as applying to certain works, such as the *Ts'ö-fu-yüan-kui*, from which his "Notes additionnelles" have been mainly derived. This work bristles with mistakes; but I would be much less inclined to assume such errors in the texts of the standard histories, the tradition of which, as regards names, compares not unfavourably with that of our me-

¹ In his paper entitled "Notes additionnelles sur les Tou-kiue (Turcs) occidentaux" in *T'oung-pao*, 1904, p. 37, note 3, in which he says: "J'ai identifié ce pays [Fou-lin] avec la Syrie, parce que j'acceptais la théorie soutenue avec beaucoup de talent par HIRTH (*China and the Roman Orient*) qui voit dans le terme *Fou-lin* (anciennement *but-lim*) le nom de Beth-léhem, et qui considère *Po-to-li*, roi du Fou-lin, comme le *bathrik*, c'est-à-dire le patriarche des Nestoriens. Un nouvel examen de la question me conduit cependant à reprendre l'ancienne identification de *Fou-lin* avec Byzance."

diæval Greek and Latin classics.¹ Conjectures of this kind may occasionally become necessary, but they ought in all cases to be supported by strong circumstantial evidence and ought also to admit of some plausible paleographic explanation.

I have called this paper "The Mystery of Fu-lin," and I wish to indicate thereby that I do not by any means pretend to have removed all doubt from what may remain a mystery for ever. I cannot, however, refrain from placing on record the arguments which have induced me to maintain my original view. I welcome Professor Chavannes' criticism as the best means throwing light on the problem, and I shall be happy to hear of his further researches in the direction indicated. There still remain quite a number of important points to be settled in connection with both Ta-ts'in and Fu-lin, and who knows whether some unexpected discovery will not some day either shake, or confirm, our present views, if not furnish clues which nobody has thought of.

1. The old sound of the name Fu-lin (拂菻).

The first character 拂, now pronounced *fu* in the Mandarin, and *fat* in the Canton dialect, has a final *t*, according to all the mediæval authorities quoted by K'ang-hi (Rad. 63, 5). In the *Tsi-yün*, a work which appeared as late as the Sung Dynasty, its sound is described as 薄密切, i. e., *p(ok-m)at*, or *pat*.

The second character 菻, now pronounced *lin* in the Mandarin, and *lam* in the Canton dialect, was according to the *Tsi-yün* pronounced 力錦切, i. e., *l (ik-k) am*, or *lam*, and K'ang-hi quotes the name *Fu-lin* (*Fat-lam* or *Pat-lam*) as an example of that pronunciation (Rad. 140, 8).

As a further example of the old sound ending in *m*, and not in *n*, I may quote the name of one of the priests which appears in estrangelo characters as *Ephraem* (read Abraham by Kircher) in the Syriac part of the Nestorian inscription with the Chinese transcription 拂林, = *fu-lin*, *fat-lam* or *pat-lam*. I need not say that 林 and 菻 are identical in sound. Certainly the final of this character was *m*, and not *n*. In

¹ Cf. my remarks on the "Textkritik" of Chinese authors, *R. O.*, p. 8 seq.

order to express the syllable *lin* in *πόλιν*, a Chinese transcriber of the sixth century would have selected some such character as 鄰, *lin*, the old final of which is *n*, rather than a sound ending in *m*. In the *T'ang-shu-shih-yin*, chap. 24, p. 3, ad vocem *Fu-lin*, the sound of the character 菴 is described as 力稔, i. e. *l* (ik-n) *am* = *lam*.

As may be seen from *R. O.*, p. 287, note 2, I do not doubt the correctness of the etymology of the name *Istambul* = *Istanpolin* (*εις την πόλιν*) as suggested by Mas'udi;¹ but we have to take into consideration that, as Professor Chavannes says himself, it applies to about the year 344 H., i. e., the tenth century A. D., whereas the name *Fu-lin* was first used in the sixth, or seventh, century. But, even granting the Byzantine Romans of that early period having called their capital "*Istanpolin*," this need not force us to identify the name with Chinese "*Fu-lin*."

2. First occurrence of the name *Fu-lin*.

I quite agree with Professor Chavannes about the *Sui-shu* being the oldest record in which the name *Fu-lin* is mentioned. Indeed I called attention to it on p. 17 and p. 288, note, of my book. The biographical portion, including the records regarding foreign countries, of that historian was completed in 636 A. D., as we are told in the Catalogue of the Imperial Library,² that is just a year after the arrival at Ch'ang-an of the first Nestorian mission under O-lo-p'ön (probably a transcription for *Rabân* or *Rabban*,—id est, *monasterii propositus*, *Assemani, Bibl. Or.*, III Pt. ii, pp. 911 and 913—also very common as a name). It seems to me quite possible that the name *Fu-lin* was just then substituted in the final revision of the *Sui-shu* text for that of *Ta-ts'in*, which may have been the original reading. But even if this had not been the case, why could not the Chinese have received notices of the country under its new name *Fu-lin* from sources not connected with the arrival of its natives, just as well as *Ta-ts'in* was known to them at the time of the general Pan Chau's campaign long

¹ For a careful compilation of material regarding the origin and history of this name see E. Oberhummer in Pauly-Wissowa's "*Real-Encyclopädie*," s. v. "*Constantinopolis*."

² *Tsung-mu*, chap. 45, p. 53.

before the first Ta-ts'in mission reached China in 166 A. D.? We know that the emperor Yang-ti tried in vain to have intercourse with Fu-lin. Could not he, or his representative Pei K'ü, the author of the *Sui-si-yü-t'u* (隋西域圖), have heard the name as being identical with that of Ta-ts'in through the Nestorians in other western countries which had then come into contact with China, such as Persia, which is described with considerable detail in the *Sui-shu*, with its city of Madain, then the see of Nestorian patriarchs? Certainly the appearance of the name Fu-lin in Chinese literature previous to that of the Nestorians in China does not argue against the identity of the country with Syria. Professor Chavannes refers to the three trade routes quoted from Pei K'ü's work in the *Sui-shu* (chap. 67, p. 12), the northern one of which leads by way of I-wu (Hami) past P'u-lei-hai (Lake Barkul), the T'ié-lö (Tölös) tribes, the court of the Great Khan of the Turks, and, *crossing the rivers that flow north, to the country of Fu-lin and to the western sea.*" The route thus described is in my opinion not the later road to Constantinople, which skirted the Aral, the Caspian and the Pontus, since the several rivers to be passed in it *flow south*; "*the rivers that flow north*" must be the Jaxartes and the Oxus, and I take it for granted that this northern route would have taken travellers to Antioch as the capital of Fu-lin. Neither John of Montecorvino nor Rubruck had to cross the "rivers that flow north," nor does Pegolotti recommend such a route except to those who may have merchandize to dispose of at Urgendj (see Yule, *Cathay and the Way Thither*, p. 288).

3. Who were the informants through whom the name Fu-lin became first known in China?

We know from the *Kiu-t'ang-shu* (R. O., pp. 55 and 105, K 33) that the emperor Yang-ti wished to open intercourse with Fu-lin, but did not succeed. Professor Chavannes, who thinks of Constantinople, maintains that the name Fu-lin became known in China through the Western Turks, and he refers to the relations of those Turks with the Byzantine Court. "A Chinese envoy at the court of the Turkish Great Khan," he says, "may have met some of these Greeks, or heard them spoken about; and thus the name of Constantinople came to

China in its form *Polin*, given to it by the Greeks themselves according to Mas'udi." I wish to offer a somewhat different explanation. In the introduction to the chapter on the western countries the *Sui-shu* (chap. 83, p. 1) confirms the emperor Yang-ti's desire to have communication with as many countries as possible; the emperor, therefore, sent expeditions under Weï Tsié (韋節), author of a lost work, called *Si-fan-ki* (西蕃記) and quoted in the *T'ung-tiên* in connection with the Ephthalites, and Tu Hing-man (杜行滿). The latter visited the regions of Western Turkestan. Other officials were sent to Japan, Siam, etc.¹ After that he appointed Peï K'ü to a special post in north-west Kan-su with a view of inducing foreign countries to send envoys to China. From the account of Possi (波斯, i. e. Persia, chap. 83, p. 16) we learn that Yang-ti had deputed an envoy by the name of Li Yü (李昱) for the special purpose of persuading the Persians to send a mission to China, and Persian ambassadors actually came to China together with Li Yü, offering tribute to the court. This Persian embassy, according to the *Ts'ö-fu-yüan-kui* (chap. 970, p. 3), arrived with the envoys of quite a number of other states in 616 A. D., probably a few years earlier, since the wording of this record, though entered under that special year, seems to involve the Ta-yé period (605 to 617 A. D.) generally as the date of arrival.

When Yang-ti's envoy Li Yü arrived in Persia, the Persian throne was occupied by Khosru II, the bitterest enemy of all the Christians, including his political opponent, the emperor Heraclius. Syria was again held by the Romans, after it had been devastated by the Persians a generation ago. Antioch, already reduced to great straits by the earthquake of 525 A. D., had been sacked and destroyed by Khosru I in 540 A. D. If Antioch was the capital of old Ta-ts'in, or as I maintain, of its equivalent, Fu-lin, the fall of this city would mark an event in the interpretation of the name inasmuch as a second Antioch had been built on Persian ground. Much of the mystery surrounding the Ta-ts'in and Fu-lin question may be explained thereby. I quote Rawlinson's *The Seventh Great Oriental Monarchy* (London, 1876, p. 395):

"The Persian prince [Khosru I] after the fall of Antioch

¹ See *Ts'ö-fu-yüan-kui*, chap. 662, p. 22 seq.

passed the winter in building and beautifying a Persian Antioch in the neighbourhood of Ctesiphon, assigning it as a residence to his Syrian captives, for whose use he constructed public baths and a spacious hippodrome, where the entertainments familiar to them from their youth were reproduced by Syrian artists. The new city was exempt from the jurisdiction of Persian satraps, and was made directly dependent upon the king, who supplied it with corn gratuitously, and allowed it to become an inviolable asylum for all such Greek slaves as should take shelter in it, and be acknowledged as their kinsmen by any of the inhabitants. A model of Greek civilization was thus brought into close contact with the Persian court." Rawlinson adds in a footnote: "Here the Oriental accounts are in entire accord with the Greek. Mirkhond and Tabari relate at length the construction of this new Antioch in the vicinity of Al Modain, adding that the name given to it was Rumia (Rome), and that it was an exact copy of the town upon the Orontes."

The captivity of the Antiochian christians is referred to by Barhebræus¹ and in Mar Amr's biographies of the Nestorian patriarchs.² Tabari describes the new city in two passages³ with some detail. The great Persian king had endeavoured to build this new Antioch just like the old city in Syria, and when the captives entered its gates, everyone of them found a home so similar to the one he had left in Syria that he might imagine to be there. Khosru I did not, at least at first, interfere with their Christian idiosyncracies, but the history of the Nestorian patriarchs in the sequel abounds with examples of that tenacity with which the heroes among them would rather

¹ J. B. Abbeloos and Tho. J. Lamy, *Gregorii Barhebræi Chronicon Ecclesiasticum*, Paris 1877, II 86: "Hic (Chosroës Anuschervan) post annos octo Antiochiam invasit incenditque, ejus vero incolas captivos abduxit atque eis Mahuzam condidit, quam Antiochiam appellavit, eosque illic habitare jussit." Mahuza is explained by Assemani (*Bibl. Or.* III Pt. ii, p. 761) to be a city in Babylonia "apud Ctesiphontem ex altera fluminis parte, ad provinciam patriarchalem pertinens, eademque Bagdadi suburbium, et Carcha, Corch seu Charch, appellatur." Professor Jastrow tells me that *mahuza* is Babylonian for *city*.

² Henricus Gismondi S.J., *Maris Amri et Slibae De Patriarchis Nestorianorum Commentaria*, Part II, containing the Latin version, Rome 1897, p. 24.

³ Th. Nöldeke, *Geschichte der Perser und Araber zur Zeit der Sasaniden*, Leiden 1879, pp. 165 and 239.

undergo martyrdom of any kind than cease to be faithful to their traditions. Many of them are recorded to have suffered death and torture under the threats of Persian kings and Arabic caliphs. It is to this virtue of the Syrian captives that Tu Huan, the author of the *Hing-king-ki* (杜環行經記), who had been made a prisoner and retained in Persia for ten years after the battle of Tharaz in 751 A. D., refers when he says of the people of Fu-lin, which country he places in the west of Sham (苦, = Damask): "*If they live as captives in foreign states they will rather accept death than change their national customs.*" I have adopted Mr. Playfair's improved translation of this passage, though I do not with him apply it to the Israelites in exile, but to the Christians in their second Antioch near Madain.¹ A prominent case of Christian martyrdom has been recorded in Mar Amr's work (*op. cit.*, p. 37) as having occurred in the third year of Abul-Abbas (752 A. D.; "per id tempus martyrium fecit Israel medicus, cui Deus requiem concedat"). Assemani (II, p. 432) refers to it in connection with the imprisonment of the patriarch Jacob (754—773 A. D.) by the caliph Abu-Jafar, under whose reign, just at the time when Tu Huan himself lived as a captive in Persia, the Syrian Christians suffered more than ever under the persecutions of Mohammedan potentates. These were the outposts of the people of Fu-lin, who may have furnished the Chinese envoy to Khosru II, Li Yü, with the accounts of their country in Syria, and if the envoy's visit to the Persian court, placed in the Ta-yé period by the Chinese historians, took place in the earlier part of it, when Syria was still protected by the Roman army, this would be a sufficient reason why Yang-ti's wish to communicate with the mother country Fu-lin could not be fulfilled. Such certainly was the state of things previous to the year 611 A. D., when Apameia and Antioch were sacked by the Persians under Khosru II. The Emperor's commissioner in Central Asia, Peï K'ü, who shared his master's ambition to see ambassadors of all the great countries of Asia at the steps of the dragon throne, succeeded in a wonderful manner; for he communicated with all, "only T'ién-chu (India) and Fu-lin (Syria) he did not reach to his regret."²

¹ Cf. Playfair, "The Mystery of Ta-ts'in" in *Journal of the China Br., R. A. S.*, Vol. XX, 1885, p. 78, referring to *R. O.*, pp. 83 and 116, Q 45.

² 獨天竺拂菻不至爲恨, *T'ang-shu*, chap. 221A, p. 25B.

4. The king of Fu-lin Po-to-li.

I have always been of opinion that Ta-ts'in and Fu-lin have to be looked upon as the representatives of the Christian world. Even in the early accounts of Ta-ts'in we may notice an ecclesiastical colouring. "Their kings are not permanent rulers, but they appoint men of merit. When a severe calamity visits the country, or untimely rain-storms, the king is deposed and replaced by another. The one relieved from his duties submits to his degradation without a murmur."¹ This is clearly neither a Roman Emperor, nor a praetor or proconsul, but a patriarch of the Christian Church, the patriarch of Antioch as the head of all the Christians in Asia. With the settling of so many Syrian Christians in Persia after the fall of Antioch in 540 A. D., the Nestorian patriarch in Persia could perhaps lay claim to that dignity.² His residence in exile was merely a makeshift; to his own flock and to the Chinese behind them he was the patriarch of all the Christians, whatever the heterodox clergy in the west may have thought of it. It was the Nestorian patriarch who sent the first Christian missionaries to China, and whether he did so under orders from a still higher patriarch in Antioch, or on his own authority, it seems not easy to decide. We have a direct allusion to this crux by a Byzantine author, the archimandrite Nilos Doxopatres, a notary in the service of the patriarch of Constantinople, who in 1143 A. D. wrote, for king Rogers II of Sicily, a short treatise on the patriarchal thrones.³ Doxopatres may have been a biassed judge owing to his connection with the orthodox church, for he seems to ignore the schism when he says that "the patriarch of Antioch was in charge of all Asia and Anatolia and even India, whither he had sent a *katholikos* ordained by himself, styled the one of Romogyris, and also of Persia and Babylon, called Bagdad in his time,

¹ *Hôu-han-shu*, R. O., pp. 41 and 100, E 19 and 20.

² According to Assemani, *Bibl. Or.*, III Pt ii, p. 617, the Nestorian Archbishop at Seleucia and the Metropolitan of Persia had to proceed to Antioch for their ordination by the Patriarch previous to 498 A. D., after which time the "Catholicus" of the Nestorians claimed the title of Patriarch, in order to be relieved of the perilous journey to Antioch.

³ Krumbacher, *Gesch. d. byzantin. Litteratur*, 2nd ed., München 1897, p. 415 seq.

and that he had under him altogether thirteen metropolitans.”¹ We know that the early Christians in India were Nestorians. The discovery of crosses resembling in shape the one appearing above the Nestorian tablet of Si-an-fu and, moreover, surrounded by Pehlevi inscriptions² points to the Nestorians in Persia as their originators.

Doxopatres' statement seems to show that the patriarch of Antioch (i. e. of Syria or Ta-ts'in) was at least the *nominal* head of the Christians of Asia and that the several metropolitans, including those of the Nestorians in Persia and in India, were nominally appointed under his authority. If the patriarch of the Nestorians appointed his own men to the Persian sees and to those of India and China, as we have every reason to assume, he may either have had this power delegated on him, or he may have acted on a self-assumed authority, looking upon himself as the patriarch of Antioch living in exile. According to my personal view it is the patriarch at the head of the Christians in Asia who is meant by the term “king of Fu-lin,” or „of Ta-ts'in,” in the later texts. To support this theory I wish to refer to an account of Ta-ts'in dating within scarcely a generation after the time when Nilos Doxopatres wrote that treatise according to which the “patriarch of Antioch” appoints the heads of all the other churches in Asia, including the one of the Christians in India. This it appears to me we may infer from Chau Ju-kua's texts regarding Ta-ts'in and T'ién-chu (usually translated by India, but here covering the Christian settlements in that country). Chau Ju-kua says of his T'ién-chu: “The country is subordinate to the country of Ta-ts'in and its chiefs are selected by Ta-ts'in.”³ I have endeavoured to explain this, at first sight startling, assertion by the relations existing, previous to the arrival of the Portuguese, between the Indian church of St. Thomas and the Nestorian patriarch as the ecclesiastical “King of Ta-

¹ Πάλιν ὁ Ἀντιοχείας κατεῖχεν ἅπασαν τὴν Ἀσίαν καὶ Ἀνατολὴν αὐτὴν τε τὴν Ἰνδίαν, ἔπου καὶ ἕως τοῦ νῦν Καθολικὸν χειροτονῶν στέλλας τὸν καλούμενον Ῥωμογύρεως καὶ αὐτὴν τὴν Περσίαν, ἐτι καὶ αὐτὴν τὴν Βαβυλῶνα τὴν νῦν καλουμένην Βαγδὰ καὶ κεῖ γὰρ ἔστειλεν ὁ Ἀντιοχείας ἔχει οὖν μητροπολεῖς σήμερον δεκατρεῖς. *Varia Sacra Stephani le Moyne*, Leiden 1685, II, p. 211 seq. Cf. Renaudot, *Ancient Accounts of India and China*, London 1733, p. 119.

² J. Richter, *Indische Missionsgeschichte*, Gütersloh 1906, p. 36.

³ 天竺國隸大秦國所立國主悉由大秦選擇.

ts'in."¹ On entering deeper into the subject I am encouraged in maintaining this view,² though there seems to be some doubt as to who the real chief of the church has been, whether the patriarch of Antioch or the one of the Nestorians in Persia. The Nestorian primate, to whom part of his jurisdiction may have been ceded by the Patriarch of Antioch (*Privilegium a Patriarcha Antiocheno concessum Primati Seleuciensi ut Episcopus ordinare possit*. Assemani, III Pt i, p. 145), seems to have been more settled in his authority in later centuries, when the extension of his dominion had grown too much for his western colleague, than in ancient times. I do not venture to say that Nestorian patriarchs called themselves "Patriarchs of Antioch." There is, however, a strange synchronism between the statement, said to be the result of an error by Assemani (*Bibl. Orient.*, III Pt. i, p. 289: "Golius apud Hottingerum in *Bibl. Or.*, p. 62") to the effect that Elias III, catholic of the Nestorians 1176—1190, was

¹ See "Chao Ju-kua's Ethnography" in *Journ. of the R. Asiat. Soc.*, July 1906, pp. 496—499.

² Ample material will be found in W. Germann, *Die Kirche der Thomaschristen*, Gütersloh, 1877, and Richter's *Indische Missionsgeschichte*. The following sentences are selected from Capt. Charles Swanston's paper "A memoir of the Primitive Church of Malayala, or of the Syrian christians of the Apostle Thomas from its first rise to the present time" in *Journ. of the R. Asiat. Soc.*, Vol. i, pp. 172—192, and Vol. ii, pp. 51—62 and 243—247.

"In 825, a merchant named Job conducted into Malabar, from Babylon, two Syrian ecclesiastics, Mar Saul and Mar Ambrose, sent by the Nestorian patriarch to rule over the church of St. Thomas." "These prelates governed the church in Trovancór for many years." "They were followed by a succession of teachers from Syria, who ruled over the church" (i, p. 178). "The authority of the Syrian bishops extends to all temporal and spiritual matters" (p. 180—181). "The Nestorian patriarch of Babylon,—a vague appellation, which has been successfully applied to the royal seat of Seleucia, of Ctesiphon, and of Bagdad" (p. 183). "Whatever credit may be thought due to the current tradition of these Christians, that the Apostle Thomas planted the seeds of the Gospel among them, so much may be considered established beyond contradiction, that they existed in Trovancór as a flourishing people, connected with the Syrian church, from the first centuries of the Christian era" (ii, p. 234). "Their liturgy is that which was formerly read in the churches of the *Patriarch of Antioch*, and their language is the *Syriac*" (p. 237). "They hold in the highest respect their *Patriarch of Antioch* or *Mosul*, and make mention of him in their prayers" (p. 239).

called "Patriarch of Antioch," and Chau Ju-kua's source, the *Ling-wai-tai-ta*, published in 1178, which says that the king of Ta-ts'in ("Patriarch of Antioch") appoints the lord of T'ién-chu (here ruler over the Christians in India). Assemani (l. c.) admits that the Melchite, Maronite and Jacobite Syrians gave that title to their patriarchs, but by no means the Nestorians. For Assemani's views on the patriarchal title among Nestorians see also *Bibl. Or.*, III, p. 57 seq.

Chau Ju-kua's account of Ta-ts'in¹ is mixed up with a good deal of ancient lore, of which it has to be freed before being taken into consideration. Thanks to the discovery of Professor Tsuboi of Tokio, who drew attention to the *Ling-wai-tai-ta* by Chóu K'ü-fei,² we are able to trace about one-third of the substance of Chau Ju-kua's work to this earlier writer, who had collected notices from personal enquiries, but did not publish them for a number of years, until he became tired of so many questions addressed to him about them by his friends. Thus the preface of his work, which may have been partly written some time before its publication, happens to be dated 1178 A. D., i. e. thirty-five years after the time in which Doxopatres wrote his treatise. It contains the account of Ta-ts'in partly copied by Chau Ju-kua, and in its simplicity makes the impression of a contemporaneous record.³

Chóu K'ü-fei says (chap. 3, p. 1): "The king is styled Ma-lo-fu" (王號麻囉弗, in Cantonese *ma-lo-fat*, or giving the last character its probable old sound: *ma-lo-pat*). Since *fu* 弗 occurs in a Sanskrit transcription for *bha* (see Julien, *Méthode*, etc., p. 104, No. 309), we may read: *ma-lo-pa*. This I look upon as the title by which "the king," or in this case the patriarch, was known to Chóu K'ü-fei's informants. It seems to correspond to Syriac *Mar-Aba*, which was indeed one of the titles by which the patriarch could be addressed. *Mar* is a title of honour given to learned devotees among the Nestorians, somewhat like our "Venerable,"⁴ *Aba* means "father." *Mar-Aba* may thus be translated by "Venerable Father." Its

¹ *R. O.*, pp. 92—96 and 120—122.

² "Cheu Ch'üfe's Aufzeichnungen über die fremden Länder", etc., in *Actes, XIIe Congrès Int. des Orient.*, Rome 1899, II, pp. 69—125.

³ Tsuboi, *op. cit.*, p. 107—110.

⁴ "*Mar*, Syriace, Dominus meus, ut post Assemanum observant docti Hagiographi", Ducange, *Glossarium*, etc., ed. L. Favre, s. v. *Mar*.

Greek and Latin equivalent was *Patricius* (πατρίκιος, *patrik*).¹ "Patricius," as a title, may be applied to a number of high positions in the ancient west. Petros Patrikios, the emperor Justinian's ambassador to the Eastern Goths in 534 A. D. and to king Kosru of Persia in 550 and 560, held this dignity.² Roman prefects and even church dignitaries could hold this title after Constantinus the Great, its supposed creator.³ But I cannot quote any particular instance in which it applies to an oriental patriarch of either Antioch or Madain.⁴ The root *patrik* would be an excellent equivalent for Chinese *po-to-lik*. But the Aramean form for the word "patriarch" itself, *batrirk*, would be fully as good from a linguistic point of view and would suit even much better on account of its sense. I do not, therefore, hesitate to adhere to my original identification of the old sound *po-to-lik* with *batrirk* against Chavannes' βασιλεύς.

Two years before Chóu K'ü-fei published his accounts of Ta-ts'in and T'ién-chu, in 1176 A. D. the Nestorian church of Bagdad was under its patriarch Elias III, elected and ordained at Madain, where he was endowed with a greenish cloak, "pallio amictus *pistacini* coloris" (Mar Amr, ed. Gismondi, II, p. 64). The sacred gown here translated by pallium is by later authors described as a kind of "pluviale," or rain cloak. The mistaken description of this gown may have caused the Chinese author to speak of a "green" (青) umbrella, by which the "king of Ta-ts'in" is protected when appearing in public. Elias III distinguished himself by his architectural works. He re-built the patriarchal palace together with the

¹ "Quem enim Graeci Latinique *Patricium* vocant, is dicitur Syriace *Aba*, et praefixo *Mar*, seu Domini titulo, *Mar-Aba*," Assemani, *op. cit.* III, Part ii, p. 92 (quoting Bar Hebraeus).

² Krumbacher, *op. cit.*, p. 237.

³ Du Cange, s. v. *Patricius*.

⁴ As a title, though it seems certain that Cosmas Indicopleustes (Migne, p. 125) speaks of a "Catholic of Persia," i. e. the head of the Nestorian church, under the name of Πατρίκιος; at a time when, according to other sources (Amr, p. 23), Mar Aba occupied the patriarchal see (536—552 A. D.). This may be the basis of Assemani's identification of the titles *Patricius* and *Mar Aba* (cf. also J. W. McCrindle's note on the passage referred to in *The Christian Topography of Cosmas*, London 1897, p. 24).

Church ("cellam in aedibus Romanorum reaedificare coepit unâ cum ecclesia,"—says Mar Amr, cf. Barhebraeus' *Chronicon*, Abbeloos and Lamy, Vol. iii, p. 370), while according to the Chinese account of 1178 the king of Ta-ts'in had a subway built from his palace to the Hall of Worship (*R. O.*, p. 93). Although the Nestorian patriarchs were even at this time crowned at Madain, their place of residence had since the eighth century been at Bagdad, for which reason Chóu K'ü-fei, and with him Chau Ju-kua, speak of Ta-ts'in as "the general meeting ground for the nations of the Western heaven and the place where the foreign merchants of Ta-shī [Arabs and Persians] assemble." *R. O.*, R 1.

The king of Fu-lin, who in 643 A. D., more than five hundred years before the time of Elias III, sent an embassy to China, did so at a time when Nestorians were in full grace with the Chinese court. The emperor T'ai-tsung favoured them with a message under his imperial seal and graciously granted presents of silk.¹ The king's name, as entered in the two versions of the *T'ang-shu*, was *Po-to-li* (波多力, in Cantonese *Po-to-lik*). What I consider to be the Syriac transcription of this title could, of course, apply to the orthodox patriarch Mar Joannes, the pontifex of Antioch, who died after eighteen years' government in 649 A. D.,² and who is distinctly described as *batrirk* ܒܬܪܝܩ. In his case—at that early time—the title *batrirk* seems certainly unquestionable, whereas his Nestorian contemporary Jesujab II is styled *katulik* ܕܟܬܠܝܩ.³ On the other hand I observe that the Nestorian chiefs are styled *batrirk* in Mar Amr's biographies throughout, and that the Nestorians who erected the tablet of Si-an-fu say that this was done at the time when "the father of fathers" Mar Hanānjesus was the catholic *patriarch*.⁴ This shows that the title, whether accorded to their primate by orthodox writers or not, was claimed for him by his own

¹ *R. O.*, K 34 and L 41.

² Barhebraeus, *op. cit.*, I, p. 279.

³ Barhebr., II. p. 114. Regarding the titles by which the early Nestorian chiefs have been referred to see Christ. Harder, *Historiae Primatium ecclesiae Nestorianorum ab Amro filio Matthaei Arabice scriptae versionis specimen*. Neumünster, 1890, p. 4.

⁴ *batrirkis* in estrangelo characters, see Havret, *La stèle chrétienne*, etc., I, p. LXXIX.

subordinates, and thus circumstances may also favour the identification of the person called *Po-to-lik* with the patriarch Jesujab II, who was at the head of the Nestorian church from 627 to 646,—a man of great political importance, who had acted as ambassador of the Persian court to the emperor Heraclius. To whichever of the two dignitaries we may give the preference, we have to consider the ecclesiastical character of certain subsequent missions to China. One of these was sent in 719 A. D., when “their lord” (其主) deputed a chief of T’u-huo-lo (Tokharestan) on a mission to the Chinese court.¹ The Nestorian patriarch was probably in a position to do so through one of his subordinates, some bishop of Balkh, a city of T’u-huo-lo or Tokharestan. For only sixty-two years later the Nestorian chorepiscopus of Kumdan, Mar Idbuzid, who had his name engraved on the Nestorian tablet with those of his fellow priests in estrangelo characters, calls himself “son of Milis, priest of Balkh.” This Milis was evidently, like his son, a Nestorian priest, and since Idbuzid probably did not attain the dignity of chief of the church of Kumdan as a young man, which was the exception among Nestorian prelates, it would appear that the Nestorians actually had a church with priests in the city of Balkh about the time when the Fu-lin embassy of 719 A. D. came to China.² I am not aware that the Byzantine Romans had any relations with Tokharestan in 719 A. D., when they had a narrow escape of seeing their capital sacked by the moslems. A few months later Fu-lin sent “priests of great virtue” with tribute to China, a further reason for regarding these relations as more of an ecclesiastical than a political character. The *Ts’ö-fu-yüan-kui* places a mission of priests in the year 742 A. D., while in 744, according to the Nestorian Inscription, “there was (it is not said when he had arrived) the Ta-ts’in priest *Ki-ho*, who had an audience with the Emperor.”

¹ R. O., K 38.

² Cf. Assemani, III Part ii, pp. 482, 550 and 727 seq: “In notitia Metropoleon apud Amrum *Halac* vigesimum locum occupat, quae eadem est ac Balcha.”

5. Political facts stated in Chinese records excluding identification with Constantinople.

The *Kiu-t'ang-shu* says: "Since the Ta-shī [Arabs] had conquered these countries they sent their commander-in-chief Mo-i [Muawia] to besiege the capital city [of Fu-lin]; by means of an agreement they obtained friendly relations, and asked to be allowed to pay every year tribute of gold and silk; *in the sequel they became subject to the Ta-shī* [Arabs]." ¹

Professor Chavannes agrees with me in explaining the name Mo-i (摩拽) as a mutilation of the sound Muawia. He does not, however, refer it to the great Muawia, who, before he became caliph, had been appointed Governor of Syria (Fu-lin) under Othman, but to his son Yezid, in order to show that the passage refers to one of the sieges of Constantinople. In doing so he seems to overlook the fact that Fu-lin was not only *conquered*, but "*in the sequel became subject to the Arabs*;" and that this means much more than a mere temporary conquest may be shown from a passage of the *Kiu-t'ang-shu* (chap. 198 p. 29), which states that the Ta-shī, i. e. the Arabs of the caliph empire, "in the beginning of the Lung-so period (661—664 A. D.), on having defeated Po-ssī (Persia) and Fu-lin, began to be in the possession of rice and bread stuff." ² Fu-lin can in this case only refer to Syria. Constantinople was never subject to the Arabs, nor did the imperial dominions outside of Asia supply them with grain. ³

¹ 遂臣屬大食. *R. O.*, K 35; cf. L 43.

² 初擊破波斯又破拂菻始有米麵之屬.

³ Something similar is remarked in the *Sung-shī*, ch. 90, p. 18, in the account of a mission from the Ta-shī having arrived at the Imperial court in 995 A. D.; but the country is there referred to under its old name Ta-ts'in. The emperor asked the Ta-shī (Arab, or Persian, of the Caliph empire, then divided into numerous branches) about his country, upon which he replied: "It is conterminous with the country of Ta-ts'in, and considering it a dependency, it is now my native country which has control over it" (與大秦國相鄰爲其統屬今本國所管之). Since Syria had been conquered and was being held by the Fatimide Caliphs residing at Cairo at the end of the tenth Century, the mission referred to seems to have come from the Fatimide portion of the Ta-shī territories.

6. Fu-lin = Bethlehem.

My identification, which may at first sight seem strange, is based on the Nestorian inscription, in which it is shown that the priests, with their "luminous religion," came from Ta-ts'in, and that "*a virgin gave birth to the holy one in Ta-ts'in* (室女誕聖於大秦)."¹ Since Ta-ts'in, according to all Chinese accounts, is identical with Fu-lin, this is equivalent to saying that "*a virgin gave birth to the holy one in Fu-lin.*" The old sound of these two syllables, as shown above, was, or could be, *pat-lam*; and it seemed to me that "Bethlehem" is a much more appropriate etymology than *polin*. In those days, when an ecclesiastical current ran through the politics of the world, east and west, Chinese literature called the great nations by the birth-place of the founders of their religions. Thus the *T'ang-shu* account of India (chap. 221^A, p. 24^B) is introduced by the words "The country of T'ién-chu, also called Mo-k'ié-to,"² because Mo-k'ié-to, i. e. Magadha, was the little country where Buddha was born. Later on Arabia received its name *T'ién-fang* (天方, "the Heavenly Square," i. e. the Kaaba) from the sanctuary in Mohammed's birth-place. Similarly we read in Chinese books: "Ta-ts'in, also called Fu-lin," i. e. Bethlehem, because it was the birth-place of Christ.

7. The Language of Fu-lin.

We possess about a dozen transcriptions in Chinese characters said to represent words of the language of Fu-lin. They occur in the eighteenth chapter of the well-known cyclopædia *Yu-yang-tsa-tsu* (酉陽雜俎) by Tuan Ch'öng-shī (段成式), who died in 863 A. D.³

The most reliable edition of this work, the quotations from which in cyclopædias, dictionaries and concordances of the present dynasty contain a number of fatal misprints, is the one published in the Ming collection *Tsin-tai-pi-shu* (津逮秘書), a rare work, of which there is a copy among the Chinese books of Columbia Library in New York. It appears that a

¹ See Havret, *La stèle chrétienne*, I, p. XXIII.

² 天竺國或曰摩伽陀.

³ Giles, *Chinese Biogr. Dict.*, p. 788.

bibliophile by the name of Hu Chön-hiang (胡震亨) had planned the publication of a collection of rare prints under the title *Pi-ts'ö-hui-han* (祕冊彙函), but that before the work saw the light, the blocks from which it was to have been printed were partly destroyed in a conflagration, when the damaged stock of blocks fell into the hands of Mau Tsin (毛晉, 1598—1657 A. D.), who published it under the above title with a number of additions constituting the greater part of the collection, in all 144 works. The texts added by Mau Tsin bear on every page the name of his studio *Ki-ku-ko* (汲古閣), and the *Yu-yang-tsa-tsu* is among them.¹

The best edition next to this is the one of the collection *Hiau-tsin-t'au-yüan* (學津討原), published in 1805 by Chang Hai-p'öng (張海鵬) in Chau-wön near Soochow,² who copied his text from Mau Tsin's edition, which he compared with original sources.

The eighteenth chapter of the *Yu-yang-tsa-tsu* is inscribed *mu-p'ién* (木篇), i. e., "chapter on trees," and treats chiefly on exotic trees and shrubs, many of which are said to be indigenous of India, Persia, or Fu-lin, giving the names used in those countries in the shape of transcriptions. I have tried to identify some of these names with the assistance of my colleagues Professors R. Gottheil and A. V. W. Jackson, and have come to the conclusion that they are neither Latin nor Greek, but Syriac.

As to the question who may have supplied the information regarding these foreign words, we receive a clue in the description, on p. 9,³ of the *Asa foetida* tree, called *a-weï* (阿魏). Having said that it comes from *K'ié-shö-na* (伽闍那) in Northern India, i. e. Ghazna in the present Afghanistan, where it is called *hing-yü*,⁴ and that it also comes from Persia, where it is called *a-yü* (阿虞), and having outlined his description of the tree, the author continues: "This is identical with what the priest Wan of the Fu-lin country says; the priest Ti-p'o [Dêva?] of the Mo-kié-t'o [Maghada] country says, etc. (拂林國僧彎所說同摩伽陀國僧提婆言 etc.)."

¹ *Hui-ko-shu-mu*, IV, pp. 54—63.

² See my "*Die Länder des Islam nach chinesischen Quellen*," p. 17.

³ I shall quote numbers of pages from the edition of 1805.

⁴ 形虞 = Skt. *hingu*, Hind. *hing*, Dakh. *hingu*, and similarly with various foreign writers. See Yule, *Anglo-Indian Glossary*, s. v. Hing.

We may be allowed to assume from this passage that the information on plants growing in Fu-lin and their native names were supplied by a priest coming from Fu-lin called Wan. Here two priests, the one of Fu-lin (Bethlehem), the other of India (Magadha), are placed in contrast with each other as representing Christian and Buddhist sources of information.

The following extracts are from the *Yu-yang-tsa-tsu*. The headings ("The Olive," "The Fig," etc.) have been added by me.

1. The Olive (p. 10^B).

"The *ts'i-t'un* tree (齊 曠, Canton Dial. *ts'ai-t'ün*) comes from Po-ssī (Persia). It also comes from Fu-lin. In Fu-lin it is called *ts'i-t'i* (齊 虛, Canton Dial. *ts'ai-t'ai*). The tree measures two or three chang (= 15½ or 23¼ feet¹) in height. Its bark is green; it has white blossoms like the pumelo (*yu*, 柚), and these are very fragrant. The fruits are like those of the *yang-t'au* (楊 桃, *Actinidia chinensis*, Pl., "a climbing shrub which bears edible fruit about the size of a plum," Henry, "Chinese names of Plants," in *J. of the China Branch, R. As. Soc.*, 1887, p. 281) and ripen in the fifth month (June). The inhabitants of the west press them into oil used for frying cakes and fruits, as we in China use *kü-shöng* (巨 勝, a kind of hemp seed? Very doubtful, cf. Bretschneider, *Botanicum Sinicum*, III, pp. 376—378)."

There can scarcely be any doubt about the identity of this tree with the olive. *Ts'ai-t'ün* is Persian and Turkish *zeitun* زیتون, and *ts'ai-t'ai* of the language of Fu-lin is Aramean *zaita* ܙܝܬܐ. See Immanuel Löw, *Aramäische Pflanzennamen*, p. 136, who says that the word applies both to the tree (*Olea europaea*, L.) and its fruit. No such name is known in Greek.

¹ The foot of the T'ang Dynasty, during whose reign the text of the *Yu-yang-tsa-tsu* has originated, was much smaller than the present Chinese foot. Cf. my notes in "Bausteine zu einer Geschichte der chinesischen Literatur," *T'oung-pao*, Vol. vii, pp. 502—505. The Chinese foot, *ch'ü*. 尺, of the K'ai-yüan period (713—742 A. D.) measured about 23½ cm., or say 9¼ inches English measurement. This has to be taken into account in forming an approximate idea of the several sizes placed on record in our text. The *chang*, 丈, or Chinese rod, which is now usually taken as 11¾, would thus correspond to scarcely 7¾ English feet in the T'ang period.

2. *The Fig* (p. 12^B).

"A-i (阿驛, Canton Dial. *a-yik*). In the country of Po-ssī (Persia) they call it *a-i* (阿駟, C. D. *a-yik*; the second character was read *jit* or *yit* during the T'ang period, see *T'ang-shu-shih-yin*, chap. 13, p. 4). In Fu-lin it is called *ti-ni* (底櫛; the second character appears as 珍, *chön*, in all the other editions and quotations I have seen, a mistake which has clearly arisen from a variant of the second character 杵, K'ang-hi, Rad. 75, 5, being confounded with 玆, another form for *chön*). The tree grows to a height of 14 or 15 *ch'i* (about 11 feet). Twigs and leaves are plentiful and luxuriant. Its leaves have five lobes (葉有五出) like those of the *pei-ma* (稗麻 = 蓖麻, *Ricinus communis*). The plant has no flowers,¹ but fruits. The fruit is reddish like the *pei-tzi* (稗子 = 稗柿子, the Chinese *Diospyros glutinifera*?), and its taste resembles that of the sweet persimmon (甘柿, *kan-shi*). Once a month there is a crop."


The *Pön-ts'au-kang-mu* (chap. 31, p. 26) has under the head of *wu-hua-kuo*, the "flowerless fruit," the name *ying-jü-kuo*, 映日果, representing the old sound *ang-it* and apparently a transcription of Hindustani *anjir*. The Persian name, according to the *Yu-yang-tsa-tsu* is *a-yit* = *ayir*, which is near enough, though not as perfect a transcription as *ang-it*, to Persian *anjir* انجیر, a fig. The Aramean name, according to Löw, p. 390, is *te(n)ta* ܬܢܬܐ, or *tēna* ܬܢܐ, cf. Biblical *teēnah* ܬܝܢܐ. Our Chinese transcription *ti-ni* is certainly much nearer the Aramean word than the Greek *συκῆ* for fig, or *ἐπιπέας* for caprificus.

3. *The Myrtle* (p. 11^B).

"The *mo* tree (沒, Canton Dial. *mut*, used up to the present day as a transcription for *mur*, the name given to the "myrrh" in several western Asiatic languages, but here clearly resorted to as a transcription for Persian, or Pehlevi, *murd* مود, which

¹ A botanical prejudice, which has caused the Chinese to call the *Ficus carica* the "flowerless fruit" (*wu-hua-kuo*, 無花果) and induced Albertus Magnus to say of the fig-tree: "fructum profert sine flore" (*De vegetabilibus*, ed. Meyer and Jessen, Berlin 1867, p. 386).

Professor Jackson informs me occurs in the Bundelesh in the sense of "myrtle") comes from Po-ssī (Persia). In Fu-lin it is called *a-tz'i* (阿綫, the last character being also read *so*, *tso* and *tsok*, K'ang-hi, Rad. 120, 10, and Chalmers' *K'ang-hi*, p. 219). It grows to a height of one chang ($7\frac{3}{4}$ feet) and more. Its bark is greenish (or, blueish) white. Its leaves resemble those of the *huai* (槐, now *Sophora Japonica* L., but possibly differing in ancient times, see Bretschneider, *Bot. Sin.*, II, p. 379), though they are longer. The flower resembles that of the *Kü* (橘, Citrus of some kind), and it has large seeds (or, berries), black in colour, resembling in size those of the *shan-chu-yü* (山茱萸, *Cornus officinalis*, S. & Z., see Bretschneider, *Bot. Sin.* II, p. 326 and III, p. 507 seq.). Their taste is sourish sweet and they are eatable."

I do not hesitate to identify the botanical features of this plant with those of the myrtle, the Aramean name of which is *asa* ; Löw, p. 50: *myrtus communis*, L.

4. *Galbanum* (p. 11).

"*Pi-ts'i* (番爾齊, Canton Dial. *pīt-ts'ai*) comes from Po-ssī (Persia). In Fu-lin it is called *han-po-li-t'o* (預勃梨吨; this is the reading of the *Tsin-tai-pi-shu* edition; other editions have substituted 毛頁 *tu*, or *tuk*, for the first character, and the *T'u-shu-tsi-ch'öng* gives it this sound, which is clearly an error easily explained by the similarity of the two characters, by adding in a scholion: 音奪, 'having the sound to,' C. D. *tiüt*; the edition of 1805 prints 預, *hü*, or *huk*. Regarding *han*, 預, see K'ang-hi, Rad. 181, 3). It grows to a height of fully one chang ($7\frac{3}{4}$ feet) and has a circumference of more than a *ch'i* ($9\frac{1}{4}$ inches). Its bark is green, thin and very glossy. The leaves are like those of the *a-weï* (*Asa foetida*), each three leaves growing on the twigs. It has neither flowers nor fruits. The inhabitants of the west usually cut them in the eighth month (September), and till the twelfth month (January) further trimming takes place. The new twigs are thus extremely rich and juicy, whereas without the trimming they would wither and die. When cut in the seventh month (August), the twigs yield a yellow juice somewhat like honey and slightly fragrant, which is used as a medicine for certain cures."

The Cantonese sound *pīt-ts'ai* is an excellent transcription of Persian *birzay* بیرزی, "Galbanum" (Johnson, p. 267). Its Aramean equivalent is *chelbānita* يبلحبنة, the product of *Ferula galbaniflua*, Boiss. & Buhse, according to Löw, p. 163. The defenders of the identity of Fu-lin with Constantinople might point to Greek χαλβάνη, which is indeed its botanical equivalent, but Professor Gottheil informs me that *-ita* is a characteristic Aramean ending, which distinguishes it from other semitic dialects (bibl. *chelbenah* חלבנה, etc.) as well as from the Greek and Latin forms of the word, χαλβάνη and galbanum.

5. *The Nard* (p. 12).

"*Nai-chi* (柰祇. The first character according to K'ang-hi, Rad. 75, 9, could be read 乃曷切 = *not*; the second, as equivalent to 祇, could be read 丁尼切 = *ti*, Rad. 113, 4; the *Tsin-tai-pi-shu* edition confounds it with 祇, Rad. 113, 5. The old sound may thus be reconstructed as *not-ti*, which may stand for *nar-ti*, or *nard*) comes from the country of Fu-lin. It is a herbaceous plant (*miau*, 苗), three or four *ch'i* in height. Its roots are of the size of duck's eggs, its leaves are like garlic (*suan*, 蒜, *Allium sativum* L.). From the centre of the leaf rises a twig of great length, and on the stem there is a flower, six-lobed, of reddish white, with a brownish calyx, forming no fruit. The plant grows in the winter and dies in the summer, and it is related to our greens or wheat cereals. Its flowers are pressed into oil used as an ointment against colds. The king of Fu-lin and the nobles in his country all use it."

The name of this plant may be the Persian *nard* نرد, or Biblical *nard* נרד, or belong to any other dialect or language, since it seems to be international. Our author does not say anything about the language of Fu-lin, as he does in other accounts, and it apparently "comes from Fu-lin," because it is so largely used there. Löw, p. 368, gives *shebbalta* يجلتة as its Aramean equivalent.

6. *Jasmine* (p. 12).

"*Yé-si-mì* (野悉蜜, Canton Dial. *yé-sik-mat*) comes from the country of Fu-lin. It also comes from the country of

Po-ssī (Persia). It is a herbaceous plant, seven or eight *ch'i* in height. Its leaves are like those of the plum-tree and grow ample all the year round; its flowers are five-lobed and white, and they form no fruits. When the blossoms open out, the whole country is filled by their flavour resembling (in this respect) the *chan-t'ang* (詹糖, a doubtful tree with fragrant flowers, Bretschneider, *Bot. Sin.* III, p. 467) of Ling-nan (Canton). The inhabitants of the west are in the habit of gathering its flowers, which they press into an oil of great fragrance and lubricity."

Persian *yasmin* ياسمين and Aramean *yasmin* ~~ܝܣܡܝܢ~~ are clearly the equivalents of this name *yé-si-mi*, which has been known in China since about the year 300 A. D., when it was described in the *Nan-fang-ts'au-mu-chuang* (南方草木狀, chap. 1, p. 2) as being introduced by foreigners in Canton under the name of *yé-si-ming* (耶悉茗). In another passage of this work (chap. 2, p. 3) the Henna plant is said to have been introduced by foreigners together with the *yé-si-ming* and *mo-li* from the country of Ta-ts'in. The Jasmine plant and the *mo-li-hua* (茉莉花) are now synonyms, but since *mo-li* is described in a separate paragraph, in which it is said that "its flowers are white like those of the *ts'iang-mi* (薔薇, 'wall rose', Bretschneider, *Bot. Sin.*, III, p. 302) and its fragrance exceeds that of the *yé-si-ming*", it appears that in 300 A. D. it denoted some other fragrant garden plant, imported from Syria together with its name *mo-li*. The latter might be connected with molo, ~~ܡܠܐ~~ (= *μῶλον*, Löw, p. 317: *Peganum Harmala* L.). The old work referred to contains a number of other botanical names clearly of western origin, such as *hün-lu* (薰陸, old sound *hun-luk*), for "frankincense," which may be a transcription of Turkish *ghyúnlu* ~~ګۈنلۈک~~ (cf. *R. O.*, p. 266 seq.), or *ho-li-lo* (訶梨勒, Canton Dial. *ho-li-lak*), the *Terminalia Chebula*, Retz, or *Myrobalan*, called *halilag* ~~הלילג~~ and similarly in old Hebrew medicinal works (Löw, p. 129). But since they have no immediate bearing on the Fu-lin problem, I shall not attempt to trace these names.

I do not wish to commit myself to identifications about which I do not feel tolerably confident both from the botanical and the linguistic point of view; but I hope to return to the subject as soon as I can offer some plausible suggestions

as to the five remaining plant names said to belong to the language of Fu-lin, viz: *a-po-ch'ön* (阿勃參), *a-pu-to* (阿蔀譚), *kün-han* (群漢), *a-li-ho-t'o* (阿梨訶咤) and *a-li-k'ü-fa* (阿梨去伐?).

As to *a-pu-to*, stated (p. 9^B) under the name *po-na-so* (婆那娑) to come from Persia, the *Pön-ts'au-kang-mu* (chap. 31, p. 25) refers this name to the Jack fruit (*po-lo-mi*, 波羅蜜, *Artocarpus integrifolia*), and gives as its Fu-lin equivalent *sa-to* (阿薩譚). But I doubt whether the Jack fruit tree occurs in Syria, to say nothing of Greece. Mr. W. F. Mayers, in 1869, took up this subject in *Notes and Queries on China and Japan*, Vol. iii, p. 85, where he says: "It may be remarked *en passant*, that an identification of the above and other sounds attributed in the *Pön-ts'au* to the language of Fu-lin might be of service in determining the precise region that is indicated by this name in Chinese literature." The few examples I have endeavoured to trace to their real linguistic origin seem to contain a broad hint as to the language of Fu-lin being Aramean, and to the country where it was spoken not being Constantinople, but Syria. Pure Syriac, or Aramean, was particularly the vernacular in use with the Nestorians not only in Syria, Mesopotamia, Chaldæa and Persia, but also in India, Tartary and China, whereas other denominations used a kind of Syriac mixed with Arabic and even Greek elements. See Assemani, *op. cit.*, p. 377 seq.

8. Pseudo-Fu-lin.

The account of Fu-lin as placed on record during the Sung dynasty, probably in connection with an embassy of 1081 A. D., has puzzled the Chinese as it is liable to puzzle us, if we compare its detail with that of older texts. It occurs in the *Sung-shih* (chap. 490, cf. *R. O.*, pp. 62—64, 108—109) and has been reproduced by Ma Tuan-lin (*Wön-hiën-t'ung-k'au*, chap. 330, cf. *R. O.*, pp. 88—91, 119—120). Ma Tuan-lin refers to "the historians of the Four Reigns" (四朝國史, cf. *R. O.*, p. 91, note), who held that "this country had not sent tribute to court up to the time of Yüan-föng [1078—1086], when they sent their first embassy offering local produce", and he draws attention to certain discrepancies in the accounts of the T'ang and Sung dynasties.

In the interpretation of this mysterious text which I offered twenty-five years ago (*R. O.*, pp. 298—301) I had pointed out the possibility of its covering the Seldjuk dominions in Asia Minor. I am still inclined to maintain this view on geographical grounds, but venture to suggest a few slight changes in the text, which would place us in the position to adapt its contents to the political condition of the country in 1081 A. D., when its ruler is said to have sent ambassadors to China. The king, in the text referred to (*R. O.*, pp. 62 and 108: N 3) is styled *Mié-li-i-ling-kai-sa*, 滅力伊靈改撒, in Cantonese *mīl-lik-i-ling-koi-sāt*. I still think that the two last characters, the old pronunciation of which must have been *kai-sāt*, stand for Greek *καῖσαρ*, and that *ling*, 靈, is a somewhat imperfect attempt to render the sound *Rūm*.¹ “*Rūm kaisar*” would have to be looked upon as the equivalent of the title “Emperor of Rome, or the Romans” placed before the Chinese court in the garb of a Turkish combination analogous to such titles as “*Türgāsh kakhan*,” i. e. “the Great Khan of the *Türgāsh*” and many others occurring in the Old-Turkish stone inscriptions. The three first characters *mié-li-i* would represent the name of the ruler who calls himself “Emperor of Rome.” I have (*R. O.*, p. 299) drawn attention to the anachronism committed by the several learned sinologues who identified the name with that of Michael VII Parapinaces, who had been deposed and withdrawn into a convent since 1078 A. D. This was the reason which had induced me to think of the Seldjuk Soliman as the ruler adding the title “*kaisar*” to his own as “king of *Rūm*.” I did not realise then that in 1081, when that embassy arrived in China, another person lived in Asia Minor who actually claimed, and was subsequently granted, the title *καῖσαρ*; and I now agree with Chavannes in referring to Nicephorus Melissenus, the pretender who claimed to be emperor just about the time when the embassy referred to arrived in China. Michael VII Ducas had withdrawn into the convent of Studion early in 1078, when one of this generals, Nicephorus Botaniates, who had been stationed in Phrygia, came to Constantinople and was crowned as Michael’s successor on the 13. April 1078. He had to fight a number of claimants who would not

¹ It may not seem to be a scientific proof, if I refer to a Pïdjin-English conversation with a Chinese cook, who asked for “one bottle that *leng* (rum)” to be served with a plum pudding.

recognise his authority. Chief among these was Nicephorus Melissenus, the descendant of a powerful family and husband of the sister of Alexius Comnenus, the emperor who succeeded Nicephorus Botaniates. Nicephorus Melissenus had made an agreement with the Seldjuk Turks of Iconium to the effect that, in consideration of their assisting him in gaining the throne, he would divide with them the provinces conquered by their united forces. No sooner was he sure of this support than he clad his feet in purple shoes, the insignia of Imperial dignity, and began to march about in Anatolia with the troops of his allies, the Turks. All the cities he approached opened their doors and recognised him as emperor, though he on his turn declared these same cities to belong to the Turks, so that through his treason the entire former proconsular part of Asia, Phrygia and Galatia fell into the hands of the Turks. From Nicaea he prepared an attack on Constantinople. Alexius, then a mere general, was instructed by Botaniates, the emperor, to meet him, but for reasons of his own he did not proceed and handed over command to a feeble eunuch, who had to withdraw from Nicaea at the end of 1080. Melissenos intended to attack Constantinople early in 1081, when after a medley of intrigues his brother-in-law Alexius was elected emperor by the acclamation of his army. Melissenus then joined arms with him, and after the two armies had taken the capital, the two relatives divided the empire between them. Alexius got the European provinces, *Melissenus received* an apanage and *the title καῖσαρ* (Anna Comnena, *Alexias*, ed. Schopen, Vol. i, p. 116. For further details see the historical works of Anna Comnena, Jo. Cinnamus and Nicephorus Bryennius in Niebuhr's *Corpus Scriptt. Hist. Byzant.*, and the abstract in W. H. Waddington's paper "Nicéphore Mélissène, prétendant au trône de Byzance" in *Revue numismatique*, Nouv. sér., Vol. viii, pp. 393—400).

Although the title "kaisar" is thus shown to have been officially conceded to Melissenus in the beginning of April 1081, the entire political situation seems to suggest that he actually claimed it, and probably had coins cast in his name as *kaisar*, ever since his commencing to pose as a pretender some time in 1078. If the embassy that arrived at the Chinese court in 1081 started from Asia Minor some time in 1080, there were at the time practically two rulers in the country dividing

supreme power between themselves, viz.: 1, Melissenus, the pretender, who considered himself emperor of Rome and claimed the title "kaisar", and 2, his ally, the Sultan of Iconium, who supported his claims and whose name was Soliman. Taking all this into consideration, we cannot well assume Soliman to have represented himself as *kaisar* in his credentials to the court of China. The one man who was a *kaisar* in Asia Minor by usurpation, if not by right, at that time, was Melissenus. This has led me to again examine the three characters preceding the words *ling-kai-sat* (= Rūm *kaisar*), and which I think might be a transcription of the *kaisar*'s name, viz. *Mié-li-i*, 滅力伊, in Cantonese: *mīt-lik-i*.

The stumbling block in this name, it appears to me, is the third character 伊, *i*. In trying to find a solution to help us out of the difficulty I beg to call attention to a practice, occasionally noticeable in the prints of the Sung dynasty, by which some characters may be deprived of their radical or written with the wrong radical. Thus the character 獅, *shī*, "lion," in the *Hôu-han-shu* (*R. O.*, p. 101, E 39) appears as 師 in the Sung edition of 1242 (see facsimile, *R. O.*, p. 9). Chau Ju-kua (chap. 1, p. 17^B) has 靛, *ting*, for 靛, *tién*, "indigo". In the ethnical name *Sié-yen-t'o*, which is clearly the equivalent of the name *Sir Tardusch* in the Old Turkish stone inscriptions, the second character 延, *yen*, must have been substituted for some character read *tan* (= *tar*), e. g. 誕, the original radical being suppressed (see my *Nachworte zur Inschrift des Tonjukuk*, passim). If we assume, therefore, that the 伊 in the *kaisar*'s name stands for what in its original transcription may have appeared as 莢, the radical No. 140 being suppressed, such a change would not be without precedent. According to the *Chöng-tzī-t'ung* (quoted in K'ang-hi, Rad. 140, 6) 莢 was used by mistake for 莢, and this character again, according to the *Tsi-yün*, could have the sound *sin*, or *sun* (聿尹切音筭, K'ang-hi, Rad. 140, 4; cf. Chalmers' *K'ang-hi*, p. 206^B, where among other sounds *sun*, 心盾, is given to the two interchangeable characters 莢 and 莢). The *kaisar*'s name may thus in its transcription be reconstructed into *Mié-li-sun*, or Cantonese *Mīt-lik-sun*, the finals *t* and *k* of which may disappear by elision so as to leave us as the equivalent of the probable old sound some such name as *Mī-lissun*. This I venture to look upon as the equivalent, trans-

mitted probably by an interpreter who spoke some Turkish dialect, of the Greek name *Μελισσηνός*.

I am encouraged in this view by the mention of a coin the description of which, after a slight, but plausible change in the text, seems to be traceable. The passage I refer to, *R. O.*, N 16) speaks of gold and silver coins without holes being cast in this country, which the people are forbidden to counterfeit and which are described by the following words:

面鑿彌勒佛皆爲王名

The change I wish to suggest in the text is the substitution of the character 背, *peï*, "the back," for 皆, *kié*, "all, alike," "that is." The two characters are quite similar to each other and may easily be confounded. Moreover, *kié* gives a poor sense, whereas *peï* is constantly used in opposition to 面, *miên*, "the face," the two terms in numismatic texts meaning the "obverse" and "reverse" of a coin. I do not, therefore, look upon the words *mi-lö-fo* (彌勒佛), the standard transcription for "Maitrêya Buddha," as the king's name, but translate: "on the obverse [of the coin] is engraved a Maitrêya Buddha, on the reverse there is the king's name." It is quite probable that the ambassadors of 1081 brought coins with them to China and on enquiry declared that the legend on the reverse represented the king's name, and that some of these coins had been preserved in the Imperial collections at K'ai-föng-fu, since according to Edkins (*Chinese Buddhism*, 2nd ed., p. 117, note) "the *Kin-shi-t'u-shu-pu* contains a rude representation of a gold coin of Mi-li-i-ling-kai-sa." I regret not to have had an opportunity of seeing the illustration referred to, because it might have given us a chance, rude though it probably is, to compare notes with a silver coin of Melissenus the pretender actually preserved to our days. The coin, which has been described by Waddington in the paper quoted from the *Revue numismatique*, is now in the Bibliothèque nationale in Paris. Mr. Waddington's illustration and description (Fig. 1) shows on the obverse the bust of the Virgin, facing, with hands held up in prayer, nimbus and the usual dress, the figure being described as *μήτηρ θεοῦ* in the customary abbreviation. On the reverse we find the legend *Νικηφορω δεσποτη τω Μελισσηνω* in five lines.¹

¹ Cf. Warwick Wroth, *Catalogue of the Imperial Byzantine Coins in the British Museum*, Vol. ii (London 1908), p. 539, and the illustration No. 11 on Plate LXIII.



M-P [ΘΥ]. Buste de face et nimbé de la Vierge, les mains élevées; le tout dans un grénétis.

Р [ΚΕ·ΒΟΗΘΕΙ] ΝΙΚΗΦΟΡΩ ΔΕΣΠΟΤΗ·ΤΩ ΜΕΛΙ-
CHNΩ, en cinq lignes; le tout dans un grénétis.

Fig. 1.

Coin of Melissenus the pretender and Mr. Waddington's description.

It looks as if this coin has something to do with the one described in the *Sung-shü*. The Chinese scribe who first placed on record the details regarding it was, of course, not able to read the Greek legend on the reverse, but he must have been told by the ambassadors that it represented the king's name Melissenus. The portrait on the obverse may have been mistaken for that of Maitrêya, the Buddha of the future world so familiar to Chinese Buddhists,—a male deity, it is true, but generally represented as a beardless youth and very frequently with the nimbus round his head (cf. Grünwedel, *Buddhistische Kunst in Indien*, Berlin, 1893, p. 141: "in Schmuck und Tracht eines indischen Gottes oder altindischen Königs meist in sehr jugendlichem Alter").

I do not venture to throw out any guesses as to the motives which may have caused the Byzantine pretender and ally of a Seldjuk sultan to send a special mission to China. Nor am I in the position to throw light on the names mentioned in connection with the embassy of 1081. According to the Chinese text (*R. O.*, N 3) the king sent "*ta-shôu-ling*¹ *Ni-ssü-tu-ling* *Ssü-möng* (大首領你厮都令厮孟), which may stand for "the governor Nestorius Simeon", or "the governors Nestorius and Simeon." The two names, if we are not mistaken in explaining them thus, are followed by the words 判來, *p'an-lai*, which I now believe means that they came in company,

¹ Clearly a high official, since in the passage N 12 we are told that "the towns and country districts are each under the government of a *shôu-ling*." The *ta-shôu-ling* must have been superior to these local governors.

—bringing as tribute saddled horses, swords and pearls. I do no longer look upon the character *p'an* as part of the name. 判, now pronounced *p'an*, must have been identical in sound and tone with 伴 *pan*. K'ang-hi, Rad. 9, 5, quotes several T'ang authorities to say that the two characters are identical in sound (伴音判). This would entitle us to look upon the two characters as interchangeable and to assume that 伴來 may be a verb meaning "to come in company" similar to 伴遊, *pan-yu*, which is backed by passages in *P'ā-wōn-yün-fu*, chap. 26^A, p. 63^B, e. g. 誰伴老人遊, "who traveled in the company of the old man?" I am encouraged in offering this explanation by a passage of the *Sung-shi* (chap. 490, p. 16^B), where an Arab embassy is stated to have consisted of 1. the ambassador (*shĭ*, 使), 2. an assistant ambassador (*fu-shĭ*, 副使), and 3. a *p'an-kuan* (判官), or "companion officer," "attaché." Possibly the passage involves that "the king sent a *ta-shōu-ling*, accompanied by the Nestorian Simeon, or Simon, as attaché."

Professor Chavannes in his recent note on Fu-lin (p. 39) has made an important discovery in connection with the ruler of what I call Pseudo-Fu-lin, and this may, quite reasonably, have induced him to fall back on the former identification of Fu-lin with Constantinople. But since the Sung historians maintain that this Fu-lin had never sent any embassies to China before, this seems to involve its non-identity with the Fu-lin of the seventh and eighth century. Although merely a pretender, Melissenus was closely related to the Imperial court and his representatives ought to have been aware of the fact, if court missions had gone forward from Constantinople to China. The ambassadors, when cross-examined as to former relations between their government and the Chinese court, might have referred to the Fu-lin embassies of 643, 667, 701 and 719 A. D.¹ On the other hand, if these former missions had been sent by Christian patriarchs, whether of Antioch, Madain, or Bagdad, the kaisar's messengers could not well refer to them as having represented the Roman emperors whom they had to look upon as the predecessors of their chief. Their silence as to former relations would thus be explained. The *Sung-shi* account describes a mission from Fu-lin, it is true;

¹ See *R. O.*, p. 126: Index to Translations, s. v. "Embassies".

but I think this name had in the course of time grown into a general term applied to the Christian world at large. Originally designating the Nestorians as representing the Latin population of Syria or Ta-ts'in, the cradle of their faith, it was later on applied to other Christians, those of Byzantium under the Sung, and even the Pope of Rome under the Ming dynasty. It had grown into a term which covered a multitude of nations and of governments, like our "America," which may mean the United States in one sense and all possible countries in another.

Mr. Kingsmill and the Hiung-nu.—By FRIEDRICH HIRTH,
Professor in Columbia University, New York City.

IN his paper "Dr. F. Hirth and the Hiung-nu," published in the *Journal of the China Branch, R. A. S.*, Vol. xxxiv, pp. 137—141, Mr. T. W. Kingsmill tries to show that the Hiung-nu and the Huns were different nations. He refers to my paper, presented to the philological section of the Royal Academy of Munich, entitled *Über Wolga-Hunnen und Hiung-nu* (München, 1900). The main object of that paper was to establish the literary proof, based on a text of the *Weï-shu*, for the identity of the Hiung-nu of Chinese history with the Huns of Europe. Mr. Kingsmill denies this identity, but, as I propose to show in the following pages, fails to prove his point.

A subsequent paper, presented by me to the Hungarian Academy of Sciences in Budapest and published in the *Revue Orientale pour les études Ouralo-Altaïques*, Vol. ii, 1901, pp. 81—91, under the title of "Hunnenforschungen," and a third paper, "Die Ahnentafel Attila's nach Johannes von Thurócz," published in the *Bulletin de l'Académie des Sciences de St. Pétersbourg*, Fifth Series, Vol. xiii, pp. 220—261, were apparently not known to Mr. Kingsmill. A study of the Chinese sources quoted in them might have prevented several serious errors in his criticisms. These I consider interesting, because they illustrate better than anything else the difference in our methods of research. I have on several occasions discussed the principles by which I am guided in this respect (cf. my *China and the Roman Orient*, pp. 152, 170 et passim). In identifying the ancient Chinese accounts of foreign countries, we should above all endeavour to recognize facts, and only after these have been established, should the linguistic explanation of names be considered as furnishing additional evidence. Mr. Kingsmill's method is the reverse of

this. He is unfortunately possessed of a regular mania to discover etymologies, and his mind once being set on what he considers similarity in sound, all passages in Chinese contemporaneous authors which might warn him as being on the wrong track are ignored.

As an example we may consider the city of Ku-tsang (姑臧), mentioned in the short, but important text of the *Weï-shu* reproduced below on p. 42. In this text it is said that the merchants of this country (Su-tö, or Suk-tak, 粟特, Alans) often went to the country of Liang (Liang-chóu-fu in Kan-su) for trade¹ and that at the capture of Ku-tsang they were all made prisoners (先多詣涼土販貨及克姑臧悉見虜); and that "in the beginning of the reign of Kau-tsung [452—466 A. D.] the king of Su-tö (Suk-tak) sent ambassadors to ask for their ransom, which was granted by cabinet order (高宗初粟特王遣使請贖之詔聽焉)."

Mr. Kingsmill's imagination here forestalls all further research, so necessary in Chinese historical reading, by jumping immediately to one of his linguistic conclusions. "*Ku-tsang*," he says "*here is* the country called by Ma Tuan-lin Kweishwang, and by the Armenian writers *Kushan*. It formed the most powerful of the five states into which the Ephthalite kingdom was divided," &c. This is a characteristic example illustrating the dangers of basing historical inferences on mere similarity of sound. It is typical of Mr. Kingsmill's method: the sound of a word takes possession of his mind to such a degree that all logical reasoning is temporarily forgotten in the pursuance of a mere phantom. The nation known as Kui-shuang, or Kushan, is by Armenian writers referred to Bactria, by the Arabo-Persian reports to Tokharestan, Transoxania, &c. (Th. Nöldeke, *Tabari*, p. 115 note 2; cf. Éd. Specht, *Études sur l'Asie centrale*, I, p. 8 seqq.) and has nothing whatever to do with the Liang country of the *Weï-shu*. Liang was the seat of an independent prince of Hiung-nu extraction by the name of Tsü-k'ü Mu-kién (沮渠牧犍), who followed his father

¹ The Aorsi (Alans) carried on considerable trade, bringing Indian and Babylonian wares, which they received from the Armenians and Medians and transported on the backs of camels from the Caspian to the Palus Maeotis. By this means they had amassed considerable wealth, and wore ornaments of gold (Strabo, XI, 5, 8 p. 506, Bunbury, *A History of Ancient Geography*, London 1883, Vol. ii, p. 278).

Tsü-k'ü Mōng-sun (蒙遜), as Prince of Ho-si (河西王) in that little dynasty known as "the Northern Liang," and whose biography is contained in the *Weï-shu* (chap. 99, p. 14^B seqq.). His troubles with his brother-in-law, the Toba emperor T'ai-wu, which have been described in my "Hunnenforschungen," led to the siege and final capture in 439 A.D. of Mu-kién's city of Ku-tsang. Before attempting guesses of any kind Mr. Kingsmill ought to have consulted the *P'ei-wōn-yün-fu* (chap. 22^C, p. 150). There he would have found a number of passages concerning the city of Ku-tsang, the analysis of which would have revealed the real historical basis of this simple passage. But apart from this he might have read the whole account in plain French in Deguignes' *Histoire des Huns*, Vol. i, Part ii, p. 273. It was at this capture of Ku-tsang that merchants hailing from the distant west were made prisoners together with 20,000 inhabitants of the city, who were transferred to the Toba capital in Shan-si (*Weï-shu*, chap. 4^A, p. 21). Ku-tsang was the residence of the Tsü-k'ü princes, and according to the *Shen-si-t'ung-chi* (quoted in the *T'u-shu-tsi-ch'ōng*, Sect. 6, chap. 578, ku-chi, p. 2) its ruins at some time or other were known to exist in close vicinity to the present city of Liang-ch'ou-fu in Kan-su.

With such fundamental errors before us we can understand why it is impossible for Mr. Kingsmill to arrive at correct results in the most simple question of Chinese research. To expose his errors would require a volume, and would entail more valuable time than we can afford. Moreover, it is difficult to contradict him, because he makes mere assertions and seldom supports his opinions by reasons based on literature. The following is another characteristic example.

Of the country of *K'ang-kü* (康居) he says: "As a general mess has been made by translators over this country of K'angku, a few words may be useful. *K'angku* first appears in Sz'ma Ts'ien, and is there, and, in the early Chinese authors, invariably *Kashgar*." No proof follows this startling assertion, but he goes on to speak about the descendants of Seldjuk in the eleventh century, winding up with a sly hit at those wicked Sinologues who venture to differ, in saying: "A little knowledge, says Pope, is a dangerous thing, and in no instance do we find a better exemplification of the general truth of the aphorism

than in our would-be Chinese authorities." I cannot say that this kind of logic will convince me that ancient K'ang-kü is Kashgar. Has Mr. Kingsmill ever come across the following passage, describing the road from Tun-huang to the west along the southern slope of the T'ién-shan to Su-lö [疏勒, i. e., the real Kashgar], "which is the northern road;" "west of the northern road," the account continues, "you cross the Ts'ung-ling, whence you come out to Ta-yüan [Ferghana], K'ang-kü [Sogdiana] and An-ts'ai [the Aorsi; 北道西踰葱嶺出大宛康居奄蔡焉]"?

This passage occurs in the *Ts'ién-han-shu* (chapter 118, p. 6) and is certainly somewhat older than Mr. Kingsmill's story of the Seldjucs. Or does Mr. Kingsmill maintain that the Ts'ung-ling is not the Ts'ung-ling? I do not intend to recapitulate the arguments which have induced Chinese scholars to identify K'ang-kü with Sogdiana or some territory in this neighbourhood, but west, not east, of the Ts'ung-ling. These scholars, I have reason to believe, are perfectly satisfied with the "little knowledge" so dangerous to them according to Mr. Kingsmill.

Another fatal mistake committed a generation ago and repeated *usque ad nauseam* up to his recent effusion about the Hiung-nu, is his identification of Ssï-ma Ts'ién's An-ts'ai, also transcribed as Yen-ts'ai (奄蔡), the country of the Aorsi, subsequently called by western and Chinese authors alike Alan, or A-lan-na, with Samarkand. To arrive at this idea he has to do violence to a perfectly plain and simple passage in the *Shi-ki* (chap. 123, p. 5^B). It occurs in Ssï-ma Ts'ién's account of An-si (安息, in Cantonese *On-sak*), i. e. Parthia, the linguistic basis of which name was, I am glad to observe, first correctly recognized by Mr. Kingsmill as *Arsak*, the Chinese account substituting the name of its kings for that of the country (*Journal, China Branch*, etc., Vol. xv, p. 8, note 11). Unfortunately later editors have broken this text into two parts, 1. An-si (Parthia), and 2. T'iau-chi (Chaldæa). But

¹ The character 耆, *k'i*, after 焉 *yen*, found in the present standard editions, has been clearly interpolated. It does not appear in the King-yu edition (1034—1038 A. D.; *Han-shu-si-yü-chuan-pu-chu*, chap. 1, p. 5). Chavannes (*T'oung-pao*, 1907, p. 170) is, therefore, right in not translating it at all.

since T'iau-chī is represented in the text as forming part of the Parthian empire, I presume that the line being broken before T'iau-chī is due to a misunderstanding. To me the passage reads as follows: 安息 &c. 其西則條枝北有奄蔡。黎軒條枝在安息西數千里臨西海 &c.

Speaking of An-si (Parthia), the author says in this passage: "West of it there is T'iau-chī (Chaldæa), in the north there is An-ts'ai (the Aorsi, or Alans); Li-kan (Syria) and T'iau-chī (Chaldæa) are several thousand li west of An-si (Parthia) near the western sea," &c.

The name *Li-kan* (黎軒) of the *Shū-ki* occurs in another transcription in the *Ts'ien-han-shu* (chap. 96^A, p. 14^B), according to which ambassadors from An-si (Parthia) brought as tribute to the emperor Wu-ti "big birds' eggs," i. e. ostrich eggs, and "jugglers¹ from *Li-kiên* (犁軒眩人)." Since this passage is clearly copied from a parallel passage in the *Shū-ki* (p. 13^B), the two names *Li-kan* and *Li-kiên* must have been identical in sound, though written with different characters in the two parallel passages. K'ang-hi's mediæval authorities also describe the two characters as being identical in sound.² The name occurs again in the *Hôu-han-shu* (chap. 118, p. 9^B), which says: "The country of Ta-ts'in (Syria) is also called *Li-kiên* (大秦國一名犁軒)." Since this third transcription is linguistically identical with that of the *Ts'ien-han-shu*, I do not hesitate to look upon the *Li-kan* of the *Shū-ki* as a variant of the name which, in the *Hôu-han-shu* and later records, is declared to be another name for Ta-ts'in, or Syria.

¹ A specialty of Syrian cities often sent abroad. Cf. Marquardt, *Das Privatleben der Römer*, 2. Aufl., p. 338, and Mommsen, *Röm. Gesch.*, V, p. 461. Jugglers and musicians came from Ta-ts'in (Syria) to China in 120 A. D. (*China and the Roman Orient*, p. 37).

² It appears, however, that the character 軒, *kiên*, had two ancient sounds, 1. *kan*, or *kin*, 2. *kem*. I refer to the work of Yang Shön (楊慎, died 1529 A. D.), reprinted in the *Han-hai* collection, Section 14, under the title *Chuan-chu-ku-yin-lü* (轉注古音略), where the character 軒 appears under the rhyme *yim* (十四鹽) with the following note: 漢地理志驪軒縣名在張掖力虔二音。I do not quite understand on what authority this statement is made; but if *kiên* 軒 can be shown to have been read *kem* during the Han period, this would tend to support from a linguistic point of view my conjecture, made on commercial grounds, as to the identity of Chinese *Li-kan* with *Rekem*, or Petra (see *China and the Roman Orient*, p. 157 seqq. and 171).

Now Mr. Kingsmill, who is so fond of fanciful and ingenious combinations, has an entirely different idea. He combines the two names An-ts'ai and Li-kan, each of which may be shown from ancient texts to have a distinct sense, and gives the following explanation (*Journal, China Branch, &c.*, Vol. xiv, 1879, p. 7, note 9): "Im-ts'ai-li-kan 奄蔡黎軒. It seems most likely here that the two first characters are inverted and that we should read Ts'ai-im-li-kan, in the old pronunciation Sal-im-ar-kand for Salmarkanda, modern Samarkand, the Marakanda of Strabo and Ptolemy." And that in the face of the *Shi-ki* itself, on page 4, describing the country of "An-ts'ai" under this name pure and simple without any inversion and without the alleged appendix Li-kan. This description reads as follows: "An-ts'ai, about two thousand *li* northwest of K'ang-kü, is a nomad country and has in the main the same customs as K'ang-kü. Its archers number fully a hundred thousand. It lies close to a great *ts'ö*, which has no shores; for they say it is the 'Northern Sea' (奄蔡在康居西北可二千里行國與康居大同俗控弦者十餘萬臨大澤無崖蓋乃北海云)."

Sü Sung (*Han-shu-si-yü-chuan-pu-chu*, chap. 1, p. 30) makes the following remarks in connection with the last sentence of my translation: "The *Shuo-wön* defines the word *ai* (崖) as meaning 'a high border;' this means that, since in looking into the far distance you do not see high shores, the raised parts must appear as low." A *ts'ö* (澤) thus described cannot be an ordinary "marsh." This, it is true, is the standard sense of the word; but broad sheets of deep water have also been called *ts'ö*, e. g. the T'ai-wu Lake near Soochow, which is known as "Chön-ts'ö" (震澤), or the Lob-nor, which is called Yen-ts'ö (鹽澤), i. e. the "Salt Lake," or Lake Balkash, which is called "the biggest *ts'ö* in the north-western territories (西北境最大澤;" *Si-yü-shui-tau-ki*, chap. 4, p. 42). Moreover, the text adds distinctly that "they say it is the 'Northern Sea' (北海)," which would involve a gross exaggeration, if *ta-ts'ö* meant a mere marsh. It is for these reasons that I have translated "a great sea," and not "a great marsh," as Mr. Kingsmill does.

I do not, of course, object to the more literal translation, as long as it is understood that, since it is said to be "the Northern Sea," we must not think of a marsh in the or-

dinary sense of the word. I have, in my first paper on the subject, thought of the Black Sea as being covered by this *ta-ts'ö*, but since its first mention goes clearly back to the oldest notice of the An-ts'ai (Aorsi), as placed on record in the *Shi-ki*, we have to look for their seats in their original homes between the banks of the Sea of Azof and the Caucasus. The Sea of Azof is described as a *palus*, i. e. "a swamp," by Pliny and other Romans. Early Greek writers speak of a *Μαιωτις λίμνη* (Dionysius in C. Müller, *Geogr. Graeci Minores*, II, p. 111), and Jordanes (Mommson, p. 89 seqq.), in his account of the Hunnic irruption, also styles it *Palus Mæotis*. This corresponds to what we know about the physical condition of its shores, which prompts Karl Neumann (*Die Hellenen im Skythenlande*, p. 536) to say: "Es verrät Sachkenntnis, wenn die Griechen die Maitis nie ein Meer, sondern stets eine Limne nannten." Herodotus (IV, 86) held that the Mæotis was not much smaller than the Pontus itself, and Ptolemy exaggerates its northern extension through more than six degrees of latitude (Bunbury, op. cit., Vol. ii, p. 591 seq.). This may have been a popular error among the ancients long before Ptolemy, repeated also at the court of the Indoscythians, where Greek traditions had been taken over from Bactria, and where Chang K'ien in 127 B. C. collected his notices of western countries subsequently reproduced in the *Shi-ki*. The Mæotis is said to be frozen in its northern part during the winter (K. Neumann, op. cit., p. 65), and this, too, may have helped to challenge comparison with the "Northern Sea" (北海), if this term refers to the Arctic Ocean as it apparently does in a passage of Pliny (II, 67), who says: "Ingens argumentum paludis Mæoticae, sive ea illius oceani sinus est, ut multos adverte credidisse, sive angusto discreti situ restagnatio."

It appears to me that the chief mistake made by Mr. Kingsmill in his attempts at identification is the ignoring of information, placed on record in notices quite as valuable as, though later than, those of Ssi-ma Ts'ien. I am, of course, fully aware that the *Shi-ki*, in its chapter 123, is the very oldest source regarding the Chinese knowledge of Western Asia; but we should not forget that between the time when Chang K'ien laid his first report before Wu-ti (126 B. C.) and the time of Ssi-ma Ts'ien's death, not much more than forty years may have elapsed and that much of the geographical

knowledge of the Chinese during the earlier Han Dynasty was placed on record soon after the *Shi-ki* was completed. Pan Ku's account in the *Ts'ien-han-shu*, though compiled towards the close of the second century A. D., was based on records dating from the earlier Han Dynasty itself. Pan Ku's own brother, Pan Chau, must have returned from his famous expedition to the west with a tolerably complete knowledge of the facts placed on record in the *Hou-han-shu*, and during the period of the Three Kingdoms, at the beginning of the third century A. D., the knowledge of the west gained three hundred years before cannot have been forgotten, though added to and modified. Even the geographers of the Sui and the T'ang dynasties (the latter with one notable exception, the division of foreign territories into nominal Chinese administrative districts), being so much nearer in time than we are to the Han period, must have been in the possession of traditions much more valuable as a source for identification than the linguistic speculations of a modern European. Mr. Kingsmill's Sal-im-ar-kand is one of these speculations. Why ignore what later, though still ancient, traditions tell us about An-ts'ai? That so-called "old tradition which made Selm, the son of Feridun, the eponym of Samarkand" is extremely doubtful. The mention of a number of other supposed founders such as Alexander the Great and Shamar Abu Karib of South Arabia (Yakut, Vol. iii, p. 133), shows how little we know about the origin of the city, so that nobody can tell whether or not such a name existed at all during the second century B. C. Of An-ts'ai, however, we read in the *Hou-han-shu*, chap. 118, p. 13: "The country of An-ts'ai has changed its name into A-lan-liau (奄蔡國改名阿蘭聊國)." Professor Chavannes has proved beyond a doubt that by this name two different countries are covered, the one being called *A-lan*, the other *Liau* (*T'oung-pao*, 1907, p. 195 note 2, and 1905, p. 559 note 1); and according to the *Wei-liao* (l. c., p. 32) An-ts'ai is also called A-lan (奄蔡國一名阿蘭).¹

¹ Chavannes (*T'oung-pao*, 1905, p. 558, note 5) remarks with regard to this passage: "Hirth a bien montré (*China and the Roman Orient*, p. 139 note 1, et *Über Wolga-Hunnen und Hiung-nu*, p. 249—251) que le nom Yen-ts'ai (prononcé *An-ts'ai*) pouvait être la transcription du nom du peuple que Strabon appelle les Ἀορσοί. Le témoignage du *Wei-liao* que

But we have yet another transcription of the foreign name represented in Chang K'ien's An-ts'ai. In the biography of the General Ch'ön T'ang (陳湯, *Ts'ien-han-shu*, chap. 70, p. 7^B) we are told that Ch'ü-ch'ü, the legitimate Shan-yü of the Hiung-nu, whom I look upon as the founder of Hunnic power near the confines of Europe (*Über Wolga-Hunnen*, &c., p. 269 seqq.) and who had been assigned to an unclaimed territory by his father-in-law, the king of K'ang-kü (Sogdiana), had attacked the capital of the Wu-sun and terrorized the population by his violence; that the Wu-sun were afraid to pursue him to his retreat, because an uninhabited waste on the western frontier obstructed the road for a thousand *li* (烏孫不敢追西邊空虛不居者且千里); and that, after having committed all possible atrocities, he built a fortified city and "sent ambassadors to exact annual tribute from the countries of Ho-su (the Aorsi) and Ta-yüan (Ferghana), which these did not dare to refuse (遣使責闐蘇大宛諸國歲遺不敢不予)." The scholiast Yen Shü-ku refers to Hu Kuang (second century A. D.) as having said that "about a thousand *li* north of K'ang-kü there is a country called An-ts'ai, another name of which is Ho-su (闐蘇)," and on this basis he concludes that the names An-ts'ai and Ho-su are identical. The two syllables *ts'ai* and *su* can easily be explained, both representing in their initials a sibilant in the transcription of foreign names and both representing a possible *sai*, *sa*, *so* or *su*. The *ho* of *Ho-su* (闐蘇) is read *hōp* in Canton, and *hak* in Foochow. This latter sound could easily be proved to stand for *har* or *ar*. But Chinese sound authorities class the character with the rhyme "27. 合," i. e. *hōp*, and this is precisely what they do with a number of characters having the same final as *an* 奄, e. g. 淹, which is even now read both *im* (英奄) and *yap* or *ap* (英業; see *T'ang-yün*, chap. 20 et passim; Eitel, *Cantonese Dictionary*, p. 190). Though quite different in sound at the present day, the two characters may have been interchangeable at some time or other, the old final

les *An-ts'ai* (Aorsi) ont pris plus tard le nom d'*A-lan* (Alani) explique d'ailleurs fort bien le terme *Alanorsi* qui, chez Ptolémée, embrasse à la fois les Alani et les Aorsi; il est vraisemblable que ce royaume comprenait deux peuples distincts, les Aorsi et les Alani, et qu'il fut connu d'abord sous le nom du premier d'entre eux (Aorsi), puis sous les noms de tous deux combinés (*Alanorsi*), enfin sous le nom du second seul (Alani)."

possibly holding the middle between *m* and *p*.¹ Yen Shī-ku is, therefore, probably right in assuming the identity of the two names. The crux in the identification with the Ἀοροί of Strabo is the old final *m* in the first syllable of *An-ts'ai*. Precedents like *Tam-mo*, 曇磨, for *Dharma* do not help us, because this transcription may stand for Pali *Dhamma*. I am in doubt about *Sam-fo-ts'i* (三佛齊, Palembang in Sumatra), which as suggested by Groeneveldt (*Notes on the Malay Archipelago*, p. 62, note 3) might be identical with Arabic *Sarbaza* of doubtful tradition. It is possible, though not certain, that the hill-name *T'am-man*, 貪漫山, the Saïan range, stands for *Tarban*, or *Türmäl*, of the Old-Turkish inscriptions (see my *Nachworte zur Inschrift des Tonjukuk*, pp. 41 seq. and 87 seq., and Parker in Thomson, *Inscriptions de l'Orkhon déchiffrées*, p. 196). But why must we have a linguistic precedent for *m* = *r* at all in the face of so much circumstantial evidence? We have other Chinese representatives of final *r*, which in their way might be called ἀπαξ λεγόμενα, e. g. Hüan Ts'ang's 耐秣陀, *nang-mot-to*, which stands for Skrt. *Narmmada*, the River Nerbudda (Eitel, 2nd ed., p. 107). Altogether I lay more stress on historical, than linguistical identification. The transcription *A-lan* (阿蘭) in the *Hôu-han-shu* and *Weï-lío* is clear and as little dependent upon differing ancient and dialectic sounds as any foreign name in Chinese records; it is as safe as if it were written in some alphabetic language to look upon it as representing the sound *Alan*, which in this neighbourhood and at the period of its first appearance in classical and Chinese literature alike can only apply to the Alans as a nation. According to the *Hôu-han-shu*, we have seen, the name *A-lan* had been changed from that of *An-ts'ai*, and Pliny (*Nat. Hist.*, IV, 80), speaking of Scythic tribes says: "alias Getae, Daci, Romanis dicti, alias Sarmatae, Graecis Sauromatae, eorumque Hamaxobii aut *Aorsi*, alias Scythae degeneres et a servis orti aut Trogodytæ, mox *Alani* et Rhoxa-

¹ Pliny (VI, 38) refers to the *Aorsi* in one passage as *Abzoae*, and it appears that the codices here offer no variants of this exceptional form (see *Nat. Hist.*, rec. Detlefsen, I, 1866, p. 238), which may possibly be a mistake for *Arzoae*. But if this were not the case, it might help to explain the finals *m* and *p* in the two Chinese transcriptions. *Abzoae* might thus be a Latin mutilation of the Greek name heard with the digamma as Ἀφορσοί.

lani." In other words, he holds that the Alani were nearly related to, or formerly called, the Aorsi. This view, supported by quite a number of other arguments, has been adopted by

自 及 其 在 粟
後 克 國 康 特
無 姑 至 居 國
使 臧 王 西 在
朝 悉 忽 北 葱
獻 見 倪 去 嶺
虜 已 代 之
高 三 一 西
宗 世 萬 古
初 矣 六 之
粟 其 千 奄
特 國 里 蔡
王 商 先 一
遣 人 是 名
使 先 匈 溫
請 多 奴 那
贖 詣 殺 沙
之 涼 其 居
詔 土 王 於
聽 販 而 大
焉 貨 有 澤

modern European scholars (cf. Tomaschek in Pauly-Wissowa, *Real-Encyclopädie*, etc., s. v. "Alani," "Alanoroi" — wahrscheinlich ein Konglomerat von Ἀλανοί und Ἀορσοί, — and "Aorsoi"). That part of the Alans which figures in the history of western Europe during the fifth century soon disappeared without leaving traces of its existence; but the eastern Alans continued for generations "in their old seats in the steppes between the Caucasus, the River Don and the lower Volga, right among the Bulgars, the successors of the Huns; in Tauris, too, we find traces of them in the towns of Sugdæa [Sogdak], and Theodosia (Kafa), about the year 500, had an Alanic name Abdarda (Tomaschek)." Under the Mongols the Alans were termed *A-su* (阿速), and sometimes *A-ssi*, (阿思), the name *A-lan* occurring only once (Bretschneider, "Notices of the Mediaeval Geography," &c., in *Journal, China*

Branch, &c., 1875, p. 261). These two forms may possibly be connected with the ancient names *An-ts'ai* and *Ho-su*.

With this material in hand we are now prepared to analyse what Mr. Kingsmill thinks an "improved" translation; for, with regard to my own, he says: "it is difficult to understand how he has been misled in the translation of a sufficiently simple passage, which refers to the Hiung-nu only incidentally, and to the Hunni not at all."

I here insert Mr. Kingsmill's so-called translation of the Chinese text reproduced above.

"Su(k)te(h) is situated west of the Ts'ung-ling; it was the ancient Im-ts'ai and was also known as Wannasha. It lies close to a great marsh to the north-west of K'ang-ku, and is distant from Tai 16 000 *li*. In former days the Hiung-nu killed its king, and held possession of the country for three generations up to the time of King (H)wui'rsz."

"Formerly the merchants of this country went in numbers to dispose of their wares in the land of Liang: [a party] having entered Kutsang were made prisoners, and at the beginning of the reign Kao-ts'ung [of the Weï] the king of Su(k)te(h) sent a mission requesting their enlargement."

"After this period no further diplomatic intercourse took place."

Before attempting any rectification I have to make a slight correction in the text. The character 已, *ssì*, should read 己, *i*, "a sign of the past," the two characters being easily confounded (cf. Giles, *Synoptical Studies in Chinese Character*, Nos. 966—968). I have adopted this view through the perusal of a paraphrase furnished in a recent Chinese treatise on the subject, the *Han-si-yü-t'u-k'au* (漢西域圖攷, chap. 6, by Li Kuang-t'ing, 李光廷, of Canton, preface dated 1870), which says: 文成帝太安初匈奴王忽倪得國已三世矣遣使贖之詔聽焉, i. e., "In the beginning of the T'ai-an period of the emperor Wön-ch'öng [in reality 457 A.D. according to *Weï-shu*, chap. 5, p. 5^B] the Hiung-nu prince Hu-ni, [his ancestors] having conquered the country three generations ago (己), sent ambassadors to ransom them [the prisoners], which was granted by imperial edict." It is with this one change in the text that I now add my own translation as first laid before the Munich Academy.

"The country of Suk-tak lies in the west of the Ts'ung-ling. It is the ancient An-ts'ai and is also called Wön-na-sha. It lies on a big sea [ts'ö] in the north-west of K'ang-kü [Sogdiana] and is 16 000 *li* distant from Tai. Since the time when the Hiung-nu killed their king and took possession of their country up to their king Hu-ni three generations have elapsed. The merchants of this country often went to the country of Liang for trade, and at the capture of Ku-tsang they were all made prisoners. In the beginning of the reign of Kau-tsung [452—466 A.D.] the king of Suk-tak sent ambassadors to ask for their ransom, which was granted by cabinet order. From

this time onward they sent no more tribute missions to our court."

It will be seen that Mr. Kingsmill's mistakes are those of interpretation rather than of translation, though he was apparently not satisfied with my rendering 克姑臧 by the German "bei der Eroberung von Ku-tsang." 克, *k'o*, means "to conquer," whether you conquer a city, a country, or your own self. Cf. Giles, No. 6115: 攻城不克, "to attack a city and not conquer it," or "to make an unsuccessful attack upon a city." Mr. Kingsmill's "a party having entered Ku-tsang" is an absolute mistake. The relative clause 詔聽焉 is left untranslated. Apart from the different spelling of names, his mistakes are thus the only points in which Mr. Kingsmill's rendering differs materially from the one he found in my German paper. I, therefore, fail to see what induces him to say: "it is difficult to understand how he has been misled in the *translation* of a sufficiently simple passage."

As regards his interpretation, the one point of his disagreement, the identification of the country called An-ts'ai, is, of course, the pivot on which the entire question turns. Chang K'ien, in his report, merely placed on record what his friends at the Indoscythian court had told him. They were the same informants who supplied him with that interesting word *p'u-t'au* (葡萄), "the grape," = Greek *βότρυς* according to Mr. Kingsmill's own happy idea, and who are known to have used coins with Greek legends as shown in Cunningham's papers on the "Coins of the Indoscythians" in the *Numismatic Chronicle*. Chang K'ien's report on An-ts'ai is in my opinion the oldest example of the introduction into Chinese literature of a piece of classical lore, to wit, the story of the *Μαυῶτις λίμνη* with its vast extension to the north and its connection with the *Ωκεανός*, here "the Northern Sea."

According to my view *Hu-ni* (忽倪, *Hut-ngai*) is Hernak, the youngest son of King Attila, who after the death of his father in 454 A. D. withdrew to the extreme parts of Scythia Minor ("Hernac quoque, junior Attilae filius, cum suis in extrema minoris Scythiae sedes delegit." Jordanes, ed. Mommsen, p. 127), which Strabo identifies with the present Crimea, and here according to Tomaschek the Alans had their city of Sogdak (Sudak, Soldaia, &c.) since 212 A. D. All this is, however, immaterial. The main point I wish to contest against Mr. Kingsmill is the

identification of the term An-ts'ai, so sadly misunderstood by him. If once we are convinced that An-ts'ai, A-lan and Suk-tak must be the Alans of western sources, we are justified in drawing the following logical conclusions:

1. Of the Alans we know from European sources that, just about three generations before the embassy sent to China by the state of Suk-tak (former Alans) in 457 A. D., they were conquered by the Huns.

2. Of the Suk-tak nation we learn in the *Weï-shu* that their ancestors, the An-ts'ai (Aorsi, Alans), three generations before their embassy of 457 A. D., were conquered by the Hiung-nu.

3. Since the same nation cannot at the same time be conquered by two different nations, the result is that the Huns and the Hiung-nu are identical. Q. E. D.

Early Chinese notices of East African territories.—By
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THE earliest accounts in Chinese literature of Western territories contain no allusions of any kind that we might interpret as referring to any part of the African Continent. The name Li-kan, or Li-kién, which occurs in Ssi-ma Ts'ién's *Shi-li* (about 86 B. C.) is there coupled with that of T'iau-chi (Chaldaeae), and since in records that date from a few generations later the term is persistently declared to be identical with that of Ta-ts'in, the Roman empire in its eastern provinces, I do not hesitate to look upon it as covering the Roman Orient, possibly including Egypt. This is also the case with the accounts of Ta-ts'in contained in the *Hou-han-shu*,—applying mainly to the first century A. D.,—in which the direction of the silk trade via Antiochia Margiana, Ktesiphon, Hira and, by the periplus of the Arabian peninsula, to the silk-buying factories of the Phenician coast, such as Tyre, Sidon and Berytos, is clearly indicated.¹ Yet no mention of African ports can be traced back earlier than the beginning of the third century A. D., when fresh information, though transmitted unfortunately in sorely disfigured texts, had reached China. I refer to the account of the *Weï-lió*,² where the city of Alexandria is manifestly meant by the name Wu-ch'i-san. I admit that the *Weï-lió* is not very clear in its details regarding the dependencies of Ta-ts'in; but the one passage I refer to leaves but little doubt that Wu-ch'i-san is Alexandria. It says: "At the city of Wu-ch'i-san, you travel by river on board ship one day, then make a round at sea, and after six days'

¹ For texts and translations see my *China and the Roman Orient*, Shanghai, 1885, passim.

² An historical work referring to one of the so-called "Three Kingdoms," the state of Weï (535 to 557 A. D.) and compiled between 239 and 265 A. D. See Chavannes, "Les pays d'occident d'après le Weï-lió" in *T'oung-pao*, Série ii, Vol. vi, No. 5, pp. 519, seq.

passage on the great sea, arrive in this country [Tats'in, or its capital Antioch]." This, I hold, describes the journey from Alexandria to Antioch. The first character of the Chinese transcription, *wu* (black), may stand for *o* and *u* in the rendering of Indian sounds;¹ and it also represents the vocalic element of the first syllable (*a*, *o* or *e*) in the several west-Asiatic forms for "ebony," such as Persian *abnus*, in their Chinese equivalent *wu-man-tzï*.² The second character *ch'i* (slow) stands for *di*,³ and the three characters may be said to stand for *adisan* or *odisan*, thus furnishing a still recognizable distortion of the name *Alexandria*. Unfortunately Chinese texts have preserved nothing beyond that name, assuming our interpretation of its transcription is at all correct.

In point of age the next mention in Chinese literature of an African territory is an account applying probably to the beginning of the T'ang dynasty. It occurs in a text devoted to the Ta-shü, i. e., the Arabs of the Khalif empire, in the *T'ang-shu* (chap. 221^B, p. 19), in a passage describing the extent of the Ta-shü dominions, "in the east of which there are the T'u-k'i-shü," i. e. the Türgäsh of the Old-Turkish stone inscriptions, the "south-west being connected with the sea." The Türgäsh being mentioned as the Eastern neighbors of the Ta-shü seems to indicate that the account belongs to the early part of the eighth century. It reads as follows:

"In the south-west [of the Ta-shü, or Arabs] is the sea and in the sea there are the tribes of *Po-pa-li* [in Cantonese and old Chinese *Put-pat-lik*, which I look upon as a transcription of *Barbarik*†]. These do not belong to any country, grow no grain, but live on meat and drink a mixture of milk and cow's blood; they wear no clothes, but cover their body with sheep-

¹ St. Julien, *Méthode pour déchiffrer et transcrire les noms Sanscrits*, etc., Nos. 1313 and 1314.

² See my "Aus der Ethnographie des Tschau Ju-kua" in *Stzb. der philos. Klasse der K. bayer. Akad. d. Wiss.*, 1898, III p. 491, note 3.

³ Julien, *op. cit.*, p. 204 No. 1876; cf. Schlegel, "The Secret of the Chinese Method of Transcribing Foreign Sounds" in *T'oung-pao*, II, Vol. i, p. 249, who says it is pronounced *ti* at Amoy.

⁴ See my paper "Chinese equivalents of the letter R in foreign names" in *Journ. of the China Branch, R. A. S.*, Vol. xxi (1886), p. 219. As there shown, final *t* in old Chinese stands for final *r*; *l* stands for *r*; and *t* before *l* (or *r*) becomes *l* (or *r*) by assimilation (see Schlegel in *T'oung-pao*, 1900, p. 109).

skins. Their women are intelligent and graceful. The country produces great quantities of ivory and of the incense *o-mo* [in Cantonese *o-mut* = *omur*, standing for Persian *ambar*, i. e. ambergris].”

“When the traveling merchants of Po-ssī (Persia) wish to go there for trade, they must go in parties of several thousand men, and having offered cloth cuttings and sworn a solemn oath (lit. “a blood oath”) will proceed to trade.”

Another account written generations before the *T'ang-shu*, the work of Óu-yang Siu completed in 1060 A. D., occurs in the *Yu-yang-tsa-tsu* by Tuan Ch'öng-shī, who died in 863 A. D. The transcription here used is identical with that of the *T'ang-shu*, viz: *Po-pa-li* (*Put-pat-lik* = Barbarik). Tuan Ch'öng-shī says (chap. 4, p. 3^B seq.):

“The country of Po-pa-li is in the south-western sea. The people do not know how to grow grain and live on meat only. They are in the habit of sticking needles into the veins of cattle, thus drawing blood, which they drink raw, on having it mixed with milk. They wear no clothes, but cover their loins with sheep-skins. Their women are clean, white and upright. The inhabitants make their own countrymen prisoners, whom they sell to the foreign merchants at prices several times [more than what they would fetch at home]. The country produces only elephants' teeth and *a-mo* [ambergris]. If the Persian merchants wish to go to this county they form parties of several thousand men and make gifts of strips of cloth, and then everyone of them, including the very oldest men and tender youths, have to draw their blood wherewith to swear an oath, before they can dispose of their goods. From olden times they were not subject to any foreign country. In fighting they use elephants' teeth and ribs and the horns of wild oxen made into halberds, and they wear armour and have bows and arrows. They have 200,000 foot soldiers. The Ta-shī (Arabs) make constant raids upon them.”

My identification of these two short accounts, which appear to be derived from a common source earlier than the year 863, is based chiefly on the great similarity which the Chinese transcription bears to the name of Berbera, the city and country on the east coast south of Abyssinia, and on the mention of ivory and ambergris as the chief products. Ambergris was as a matter of fact exported from the coast

of Berbera.¹ The identification is, however, further supported by a later account of the same country in the *Chu-fan-chi* of Chau Ju-kua, who describes it under the name *Pi-pa-lo*, in Cantonese: *Pat-pa-lo*, which is another intelligible transcription of the foreign sound *Barbara*.

Chau ju-kua² describes the country as follows:

"The country of *Pi-pa-lo* contains four *chôu* (cities), the remaining places being villages rivalling each other in influence and might. The people worship heaven, they do not worship Buddha. The country produces many camels and sheep, and the ordinary food of the people consists of camels' flesh, milk and baked cakes. The country has ambergris [*lung-hiën*, lit. "Dragon's Spittle," the standard word for ambergris, see Giles, No. 4508], big elephants' tusks and big rhinoceros horns. There are elephants' tusks which weigh over a hundred catties and rhinoceros horns of ten catties and more. There is also much putchuck, liquid storax, myrrh, and tortoise-shell of great thickness, for which there is great demand in other countries. Among the products there is further the "camel crane" [*lo-t'o-hau*, i. e., the ostrich]. It measures from the ground to the top of its head six or seven feet. It has wings and can fly, but not to any great height. There is an animal called

¹ See Heyd, *Histoire du commerce du levant au moyen-âge*, ed. Furcy Raynaud, Leipzig, 1886, Vol. ii, pp. 571—574. The best quality is found on the coast of Berbera and Zinj (Renaudot, *Ancient accounts of India and China*, London, 1733, p. 64).

² Regarding this author see my papers "Die Länder des Islam nach chinesischen Quellen", *T'oung-pao*, Supplément, Vol. v, Leiden 1894, p. 12 seqq., and "Chau Ju-kua, a new source of mediaeval geography" in *Journal, R. A. S.*, 1896, p. 57 seqq. Chau Ju-kua probably wrote at the time of the last Abbaside caliph Mustasim (1242 to 1258 A. D.), since in his description of Bagdad ("Die Länder des Islam," etc., p. 41) he describes its king as a linear descendant of Mohammed the Prophet, and adds that the throne was handed down to his own times through twenty-two generations. If we look upon Cossai as the genealogical head of the several generations the sixth of which saw the prophet himself, the twenty-second was that of the caliph Mustasim. The latest date mentioned in Chau Ju-kua's work is 1210 A. D. In the *Ling-wai-tai-ta* by Chôu K'ü-fei, published in 1178, which goes over the same field as the *Chu-fan-chi* and from which about one-third of the matter placed on record by Chau Ju-kua has been copied (see K. Tsuboi, "Cheu Ch'üfe's Aufzeichnungen," etc., in *Actes, XII^e Congrès Intern. des Orientalistes, Rome, 1899*, Vol. ii, pp. 69-125), no mention is made of *Pi-pa-lo*.

tsu-la [in Cantonese: *tso-lap*, a transcription of Arabic *zarafa*, the giraffe]. It resembles a camel in shape, an oxen in size, and it is of a yellow colour. Its front legs are five feet long, its hind legs only three feet. Its head is high up and turns upwards. Its skin is an inch thick. There is also a mule with brown, white and black stripes around its body. These animals wander about the mountain wilds; they are a variety of the camel. The people of the country are great huntsmen and hunt these animals with poisoned arrows."

Mr. W. W. Rockhill, who has collaborated with me in the publication of my translation of Chau Ju-kua's ethnographical sketches, holds that the "four cities" referred to are Berbera, the Malao of the Periplus, and Zeyla, the mart of the Aualites of the Periplus to the west of it; and to the east of Berbera, Mehet or Mait, the Moundon of the Greeks, and Lasgori or Guesele, the Mosullon of the Greeks. He refers to Ibn Batuta (II, 180), who says of Zeyla that it was an important city, but extremely dirty and bad-smelling on account of the custom of the people of killing camels in the streets. He also notes that the sheep of this country are famous for their fat. At Mukdashau, our Magadoxo or Mugdishu, he says, they killed several hundred camels a day for food. In the first century A. D. the Periplus mentions myrrh, a little frankincense, tin, ivory, tortoise-shell, odoriferous gums and cinnamon among the exports of the Berbera coast.

The Chinese name "camel-crane" is a translation of the Persian name of the ostrich, *shutur-murgh*, meaning "camel-bird" (Bretschneider, *Mediaeval Researches*, London 1888, Vol. i, p. 144, note 392). Chóu K'ü-fei refers to the "camel-crane" in similar terms in his account of the Zinj tribes, but he adds that it eats all possible things, even blazing fire or red-hot copper or iron. In other words he justifies its wellknown characteristic, which is conveyed in the popular adage the "stomach of an ostrich." The Chinese author speaking of the camel as the animal from which the "striped mule" is descended would seem strange, if we did not assume that his remark on that point refers to the three animals, the ostrich, the giraffe and the mule. It certainly holds good for the giraffe, which, as Mr. Rockhill points out, was held by some to be a variety of camel, e. g. by Mas'udi (*Prairies d'or*, III 3). Mr. Rockhill has the following note regarding the striped mule of Pi-pa-lo: "This, I suppose,

is the same animal as the *hua-fu-lu*, or "spotted *fu-lu*," of the *Ming-shih*, 326. Bretschneider (*Ancient Chinese and Arabs*, 21 note 7) says that "the *hua fu-lu* is probably the *Hippotigris Burchellii*, or Douw, the *Tiger-horse* of the ancients, which was brought several times to Rome from Africa. It inhabits the deserts of Eastern Africa, between the equator and the tenth degree of northern latitude, whilst the two other species of this genus of the horse family, the *Zebra* and the *Quagga*, are to be met with only in Southern Africa." Mr. Rockhill refers to Barbosa, who says that the people of Magadoxo "use herbs with their arrows."

There can be but little doubt that the Chinese account of Pi-pa-lo refers to Berbera, and this involves a broad hint as to the identification of another sketch of Chau Ju-kua's which is found in the *Chu-fan-chi* under the designation *Chung-li*. It reads as follows:

"The people of the country of Chung-li go bareheaded and barefooted; they wrap themselves about with cotton stuffs, for they dare not wear jackets, since wearing jackets and turbans is a privilege reserved for the ministers and courtiers of the king. The king lives in a brick house covered with glazed tiles, the people live in huts of palm-leaves thatched with grass. Their daily food consists in baked flour-cakes, sheep's and camel's milk. There are great numbers of cattle, sheep and camels."

"Among the countries of the Ta-shih (Arabs) this is the only one which produces frankincense."

"There are many sorcerers among them, who are able to change themselves into birds, beasts or fish and by these means keep the ignorant people in a state of terror. If some one of them while trading with a foreign ship has a quarrel, the sorcerers cast a charm over the ship, so that it can neither go forward or backward, and they only release the ship when the dispute has been settled. The government has formally forbidden this practice."

"Every year countless numbers of birds of passage alight on the desert parts of the country. When the sun rises they suddenly vanish so that one cannot find a trace of them. The people catch them with nets and eat them; they are remarkably savoury. They are in season till the end of spring, but as

soon as summer comes they disappear to return the following year."

"When one of the people dies and they are about to put him in his coffin, his kinsfolks from near and far come to condole. Each person flourishing a sword in his hand, goes in and asks the mourners the cause of the person's death. 'If he was killed by someone', each one says, 'we will revenge him on the murderer with these swords.' Should the mourners reply that he was not murdered, but came to his end by the will of heaven, they throw away their swords and break into violent wailing."

"Every year there are driven on the coast a great many dead fish measuring as much as twenty *ch'ang* in length, and two *ch'ang* through the body. The people do not eat the flesh of these fish, but cut out their brains, marrow and eyes, from which they get oil, often as much as three hundred *töng*. They mix this oil with lime to caulk their ships, and use it also in lamps. The poor people use the ribs of these fish as rafters, the back-bones as door-leaves and they cut off the vertebræ to make mortars with."

"There is a *shan* [hill, range of hills, island, promontory, or high coast] in this country which forms the boundary of Pi-pa-lo [Berbera]. It is 4,000 *li* in circumference; for the most part it is uninhabited. Dragon's blood is obtained from this *shan* [hill, island, etc.], also aloes, and from the waters, tortoise-shell and ambergris [*lung-hiën*, lit. Dragon's Spittle]."

"It is not known whence ambergris comes; it suddenly appears in lumps of from three to five catties, driven on the shore by the wind. The people of the country make haste to divide it up, lest ships run across it at sea and fish it up."

The essential point in the identification of this country of Chung-li is the mention of a *shan*, which may mean "a range of hills," at the boundary of Pi-pa-lo (Berbera). This port, well-known to the Arabs of the thirteenth century, was indeed separated from the adjoining high plateau by a range of hills, the natural boundary between the territory of Berbera and Somaliland. The extent of the *shan*, in this case "a plateau," being stated to be 4,000 *li*, would point to a large tract of land. I would not lay too much stress on the name Chung-li;

but final *ng* has been used to transcribe final *m* (see Julien, *Méthode*, etc., Nos. 485 and 486: *kang* for Sanscrit *kam* and *gham*); *chung*, middle, is pronounced *tsung* at Shanghai, and *ts* is quite commonly interchanged with initial *s*, e. g. in the title *sengün*, "a general," of the Old-Turkish stone inscriptions, which stands for Chinese *tsiang-kün*. Chung-li may thus possibly be a transcription of the sound *Somali* or *Somal*. Another important characteristic is the remark that this country is the only one among the Ta-shi, or Arab, territories which produces frankincense. This, even if we admit the coast of Hadramaut to have participated in this industry, is a broad hint as to its identification with Somaliland¹.

Mr. Rockhill is of the opinion that the island of Socotra corresponds to Chau Ju-kua's Chung-li, and in support of this view he quotes a number of interesting parallels from mediaeval authors. Thus the aloe, mentioned as one of the products of Chung-li, is referred to by Mas'udi (III, 37), who calls it *socotri* from the name of the island; Marco Polo (II, 398-399, Yule, 2nd ed.) says of its people, "they have a great deal of ambergris," and he relates the almost identical story told by Chau Ju-kua more than a century before him in connection with his Chung-li. He says (p. 399): "And you must know that in this Island there are the best enchanters in the world. It is true that their Archbishop forbids the practise to the best of his ability, but 'tis all to no purpose, for they insist that their forefathers followed it, and so must they also. I will give you a sample of their enchantments. Thus, if a ship be sailing past with a fair wind and a strong, they will raise a contrary wind and compel her to turn back. In fact they make the wind blow as they list and produce great tempests and disasters; and other such sorceries they perform, which

¹ F. A. Flückiger, *Pharmakognosie des Pflanzenreiches*, 3rd. ed., Berlin 1891, p. 45 seqq.: "Die Bäume, welche den Weihrauch liefern, wachsen im Lande der Somalistämme, im äußersten Osten Afrikas, sowie auch auf den jenseits liegenden südostarabischen Küstenstrichen Hadramaut, Schehr und Mahrah." "Der meiste und geschätzteste Weihrauch wird im nordöstlichen Somalilande gesammelt." "In Arabien eingeführter oder dort gesammelter Weihrauch nimmt auch die Namen arabischer Landschaften an, z. B. Schehr, Morbat, Dhofar." In a special chapter on frankincense Chau Ju-kua mentions just these three places as producers of the drug.

it will be better to say nothing about in our Book." Chau Ju-kua is less discreet, when he informs us that the sorcerers of Chung-li changed themselves into birds or fish, in order to terrorize the population. According to him "the Government has forbidden such practices." This applies in Socotra to the "Archbishop,"—in reality as late as 1281 a bishop ordained by the Nestorian patriarch of Bagdad (Assemani, *Bibl. Orient.* IV, p. 780). Rockhill quotes two other stories of sorcerers, one from Purchas' Pilgrims (IX, 254), who quotes Friar Joanno dos Santos (A. D. 1597) as describing quite a similar trick practised by a great sorcerer on the isle of Zanzibar, and another, mentioned by Ibn Batuta (IV, 227), of sorcerers on an island in the eastern part of the Indian Ocean, who "raised storms by enchantment when vessels did not pay the customary tribute."

Taking into account the parallels to which Mr. Rockhill has drawn attention, I feel tempted to accept his suggestion as regards Socotra. The translation of *shan* by "a rocky island" is certainly unobjectionable, and since nearly all that can be shown to apply to Socotra from western sources occurs in the text after the words "there is a *shan* in this country," etc., the concluding part of the chapter may be regarded as an appendix to the account of Chung-li describing this outlying island of Socotra. The *shan* being stated to measure "four thousand *li* in circumference" fairly corresponds to the ideas current among western geographers of the period, if we look upon the *li* not as the Chinese *li*, but as the thirtieth part of a parasang, or a stadium, in which sense I have shown it is to be taken in the identifications of several western Asiatic itineraries (see my *China and the Roman Orient*, pp. 222-225). Four thousand *li* would thus be equal to 133 parasangs. This may be an exaggerated estimate of the size of the island, but scarcely more so than the statements of Yakut (Wüstenfeld III p. 102, quoting al Hamadani) and Abulfeda (*Geogr. d'A.*, ed. Reinaud and de Slane, Paris 1840, p. 371,—kindly furnished to me by Prof. Gottheil),—who state that the length of Socotra alone was "eighty parasangs."

This part of the coast of Africa was certainly well-known and much frequented by Arab and Persian traders during the thirteenth century. Chau Ju-kua is well acquainted with its products such as frankincense, aloe, dragon's blood

and ambergris, and since all these were staple articles of the Chinese market, we may infer that direct commerce was carried on through the mediation of Arab skippers plying between Ts'üan-chóu-fu (Zaitun) and Canton in the Far East and the several ports *en route*, including those of Africa, and their Arabian homes. We need not be astonished, therefore, to find that remnants of the mediaeval intercourse between the coasts of China and Eastern Africa have actually been discovered. In April 1898 two small collections of Chinese coins were sent to me for identification, one by Dr. F. L. Stuhlmann, now at the head of the biological and agricultural Institute at Amani (East Africa), the other by Mr. Justus Strandes, both well-known African travellers. Dr. Stuhlmann wrote me that his collection of eight coins had been excavated in the neighbourhood of Mugdishu on the Somali coast together with a great many broken pieces of Chinese céladon porcelain, vitreous paste and Arabic coins; Mr. Strandes, who had purchased his collection of seven coins at the same place, wrote in similar terms. Both collections are now in the "Museum für Völkerkunde" of Berlin. The several coins were unfortunately in a bad state of preservation, but they were without exception of the Chinese type, i. e. round with a square hole and of bronze.

Those coins the legends of which I was able to identify are all dated from before the beginning of the thirteenth century, the eleventh and twelfth centuries being chiefly represented. I am, therefore, inclined to ascribe them to the very period covered by Chau Ju-kua's account of Chung-li, which, owing to the fact that the *Ling-wai-tai-ta* of 1178 contains no mention of these territories, must be placed between this date and Chau Ju-kua's time, i. e. about 1242 A. D. Chinese junks have visited Mugdishu in 1430 (see my *Ancient Porcelain*, Shanghai, 1888, p. 62 and note 155), but since no coins of the Ming Dynasty could be traced in the two small collections, unless they were among the few hopelessly disfigured unidentified specimens, I conclude that these unique traces of Chinese intercourse so far discovered had nothing to do with that later period.

Of the east coast south of Somaliland we possess short accounts of an island called *Ts'öng-pa* and of a country *K'un-lun-tsöng-ki*, both by Chau Ju-kua.

Ts'öng-pa, in Cantonese *Ts'ang-pat*, may be a transcription of *Zanguebar*, or *Zanzibar*.

Chau Ju-kua's text runs as follows:

"The *Ts'öng-pa* country is an island of the sea south of *Hu-ch'a-la* [Guzerat]. On the west it borders on a great mountain."

"The inhabitants are of *Ta-shī* stock and follow the religion of the *Ta-shī*. They wrap themselves in blue foreign cotton stuffs and wear red leather shoes. Their daily food consists of meal, baked cakes and mutton."

"There are many villages and wooded hills, and lines of hills rising one above the other."

"The climate is warm, and there is no cold season. The products of the land include elephants' tusks, native gold, or gold bullion, ambergris and yellow sandalwood."

"Every year *Hu-ch'a-la* [Guzerat] and the *Ta-shī* settlements along the sea-coast send ships to trade white cotton cloth, porcelain, copper and red *ki-pei* [cotton] in this country."

The chief difficulty in the explanation of this account is the mention of sandalwood among the products of the country, since it is not likely that Indian, Timorese, or far-eastern varieties were brought to this out-of-the-way part of the Indian Ocean as a market. I do not know whether the dye made of the rock-moss, or orchil, of Zanzibar may possibly be confounded with some dye made of sandalwood. The mistake might perhaps be accounted for in this way.

On the other hand we have unmistakeable evidence of the importation of Chinese porcelain. The late Dr. W. S. Bushell, in a review of my book on "Ancient Porcelain" (*North-China Daily News*, May 9th, 1888) has the following remarks on this point:

"Arabian writers tell us of fleets of large Chinese junks in the Persian Gulf in the eighth century, and the return voyage of Marco Polo in the suite of a Mongol Princess from Zayton to Hormuz is well-known. The "*Chu Fan-chi*," a book on foreign countries by Chao Ju-kua, an author of the Sung Dynasty, was published a century before the time of Marco Polo. Dr. Hirth quotes this to trace the export of porcelain even as far as the coast of Zanzibar, the great African mart of ivory and ambergris, which is described

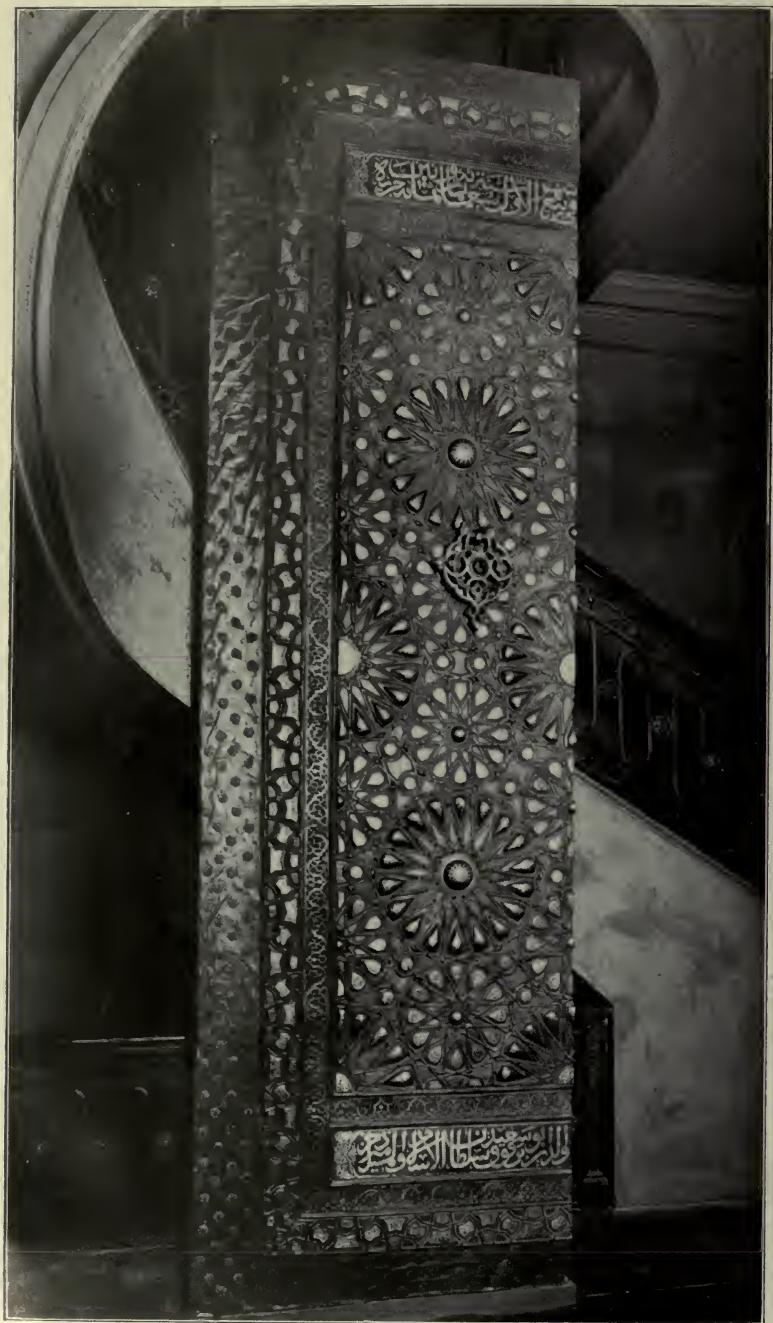
under the name of Ts'eng-p'o. I may add that Sir John Kirk during his residence as Consul-General at Zanzibar, made a collection of ancient Chinese céladon porcelain, which he took to the British Museum last year. Some of it was dug up, I believe from ruins, mixed with Chinese cash of the Sung Dynasty, a striking confirmation of the Chinese writer, who was Inspector of Foreign Trade and Shipping in Fuhkien Province."

A Door from the Madrasah of Barḳūk.—By RICHARD J. H. GOTTHEIL, Professor in Columbia University, New York City.

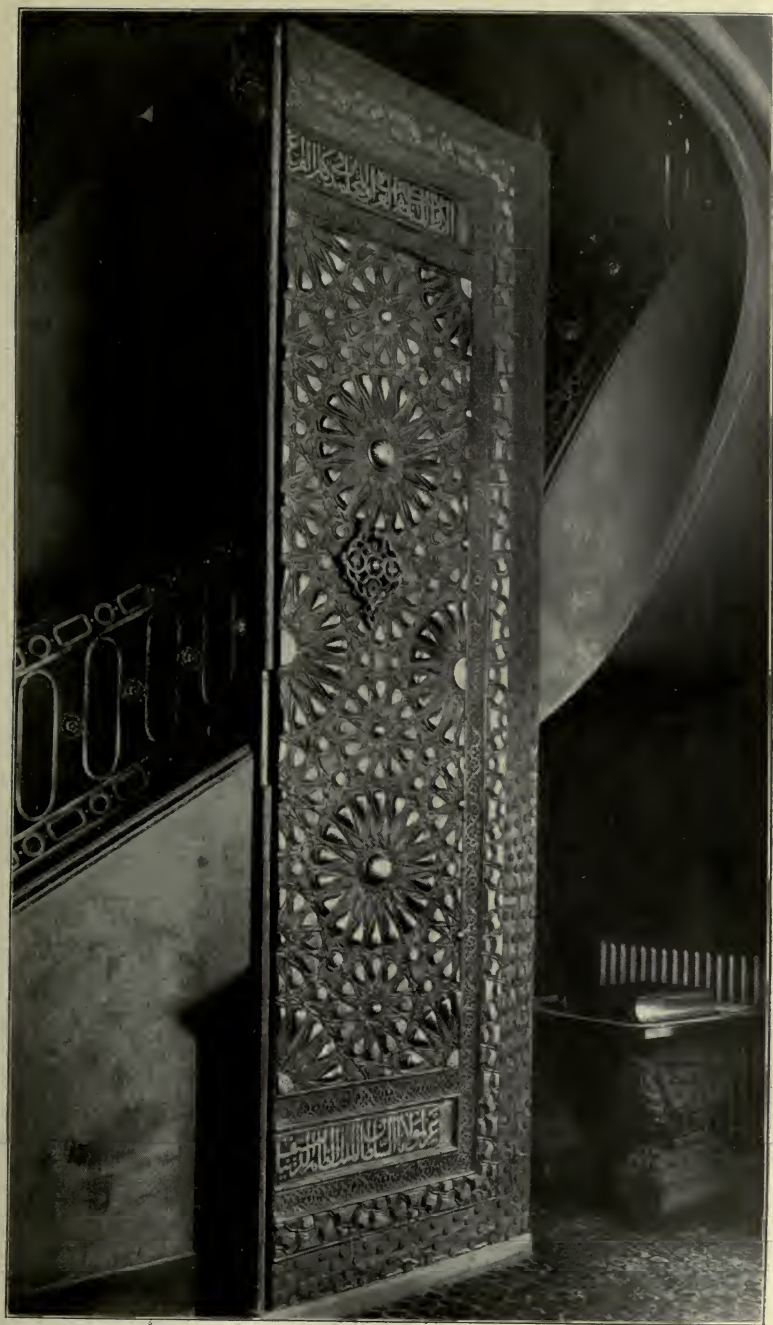
THE doors, of which a separate photograph for each wing is here given, are to-day placed in the entrance to the Hispanic Museum in New York City. They were bought in Cairo some years ago by Mr. Archer Huntington and belong to the finest period of Egypto-Muhammedan metal work. The doors are in a perfect condition; and though it looks as if in one or two places they had been restored, the restoration has been so cleverly done that it is hardly apparent. Each wing is made of wood completely covered with bronze. Along the sides the metal is very thin and artistically kept in place by nails forming diminutive rosettes. The rest of the wood is covered with thick pieces of metal so cut as to form polygonal rosettes the angles of which are filled up or embossed so that the rosettes stand out in relief. All of the embossed work, again, is damaskeened with silver and part of the unembossed surface is damaskeened with gold. Each leaf has a finely chiseled knocker placed about two-thirds of the way up. The inscription commences at the lower end of the right-hand leaf and is of silver damaskeened in plaques of bronze. It is in the late Naskhi form of the Mameluke period, and reads as follows: *عن مولانا السلطان الملك الظاهر سيف الدنيا والدين ابو سعيد برقوق سلطان الاسلام والمسلمين نُخِرَ الايتام والمساكين نُصْرَةُ الْغُرَاتِ وَالْمُجَاهِدِينَ وَكَانَ الْفَرَاغُ فِي شَهْرِ رَبِيعِ الْاَوَّلِ سَنَةِ سَبْعِمِائَةٍ وَثَمَانٍ وَثَمَانِينَ هِجْرِيَّةً.*

"Glory to our master the Sultan al-Malik al-Zāhir Saif al-dunya wal-dīn Abu Sa'īd Barḳūk, Sultan of Islām and the Muhammedans, the one who is munificent to orphans and to the poor, the help of warriors and of those who fight for the faith. It was finished in the month Rabī' al-Awwal in the year seven hundred and eighty eight of the Hijra."

On the bosses of the four central rosettes is the name برقوق. In the centre of the rosettes in the middle which are



A door from



the Madrasah of Barkuk.



divided into halves there are also inscriptions which I have not been able to decipher satisfactorily.

It is quite evident that we have here a door from a building put up by the Burjī Mamluke Zāhir Saif al-Dīn Barḳūk who came to the throne in 784 A. H. (= 1382 A. D.). The doors were finished in April of the year 1386. It is also evident that the doors come from the Barḳūkiyyah¹ or, as it is called, the Zāhiriyyah al-Jadidah—the Madrasah built by Barḳūk in the Sūk al-Naḥḥāsīn, which served also as a convent for the Sufis. Van Berchem has given in his *Corpus* a number of other inscriptions similar to the one on these doors. The Madrasah has been often restored; within recent years by Herz Bey.

The inscription, however, contains one or two difficulties which it is so hard surmount. I do not refer to the form ابو for ابي; that is not at all uncommon; but to the manner in which the date is expressed. The hundreds placed first is not an impossible construction, as compound numbers in Arabic can be expressed either in an ascending or a descending scale. But here the units are placed between the hundred and the decade, which will not do at all. Indeed, the whole order of the numerals is unusual in inscriptions. In many hundreds of inscriptions coming from Egypt, Syria and Mesopotamia I have not found one case in which the order of the numerals is other than that of the ascending scale.

In addition to this, the last word of the inscription هجرية is uncommon. The expressions used are: للهجرة and للهجرة المحمدية, من الهجرة النبوية, من الهجرة المحمدية, من الهجرة النبوية. The only other case in which I have found it used is in the inscription of Aḥmad ibn Muẓaffar al-dīn ʿUthmān ibn Mankūrus on the fortress of Muhēlbah in Northern Syria.² The want of space may have occasioned the use of the shortened form in our inscription.

It would be hazardous to pronounce a judgment upon the genuineness of this door. But, it is surprising that Van Berchem in his *Corpus* of the Arabic inscriptions at Cairo³ mentions

¹ See Van Berchem, *Corpus Inscriptionum Arabicarum*, pp. 297 et seq.; Baedeker, *Egypte*, (1903), p. 64; *Manuel d'art Musulman*, I (par H. Saladin) pp. 140 et seq.; II (par G. Migeon), pp. 196, 209, 232.

² Van Berchem, *Inscriptions Arabes de Syrie* (Le Caire 1897), p. 86.

³ *loc. cit.* p. 304.

the fact that in the year 1893 a dealer, Hatoun, in the Mouski of that city, had for sale a door very similar (to judge from the description given by Van Berchem) to the one at present under discussion. The inscription is exactly similar to the one I have given, only with the word *هجريّة* omitted. Van Berchem could not find any reason for the slightest suspicion and pronounced the door to be genuine; but Herz Bey pronounced it to be a piece of modern work manufactured in the selfsame year 1893, and his judgment was supported by others on the spot.¹

To add to the difficulty, Migeon, in his *Manuel d'art Musulman*, II, p. 196, gives a reproduction of a mosque door which in every artistic particular is an exact copy of the one under discussion, with the exception of the outer border which has less rows of nails than has the door in the Hispanic Museum. The inscription, however, is different and is similar both in the upper and lower bands:

عز لمولانا السلطان المجاهد محمد الناصر سلطان الاسلام والمسلمين

"Glory to our master the Sultan, the fighter for the faith, Muhammad al-Nāzir Sultan of Islām and the Muhammedans," i. e. Nāsir al-Dīn Muhammad ibn Qalā'ūn, who ruled several times in Egypt towards the end of the 13th century. Migeon states that these doors are in the Arabic Museum in Cairo; but I can not find them mentioned in the latest edition of the Catalogue of that Museum.²

¹ *loc. cit.* p. 770.

² *Catalogue raisonné des monuments exposés dans le Musée Nationale de l'art Arabe* . . . par Herz Bey (2nd Ed.). Le Caire 1906. pp. 173, 177, 212.

Postscript (August 18. 1908). In a letter, dated July 15. 1909, Herz Bey confirms my suspicions in regard to the genuineness of the doors. He writes that they were made in the year 1892 by an Arab workman named 'Alī al-Shiyashī (علي الشيشي) for the Cairo Street of the Midway Plaisance in the Chicago World's Fair. 'Alī, however, could not come to an understanding with the managers of the "Street" in regard to the price, and the doors remained in Cairo, where they passed into the possession of the dealer Hatoun.

A Hymn to Bêl (Tablet 29623, CT. XV, Plates 12 and 13).—By FREDERICK A. VANDERBURGH, Ph. D., Columbia University, New York City.

THE following is one of the collection of twelve unilingual non-Semitic Babylonian hymns copied from tablets in the British Museum by Mr. L. W. King, M. A., Assistant in the Department of Egyptian and Assyrian Antiquities, and published in "Cuneiform Texts from Babylonian Tablets in the British Museum by Order of the Trustees," Volume XV.

Dr. J. Dyneley Prince, Professor of Semitic Languages in Columbia University, and myself have now translated the whole collection. Professor Prince has published three: viz., "To the Goddess Bau;" "To the God Nergal," and "To the Goddess Girgilu." "I have published in my "Sumerian Hymns" four: "To Bêl;" "To Sin;" "To Adad;" and "To Tammuz." I have another "To Bêl" that is expected to appear in the Journal of the American Oriental Society, and still another "To Bêl" is in preparation. The one of which a transliteration, translation and commentary are given in this Article is the fourth and last one "To Bêl" in the collection.

I am not aware that the hymn treated in this Article has ever been translated before or published.

This hymn in which Bêl is addressed in both the Eme-Ku and the Eme-Sal dialects of the non-Semitic literature of Babylonia must be recognized as very ancient. It is evident that Bêl is invoked here as the ruler of the nations in the same spirit in which he is honored in the inscriptions of the kings of the predynastic and early dynastic periods from the time of En-šag-kušanna until the time of Hammurabi. When the hymn was composed, Nippur, Ur and Larsa, the three cities therein mentioned, were flourishing towns.

Our copy of the hymn, however, is not Old-Babylonian, but New-Babylonian. While the composition is very old, the copy is not. For example, GIR or ELIM, MA, LUL, TA, KAN, BU are Old-Babylonian, but the following signs are New-

Babylonian: BIT, ZI, UN, AN, KIT, GA, DA, MI, TUR, IM, EN, NE, DAMAL, AZAG, KA, MAḤ, ŠIŠ, BI.

This hymn is apparently the most beautiful and interesting one of the four addressed to Bêl in CT. XV, 7-30. The conception of the subject is very picturesque and the lyrical quality characteristic of the religious literature of the Semitic race is fully as apparent here as in other Babylonian hymns. The thought is wrought into rhythmic stichs for recitation in divine service with some traces of strophic division. The essential attributes of the god and the power he exercises over the lands are dwelt upon, but, above all, attention seems to be focused on the heroic administration of Bêl in the conquest of an insubordinate city.

As to thought and form of statement, the hymn is clearly divided into three parts. Lines one to nine contain descriptive epithets of Bêl's divine attributes. (1) Bêl is known as the 'mighty one,' expressed by the Assyrian *kabtu*, synonymous with either *gûr* or *elim*, and suggestive of the Scriptural idea 'almighty.' (2) Bêl was 'lord of the lands;' this *umun* corresponds to the Semitic *bêlu*, 'proprietor' of the lands: a 'lord' was an 'owner.' As Anu was the heaven god, Sin the moon god, Šamaš the sun god, Ištar the star deity, so Bêl was the earth god. (3) Bêl was a 'righteous' god, being called 'lord of righteous command.' (4) Bêl was a god of 'providence,' being 'father of the word of destiny.' (5) Bêl's particular care reached over the Babylonians; he was 'shepherd of the black-headed.' (6) Bêl was a god of vengeance, a 'wild bull executing judgment on the enemy.' (7) Bêl was omniscient, 'the all-seeing one.'

Lines ten to twenty particularize the location of Bêl's dominion. The seat of his cult was Nippur, but he was honored also in Ur and Larsa. His temple, E-kur, was located in Nippur, whither kings and princes from distant lands came to do him homage.

In lines one to twenty it may be noticed that with a single exception a characteristic praise-refrain is observed in every stich.

At the end of line twenty there is a decided change in style. Lines twenty-one to thirty-four delineate the experiences of a city in siege under the surveillance of Bêl. Water and corn supplies are cut off. Scenes of famine are sketched and also

of conflagration and pillage. As the result the fear of Bêl extends over the lands.

Transliteration and Translation.

Obverse.

1. *ni-tuk gùr*(KIL) *šâ*(Û) *eri-zu igi*(ŠI)-ê(BIT) — — — —
Thou art the mighty one of old; thy desirable city — —
2. *elim-ma ni-tuk gùr*(KIL) *šâ*(Û) *eri-zu igi*(ŠI)-ê(BIT) — —
O king, thou art the mighty one of old; thy desirable city — — — — — — — — — —
3. *ù-mu-un kùr-kùr-ra-ge*(KIT) *gùr*(KIL) *šâ*(Û) *eri-* — — — —
O lord of the lands, the mighty one of old; city — —
4. *ù-mu-un sag-ga zi-da gùr*(KIL) *šâ*(Û) *eri-* — — — —
O lord, head of life, the mighty one of old; city — — — —
5. *dimmer mu-ul-lil*(KIT) *a-a ì*(KA) *na-àm-mă*(MAL) — *ne* — —
O Bêl, father of the word of destiny; — — — — — —
6. *siba sag gîg*(MI)-*ga gùr*(KIL) *šâ*(Û) *eri-* — — — — — —
O shepherd of the black-headed, the mighty one of old; city — — — — — — — — — —
7. *i-de gaba nî*(IM)-*te-na gùr*(KIL) *šâ*(Û) *eri-* — — — — — —
O thou who art by thyself the all-seeing one, the mighty one of old; city — — — — — — — — — —
8. *ama erim*(SAB)-*na di-di gùr*(KIL) *šâ*(Û) *eri-* — — — — — —
O thou wild bull executing judgment on the enemy, the mighty one of old; city — — — — — — — — — —
9. *ù-lul-la ma-ma gùr*(KIL) *šâ*(Û) *eri-* — — — — — —
O thou powerful one of the countries, the mighty one of old; city — — — — — — — — — —
10. *eri-zu en-lil*(KIT)-*ki-zu gùr*(KIL) *šâ*(Û) — — — — — —
In thy city thy Nippur, the mighty one of old; — — — —
11. *še-ib ê*(BIT)-*kùr-ra-ta gùr*(KIL) *šâ*(Û) — — — — — —
In the foundation of E-kur, the mighty one of old; — — — —
12. *ki damal ki gal-ta gùr*(KIL) *šâ*(Û) — — — — — —
In the broad land the great land, the mighty one of old; — — — —
13. *dû*(TUL) *agaz ki azag-ta gùr*(KIL) *šâ*(Û) — — — — — —
In the glorious dwelling of the glorious land, the mighty one of old; — — — — — — — — — —

14. *ša(LĪB)-ê(BIT) dīm-ma-ta gūr(KIL) šâ(Û) — — — —*
In the midst of the house of the king, the mighty one
of old; — — — — — — — — — — — — — — — —
15. *ê(BIT) kâ maḥ-ta gūr(KIL) šâ(Û) — — — — — — — —*
In the house of the high gate, the mighty one of old; —
16. *ê(BIT) gâ(MAL) nun maḥ-ta gūr(KIL) šâ(Û) — — ka*
In the firm house of the exalted prince, the mighty one
of old; — — — — — — — — — — — — — — — —
17. *ma-mu šu-a-ta gūr(KIL) šâ(Û) — — — — — — — — ka*
In the entrance of my land, the mighty one of old; — —
18. *ma ê(BIT)-gal maḥ-ta gūr(KIL) šâ(Û) — — — — — ka*
In the land of the exalted temple, the mighty one of
old; — — — — — — — — — — — — — — — —
19. *še-ib ùru-unu-ki-ma-ta gūr(KIL) šâ(Û) eri- — — ne ka*
In the foundation of Ur, the mighty one of old; — — —
20. *še-ib utu-unu-ki-ma-ta gūr(KIL) šâ(Û) eri-zu — — ne ka*
In the foundation of Larsa, the mighty one of old; — —
21. *eri a-dug(KA)-ga a-gi-a-zu*
A city striveth; it is turned away by thee.
22. *a-dug(KA)-ga a-ta gâr(ŠA)-ra-zu*
It striveth; it is shut off from water by thee.
23. *eri še-kud(TAR)-da ki-lal-a-zu*
It is a city with corn cut off; it is blocked by thee.

Reverse.

24. *[nu]-nag nu-nag-a ud-zal(NI)-zal(NI)-la dî(RI)*
They drink not, they drink not; the morning dawneth.
25. *dam tur-ra-ge(KIT) dam-mu mu-ni-ib-bi*
To the young spouse, one crieth "My spouse."
26. *dû(TUR) tur-ra-ge(KIT) dû(TUR)-mu mu-ni-ib-bi*
To the little child, one crieth "My child."
27. *ki-el-e šes-mu mu-ni-ib-bi*
The maid crieth "My brother."
28. *eri-ta damal gan-e dû(TUR)-mu mu-ni-ib-bi*
In the city the bountiful mother crieth "My child."
29. *dû(TUR) bân(TUR)-da a-a-mu mu-ni-ib-bi*
To the strong man one crieth "My father."

30. *tur-e al-è*(UD. DU) *maḥ-e al-è*(UD. DU)
The small (flames) break out, the great (flames) break out.
31. *e-sir*(BU) *e-gub*(DU)-*ba mu-un-sar-ri-ni*(NIN)
On the street they stand, they cry.
32. *sal-la-bi ur-e ám*(A. AN)-*da-ab-lá*
Their booty men bear away.
33. *sig*(PA) *gan-bi mu bar-ri ám*(A. AN)-*da-ab-lá*
The staff of their youth the king of judgment beareth away.
34. *ki e-ne ki-zu-ge*(KIT) *ba-e-ni*(IM)
Those lands are in fear of thy land.
ušu(EŠ) *za êr*(A. ŠI) *lîm(b)*(LUL)-*ma dingir en-lil*(KIT)-*a-kam*
34 (lines) Penitential hymn to Bêl.

Commentary.

1. *ni-tuk*: *ni*, a common pronominal verbal prefix of the second person; *tuk* means primarily 'seize,' 'have,' and then in an intransitive relation, 'be present,' 'be.'

gûr(KIL): the question might arise whether the sign is not IZ; it occurs nineteen times in the tablet; the wedges seem to make an enclosure of an equilateral rectangle, as is always intended in KIL, but usually in the sign IZ, the horizontal dimension is greater than the vertical. For examples of IZ in this collection of hymns in CT. XV, see Plates 10 : 24; 11 : 13, 14, 15 and 16; 14 : 35; 16 : 6; and 19 : 25. For examples of KIL, see Plates 7 : 27; 9 : 2 and 3; and 19 : 24, 27 and 28. Also cf. sign-lists of Delitzsch in *Assyrische Lese-stücke*, vierte Auflage, and Amiaud in *Tableau Comparé des Écritures Babylonienne et Assyrienne Archaïques et Modernes*, *gûr* equals *kabtu*. If the sign is IZ, the value is *geš*, equal to *idlu*, 'hero.'

šâ(Û) equals *labîru*, 'old;,' see Prince's Hymn to Nergal in JAOS, XXVIII, pp. 168-182. Brummer, in *Die Sumerischen Verbal-Afformative nach den ältesten Keilinschriften*, explains Û as a compound sign, equal to ŠI, 'eye,' plus LU, 'take away;,' giving the meaning 'take away the eye,' 'become old,' 'elderly.'

eri or the Eme-Ku *üru* equals *alu*, 'city,' and *zu* is the common pronominal suffix 'thy,' phonetically cognate with the personal pronoun *za-e*; the value *eri* for ER occurs in the ideogram for *eridu*; see Creation Legend, Tablet 82-5-22, 1048, CT. XIII, 35-38, Obverse, line 8, *eridu* (ERI. HI) *ul ba-ni*.

igi(ŠI)-ê(BIT): the erasure of the last end of this line precludes satisfactory explanation of this word, although ŠI. BIT is sometimes equal to *amâru*, 'see,' *igi* commonly having the meaning 'eye' and ê the meaning 'house;' i. e. 'eye-structure.'

2. *elim-ma*: by the process of gunation, several signs have developed from GIR; for example, KİŠ by the addition of MIN, ANŠU by the addition of PA, HUS by the addition of HI, AZ by the addition of UD, UK by the addition of ZA, and ELIM, or more exactly ALIM, by the addition of ÊR(A. ŠI). The sign in the text is somewhat indistinct; it appears to be GIR, but MA as a phonetic complement would indicate that the sign was ELIM. GIR equals 'power'. ELIM means 'lord,' 'king.'

3. *ù-mu-un*, phonetic representation, is sometimes ideographically represented by the corner wedge Û; the value *umun* may be shortened to *u* or *mun* or *un*, or it can be lengthened to *ù-mu-un-e*, having the defining vowel *e*, as in Plate 10 : 3 where Bêl is spoken of, and Plate 17 : 2 and 3 where Sin is spoken of. *umun* equals 'lord' (*u*) plus 'being' (*mun*).

kûr, 'mountain,' 'land,' is probably etymologically connected with *ku*, *ašâbu*, *šubtu*, 'dwell,' 'dwelling': *ku* being possibly a shortened form of *kûr*. *ge*(KIT) is a common sign of genitive relation: 'lord of lands.'

4. *sag-ga*: the sign is quite clearly SAG, but perhaps the clause is the same as the last clause in Plate 10 : 4, if so, the reading should be, 'lord of righteous command,' with *dug*(KA)-*ga* instead of *sag-ga*, *dug-ga* being equal to *kîbîtu*, 'command,' and *zi(d)-da* being equal to *kênu*, 'righteous;' see Vanderburgh, Sumerian Hymns, p. 27.

5. *mu-ul-lil*(KIT) is Eme-Sal for *en-lil*(*el-lil*), *mul*(*wul*) being dialectically equal to *en*(*el*). The meaning of *lil* is somewhat confused by the word's having been wrongly connected with *zakîku*, 'wind;' it more properly means 'structure,' 'fulness.'

a-a is the common word for 'father,' how it comes to mean 'father' is somewhat obscure; it may be shortened from *ad-da*, where *ad* equals *abu*. *a* primarily means 'water,' but also means 'father,' perhaps as 'seed-producer.' *a-a* is probably a phonetically lengthened *a* equal to *abu*.

î(KA): the meaning of KA here is not distinctly indicated. KA is a sign which has many meanings, but the one sometimes represented by î gives tolerably good sense here. *na-âm-mă*(MAL) is phonetic and is a lengthened form for *nam* which equals *šîmtu*.

6. *siba* means 'he who grasps the staff,' and is the common word for 'shepherd,' though LAH. BA sometimes stands for 'shepherd.' *sag-gîy*(MI)-*ga*, equal to *šalmât kaḫḫadi*, is an often repeated designation for Babylonians, as subjects of Bêl or some other ruler.

7. *i-de* is Eme-Sal for *igi*(ŠI), equal to *înu*, 'eye.' *gaba* equals *pitû*, 'open.' *nî*(IM)-*te* equals *ramânu*, 'self,' although the original meaning is 'fear,' yet when applied to the one who causes fear it comes to mean 'self.' *nî-te* literally means 'fear a fear.' *i-de gaba nî-te-na* then means 'open eyed by thyself,' *na* being a pronominal suffix equal to *-ka*.

8. *ama*: AMMU originally represented the 'bull of the mountain,' while the same form ungulated by the addition of the sign KÚR, 'mountain,' being a picture of the bull's head, represented the domestic bull. *erim*(ŠAB)-*na* equals 'warrior,' 'soldier,' 'enemy,' and *di*, 'to judge.' The whole expression *ama erim-na di-di* occurs in Plate 10 : 7.

9. *û-lul-la*: *û* is sometimes a nominal prefix, having a determinative force, like *a* in *a-lig*; see Plate 19 : 2 and 3, also Plate 20 : 4, 5, 6, 7, 8 and 9; see MSL. p. XVII, and *û-tu*, Br. 1070. LUL sometimes equals *dannu*, see Br. 7268 and 7276. Its original form was that of a gunated GIR; in the copy of Tablet 13963, Plate 10 : 8, it has been mistaken for GIR, as this line clearly shows.

ma-ma: MA is not so common an ideogram as KÚR; MA means 'earth,' KÚR means 'mountain.' MA. DA, 'strong land,' seems to be original and the Assyrian *mātu* a loan-word. Besides MA and KÚR there seem to be two other Sumerian ideograms for *mātu*, namely KALĀM and sometimes KI.

10. *en-lil*(KIT)-*ki*, 'land of Bêl,' common ideogram for 'Nippur.'

11. *še-ib* equals *šeb*, the Eme-Sal value for GAR which is equal to the Eme-Ku *šeg* no doubt; the Assyrian equivalent is *libittu*, 'layers of brick,' from *labānu*. *ta* equals 'in,' meaning 'source,' as is shown by the expression *kūr babbar è-ta kūr babbar šu-šù*, 'from the land of the rising sun to the land of the setting sun.'

12. *damal*, Eme-Sal for *dagal*, equals *rapšu*, 'broad,' and *gal* equals *rabû*.

13. *dû*: TUL meaning 'to cover,' readily yields the meaning *šubtu*, 'dwelling,' with the value, however, of *dû*; *dû-azag* sometimes has the meaning of *šadû*, 'mountain.'

14. *ša*(LÌB) is a proposition or rather noun in the construct state followed by the genitive *ê*(BIT). *dím-ma* equals *šarru*, 'king.' Br. 4254.

15. *ká* equals *bābu*, 'gate,' while *ka* equals *pû*, 'mouth.' *ká* must be pronounced differently from *ka*. KÁ represented 'entrance to a house,' but KAGU first represented 'head,' then 'mouth.' The meaning 'high' for *maḥ* is derived from that of being 'important' or 'great.'

16. *gà*(MAL) equals *šakānu*, 'establish,' and *nun* equals *rubû*, 'prince.' Br. 2629.

17. *šu-a-ta* means 'in the entrance,' or 'when he enters,' *šu* being equal to *erēbu*.

18. *ê*(BIT)-*gal*, 'great house,' the Sumerian form from which the Assyrian *êkallu*, 'temple,' is derived.

19. *ûru*(ŠIŠ)-*unu-ki-ma*, Ur, apparently signifies the 'protected dwelling place,' *uru* being equivalent to *našāru*. But it is to be noticed that the ideogram for Ur sometimes takes the form *uru-ab-ki*; see Code of Hammurabi, 2:17. It also takes the form *uru-um-ki-ma* in which *ma* becomes a true phonetic complement; see Hilprecht's Old Babylonian Inscriptions chiefly from Nippur, Nos. 14, 15, 18, 19 and others. Ur was chiefly famous as being the seat of the cult of Nannar whose temple was called E-gišširgal.

20. *utu-unu-ki-ma*, the ideogram for Larsa which was one of the old seats of the cult of Šamaš, means the 'dwelling place of light.'

21. *dug*(KA) is a verb with the meaning here of *maḥâṣu*; the primary significance of the sign suggests that the meaning might originate from a contention of words, *zu* as a suffix here is subjective, considered as a relative pronoun the antecedent does not appear in the line.

22. *a-ta* means 'from water.' *gâr*(ŠA) equals *esêru*.

23. *še-kud*(TAR)-*da* means 'with corn cut off,' *kud* being equal to *parâsu*, and *ki-lal* equals *sanâḫu*, 'blockade,' literally 'raise up the ground.'

24. *-nag*: no doubt the text should be *nu-nag*. *nu-nag-a*: *a* is a vowel of prolongation; 'to drink no water' would be *a nu-nag*. *ud-zal*(NI)-*la* means *šêru*, 'morning,' *ud* is equal to 'light,' and *zal* to 'shine,' while *la* is a phonetic complement. *dî*(RI) equals *nabâtu*.

25. *dam* equals *hâiru*, 'spouse.' *tur-ra* equals *ṣîḫru*, 'young.' *ge*(KIT) is sometimes represented by *ana* although always secondarily. It is more commonly the sign of the genitive. *mu-ni-ib-bi* equals 'one speaketh to him,' *ni-ib* being an infix that represents a dative, the *ni* representing the 'him' and the *ib* the 'to'. *bi* equals *ḫibû*, 'speak.'

26. The sign DUMU as equal to *mâru* or *mârtu* has the value *dû*.

27. *ki-el-e* equals *ardatu*, 'maid,' *ki* being a prefix of determination, while *el* means 'shining one.' *šes* equals *aḫu*; there is doubt whether the archaic form meant 'protection' or 'other one.'

28. *damal* equals *ummu*, 'mother.' *gan-e* equals *alidu* or *alidtu*.

29. *dû*(TUR) may equal *amêlu* and TUR with DA equals *bân-da*, 'strong.'

30. *al-è*(UD. DU) equals *nabâtu*, 'light up,' 'break out,' the prefix *al* being the same as *an*. Probably the city is set on fire, so it is the flame that breaks out.

31. *e-sir*(BU) equals *sûḫu*, *gub*(DU) equals *nazâzu*, and *sar-ri* equals *ṣarahû*; the *nî*(NIN) at the end may be a phonetic prolongation although the full force of the syllable is not very clear.

32. *sal-la-bi*: *sal-la* equals 'booty,' and *bi* is a pronominal suffix. *ur-e* equals *amêlu*. In *ûm*(A. AN)-*da-ab-la da-ab* is an

infix referring to the object *sal-la* and *lá* is the verb equal to *našû*.

33. *sìg*(PA) may equal 'staff,' *gan* 'youth,' *mu* 'king,' and *bar-ri* 'judgment.'

34. *e-ne* equals *šunu*.

35. *lìm(b)*: the sign is probably LUL which sometimes means 'woe;' see Brünnow's Classified List, 7271. *êr*(A. ŠI or A. IGI, 'water of the eye') commonly equals *bikîtu*.

Glossary.

a-a, 5
 a-a-mu, 29
 a-dug(KA)-ga, 21
 a-gi-a-zu, 21
 al-è(UD. DU), 30
 azag, 13
 ama, 8
 ám(A. AN)-da-ab-lá, 32
 a-ta, 22
 i-de, 7
 igi(ŠI)-ê(BIT), 1
 ì(KA), 5
 e-gub(DU)-ba, 31
 e-sir(BU), 31
 elim-ma, 2
 e-ne, 34
 en-lil(KIT)-a-kam, 35
 en-lil(KIT)-ki-zu, 10
 eri-zu, 1
 eri-ta, 28
 erim(ŠAB)-na, 8
 ê(BIT), 15
 ê(BIT)-gal, 18
 êr(A. ŠI), 35
 ud-zal(NI)-zal(NI)-la, 24
 ur-e, 32
 ùru(ŠIŠ)-unu-ki-ma-ta, 19
 utu(UD)-unu-ki-ma-ta, 20
 ušu(EŠ), 35
 ù-lul-la, 9

ù-mu-un, 3
 ba-e-ni(IM), 34
 bàn(TUR)-da, 29
 bar-ri, 33
 gaba, 7
 gal-ta, 12
 gan-bi, 33
 gan-e, 28
 gà(MAL), 16
 gár(ŠA)-ra-zu, 22
 gîg(MI)-ga, 6
 gûr(KIL), 1
 dam, 25
 dam-mu, 25
 damal, 12
 di-di, 8
 dimmer, 5
 dingir, 35
 di(RI), 24
 dîm-ma-ta, 14
 dú(TUL), 13
 dû(TUR), 26
 dû(TUR)-mu, 28
 ká, 15
 ki, 12
 ki-el-e, 27
 ki-lal-a-zu, 23
 ki-zu-ge(KIT), 34
 lìm(b)(LUL)-ma, 35
 ma, 18

ma-ma, 9
ma-mu, 17
mah-e, 30
mah-ta, 15
mu, 33
mu-ul-lil(KIT), 5
mu-un-sar-ri-ní(NIN), 31
mu-ni-ib-bi, 25
na-àm-mă(MAL), 5
ni-tuk, 1
ni(IM)-te-na, 7
nun, 16
nu-nag, 24

sag, 6
sag-ga, 4
sal-la-bi, 32
siba, 6
sig(PA), 33
ša(LÌB)-ê(BIT), 14
ša(Ù), 1
še-ib, 19
še-kud(TAR)-da, 23
šes-mu, 27
šu-a-ta, 17
tur-e, 30
tur-ra-ge(KIT), 25.

The Dasara Festival at Satara, India.—By LUCIA C. G. GRIEVE, New York City.

It is difficult for a mere European, brought up on a dictionary and accustomed to define everything accurately, to grasp the Proteanism, the fluidity, if I may so speak, of the Hindu divinity called for the most part simply Devi, the goddess, or Mai, the mother, or more simply still, Bai, the woman. Her names are legion: Mahalakshmi, Mahasaraswati, Jogeshwara, Kali, Bhawani, and many another, often strange and uncouth. But in the ultimate analysis, each female divinity, however different her attributes and forms of worship, is a manifestation of the same "eternal feminine," the goddess, the mother, the woman.

In every Hindu household in the Maratha country, Devi is one of the panchāitana, or set of five gods—the others being Ganapati, Vishnu, Sāmbh and Surya—represented by five small stones of appropriate colors and set on a tiny table in a particular order, according to the chief object of the householder's devotion. These are worshiped every morning directly after the Sandhya; but they may each and all be worshiped separately besides; and each has his particular day of the week and a high annual festival. Devi's days are Tuesday and Friday, when she is worshiped with red and yellow powder, marigolds, sweetened milk and a Sanskrit prayer.

Her great festival occurs in Ashwin (Sept.-Oct.) during the first ten days of the new moon, and is called Navarātra. Among the Maratha Brahmans are three classes: Deshasthas or hill Brahmans, Konkonasthas or Brahmans of the western slope, and Karhādās, so called from their chief town. These last, being devotees of Kali, observe this festival with great solemnity. During the whole nine days they do not shave; and they arrange a little vessel, called abhishakpātra, so that water or oil may run continually on the head of the image of Devi. On the tenth day they kindle the hōm fire (with a Swedish safety match) in the presence of many Brahmans, and end the day with a great feast.

In every Hindu house this festival is observed. The image of Devi is set up on its little throne. Every day the worshiper

makes a wreath of flowers, usually marigolds, and placing one wreath on the neck of the image the first day, adds another each day. In front of the image a square is made of corn, gram or barley, mixed with dry earth. In the midst of this is set an earthen water-pot (gāger or ghat), and on this they hang a wreath of flowers, adding another each day. Every day cakes of wheat are prepared for offering; and if the family be sufficiently rich, a married woman, a Brahman and an unmarried girl are brought in to be fed and worshiped. Every day in Brahman households, a Sanskrit prayer, *Saptaçatti*, is read after bathing, and the worshiper must not yawn nor leave his place on any pretence, nor make a mistake in a single letter. On the tenth day the worship is concluded by a great feast, in which the different castes follow different customs.

This tenth day, the *Dasara*, is the great day of the festival, and in *Satara* the greatest feast-day of the year. *Shivāji*, the liberator of the Marathas from the Mohamedan yoke, was a devotee of *Kāli*, or *Bhāvāni*, and of course made much of her high festival. There was sound reason in this; for it occurred at the end of the rainy season when the crops were all in, and settled dry weather might be expected. Furthermore, this tenth day, the *Dasara*, commemorated the setting out of *Rāma* on his march against *Rāvana*; and what more appropriate and auspicious day for summoning his army to march against foes, who were not only their enemies in religion, but, like *Rāvana*, had frequently carried off their women? Assembling his soldiery, who were mostly farmers cultivating little patches of ungenerous soil on the rough hillsides, he personally inspected every man and horse and had an inventory made of all their possessions. Then their horses and arms were worshiped, and a day set for their departure to the predatory warfare which was their joy and strength.

During the latter days of *Satara's* independence, when wealth had increased and valor departed, the *Dasara* procession was a grand sight. Starting from the *Rang Mahāl*, or chief palace of the Maharaja, on the upper road, the procession, numbering as many as 75 elephants in their gay housings, with instruments of music, chanting priests, prancing horses and gorgeously apparaled courtiers and servitors, marched to the *Poyiche Nāka*, or city limit, two miles away; and frequently the head of the procession had reached that point long before the rear

had started. Now a solitary unhappy elephant and a few ponies represent the kingly state.

But to the people, recalling as it does the great days of old, the festival is as dear as ever. On this day every house is whitewashed or painted; wreaths of marigolds are strung across the tops of the doors; and every man puts on a new white dress. Those who have horses wash them in warm water and give them an offering of food; wine, or eggs, or something supposed to be specially acceptable. A corner of the house is swept clean and washed with cowdung; and instead of swords and guns and other weapons whose use the Government has prohibited, axes, hoes and other farm-implements are carefully washed and placed on this spot, and are given offerings of flowers and sandalwood oil and red and yellow powder. Brahmans bring a drink offering, and other castes an offering of flesh; and after showing it to the tools they divide it up among the members of the family.

In the afternoon the horses have cloths, generally the housewife's best sari, strapped on their backs; wreaths of flowers are placed around their necks; and the ladies of the family lend their anklets and even strings of gold and pearls to adorn the horses' hoofs; and if there be a light-colored creature, patterns are traced on his flanks.

In these degenerate days, if the horse belongs to a white man, the owner is supposed to worship the animal by giving a coin to the horse-boy; and this particular form of worship is not confined to Hindus but shared by Mohamedans and outcastes. Even the Sahib's cats and dogs have their wreaths of marigolds on this great day.

Early in the afternoon, the gaily dressed horses, and litters containing images of the gods, in small irregular processions, are brought to the Rāj-wādā, or chief market-square. Here booths are erected for the sale of cakes and sweets, and especially of great bundles of branches of kānchan, mountain ebony. Athletic sports of all sorts are carried on, interspersed with songs and recitations called kīrtans. A large male buffalo, reda, has been fed up for ten days, or even as many months. At the appointed time he is led out in front of a temple of Bhāvānī, and after the proper ceremonies some descendant of Shivāji's family, always a man with the surname of Bhonsle, strikes off the beast's head with a sword. Two strokes may

be given, but the act is more meritorious if only one suffices. The meat is then cut up and distributed to any who will take it. Goats and hens are sacrificed by the farmer caste.

The sacrifice of these animals on this day is common throughout the Maratha country and in many other parts of India. Indeed, the Dasara festival is a national one, and on it soldiers of every faith worship their arms; but beyond that, its significance and mode of observance are different in the different parts of the country.

As soon as twilight begins to fall, the great procession is formed in front of the Rang Mahāl. Bhāvānī, Shivāji's sword, which he considered an incarnation of the goddess, and which is now kept in a small temple in the Rani's Palace, is placed on a palanquin and leads off, followed by the Rajah's elephant and ponies, the Rajah or his representative in an open carriage, the bloody sword with which the reda was slain, and the usual oriental rabble. Crowds of people of all sorts line the route, and congregate especially at the Nāka, or sentry-box marking the city limit. For Satara is an unwall'd town, Shivāji believing, like the King of Sparta, that soldiers are better than bricks for defence.

In former days the procession went farther, for the purpose of worshipping an aptā or kānchan tree, the mountain ebony, which was then cut down and the leaves distributed to the crowd. This object has now been lost sight of; the procession merely passes a little beyond the city limit and then turns and goes back. Throughout the Maratha country, everyone, to keep the festival properly, must walk at least beyond the limits of his town or village, to commemorate the starting out of the army on that day. When the procession has passed the Nāka, a man comes running through the crowd with his arms full of kānchan branches, which he distributes to the hundreds of eager hands reached out to him. The recipients pull off the leaves and bestow them on their friends and acquaintance, saying, "This is gold!" This little ceremony is eminently Hindu; kānchan, besides being a name for the ebony and champak trees, also means "gold," and the leaves of the kānchan, which in size and shape resemble gold coins, are called "soni," the ordinary word for gold. This giving of "gold" leaves is said to represent the distribution of money among the crowd "in the brave days of old."

The deepening darkness is put to flight by colored lights, sky-rockets and other fire-works; and the crowds return home to feast and make merry.

This festival has in some places a darker side. The Karhādā Brahmans are strict worshipers of Devi; and her most acceptable sacrifice is a human being. This caste is perhaps one of the last vestiges of the dreaded Thugs who used to infest India; but in some respects their organization is quite different, though on that I need not dwell. The Government has attempted to suppress this sect, but has not fully succeeded. A favorite sacrifice is a son-in-law, who is invited to the house of his wife's parents and there poisoned. The best sacrifice is a wedded wife, and in return Kali promises her devotees great wealth. The proper method of conducting this sacrifice is to invite the lady to visit her mother-in-law for the whole ten days' festival. There she is made much of, given presents, bathed in perfumes, clad in fine new garments, and wreathed with flowers. Meanwhile, in the god-room, a hole has been dug in the floor in front of Devi's image, the sacred hōm fire is kindled, prayers are said into the hole, and a lighted lamp set in each corner. At the right moment the unsuspecting victim is brought in and suddenly thrown into the hole, and the earth piled in on top. While I was in Satara an attempt was made to perform this sacrifice in a nearby village; but at the last minute the girl discovered the plot, and, escaping, fled to her father's house, where she was protected against her too religious friends.

Since the British Government is so inconsiderate and oppressive as to interfere with these little family matters, the usual method now is by poison; and such masters in the poisoning art are the Hindus that the dose may be administered many days previous to the intended death of the victim. It is even said that as long as six months before the festival, poison may be given which will cause the victim to die on the proper day. Though currently believed, this is not easy to credit; and by its nature is a matter not susceptible of investigation.

Next after their kindred-in-law, the best sacrifice is a Konkon Brahman; and in such dread do the Konkonasths hold their Karhādā fellow-castemen, that they would rather die of starvation than risk taking food at their hands.

The Interrelation of the Dialects of the Fourteen-Edicts of Asoka. 1: General introduction and the dialect of the Shāhbāzgarhi and Mansehra redactions. — By TRUMAN MICHELSON, Ph. D., Ridgefield, Conn.

IN investigating the dialects of the Fourteen-Edicts of Asoka, it is necessary to remember that the Shāhbāzgarhi, Mansehra, and Gīrnār redactions are translations of an original composed in a dialect essentially the same as the dialects of the Dhāuli, Jaugaḍa, and Kālsī (edicts i—ix) recensions of the Fourteen-Edicts and the dialects of the six versions of the Pillar-Edicts; and that the dialect of this 'Māgadhan' original has left traces in them. The dialect of the Kālsī redaction presents a rather curious problem: in edicts i—ix the dialect is practically pure 'Māgadhan,' with but few traces of the local dialect, but in edicts x—xiv the local peculiarities are prominent; yet at the same time the dialect is intimately related with the dialect of the Dhāuli and Jaugaḍa texts—for these two redactions are practically the same in both content and language. And as a matter of fact we can find a few faint traces of the local dialect in even the Dhāuli and Jaugaḍa texts. Examples are Dhāuli *vuḍhī* for 'Māgadhan' *vaḍhim*; Dhāuli and Jaugaḍa *bābhana-* for *baṃbhana-*. (That *baṃbhana-* was the 'Māgadhan' correspondent to Sanskrit *brāhmaṇa*—is shown by the invariable *baṃbhana-* of the Kālsī text as well as by the occurrence of *baṃbhana-* in Dh., J. also.) If *savatu* at J. ii, 9 is not a mere blunder for *savata* (Sanskrit *sarvatra*)—which is found several times in J. as well as Dh., and the 'Māgadhan' portion of K.—it is a local peculiarity. The 'Māgadhan' dialect was undoubtedly the official imperial language, and hence—as Pischel has very justly remarked—understood even where it was not spoken as a vernacular. How far the 'Māgadhan' dialect as a koine had influenced the other local vernaculars, is impossible to say with certainty: but the 'Māgadhisms' in the Gīrnār, Shāhbāzgarhi, and Mansehra recensions give the impression that they were taken over bodily from the original manuscript, and were really foreign to the spoken vernaculars.

The dialect of the fragment of the eighth edict of the Sopārā version (ed. by Bhagvānlāl Inārajī, JBOAS. xv, 282—288) must be passed over in the present paper for two reasons, to wit, that the fragment is extremely small, and that it fairly bristles with easily recognizable 'Māgadhisms.' Examples of these are: *nikhamithā*, line 5; *heta*, *baṃbha[na]*-, *iyaṃ*, *hoti*, line 6 (*hoti* also line 9); *dasane*, line 7; *vuḍhānaṃ*, *paṭivīdhāne*, line 7; *ye* (read *bhūye*), line 9; *ane* (i. e. *aṇṇe*), line 10. It may be mentioned, however, that the dialect agreed with that of the Shāhbāzgarhi, Mansehra and Gīrnār recensions in maintaining *r* as opposed to the *l* of the Dhāuli, Jaugaḍa, and Kālsī versions as is shown by *rati* in line 9. This fact enables us to interpret *hiraṇṇa*- in line 7; it is a cross between native *hiraṇṇa*- (so the Gīrnār text) and 'Māgadhaṇ' *hilaṇṇa*- (so the Jaugaḍa and Kālsī redactions). Shāhbāzgarhi and Mansehra *dhiraṇṇa*- has long been recognized as a cross of the same type (cf. Shb. and Mans. *dhrama*-; and Db., J. and K. *dhaṇṇa*-); and I have tried to show in IF. xxiii, pp. 240, 241 that Shāhbāzgarhi *prati* is to be judged the same way; moreover I hope to show in my forthcoming paper mentioned below, that crosses of this type are far commoner than supposed. It is perhaps worth while noting that *-jina* in line 10 is to be read *rājine*, and so is identical with Mansehra *rajine* which has been recognized as standing for native *raño* (i. e. *rāño*) through the influence of 'Māgadhaṇ' *lājine*.

Another point that must be born in mind is the fact that the dialect of the Shāhbāzgarhi and Mansehra recensions is practically identical. In my opinion if we had texts absolutely free from 'Māgadhisms,' it would be absolutely identical. It may be remarked that the evidence of both texts makes it comparatively easy to detect 'Māgadhisms' in either individual text. Thus Shāhbāzgarhi *prati* shows that Mansehra *paṭi* is a 'Māgadhism';¹ similarly Mansehra *spagaṃ*, i. e. *spargaṃ* (Sanskrit *svargaṃ*) shows that Shāhbāzgarhi *spagaṃ* is a partial 'Māgadhism' (cf. J. and K. *svagaṃ*): the evidence of Shāhbāzgarhi and Mansehra *vagrena* (i. e. *vargena*) confirms this.

There are certain points of interest to the general Indo-European comparative philologist in the dialects of the Four-

¹ See Michelson, IF. xxiii, p. 240.

teen-Edicts of Asoka. For example long syllabic \bar{m} appears as \bar{a} —and this only—in the dialect of the Gīrnār version, e. g. *atīkrātam* (Sanskrit *atīkrāntam*). This shows that this dialect is not a linear descendant of Sanskrit. Again the short \bar{u} of Gīrnār *susrūsā*, *susrūsātām* is noteworthy in view of Avestan *susrušəmnō*. Moreover Shāhbāzgarhi, Mansehra, and Kālsī *kīti* come from *kid+iti*, not *kim+iti* as Johansson (Shb. ii, p. 52) has shown,¹ Likewise it is worth while noting that Gīrnār *sruṇāru*, Shāhbāzgarhi *śruṇeyu*, Mansehra *śruṇey[u]* agree with Avestan *surunaoiti* in structure as opposed to Sanskrit *śṛṇoti* as I shall shortly demonstrate in Zverg Sp. Furthermore the fact that the dialects of the Shāhbāzgarhi and Mansehra redactions have *st* corresponding to Sanskrit *ṣt(h)* would seem to indicate that the lingualization of *t* and *th* respectively in Aryan *ṣt* and *ṣth* (Avestan *št*) was Pan-Indic and not Proto-Indic. (We may say Pan-Indic, even if this is not strictly accurate, for nearly all the Indic languages point to this: cf. Sanskrit *ṣt(h)*, Gīrnār and Māgadhi Prākṛit *ṣt*, Pāli and ordinary Prākṛit, Dhaulī, Jaugaḍa, Kālsī, etc. *ṭth* (written *ṭh* on the Asokan inscriptions).

But in fairness I should remark that Gīrnār *uṣṭāna*- and other Middle-Indic words cited by Johansson to demonstrate his thesis that I. E. *tst(h)* became *st(h)* in the I. E. period, in reality are not valid evidence, quite irrespective of the correctness or falsity of his contention, as I hope soon to show in the *Indogermanische Forschungen*.

It is proper for me to state that with Johansson and Franke, I reject Senart's theory of historical and learned orthography in the inscriptions of Asoka.

Certain linguistic facts mentioned by me in the present paper will be proved at length in my 'Linguistic Notes on the Shāhbāzgarhi and Mansehra Redactions of the Fourteen-Edicts of Asoka' which is to appear in the American Journal of Philology, presumably in numbers 119 and 120. The same applies to the value of certain symbols used in these texts; certain linguistic statements concerning the dialect of the Gīrnār redaction will also be fully discussed in the same paper.

¹ According to Dr. Bloch the reading *kīti* on the Rāmpūrvā Pillar is really *kiṃ ti*. If *kīti* were correct we should connect it with Shb., etc. *kīti*: see IF. xxiii, p. 253.

Where there is dispute regarding the precise values of certain characters in the Gīrnār recension, I have in most cases briefly indicated the value I think should be assigned to said characters, and the reason thereof. But I expect to take these up systematically later.

In certain cases it is not easy to determine whether a given form in the Shāhbāzgarhi, Mansehra, and Gīrnār redactions is a 'Māgadhism' or is really native to the dialects of these texts. For example in the Shāhbāzgarhi and Mansehra versions two different formations in the gerund are to be found, namely, one in *ti* (i. e. *ttī*, Vedic *tvī*) and one in *tu*. Now there is but one form of the gerund in Dhāuli, Jaugada, and Kālsī recensions, to wit, that in *tu*. It therefore seems plausible to consider the gerunds in *tu* in Shb. and Mans. to be 'Māgadhisms,' especially as but one form of the gerund, that in *tpā* (Sanskrit *tvā*), is native to the Gīrnār redaction. Yet as the dialects of the Shb., Mans., Dh., J., and K. texts are in concord as opposed to the dialect of G. in some particulars—few, to be sure, when contrasted with the linguistic agreement of the dialects of Shb., Mans. and G. as opposed to the dialects of Dh., J., and K.—this conclusion does not necessarily follow.

It will be understood that in giving the characteristics of the dialects, the 'Māgadhisms' are for the most part passed over in silence. Where there is room for doubt, I have tried to demonstrate briefly whether the form is a 'Māgadhism' or not. Where a long elaborate proof is necessary to decide the point involved, I have given reference to my paper which is to appear in the AJP.

The orthography of the Shāhbāzgarhi and Mansehra redactions, as well as that of the Kālsī recension, limit our investigations to a certain degree. Thus it is impossible to say whether Shāhbāzgarhi and Mansehra *puna* is the equivalent of Gīrnār *puna* or Kālsī *punā*, or both; for vowel quantities are not distinguished in the Kharoṣṭhī alphabet; nor is *ī* distinguished from *î*, *ũ* from *ū* in the Kālsī redaction.

Bühler's editions of the Gīrnār, Shāhbāzgarhi, Mansehra, and Kālsī recensions in Epigraphia Indica ii, 447 ff.; and his ed's of the Dhāuli and Jaugada redactions in ZDMG. 39, 489 ff. and 37, 87 ff. respectively have been made the bases of our investigations; though his ed's of Shb. and Mans. in ZDMG. 43 and 44 have been consulted; as well as his ed's of Dh.

and J. in the 1st vol. of the Archaeological Survey of Southern India.

Franke, Pāli und Sanskrit, p. 108ff. should also be consulted for dialectic peculiarities. Johansson's essay on the dialect of the Shāhbāzgarhi (and incidently the Mansehra) redaction is a systematic exposition by a comparative philologist. I have consulted it constantly, but the material in this paper is drawn from the inscriptions themselves. It should be noted that Johansson does not state what the characteristics of the dialect are, and treats the general relations of this dialect with the dialects of the other redactions only in a general way (see ii, pp. 24, 25). The present paper and my "Linguistic Notes on the Shāhbāzgarhi and Mansehra redactions of the Fourteen-Edicts of Asoka" which is to appear in AJP. (presumably in no's 119 and 120), are designed to supplement Johansson's work.—Konow's treatise on the dialect of the Gīrnār recension is descriptive only, and nearly neglects the phonology.—Senart's treatment of the various Asokan dialects is now nearly antiquated, though valuable at the time.

With this general introduction ended, we will now proceed to investigate the separate dialects.

Dialect of the Shāhbāzgarhi and Mansehra redactions.¹

The most important characteristics of this dialect are: three sibilants which correspond as a whole to the same sounds in Sanskrit, though subject to certain phonetic laws which have a slightly modifying effect² (*paśu-*; *śramaṇa-*; *aśilasa*; loc. pl. *-eṣu*; etc.); *r* is not assimilated to any adjacent consonants whatsoever³ (*śravakaṃ*, *śramaṇa-*, *suśruṣa*, *sahasra-*, *mitra-*,

¹ In the following citations, the forms are found in both versions, unless expressly stated to the contrary.

² These laws are: 1. *ś-* is dissimilated to *s* if the next syllable begins with *ś*, 2. intervocalic *s* is assimilated to *ś* if the preceding syllable contains *ś*, 3. *ṣiy* and *ṣy* become *śś* (written *ś*), 4. Aryan *št* and *sth* become *st*. Exceptions are 'Māgadhisms'. The whole matter is taken up in detail in my paper which is to appear in the AJP. Examples are: *suśruṣa*, *anuśaśiśaṃti*, *manuśa-*, Shb. *tistiti*, Mans. *[ti]stitu*.

³ Such is the view of Johansson. In AJP. I hope to show that we can hardly avoid assuming that *r* was in fact assimilated in the combinations *ārṣ* and *ārṣy* (in this case *ṣṣ* not *śś* is the result).—In the same periodical I take up the entire question as to whether *dhrama-* is merely

parakramena, *agrena*, *vagrena*, i. e. *vargena*, *athrasa*, i. e. *arthasa*, *dhrama-*, i. e. *dharma-*, *pruva-*, i. e. *purva-*, *savram*, i. e. *sarvam*, etc.); vocalic *r* becomes *ir* ordinarily, *ur* after labials (Shb. *kiṭram*, i. e. *kirtam*, Mans. *vudhrama*, *vudhreṣu*, i. e. *vurdh-*, Shb. *mrugo*, i. e. *murgo*);¹ *h* in the combination *hm* is assim-

graphic for *dhrama-* (as Senart, Bühler and Johansson hold) or really represents *dhrama-* (as Pischel holds), and similar combinations. I come to the conclusion that those who hold that *dhrama-* is merely graphical for *dharma-* are right. The matter is an exceedingly complicated one, and not to be disposed of in a few words. I therefore ask the reader to consult my article in AJP.—Johansson holds that *r* is assimilated to dental stops (which then become linguals) in the dialect of Shb. (He does not discuss the dialect of Mans. in this connection.) I have exhaustively taken up this problem in the previously mentioned paper. My conclusions are that *r* in fact is retained before dental stops in both Shb. and Mans. but that 'Māgadhisms' have largely supplanted the true vernacular forms in both texts. Briefly my arguments are as follows: it being agreed that the language of Shb. and Mans. is practically identical, it would be strange if Mans. and Shb. should differ in such a point. Now in Mans., *athra-* (merely graphic for *artha-*) occurs a dozen and a half times; so there can be no question but that in the dialect of Mans. *r* is not assimilated to an immediately following *th*, for no other correspondent to Skt. *artha-* is found in Mans. This makes it certain that the single *athra-* of Shb. is the true native form, and that *aṭha-* (i. e. *aṭṭha-*), found more than a dozen times, is a 'Māgadhism' as *aṭha-* and this only is the correspondent to Skt. *artha-* in the Dhauli and Jaugaḍa versions of the Fourteen-Edicts as well as in the six recensions of the Pillar-Edicts. As a parallel where a 'Māgadhism' has nearly driven out the native form in Shb. but never occurs in Mans., we have *sava-* (the true native form is *savra-* which is found several times in Mans. and a few times in Shb.). The word *aṭha-* in Shb. is a blend of native *athra-* and 'Māgadhan' *aṭha-* exactly as Shb. and Mans. *dhramma-* is a cross between *dhrama-* and *dhamma-* (this last has long been recognized). Mans. *vadhrite* (i. e. *vardh-*) and *vadhrayīṣati* (i. e. *vardh-*) show that *r* was not assimilated to an immediately following *dh*; but 'Māgadhisms' have largely usurped the place of the true native forms in Mans., and exclusively obtain in Shb. (On Shb. *diyadha-* see AJP.) 'Māgadhisms' or crosses between 'Māgadhisms' and the true native correspondent to Indic *rt* have ousted the vernacular correspondent in both Mans. and Shb.

¹ The history of Indic *r* in both Shb. and Mans. is treated in detail in the paper mentioned above. Scholars are divided as to whether *mrugo* represents *murgo* or *mrugo*. Bühler holds the latter, Johansson the former. Likewise there is dispute as to whether *vudhra-* represents the actual pronunciation or is merely graphical for *vurdha-*. I have tried to show that the view of those who hold that *mrugo* and *vudhra-* are respectively merely graphical for *murgo* and *vurdha-* alone is tenable. I have also tried to demonstrate that all other apparent products of Indic *r* than *ir*

lated (*bramana-*); *tm* is retained¹ (Mans. *atma-*); *sm* before *i* becomes *sp*² (loc. sing. of *a*-stems, taken from the pronominal declension, **aspi*, *-*asmi*, cf. Avestan -*ahmi* as opposed to Sanskrit -*asmin*); *su-* and *sv-* become *sp*-² (*spamikena*, cf. Dh. J. K. *suṽmikenā*, Shb. *spasunaṃ*, Mans. *spasuna*,³ Skt. *svasar*-. Mans. *spagraṃ*, K. etc. *svagaṃ*, Skt. *svargam*); *viy* and *vy* become *vv*⁴ (Shb. gerundive -*tava-*, i. e. *tarva-*, e. g. *vatavo*, Skt. *vaktavyās*: [see Whitney, Skt. Gr.³ § 964c end], *divani*, Skt. *divyāni*); *dv-* becomes *b*-⁵ (Shb. *badaya-*, a mistake for *badāsa-*); *tv* becomes *tt*, written *t* and *tt* (gerund in *tī*, Vedic *tvī*; *tada-ttaye*, Skt. *tadātva-*); *my* becomes *mm* (Shb. *samma-*, Skt. *samyak-*); Aryan *št* (Skt. *ṣṭ*, Av. *št*) and *šth* (Skt. *ṣṭh*, Av. *št*) alike become *st* (Shb. *asta-*, so probably in the 13th edict, Shb. *dipista*, Skt. (a)*dipīṣṭa*; Shb. *tistiti*, Skt. **tiṣṭhitvī*, Mans. *tistitu*, Skt. **tiṣṭhitu*); *ñj* becomes *ññ*, written *ñ* (Shb. *vañanato*, Skt. *vyañjanatas*); *d* is retained in the Iranian loan-word *dipi*; intervocalic *j* becomes *y*⁶ (Shb. *raya*, *samaye*, *Kaṃboya-*, *Kaṃboyeṣu*, *prayuhotave*;

and *ur* in both Shb. and Mans. are either 'Māgadhisms' or blends of 'Māgadhisms' and native forms; and that *r* does not lingualize following dental stops in the true native forms of both Shb. and Mans. The whole problem is exceedingly complex and can only be summarized here.

¹ Native *tm* in Shb. is completely ousted by 'Māgadhan' *tt* (written *t*) exactly as native *prati* by 'Māgadhan' *paṭi* in Mans. (See Michelson, IF. xxiii, pp. 240, 241.)

² The exact value of the symbol which Bühler transcribes by *sp* is in dispute. Provisionally I follow Bühler. The 'Māgadhan' loc. sing. -*asi* has largely taken the place native -*aspi* in both Shb. and Mans.

³ Graphically *m* is often omitted.

⁴ In Mans. the 'Māgadhan' gerundive -*taviya-* has completely usurped the place of native -*tava-* as Franke already has said; it is found a few times in Shb.

⁵ In my judgment (contrary to the opinion of Johansson), Mans. *duvadaśa-* is a Māgadhiśm as well as Shb. *duvi* and Mans. *duve* (cf. Kālsī *duve*, etc.)

⁶ Johansson, Shb. i, p. 177, 63 of the reprint, judges Shb. and Mans. *uyanaspī* (so for his -*asi*) wrongly. According to him it is 'eigentl. wohl *ujana-* st. *ujjana-*.' Shb. and Mans. *uyanaspī* is merely graphical for *uyyāna-*. That is to say that -*d y-* in word-composition have a different history than -*dy-* when not in word-composition (per contra, note *aja*, i. e. *ajja*). The same holds true for the dialects of the Gīrnār, Dhaulī, Jaugāḍa, and Kālsī recensions of the Fourteen-Edicts; cf. G. *uyānesu*, Dh. (u)*yān[asi]*, J. and K. *uyānasi* as contrasted with G., Dh., J. *aja*, K. *ajā* (Skt. *adya*, Vedic *adyā*). That the *y* is purely graphic for *yy* and the *j* for *jj* is shown by Pāli *uyyāna-*, *uyyāma-*, *ajja*. See Henry, Précis, section 87, 3 and E. Müller, Pāli Gr. p. 49; and for the principle

Mans. *pra[yuho]taviye*); intervocalic *h* is either lost, or weakly pronounced (*ia*, Mans, *maa* as contrasted with Shb. *ma[ha]*); Indic *niḥ* appears as *ni* in compounds (Shb. *nik[r]amatu*, Mans. *nikramamtu*, *nikramiṣu*; Shb. *nikramanam*);¹ *h* as the correspondent to Indic *dh* in Shb. *iha*; Indic **utthānam*² is retained

Jacobi, Erz. section 36. Windisch in his essay on Pāli (in the transactions of the International Congress of Orientalists held at Algiers) overlooks this fact when he takes Pāli *uyyāna-* as a Māgadhan relic. In Prakrit *-d y-* in word-composition necessarily has the same history as *-dy-* when not in word-composition, i. e. *jj*, Māgadhi *yy*. Against Johansson's supposition that where we have *y* for *j* in Shb. (and Mans.), it can be safely considered a 'Māgadhi' is the following important fact, viz., that *y* for *j* is never found in the Dhauli, Jaugaḍa, or Kālsī redactions of the Fourteen-Edicts, and yet it is agreed that the dialect of the 'Māgadhi' original—of which Shb. and Mans. are translations—was composed in a dialect essentially the same as the dialects of these redactions. That *j* becomes *y* in Māgadhi Prakrit according to the native grammarians proves nothing, for Māgadhi Prakrit has only two noteworthy agreements with the Māgadhi dialects of the Asokan inscriptions, namely that *l* takes the place of *r* and *-e* of original *-as* (*-o* in the other dialects): but Māgadhi Prakrit has one special agreement with the dialect of the Gīrnār redaction, namely that Aryan *ṣt* (Skt. *ṣṭ*) and *ṣth* (Skt. *ṣṭh*) fall together in *st*. I take Shb. and Mans. *majura-* to be a 'Māgadhi': cf. the correspondent in the versions of Dh., J., K.

¹ Johansson (Shb. ii, p. 17) is in error when he places *nikramiṣu* in the same category as *dukaram*, Shb. [*dukaṭam*, Mans. *dukata* (final *m* graphically omitted). In the first place [*dukaṭam* and *dukata* are 'Māgadhis' as I shall show in AJP. (cf. Kālsī *dukaṭam*), and so must be left out of consideration. In the second place, note the difference in Kālsī *dukaṭam*, *dukale* and *nikhamamtu*, *nikhamiṣu*, *nikhamiṭhā* (possibly *-thā*), *vinikhamane*; cf. also Dhauli and Jaugaḍa *nikhamāvū* (for the formation see Johansson, Shb. ii, p. 89, footnote 2). Shb. *joti-kamdhani* is certainly a 'Māgadhi' as is shown by Mans. *agi-kamdhani*, K. and Dh. *agi-kamdhāni*; Gīrnār *agi-kamdhāni* points in the same direction, cf. the contrast with *dukaram*, *dukaṭam*. Johansson read Gīrnār *agikamdhāni*, and so offered an explanation which he thought preferable to the one given, but the *kh* is absolutely certain: see the plate in Epigraphia Indica ii.

² I see no reason why Shb. *uthanam*, i. e. *utthānam*, should not be considered the true native word, and hence the exact equivalent of Skt. *utthānam*. The fact that the termination in any case is the vernacular one, supports this view. Per contra note the 'Māgadhi' endings *-e* and *-asi* in Mans. *uthane*, Shb. *uthanasi*, Mans. [*uthanasi*]. That these last cited forms are 'Māgadhis' is absolutely certain as Johansson previously saw. Johansson regards Shb. *uthanam* also as a 'Māgadhi'. This is highly improbable because **uthāna-* never is found in any of the so-called Māgadhi versions of the Fourteen-Edicts. That the *th* of Shb. *dhrama-dhithanaye* and *dhramadhithan[e]* is not a careless writing for *ṭh* is shown

(written *uthanaṃ*); *śc* appears as *c*¹ (graphical for *cc*? *paca*)²; the *r* of *Kerala-*; the nom. sing. masc. of *a*-stems a few times apparently ends in *-a* (Shb. *jana*, etc.); original *r*-stems become *u*-stems (*pituna*, Shb. *bhratunaṃ*, Shb. *spasunaṃ*, Mans. *spasuna*, Shb. and Mans. *matapituṣu*); nom. pl. of the cardinal number 4 *caturō* (Shb. *cature* with 'Māgadhan' *-e* for *-o*); the locative plurals *pañcaṣu* (Shb. *pa[ṇca]ṣu*, Mans. *paṇ[caṣu]*) and *ṣaṣu* by the analogy of *a*-stems; the genitive sing. of the first personal pronoun *maha* (Shb. *ma[ha]*, Mans. *maa*:² see above); *ayo*³ as a nom. sing. (only in Shb.); the peculiar optatives

by Mans. *dhramadhithanaye*, *dhramadhithane*, Kālsī *dhaṇmādhithānāye*. [For the views of Johansson, see his treatise on the dialect of the Shb. recension, i, pp. 165, 166 (51, 52 of the reprint), 168, 169 (54, 55), 170 (56); ii, pp. 17, 18.] These forms are 'Māgadhisms.' On 'Māgadhan' *uṭhāna-* and Gīrnār *uṣṭāna-*, see my coming paper in IF.

¹ So Bühler reads in the two occurrences of the word in Shb. as well as Mans. in his ed's of these recensions in ZDMG. 43, 44; but in his ed's in Epigraphia Indica ii he reads *pacha* for the occurrence in the 13th edict for both Shb. and Mans. (Bühler in EI. *chh* for *ch*); so that I am not sure but his readings in EI. are really a mistake. The devanāgarī transcript in ZDMG. settles the reading in the 1st edict. If not a blunder, then Mans. and Shb. *pacha* (his *pachha*) in the 13th edict are 'Māgadhisms;' cf. Kālsī [*pa*]chā (B's [*pa*]chhā). [His reading *pacā* (*pachā* in his transcription) in the 13th ed. of G. in ZDMG. 43 is an error.]

² Johansson, Shb. ii, section 118 (end) explains this as 'wohl eine Konfusionsbildung von *mama* und *aham*.' This does not strike me as convincing. The same form is found in Prākṛit. Pischel's explanation (Gr. section 418) that it corresponds to Skt. *mahyam* is phonetically impossible. The simplest solution seems to me is that *maha* is for **mama* by influence of **mahyam*. If we cared to go outside the Indic sphere, other solutions—all more or less bold—readily would suggest themselves.

³ According to Johansson, Shb. ii, p. 46, under different accentual conditions *-am* becomes *-aṃ* and *-o* in our dialect. I am not convinced of this. To begin with, a considerable portion of the material brought forward in reality is not decisive as Johansson himself admits (see p. 45, footnote 1). If the law be correct, extensive levelling must have taken place. It should particularly be observed that *ay[aṃ]* is found as well as *ayo*. In my opinion *ayo* is for *ayaṃ* by the analogy of the nom. sing. masc. of other pronouns such as *so*, *yo*, etc. The form *ayi*, I hold to be a hyper-Māgadhimism: see IF. xxiv, p. 55. *Iyo* is a blend of native *ayo* and 'Māgadhan' *iyaṃ*, and is directly comparable to *dhraṇma-* a cross between native *dhrama-* and 'Māgadhan' *dhaṇma-*. The sole support for Johansson's theory according to the text of Bühler in EI. seems to be *dhramo*, acc. sing. at Shb. xii, 6; and it is not venturesome to pronounce this a simple error (cf. Mans. *dhramaṃ* in the corresponding passage as well as the quite numerous other accusative singulars of masculine

siyasu and *hamñeyasu* (Mans. has lacunas where the forms would otherwise occur); gerund in *tī* (written *tī*) corresponding to Vedic *-tvī* (Shb. *tistiti*, Mans. *darśeti* **darśayitvī*); certain lexical features such as *atra*, *apagratho*¹ (Mans. has a lacuna in the corresponding passage), Shb. *meñati* (if not a blunder for *ma-* it corresponds to Gothic *mainjan*, Old Bulgarian *mēniti*), Shb. *joti-* (Skt. *jyotiṣ-*), Shb. *vuta* (i. e. *vuttā*, Skt. *uptāni*), Shb. *vidhenam* (if not a mere blunder; see Johansson, Shb. i, p. 134, 20 of the reprint), Shb. *vracanti*, Shb. and Mans. *tathaṃ*,² Mans. *vaṃ*, Shb. *vo*,³ Mans. *aśatasa*, Shb. *aśamanasa*, Mans. *spasuna*, Shb. *spasunaṃ*, Shb. *yo*,⁴ Shb. *yamatro*.⁵

From the above it will be seen how much nearer to Sanskrit the dialect of the Shāhbāzgarhi and Mansehra redactions is than the dialects of the other versions of the Fourteen-Edicts. Geographically this is just what we should expect.

a-stems in both Shb. and Mans.). On the gender of *ayo*, see Johansson, l. c., ii, pp. 34 (footnote 2), 79. *Iyaṃ* in both Mans. and Shb. is a 'Māgadhiism'. I may add that J's [*imo*] vanishes in the ed. in EI. and is replaced by *imaṃ*; his *im*[**o*∗] by *im*. which can be for *imaṃ*; and *ayi* is read at Shb. vi, 1, *ayo* at Shb. xiii, 11.

¹ On the etymology of this word, see Bühler, ZDMG. xliii, p. 174.

² On *tathaṃ*, see Johansson, Shb. ii, p. 39.

³ On *vo*, see Johansson, ii, pp. 44, 45; Franke, Pu Skt., pp. 105, 151. Mans. *vaṃ* corresponds to Skt. *evam*; cf. Johansson, Shb. i, p. 154, 40 of the reprint.

⁴ The etymology of this particle has not yet been solved. Johansson, Shb. i. pp. 154, 155 (40 and 41 respectively of the reprint) rightly saw that Bühler's explanation was untenable. The suggestion of Johansson that *yo* stands for **yava*, a doublet of *eva*, is too far-fetched. His alternative will not be taken seriously. *Yo* is a fossilized nom. sing. masc. of *ya-* as is shown by the correspondents to Shb. *yo* (not the particle) at x, 21 in the Mansehra and Kālsī redactions, namely, *yaṃ*. Similarly Shb. *so* and 'Māgadhi' *se* as adverbs are fossilized nom. sing. of *sa-* as is shown by the Gīrnār correspondent *ta* (**tad*). (Shb. *so* and 'Māgadhi' *se* are treated by Johansson, Shb. ii, pp. 42–44 without coming to any definite decisions. However brilliant his suggestions are, his combinations are strained and complicated as compared with the solution offered above.) Shb. *cayo* (also hitherto unsolved) is simply *ca+yo*.

⁵ On the etymology of this word, see Johansson, Shb. ii, p. 98. Here again, I think Johansson goes too far afield in turning to extra-Indic Indo-European languages to explain this difficult word, admitting that occasionally we must do so to properly explain certain Middle-Indic words. I see no reason why *yamatro* may not be analyzed as *ya+mātro*, a possessive adj. compound meaning 'as many as.'

Indeed the dialect of Shb. and Mans. hardly belongs to the Middle-Indic stage of developement.

We have next to take up the general relations with the dialects of the other recensions.

Special points of contact with the dialect of the Girnār version.

These are very numerous. It is instructive to notice how much more striking the points of contact are between the dialect of Shb. and Mans. and the dialect of G. than between the dialect of Shb. and Mans. and the 'Māgadhan' dialects.

Examples are: final *-as* appears as *-o*;¹ *st* is retained (Shb. Mans. *nasti*, Girnār *nāsti*; Shb. *dhramasamstave*, G. *dharmasamstavo*; Shb. [*ha*]stino, Mans. *hastine*, G. *hasti*-; Shb. *vistritena*, G. *vistatana*, etc.); the sound *r*; the sound *ṇ*² (Mans. *dhramacarāṇa*, Shb. *dhramacarāṇam*, G. *dharmacarāṇam*; Shb. Mans. *bramaṇa*-, G. *brāhmaṇa*-, etc); *ññ* (written *ṇṇ* and *ñ*) from Indic *ny*³ (Shb. G. *aṇṇa*-, *aṇa*-, Mans. *aṇa*-); *jñ* becomes *ñ* initially, and either *ññ* or *ñ* medially (Shb. *ñatinam*, Mans. *ñatina*, G. *ñātinaṃ*; Shb. *raṇa*, *raño*, G. *rāṇā*, *rāño*);⁴ *ll* (written

¹ In Mans. 'Māgadhan' *-e* has entirely wiped out native *-o*.

² In cases endings *ṇ* is replaced by *n* through the analogy of other words where dental *n* is obtained phonetically. This is true for Mans., Shb., and G. There are a couple of cases where the same phenomenon takes place in suffixes in the dialect of Shb. See Johansson, Shb. i, p. 166 (52 of the reprint), and Michelson, AJP. xxx, l. c. J's *ka[lanam]* vanishes in Bühler's ed. in EI. ii; I take *garana* to be a blunder for **garaha*, following Bühler. On *Tambapamni*, see Michelson, IF. xxiv, p. 55; also on *Pitinika*-. On Bühler's reading *kāranam* in G. see Michelson, l. c. p. 53.

³ In Mans. we have doublets with *ṇṇ*² (written *ṇ*); e. g. *aṇa*-, *aṇa*-, *maṇati*, *maṇati*. Similarly Mans. *puṇam*, *puṇam* but always Shb. *puṇam* (G. *puṇnam*, Skt. *punyaṃ*). I know no thoroughly satisfactory explanation of the doublets. The best I can offer at present is that as *ṇ* and *ñ* alike were foreign to the dialect of the Māgadhan scribe, he was careless in distinguishing the two or was ignorant of their proper usage. The forms with *ṇ* then are purely fictitious. For the possibility of the principle, see Johansson, Shb. ii, p. 43.

⁴ The alphabets of Shb., Mans., and G. hinder us from being positive in the matter. For Shb. *raṇa*, *raño* can be either *rāṇṇā*, *rāṇṇo* or *rāṇā*, *rāṇo* (and conceivably *rāṇṇā*, *rāṇṇo*); while G. *rāṇā*, *rāṇo* can be either *rāṇā*, *rāṇo* or *rāṇṇā*, *rāṇṇo* (it will be recalled that long vowels are not shortened before two consonants in the dialect of G.). Pāli and the various Prākṛit languages point to *ññ* in the forms. Shb., Mans. *aṇapemi*,

l) from Indic *ly* (Shb. Mans. *kalāṇa-*, G. *kalāṇa-*; cf. Pāli *kallāṇa-*); *bh* is retained in the correspondents to Skt. *bhavati*, *bhūta*-¹ [as a participle] (Shb. Mans. *bhoti*, G. *bhavati*; Shb. Mans. *bhuta-*, G. *bhūta-*); partial agreement is not assimilating *r* to adjacent consonants² (Shb. Mans. *savratra*, i. e. *sarvatra*, G. *sarvatra*; Shb. Mans. *parakramaṇa*, G. *parākramaṇa*; Shb. G. *priyo*, Mans. *priye*; Shb. Mans. *śramaṇa-*, G. *sramaṇa-*; Shb. *śatasahasra-*, G. *satasahasra-*; Shb. Mans. *bramaṇa-*, G. *brāmhana-*, etc.); Indic *kṣ* becomes *cch*, initially *ch*³ (written *ch* in both cases), e. g. Shb. *achati*, G. *achatiṃ*, Shb. [*chaṃ*]ti, G. *chāti*[ṃ]; *ty* becomes *cc* (written *c*), e. g. Shb. *apaca*, G. *apacaṃ*; initial *y* is retained in relative pronouns and adverbs (frequently omitted in the 'Māgadhan' versions; so it would appear that it was either wholly lost in actual pronunciation or very weakly pronounced); *evaṃ* not *hevaṃ* is the correspondent to Sanskrit *evam*; the inflection Shb. *raṇa*, *rano*, G.

Shb. *aṇapayami*, Shb. *aṇapitaṃ*, Mans. *aṇapita*, Shb. *aṇapeṣaṃti*, Mans. *aṇapayisati* offer some difficulty when contrasted with G. *āṇapayāmi*, *āṇapitaṃ*, *āṇapayisati*. Johansson (Shb. i, p. 165, 51 of the reprint) considers the initial *a* as long and that *ñ* phonetically became *ṇ*. Note that we have the same phenomenon in Pāli, e. g. *rañṇā*, *rañṇo*, *yañṇo*, *añāpeti*, *añatti*. In ordinary Prākṛit *jñ* becomes *ṇṇ* (initially *ṇ*), in Māgadhi and Paisaci *ññ*. For the agreement of Pāli with Shb. Mans. in this point as opposed to G., note Pāli *hirañṇaṃ*, Shb. [*h*]i[ra]ṇa-, Mans. *hiṇa*- (read *hiraṇa*-), G. *hiraṇa*-.

¹ 'Māgadhan' *hoti* has nearly everywhere usurped the place of native *bhoti* in Mans.; similarly *hūta*- (written *huta*-) the place of *bhūta*- (written *bhuta*-); *hotu* has everywhere taken the place of *bhotu*. In Shb. *hoti* is found a couple of times. In G. *hoti* is found a few times but *bhavati* is greatly predominant. That *hoti* is a 'Māgadhi' is shown by the fact that the Dhauli, Jaugaḍa, and Kālsī redactions have *hoti* and this only as the correspondent to Sanskrit *bhavati*. Similarly regarding *huta*- and *hotu*.

² The law for the retention or assimilation of *r* in conjoint consonants in the dialect of G. is: *r* is retained after stops and sibilants; and before *v*; is assimilated to following stops, sibilants, and nasals. Exceptions are 'Māgadhisms.'

³ Where we have *kh* in G., Shb., Mans., these are 'Māgadhisms' as is shown by the fact that in the dialects of the Dhauli, Jaugaḍa, and Kālsī recensions, *kkh* (written *kh*, *kh* and not *kkh* of course initially) is the regular correspondent to Indic *kṣ*. Cf. Johansson, Shb. ii, p. 23. [According to Johansson, Bühler reads *saṃ[chi]tena* in ZDMG.; in EI. he reads *saṃkhitena*.] I may add that I reject Pischel's 'law' as Johansson and, I think, Bartholomae before me. As to whether Aryan *žžh* is reflected by *jjh* in Middle-Indic languages, at present I am not able to judge.

rāñā, *rāño* (and not *-jin-*); *mayā* (written *maya* in Mans. and Shb.) as the inst. sing. of the 1st personal pronoun (and not *mamayā*); *ahaṃ* (and not *hakaṃ*) as the nom. sing. of the 1st personal pronoun; *y* (and not *h*) in the ending of the 1st person sing. of the optative (Shb. *vracheyam*, G. *gacheyam*); *o*-conjugation of *karoti*, *prati* (not in Mans.), and not *paṭi*, corresponding to Skt. *prati* (see Michelson, IF. xxiii, pp. 240, 241).

In the American Journal of Philology I shall show that it is possible that the law in the dialect of the Shāhbāzgarhi and Mansehra versions that *ś* converts a following intervocalic *s* to *ś* is to be connected with the law that in the dialect of the Gīrnār redaction original *ś* (historical *s*) converts a following *st* to *st̥*; it is also probable that Shb. Mans. *st* and G. *st̥* from Aryan *sth* are to be brought into correlation: observe the retention of the sibilant and the deaspiration in both cases, even if the final result is different. It is certain that in the dialects of all three recensions that Indic *sth* becomes *st*, but 'Māgadhisms' by chance take the place of the native sounds in the case of both the Shāhbāzgarhi and Mansehra versions.

It is more problematic if the law that in the dialect of the Gīrnār recension that original *ārṣ* and *ārṣy* become *ās* (Michelson, IF. xxiv, pp. 53, 54) should in any way be united with the apparent law that in the dialect of Shb. and Mans. that *r* is assimilated to an immediately *ṣ* after *ā* (Michelson, AJP. xxx), as vowel quantities are not distinguished in the Kharoṣṭhī alphabet nor are geminations. If the two are to be brought into rapport with one another, the law would be as follows: *r* is assimilated to an immediately following *ṣ* in the combinations *ārṣ* and *ārṣy* in the dialects of Shb. Mans. and G. becoming *āṣ(ṣ)* in the dialect of Shb. Mans., *ās* in the dialect of G.; original *ārṣ* remains in Shb. Mans.¹ but becomes *ās* in the dialect of G.

¹ Cases where the *r* is omitted are probably 'Māgadhisms.' Yet it is possible that the process which was completed in the case of *ārṣ*, was beginning to take place in the case of *ārṣy*, and hence the graphic fluctuation. The fact that *r* is assimilated before *ṣ* but not before other consonants in the dialect of Shb. and Mans., may be accounted for by the fact that *ṣ* as well as *r* is a lingual consonant: *r* would naturally be more readily assimilated to a consonant of its own class than other consonants. I call attention to the fact that in the American Journal of Philology I have shown that, contrary to the opinion of Johansson, *r* is not assimilated to immediately following dental stops in our dialect, nor are the dental stops converted to lingual stops by the influence of the preceding *r*.

**Special points of contact with the dialects of both the
Kālsī and Girnār redactions.**

These are but few in number. Examples are: the contraction of *ayi* to *e*¹ (Shb. Mans. *pujetaviya*, K. *pujetaviya*, G. *pūjetayā*, a blunder for **pūjetavyā*; Shb. *lekhapeśami*, K. *lekhāpeśāmi*; Mans. *hapeśati*, Shb. [*hapeśati*], G. *hāpeśati*; Shb. [*vadhe*]*śamti*, *aṇapeśamti*; Shb. *aloceti*, G. *alocetpā*, Mans. *draśeti*; Shb. *vijetavi[ya]ṇ*, G. *vījetavyaṇ*; Shb. *praṭivedetavo*, *paṭrivedetavo*,² G. *prativedetavyaṇ*); the phonetic correspondent to Sanskrit *manuṣyā-*, Shb. Mans. *manuśa-*, i. e. *manuśśa-*, G. *manusa-* i. e. *manussa-*, K. *manuṣa-*,³ i. e. *manuṣṣa-*; *-eyu* (and not *evu*) as the ending of the 3d person pl. of the optative active (Shb. *avatrapeyu*, *śruṇeyu*, Shb. Mans. *vaseyu*, *suśruṣeyu*, Mans. *śruṇey[u]*, Mans. *haveyu*, G. *vaseyu*, K. *ṣuneyu*, *ṣuṣuṣeyu*, *huveyu*, *-neyu* i. e. **haneyu*).

It is an acknowledged fact that in edicts i—ix, the dialect of the Kālsī recension is practically pure ‘Māgadhan,’ with but few traces of the native dialect. In edicts x—xiv the local dialect is prominent, but ‘Māgadhisms’ are not infrequent. It is probably due to this that we are unable to point out more special points of contact of the dialects of Shb., Mans., G., and K.

**Special points of contact with the dialect of the Kālsī
recension.**

For the reason stated above, few special points of contact can be shown, even if they existed. Examples are: the con-

¹ In Dh. and J. *ayi* is uncontracted; as also in the ‘Māgadhan’ portion of K. ‘Māgadhan’ *ayi* for *e* has forced itself into several words in Shb., Mans., and G. I consider that Johansson’s attempt to formulate a law determining under what circumstances *ayi* is retained and when contracted in the dialect of Shb. and Mans. (the dialect of G. is not treated) is a failure. In my judgement *ayi* phonetically contracts to *e* in the dialects of G., Shb., and Mans. under all circumstances. The fact that Shb. and Mans. are not always in agreement in the use of *ayi* and *e* distinctly points in this direction. For the principle involved, see Franke, Pāli and Sanskrit, p. 109.

² On Shb. *praṭi* and *paṭri*, see Michelson, IF. xxiii, pp. 240, 241.

³ This is the true native word. *Manusa-*, in the ‘Māgadhan’ portion is due to the influence of ‘Māgadhan’ *munisa-* which is also found in the ‘Māgadhan’ portion of K. This does not affect the fact that ‘Māgadhan’ *munisa-* itself is a contamination of **manusa-* and **pulisa-* (Michelson, IF. xxiii, p. 254 ff.).

traction of *aya* to *e* in the 3d sing. indicative and 3d pl. of the imperative of the causative¹ (Shb., Mans., K. *pujeti*, Shb. *paṭ[r]ivedetu*,² Mans. *paṭivedetu*,² K. [*paṭi*]vedemtu, Shb. *rocetu*,² K. *locetu*,² Shb. Mans. *aradhetu*,² Shb. *aradheti*, Mans. *aradheti*, Shb. *vaḍheti*, Shb. *anuneti*); Shb. Mans. K. *kiti* from **kid* **iti* (Johansson, Shb. ii, p. 52); *imaṃ* (written also *ima* in Shb. and Mans.) as nom. acc. sing. neutre; *i* in the gen. sing. of Shb. Mans. *etisa*, K. *ētiṣā* (as shown by Shb. *imisa* we should expect this in Mans. and the corresponding form in K., but 'Māgadhisms' have usurped the place of the native words).

Special points of contact with the dialects of the Dhauli, Jaugaḍa, and Kālsī (edicts i—ix) recensions.

It will probably always be a matter of dispute as to what are special points of contact between the dialect of the Shāhbāzgarhi and Mansehra redactions on the one hand and the dialects of the 'Māgadhan' versions on the other. For it is sometimes difficult to determine whether the seeming points of contact are not after all nothing more than 'Māgadhisms' in the Shāhbāzgarhi and Mansehra versions. In some cases absolute tests are wanting, and the matter becomes more or less subjective. For example, I am persuaded that gerunds in *tu*, the *iy* passive, the word *cu* 'but' in Shb. and Mans. are really 'Māgadhisms', and not special points of contact with the dialects of the 'Māgadhan' versions.³ I am confident that

¹ The contraction of *aya* in these forms is foreign to the dialects of the Gīrnār, Dhauli, and Jaugaḍa redactions of the Fourteen-Edicts. Hence where *aya* remains uncontracted in these forms in Shb. Mans. K., we can safely conclude that these cases are 'Māgadhisms.' (Exactly as where *ayī* remains uncontracted to *e* in the dialects of Shb., Mans., G., and K.) Johansson, Shb. i, p. 141, 142 (27 and 28 of the reprint) attempts to formulate a law determining under what circumstances *aya* phonetically remains or is contracted to *e*—successfully in my judgment, only he does not make use of the principle of 'Māgadhisms' in explaining the apparent exceptions. *Anuneti* included for convenience.

² 3d pl.; *m* graphically omitted.

³ For an argument in favor of holding such gerunds in *-tu* as occur in Shb. and Mans. to be 'Māgadhisms', see above p. 82. An argument to show that the *iy* passive in Shb. and Mans. is a 'Māgadhism' is that we should otherwise have to assume that *iyi* remained or was contracted to *ī* in both Shb. and Mans. under unknown conditions; whereas *iyi* remains in Dh., J., and K. Moreover the present passive in *iy* is the only present

the following are real points of contact and not 'Māgadhisms': the contraction of *ava* to *o* in the correspondents to Skt. *bhavati*, *bhavatu* (Mans., Shb. *bhoti*, Shb. *bhotu*; Dh. J. K. *hoti*, *hotu*); original vocalic *m̐* appears as *a*+*a* nasal (Shb. Mans. *atikram̐tam*, Dh. J. K. *atīkram̐tam*); the initial *i* of *iti* is lost after immediately preceeding vowels; the dat. sing. of *a*-stems ends in *-āye* (written *-aye* in Shb. and Mans.); the oblique cases in the sing. of *ā*-stems ends in *-āye*¹ (written *-aye* in Shb. and Mans.); *saṃtam* as a nom. sing. of the present

passive found in the dialects of the Pillar-Edicts. The fact that Mans. *ara. isu* (i. e. *arabhisu*) corresponds to Shb. *a[rabh]i[yisu]* points in the same direction. 'Māgadhan' *s* for native *ṣ* should be observed in the termination of both words. Note too the Shb. passive *haṃnāṃti* (**hany-*) with active ending.—It should be noticed that *cu* (and not *tu*) alone is found in the Kālsī redaction of the Fourteen-Edicts as well as the various recensions of the Pillar-Edicts. The *tu* of the Dhauli redaction of the Fourteen-Edicts then would be a trace of the true local vernacular (cf. above). — This does not make it possible to declare *cu* the phonetic equivalent of Skt. *tu*, as *t* before *u* remains in the dialect of the Delhi-Sivalik version of the Pillar-Edicts (cf. *tuthāyatanāni*, Skt. *tuṣṭyāyatanāni*) On the etymology of *cu* see Michelson, IF. xxiii, p. 256 ff. I may add that I hold Shb. and Mans. *hida* to be a 'Māgadhism' also. Similarly Mans. *hidam*, if not a pure blunder.

¹ Johansson's explanation of this form is wholly erroneous. As Pischel (see his Gr. d. Pkt.-Sprachen) rightly saw, *āye* corresponds phonetically to Sanskrit *āyāi*. For the use of *āye* (**āyāi*) as a gen. sing. no question will be raised. The use of *āye* as an inst. sing. is thus to be explained **iṃās* and **iṃā*, the gen. and inst. sing. of *i*-stems respectively phonetically fell together in **iṃā*; likewise **uvās* and **uvā* of the *ū*-stems; after the syncretism of the gen. and dative, *iye* did duty as a gen. also: now as *iṃā* had the function of both gen. and inst., *iye* was made to serve as an inst. Hence *āye* of *ā*-stems also was used as an inst. It would be possible to assume that *āye* simply levelled *ayā*. Another hypothesis that is also plausible is: the inst. *ayā* was levelled to *āyā* by influence of the gen. sing. *āyā* (**āyās*); so when *āye* came to be used as a gen., it also was used as an inst. As a matter of fact all the above forces may have played a part in bringing about the result.—The original loc. sing., whatever it may have been, was simply wiped out in favor of *āye*. For *āya* in the oblique cases of *ā*-stems in Pāli, and in the Gīrnār redaction of Fourteen-Edicts; as well as in the dialects of the Pillar-Edicts see my forth-coming essay on the dialect of the Gīrnār redaction. The dat. sing. of *a*-stems in *āye* is simply borrowed from the *ā*-stems. Pischel (see his Gr. d. Pkt.-Sprachen) already saw the possibility of this explanation, but rejected it on what appears to me insufficient grounds. Johansson's explanation is untenable as Pischel presumably saw. See also Michelson, IF. xxiii, p. 243.

participle (written *saṃta* once in Mans.); similarly Shb. Mans. *karaṃtaṃ* (written also *karataṃ* in both Shb. and Mans., *karata* in Shb.), Kālsī *kalaṃtaṃ* (written also *kalaṃta*, *kalata*); the optative *siyā* (written *siya* in Shb. and Mans.). It should also be noted that in these dialects the nom. sing. neutre of *a*-stems is frequently replaced by the nom. sing. masc. (Shb. -o, Dh., J., K. -e; in Mans. 'Māgadhan' -e replaces native -o). And the vocalism of *ucāvuca-* (written *ucavuca-* in Shb. and Mans.) in the dialects of J., Dh., and K. is deserving of mention in contrast with Girnār *ucāvaca-*. (Such is the reading of J. in ASSI.)

A Hymn to Tammuz (Cuneiform Texts from the British Museum, Tablet 15821, Plate 18) with translation and commentary by Professor J. DYNELEY PRINCE, Ph. D., Columbia University, New York.

Transliteration and Translation.

Obverse.

1. — — — — — *ama-mu-ra nu-un-ti*
(Lament) for my mighty one who liveth no more.
2. — — — — — *nu-un-ti ama-mu-ra nu-un-ti*
— — — — — who liveth no more, for my mighty one who
liveth no more.
3. — — — *mu-lu* — — — *nu-un-ti ama-mu-ra nu-un-ti*
— — — — — who — — — liveth no more; for my mighty
one who liveth no more.
4. — — — — — — — *du mu-ud-na-mu nu-un-ti*
— — — — — — — my spouse who liveth no more.
5. — — — — — — — *mu mu nu-un-ti*
— — — — — my — — — — — who liveth no more.
6. — — — — — *dimmer gal mu-an-na nu-un-ti*
— — — — — great god of the heavenly year who liveth
no more.
7. *ù-mu-un-e a-ra-li nu-un-ti*
Lord of the lower world who liveth no more.
8. *ù-mu-un-e sar-ra lamga ki nu-un-ti*
Lord of vegetation, artificer of the earth, who liveth no more.
9. *lax(?)ba en dimmer dumu-zi nu-un-ti*
The shepherd, the lord, the god Tammuz who liveth no more.
10. *ù-mu-un-e ba-ta(?)ba nu-un-ti*
The lord who giveth gifts who liveth no more.
11. *mu-ud-na-bi-ta (an-na)-ka nu-un-ti*
With his heavenly spouse he liveth no more.
13. — — — — — *mu-tin-na nu-un-ti*
(The producer of) wine who liveth no more.
14. — — — — — *lum-lum-ka na-àm-mal nu-un-ti*
Lord of fructification; the established one who liveth no more.

15. *ù-mu-un (gìr)-ka na-àm-mal nu-un-ti*
The lord of power; the established one who liveth no more.
16. *gud kala-a-dim alam-ne-en dib (LU)-dib (LU)-bi ù-ša (Ù)-a-dim ne-tuš (KU)*
Like a mighty bull is his appearance; the forceful one, like an ancient bull he coucheth.
17. *gud kala-a-dim alam-ne-en má bir-bi ù-ša (Ù)-a-dim ne-tuš (KU).*
Like a mighty bull is his appearance; in his ship of plenty like an ancient bull he coucheth.
18. *me-e-zu(?) -da(?) LI ga-a-an-ma-kud*
In accordance with thy word(?) the earth shall be judged.
19. *su-gir-ma LI ga-a-an-ma-kud*
(Thus) the high parts of the earth verily shall be judged.
20. — — — — *mu-lu* — — — — *me-a ga-a-an-ma-ab-gu (KA)*
— — — — — who — — — — verily they shall cry out for it.
21. *[šuku (PAD) nu]-kú-a-mu ga-a-an-ma-ab-gu (KA)*
For food which they have not to eat they shall verily cry out.
22. *(a) nu-nag-a-mu ga-a-an-ma-ab-gu (KA)*
For water which they have not to drink they shall verily cry out.
23. *(ki)-el šag-ga-mu ga-a-an-ma-ab-gu (KA)*
Verily the maiden who is pleasing shall cry out for it.
24. *(kala) šag-ga-mu ga-a-an-ma-ab-gu (KA)*
Verily the warrior who is acceptable shall cry out for it.
25. — — — — *a(?) -zu gir-e kur aš ba-šub (RU)*
— — — — — thy — — — — the mighty one, the land with a curse is destroyed.
26. — — — — — *gir-e kur aš ba-šub (RU)*
— — — — — the mighty one, the land with a curse is destroyed.

Reverse.

27. *(gìr) kur-ra i-de ugun (DAR) nu ugun (DAR) kùr-e*
Power of the land (is he). With (his) gift no gift can vie.
28. *(gìr) kur-ra gu (KA) xu-tu-ul-xu-tu-ul-e*
Power of the land (is he). The Word which overcometh disease.
29. *gìr ù-mu-un-da ù-mu-un-da*
Power he exalteth, exalteth.

30. [*šuku* (PAD)] *nu-kù-a-mu ù-mu-un-da*
Food which they have not to eat he raiseth up.
31. *a nu-nag-a-mu ù-mu-un-da*
Water which they have not to drink he raiseth up.
32. *ki-el šag-ga-mu ù-mu-un-da*
The maiden who is pleasing he raiseth up.
33. *kala šag-ga-mu ù-mu-un-da*
The warrior who is acceptable he raiseth up.
34. *kala mu-lu-zu-ne mu-da-ab-xa-lam-ma*
The mighty one who destroyeth your people.
35. *dimmer ab-u tur mu-lu-zu-ne mu-da-ab-xa-lam-ma*
The god Ninib destroyeth even the least among your people.
36. *i-de-bar šag-ga-ni Nina nam-ba-e-bi-bi*
With her gracious aspect Ninâ speaketh.
37. *sar-bar šag-ga-ni xu-ub-na-an-ni-bar-ri*
In her gracious rising verily she shineth forth.
38. (*ki*) *àm-dirig-ga-na ur-ba kala(?) alam*
Where she waxeth full, her procreative power is mighty of aspect.
39. *mu-lu-mal PA gubu (KAB)-gub(DU)-bi-na šam-elteq-ga xu-ba-e-ku*
The creative one (with) the staff of her left hand, verily she establisheth the cleansing *uxulu*-herb.
40. *gi-sa (DI)-da-ni im-e-a-an-me*
With her sceptre of judgment she commandeth.
41. *mu-lu-mal li-du-ni im-mi-ir-ri-a-an-me*
The creative one with her firm voice she speaketh to him.
- XLI. *er-lim-ma dimmer dumu-zi-da*
XLI lines. A hymn for the god Tammuz.

Commentary.

The present hymn to Tammuz in Eme-sal is one of a series found in Cun. Texts from the British Museum, Vol. xv, plates 10ff. Of these Dr. F. A. Vanderburgh has published in his thesis "Sumerian Hymns" (Columbia University Press, 1908) Plates 10, 15—16, 17, 19 and also Plates 11—12 in the JAOS, 1908. I have published Plates 14, 22, and 23 in the AJSL, while Dr. Vanderburgh, who is at present preparing for publication Plates 7, 8, 9, and 13—12, has aided me with the present text by many valuable suggestions.

Obverse.

Line 1. *ama* = AM 'bull' I render 'mighty one.' Note that the god Ea is also called a bull in ii, 58, 52.

Line 3. *mu-ud-na* = *xâ'iru* 'spouse;' cf. Br. 1304. Here the bereaved Ištar is probably speaking.

Line 6. *dimmer gal mu-an-na* 'great god of the year (lit. 'name') of heaven,' in contradistinction to the present condition of Tammuz as lord of the lower world *arali*, line 7, whither he had been transported, leaving the heavenly (or upper) year destitute of vegetation.

Line 8. *u-mu-un-e sar-ra* 'lord of (spring) vegetation.' Note that *sar* = SAR = *kirû* 'plantation,' Br. 4315 and see Prince, Materials, p. 283.

The mourning ceremonial for Tammuz took place just before the summer solstice which was followed by a season of rejoicing at his re-appearance. For this mourning-ceremonial which was evidently practised at Jerusalem in the time of Ezekiel, cf. Ezek. viii, 14:

יבא אתי אל פתח שער בית יהוה אשר אל הצפונה והנה שם הנשים
ישבות מבכות את תמוז:

Probably also in Zech. xii, 10, the words *מספר על היחיד* refer to the ritual lamentation for Tammuz.

lamga ki; he was the artificer of the earth, because he was the cause of plant life especially. For *lamga*, cf. Prince *op. cit.* 221.

Line 9. *lax(?) -ba*. Although the first sign is obscure, it is most probably *lax* of the combination *lax-ba* = *rê'u* 'shepherd,' IV, 27, 1a.

The Sumerian form *dumu-zi* 'son of life,' i. e., 'life itself' = the god of life *par excellence*, is clearly the original of the Semitic corrupted name of this god *Tammuz*, which appears also as the name of the fourth month. Note the fuller form *dumu-zi-da* in line 42, showing that the full form of the word for 'life' in Sumerian was *zid*.

Line 10. *ba-ta(?) -ba*. This seems clearly *ba* verbal prefix + the locative infix *-ta-* + the root *ba* = BA = *qâšu* 'give, bestow,' Br. 107.

Line 13. I assume that some word meaning 'producer,' i. e. 'of wine' has been erased here.

Note the ES. form *mu-tin-na* for *geš-tin*. See Prince, *op. cit.*, p. 247 = *karânu* 'wine.'

Line 14. On *lum* = LUM, see Prince, *op. cit.*, p. 227.

na-âm-mal seems to consist of the abstract prefix *nam-* + *mal* = GA = *šakânu*, Prince, p. 231.

Line 15. This line evidently contains *gir-emûqu* 'power,' Br. 9184 + the genitive suffix *-ka*.

Line 16. The second sign here must clearly be read *kala* owing to the following vowel of prolongation *-a*, and not *lig*, as is frequently the case. The suffix I read *dim* and not *gim*, as the hymn is in ES.

On *alam*, see Prince, 29. This is not a certain reading for the sign ÇALAM. Note that Hrozný reads this sign with value *alana*, probably associating it with Sem. *lânu* 'appearance,' Br. 7299, which seems to be its meaning here.

The suffix *ne-en* seems to consist of the demonstrative element *ne-* + the verbal *-en*, seen in *mên* 'to be.'

Note that the combination *dib* (LU)-*dib* (LU)-*bi* has the meanings *šitpûru*, Br. 10740; *šitbuçu*, Br. 10741; and *šitmarru*, Br. 10742. Hence my translation.

û-ša(Û)-a-dim consists of *ša* = Û = *labîru* 'ancient,' Br. 9465, + the prolonging vowel *-a* + the suffix *dim* (GIM) = 'like unto.'

tuš (KU) = *ašâbu* 'sit, dwell,' Br. 10523. The god is conceived of as sitting, i. e., couching like a powerful bull resting. The couchant attitude is no doubt suggested by the fact that the god's power is temporarily *at rest* in the lower world.

Line 17. *má* = *elippu* 'ship,' Br. 3683. This is his ritual ship of state or wealth; *bir* = *çibtu* 'wealth,' Br. 2029, probably referring to the ceremonial of carrying the image of a god in a small symbolical ship.

Line 18. *me-e-zu(?) -da* 'in accordance with thy word;' *me* = *qûlu* 'utterance', Br. 10370. LI means *erçitu* 'earth,' Br. 1104; perhaps this is correct here in connection with the verb-root *tar-kud* = *dânu* 'judge,' Br. 364. The prefix *ga* although precativè properly, I render here as 'shall,' expressive of the singer's hope and thus also in the following lines.

Line 19. *su-gir* I render as 'highlands'; see Br. 233 = *Elam-tu* = *ma* = *mâtu* 'land', Prince, 228. This combination seems to be in genitive apposition to the following LI = *erçitu* (see just above on line 18).

Line 20. *me-a* here is perhaps the cognate accusative of *gu* (KA) and means 'they cry a crying' = 'they cry lustily for it.'

Line 21. *šuku* (PAD) = *kurmatu* 'food,' Br. 9929. In *nu-kù-a-mu*, *kù* = *akâlu* 'eat,' Br. 882, *passim*. I supply this mutilated line from kindred passages. Note also below line 30.

Line 22. Note the parallelism here with line 21. *nag* = *šatû* 'drink,' Prince 251.

Line 23. *ki-el* = *ardatu* 'maid-servant.' For full discussion, see Prince 204. In *šag-ga-mu*, *šag* = *damqu*, Br. 7291 + the relative suffix *-mu*, in this case probably not the *-mu* of the first person, but the indeterminative relative possessive *-mu* discussed Prince, p. XXI.

Line 25. *aš* = *arratu* 'curse,' see Prince, 41. *šub* (RU) = *maqâtu* 'overwhelm,' Br. 1432. Literally: 'the land he overwhelmed (with) a curse.' I render it passively "is destroyed" here, because the curse is negative on the part of Tammuz, consisting in his absence.

Reverse.

Line 27. The first sign here must be *gir* = *emûqu* 'power' fully discussed, Prince, 149. (*gir*) *kur-ra* seems to me to be an epithet of the god. *i-de* I take as prepositional; cf. Br. 4005: *maxar*; here = 'before' or 'in comparison with.' *ugun* (DAR) = the abstract prefix *u-* + *gun* = *biltu* 'gift, tribute.' See Prince, 341. In the last part of the line *pap* must be = *nakâru*; here = 'vie with,' Br. 1143.

Line 28. *xu-tu-ul xu-tu-ul-e* by repetition means 'to overcome disease thoroughly.' Note *xutul* = *xatû ša murçi*, Br. 2056: 'overcome disease.' Here Tammuz is the life giving Word, a conception which has many parallels in early Semitic literature and which culminated in the Word of the Gospel of St. John.

Line 29. I must regard *-da* here as a verb = *našû* 'lift up;' see Br. 6654 = *šaqû* 'be lofty.'

Lines 30—33 incl. are parallel with lines 21—24 incl. above.

Line 34. The suffix *-zu-ne* ought to mean "your people" (*mulu* = *nišû*, Br. 1339). See Prince, p. XXIII § 10 on *-zu-ne* which can sometimes but incorrectly mean 'their.' *xa-lam-na* must signify 'destroy'; see Br. 11850: *xa-lam* = *xulluqu* 'destroy.'

Line 35. The god *ab-u* = *Ninib*, Br. 3836.

Line 36. *i-de* = *naphusu* 'look, aspect,' Br. 4010. *bar* = *namâru* 'shine forth,' Br. 1775. *i-de-bar* is a combination which means 'aspect' in this connection. *šag* = *damqu* 'gracious,' Br. 7291. *nam-ba-e-bi-bi*; the prefix *nam* is not necessarily negative; cf.

Prince, p. XXIX § 34: it merely serves here to strengthen the ordinary *ba*-prefix. *bi-bi* = *qibû* 'speak', Prince, 57.

Line 37. *sar* = *nipxu* 'rising,' as of the sun or a planet, DW 474. *sar-bar* is a synonym or a parallel of *i-de-bar* of the preceding line. I render the precativ force of *xu-* in *xu-ub-nani-bar-ri* as 'verily she shineth forth;' note that *bar* = *namâru* 'shine forth,' Br. 1775. *pitû* 'open out,' Br. 1791.

Line 38. (*kî*) really = 'place;' here probably = 'where, wherever.' *âm-dirig* = 'fullness,' with abstract prefix *âm* + *dirig* 'be full,' Prince, 81. I render *ur-* here as *bultu* 'procreative power,' Br. 11258 + the 3 p. suffix *-ba*. The sign after BA is probably *lig* or *kala*, as it seems to be pronounced in this hymn (note above line 16 LIG -a = *kala-a*). *kala*(?) + *alam* must mean 'mighty of aspect.'

Line 39. *mu-lu-mal* 'she who' (relative *mulu*) + *mal* = *šakânu* 'establish, make,' Br. 5421. This must be an epithet applied to Ninâ. PA can only indicate the goddess's sceptre of power; Br. 5573: *xatû* 'sceptre, staff.' *kab* = *gubu* = *šumêlu* 'left hand,' Br. 2684. I believe that DU = *gub* is a gloss giving the reading of KAB = *gub(u)*. *šam-nag-ga*; this *nag* = *elteq* = *uxulu* 'a cleansing plant like a soap,' DW. 43; the prefix *šam* = U is the determinative for 'plant.' *ku* here must = *nadû* 'put in a specified place,' Br. 10542.

Line 40. In *gi-sa* (DI)-*dan-ni*, *gi* = 'reed,' Prince, 138; *sa* (DI) = *milku* 'counsel, judgment,' Br. 9531; *da* is probably the infixed postposition before the suffix *-ni* 'her.' *me* = *qâlu* 'speak,' Br. 10361.

Line 41. *li-du* appears in *li-du an-na* = *elîtum ša zamâri* 'high voice in singing.' It is probable that LI was pronounced *ngu(b)*, a cognate of *me* = *qâlu* 'speak.' *du* in *li-du* = *kânu* 'firm,' Br. 4884. In *im-mi-ir-ri-a-an-me*, 'unto him' is contained in the *-r-* element.

It should be noted that in lines 36—41 the goddess Ninâ, the consort of Tammuz, is represented as being the revivifying power acting against the destructive force of Ninib. Ninâ is thus associated with Tammuz in this hymn as a life-giver after the winter solstice. While she and Tammuz are away, all vegetation ceases.

Line 41. *er-lim-ma*; the second syllable is really *lib*, probably pronounced *lim* in conjunction with the following *-ma*.

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Another Fragment of the Etana Myth.—By MORRIS
JASTROW jr.

I.

By a fortunate chance the Berkshire Athenaeum of Pittsfield Mass. has come into possession of one of the tablets of Ashurbanapal's library.¹ Like the other specimens known to exist in this country,² this one also was brought to this country by the Rev. Dr. W. F. Williams, who, being at Mosul while Layard was conducting his excavations in the region, obtained some tablets from native Arabs. Three fragments are now in the possession of Dr. Talcott Williams of Philadelphia (son of Rev. Dr. Williams), a fourth after passing through several hands came into the hands of Mr. George Harding, a Trustee of the Berkshire Athenaeum who about two years ago presented it to the institution. My attention was called to it during a visit to Pittsfield, and I wish to express my obligations to Mr. H. H. Ballard, the curator of the Athenaeum who kindly placed the very interesting specimen at my disposal for study and copying. It measures $8\frac{1}{2} \times 10$ cm. and contains parts of 31 lines on the obverse and parts of 24 lines on the reverse together with a colophon showing parts of 6 lines. By comparison with similar colophons, the one on our text can be completed, adding about 3 more lines. Completing the tablet in this way, we are enabled to estimate the number of lines missing at the top of the obverse at about 9 lines. How many lines are missing at the bottom of the obverse and at the top of the reverse, it would, of course, be difficult to say,

¹ Discovered at Kouyunjik by Layard (1849). See Jastrow, *Did the Babylonian Temples have Libraries* (PAOS. XXVII, 147 seq.) and Bezold's Introduction to his *Catalogue of the Cuneiform Tablets in the Kouyunjik Collection* etc. (Vol. 5).

² Two have been published by me (1) "A Fragment of the Babylonian Dibbara Epic" (Phil. 1891) and (2) "A New Fragment of the Etana Legend" (*Beiträge zur Assyriologie*, Bd. III, pp. 363–383).

but from the comparison of this fragment with the twelve others known to us and a study of the various editions of the text that they represent, the conclusion may be reached that the obverse of our fragment covered about 70 lines and the reverse about 54.¹ The tablet when received contained considerable incrustation. Thanks to careful treatment at the Chemical Department of the University of Pennsylvania (for which I am under obligations to my colleague Prof. E. F. Smith and to his assistant Mr. Wallace) and to a thorough soaking of the tablet in water, many lines or individual characters that were at first obscured became entirely legible, or sufficiently so as to enable me to practically make out all of the tablet that has been preserved. Conjectural restorations are indicated in the transliteration and translation by being placed within brackets. The clay of the tablet is of the reddish color that is characteristic of so many of the tablets of Ashurbanapal's collection. The characters are carefully written but often difficult to read especially in the crowded portions. An interesting feature is the small double wedge frequently appearing in some of the lines,² indicating that in the copy from which our tablet was copied a line ended at the mark in question. The bearing of this feature on the interpretation will be shown further on. As to the holes evidently inserted into the clay *before* the characters were inscribed, scholars still waver between the supposition that they were made to protect the tablet from cracking in the course of baking, or as receptacles for wooden pegs on which the tablet rested while the one side was being inscribed. Probably neither supposition is correct. Tablets can be burned without air holes—witness the large historical clay cylinders and the business documents—and the attempt to steady the tablet by means of pegs at the places indicated by the holes would hardly prove very effective. The holes are both too close together and too irregularly distributed to make this supposition a plausible one. I have sometimes thought that they were inserted as a kind of guide to the scribe in copying his tablet, but this thesis also encounters objections.

¹ The colophon takes up 9 lines and these being more widely spaced, the reverse contains fewer lines than the obverse. See below pp. 113—123.

² On the reverse ll. 3. 12. 16. 17. 19. 20. 21. 22.

That the tablet belongs to the Etana myth follows from the colophon and is confirmed by the context. It is therefore a curious chance that two of the four fragments of the royal library that found their way to this country should form parts of one and the same series.

II.

The fragment reads as follows:¹

Transliteration.

Obverse

[about 9 lines wanting].

1. [it-ti(?)]ka — — — ru-'a-u-[tu]²
[lu] it-ba-ru a-[-na-ku]
[erû] pa-šu i-pu-šam-ma [a-na širi izakkar]
— — — — — ša ru-'a-u-tu — — — —
5. [lim-ni-ta]³-ma kab-[ta-ti nu-u-ri-is]⁴
il [GAL-la]⁵ ša ilâni [a-šak-ku ni-kul-ma]⁶
al-ka(?)⁷ ni-zaḥ-pa-am-ma — — —
ni-it-ma-a iršitim — —
ina maḥar (il) Šamaš ku-ra-di ma-mit it-[mu-u]
10. [ša] i-ta-a ša (il) Šamaš [it-ti-ku]
(il) Šamaš lim-niš ina ḫa-at ma-ḫi-ši [limahḫiṣ(?)⁸

¹ Restored portions and conjectural readings in brackets.

² A variant writing to ru-'u-tu. Cf. Muss-Arnolt, *Assyr. Dictionary*, p. 941^a where it is used of the friendship between ox and horse.

³ Restored according to rev. l. 8. Traces of *lim* and *ta* are discernible.

⁴ Restoration likewise based on rev. line 8 only that—since it is Shamash who is bringing the charge against the eagle,—rev. l. 8 reads *tu-u-ri*, whereas here where the eagle and serpent are forming a plan, we must read *nu-u-ri*, corresponding to the verbs in ll. 7—8 which are in the first person plural.

⁵ Traces discernible. Cf. rev. l. 9.

⁶ Restored according to rev. l. 9 but *nikul* again instead of *takul*.

⁷ The first sign can hardly be anything else than *al*, though Geštin (Brünnow Nr. 5004) is possible. The second sign is very puzzling. I have settled upon *ka* as the most likely, though it looks as though the scribe had started to write a different sign—perhaps Šun (Brünnow Nr. 250).

⁸ Compare for lines 10—11, the parallel in the other fragment of the Etana myth published by me obv. l. 13 (*Beiträge zur Assyr.* III, p. 364), where we can now restore after *ḫa-at* the word *ma-ḫi-ši* and which on the other hand enables us to restore the end of ll. 10 and 12 of our text. Note also that in the other fragment ll. 10—11 appear as one line,

- ša i-ta-a ša (il) Šamaš [it-ti-ku]
 li-is-su-šu-ma ni-ri — — —
 kak-ku mur-tap-pi-du êli-šu — —
15. giš-par-ru ma-mit (il) Šamaš lib-bal-ki-tu-šu-ma [li-bar-ru-šu]¹
 iš-tu ma-mit [(il) Šamaš] it-mu-u iršitim — —
 iz-zaḫ-pu-nim-ma ša-da-a e-lu-[u ur-ḥa e-te-ku-u]
 ūmu I (kam) ta-a ili i-na-ša-ru-[u]²
 alpu rimu pu-ri-mu erû³ i-bar-ram-[ma]
20. širu ik-kal i-ni-'i-u ik-ka-lu mârê [širi(?)]
 ar-mi šabitê širu i-bar-ram-[ma]
 erû ik-kal i-ni-'i-u ik-ka-lu mârê [erû(?)]
 sa-ap-pa-ri di-da-ni erû i-bar-ram-[ma]
 širu ik-kal i-ni-'i-u ik-ka-lu mârê [širi(?)]
25. — — — ḫaḫ-ka-ri širu i-bar-ram-ma
 [erû ik-kal i-ni]-'i-u ik-ka-lu mârê [erû(?)]
 [erû ir-bi ak-]kul-li mârê erû ir-bu-u i-ši-ti
 [ištu mârê erû] ir-bu-u i-ši-ti
 [ištu mârê erû]⁴ li-mut-tu ik-pu-du-ma
30. [erû lib-ba-]šū li-mut-tu
 [ik-pu-ud-ma a-na a-ka-li ad-mi ša ru'a]⁶šū iš-kun
 [number of lines lacking about 30].

Reverse.

[number of lines lacking about 30].

— — — — — — — — — — ri — — —
 — — — — — — — — — — i i-pu(?) — — —

though with the indication that in the text from which it was copied there were two lines as in our text. The word *limût* is of course conjectural but some such word must have stood there.

¹ Parallel line in the other fragment obv. 12 which suggests the restoration at the close.

² Cf. the phrase *la na-šir mamit ilâni rabûti* (VR. 8, 67).

³ So the compound ideograph Id-Ḫu is to be read and not *našru*, as is shown by the phonetic writing *e-ru-u* in the fragment published by Scheil (*Rec. des Travaux*, xxiii, p. 21; rev. ll. 2 and 4). This is confirmed by [e]-*ru-u* in the fragment K. 1547 rev. 20 (*Beiträge zur Assyriologie*, ii, p. 445) which in turn corresponds to rev. 21^a of our fragment where the ideographic writing Id-Ḫu occurs.

⁴ Restoration suggested by the other fragment obv. 2 which itself may now be restored as follows: *ištu mârê erû [li-mut-tu ik-pu-du-ma]*.

⁵ The restoration [lib-ba-]šū is quite certain. Traces of *ba* discernible. Cf. the other fragment obv. 3 where no doubt *limuttu* is to be added.

⁶ Restored according to the other fragment obv. 5.

- — — — — [u-mi-]šam-ma im-ta-na-ḥa-[ra (il) Šamaš]
 [i-na] šu-ut-ta-ti a-ma-ta-ma man-nu i-di-ki i-šak-na tuš-še
 arad-ka
5. [ia-]a-ši erû bul-liṭ-an-ni-ma
 [a-na] u-mi da-ru-u-ti zi-kir-kalu-uš-te eš-me
 (il) Šamaš pa-šu epuš-ma a-na erî i-zak-kar-[šu]
 lim-ni-ta-ma kab-ta-ti tu-u-ri-is
 (il) GAL-la ša ilâni a-šak-ku ta-kul
10. ta-ma-ta-a-ma la a-sa-an-ni ḥa-aḫ-ḫa-[ri]¹
 a-lik a-me-la ša a-šap-pa-rak-ka ḫat-ku li-iš-[bat]
 (il) E-ta-na u-mi-šam-ma im-ta-aḫ-ḫa-ra (il) Šamaš
 ta-kul (il) Šamaš ku-bur šu-'e-a iršitim² mithar-ti³ i-da-am
 az-li-[ia]
 ilâni u-kab-bit e-dim-ma ap-kid
15. ig-dam-ra maš-šak-ki-ia (ŠAL)EN-ME-LI (meš)
 āz-li-ia ina tu-ub-bu-ḫi⁴ ilâni ig-dam-[ru-]
 be-lum ina pi-i-ka li-ša-am-ma id-nam-ma šam-ma ša a-[la-di]
 kul-li-man-ni-ma šam-ma ša a-la-di bil-ti u-suḫ-ma šu-[ma
 šuk-na-an-ni]⁵
 (il) Šamaš pa-šu i-pu-uš-ma a-na (il) E-ta-na i-zak-[kar-šu]
20. a-lik ur-ḥa e-ti-iḫ šad-a a-mur šu-ut-ta-tum ki-[rib-ša bi-ri]⁶
 ina lib-bi-ša na-di erû u-kal-lim-ka šam-[ma ša a-la-di]
 a-na zi-kir (il) Šamaš ḫu-ra-di (il) E-ta-na il-lik [ur-ḥa e-ti-iḫ
 šad-a]
 i-mur-ma šu-ut-ta-tum ki-rib-ša ib-ri ina lib-[bi-ša na-di erû]⁷
 ul-la-nu-um-ma ul-taḫ-ḫa-aš-[šu]⁸

¹ From this line on to the middle of l. 21 we have a duplicate in Harper's 2d fragment, *Beiträge zur Assyriologie*, II, p. 394 (K. 1547 Rev.). Lines 5 to 10 of this fragment may now be restored according to our text.

² The reading confirmed by *ir-ši-[ti]* in Harper's fragment l. 9. Note that line 13 of our text covers two lines in Harper's fragment (ll. 8—9).

³ Brünnow Nr. 11261 or perhaps *rapašti* as Harper restores (ib. p. 392, line 10).

⁴ Correct Harper's reading accordingly. Cf. IV R² 20 Nr. 1, 27 *az-lu tu-ub-bu-ḫu*.

⁵ Restored according to the duplicate l. 16.

⁶ Restoration based on l. 23.

⁷ According to l. 21.

⁸ See the line before the colophon to K 2606 rev.—parallel to our text *[ul-]la-nu-um-ma uš-ta-ḫa-aš-šu*. Correct Harper's reading of the line accordingly. For *ullanum* in the sense of "recently just now," see e. g. Virolleaud, *L'Astrologie Chaldéenne*, Sin Nr. III, 4; xviii, 29 etc.

Colophon.

25. *erû pa-šu i-pu-šam-ma ana (il) Šamaš beli-šu [i-zak-kar]
 duppu II (kam) ala i-ši tum(?) — — —
 êkal Ašur-ban-apal šar [kiššati šar mât Ašur(ki)].¹
 ša (il) Nabu (il) Tāš-me-tum uz-nu ra-[pa-aš-tum išrukû-šu]
 i-ḫu-uz-zu ênâ na-mir-tum [ni-sik dup-šar-ru-ti]*
30. *ša ina šarrâni a-lik maḫ-ri-ia [mimmu šip-ru šu-a-ti la
 i-ḫu-uz-zu]
 [ni-me-ki (il) Nabu ti-kip sa-an-tak-ki ma-la ba-aš-mu
 ina duppâni aš-tur as-nik ab-ri-e-ma
 a-na ta-mar-ti ši-ta-as-si-ia ki-rib êkal-ia u-kin].*

Translation.

[Obverse.]

1. [Let us form(?)] friendship [you and I(?)]²
 Verily, a friend I [to thee will be(?)]
 [The eagle(?)]³ opened his mouth and [to the serpent(?)]
 spoke],
 [An agreement(?)] of friendship [let us make(?)],
5. The wicked and mighty(?) let us crush(?)⁴,
 [The *gallu*]⁵ of the gods, [the *ašakku* let us destroy],

¹ Restored according to II R 21, 26–34; 33; 38; IV R² 55 etc. etc.

² While the restorations in this and in the 4th line are of course purely conjectural, it is evident that the serpent and eagle are proposing to form an alliance.

³ Room for two signs—hence the suggestion to read *ID-ḪU*, though of course it is possible that the serpent is addressing the eagle.

⁴ *nu-u-ri-is* (like *tu-u-ri-is* rev. 8) from *arâsu*(?), perhaps related to *rêsu* (Muss-Arnolt, *Assyr. Dict.*, p. 104^b) like *arašu* to *rêšu*. One is naturally inclined at first to take *limnita* and *kabtati* as permansives “evil and wicked art thou” but there are various obstacles in the way. One should expect *kabtata* as in the 4th tablet of the Creation Story l. 3. To denounce one as “evil and mighty” would be a strange combination. I prefer to take both words as descriptive epithets. The force of the *ma* which as the combining element outside of verbs is not infrequent in divination texts (see e. g. IV R² 34 Nr. 1, obv. 4) seems to be that of conveying a compound term “powerfully wicked” or “wickedly powerful.”

⁵ The addition of *la* to *Nun* points to the reading *gallu* and I have no hesitation in identifying this with the well-known designation of a particular demon, for which, to be sure, the ordinary ideographic designation is *Te-Lal* (Brünnow Nr. 7732) but which is also written phonetically *gal-lu-u* and *gal-lu*. See Muss-Arnolt, *Assyr. Dict.*, p. 217^a. The juxtaposition with the demon *ašakku* leaves no doubt as to the identification.

— — let us set up — — —

Let us lay a ban on the earth — —

In the presence of Shamash, the warrior, the ban they laid.

10. Whoever [transgresses] the bounds of Shamash,
May Shamash grievously through the destroyer¹ [cut off]!
Whoever [transgresses] the bounds of Shamash,
May he remove him and — — —
May the overpowering weapon [fall] on him — —

15. May the sling, the ban of Shamash hit him [and catch him]!
When they had laid the ban [of Shamash] on the earth — —
They set up, they ascended the mountain [they took the
road(?)].

For one day they kept the charm² of the god.

An ox, a wild ox, a wild ass, the eagle caught,

20. The serpent ate,³ drew back, the young [of the serpent(?)] ate.
A mountain goat, gazelles, the serpent caught,
The eagle ate, drew back, the young [of the eagle(?)] ate.
A wild mountain gazelle,⁴ a *didanu*,⁵ the eagle caught,
The serpent ate, drew back, the young [of the serpent(?)]
ate.

25. — — — of the ground⁶ the serpent caught,
[The eagle ate, drew back], the young [of the eagle(?)] ate.

¹ For *mahiṣu* in the sense here taken it is sufficient to refer to the passage in the hymn to Shamash ZA. IV, p. 31, col. III, 29 where the word appears in juxtaposition with *mu-tir-ru bâli* "destroyer of cattle."

² Instead of *ta-a* one is tempted in view of the preceding lines to read *i-ta-a*, the accidental omission of the *i* being due to its resemblance to the preceding *kam*. However, *tû* as a synonym of *mamîtu* is no doubt correct.

³ The reading *ik-riḥ* "drew near" is of course possible here and in the succeeding lines, but in view of *ik-ka-lu*, the preference is to be given to *ik-kal*, just as in the Deluge myth (Gilgameš XI, 155) *ik-kal i-ša-aḥ-ḥi* "ate and went away" which is a partial parallel to our passage. Cf. Muss-Arnolt, *Assyr. Dict.*, p. 34^b. Whether at the end of the line we are to restore *erû* or *siru* is also open to question, though the general sense is not affected whichever reading we adopt.

⁴ Cf. II R 6, 6d. Our passage fixes the correct reading of the term with an *s* and not *šap-pa-ru* as has been hitherto assumed. Delitzsch in his *Assyrische Tiernamen*, p. 48 read correctly *sapparu*, but his comparison of a very doubtful Arabic term شفر "young gazelle" is not acceptable.

⁵ Or *di-ta-nu* as II R 6, 7^d.

⁶ It is tempting to restore *šaḥ kaḥḥari* in view of II R 24 Nr. 1 rev. 19, but the traces do not favor this.

[When the eagle stirred up] tribulation(?),¹ the young of the eagle raised an uproar.²

[When the young of the eagle] raised an uproar,

[When the young of the eagle] planned evil,

30. [The eagle directed his heart] in evil design.

[To eat the young of his friend] he determined.³

— — — — —

[Reverse.]

— — — — — [the eagle] daily faced Shamash.

[In] the hole I will die and he who stirred up, should settle the strife⁴ of thy servant.

5. Me the eagle let me live and

Eternally, I will glorify thy name.

Shamash opened his mouth and spoke to the eagle.

The wicked and mighty one didst thou carry off.

The powerful one of the gods, the *ašakku* didst thou consume.

10. Therefore thou shouldst die⁵ and to the unseen(?)⁶ land

Go! The man whom I shall send to thee may he seize hold of thee.⁷

Etana daily faced Shamash,⁸

¹ The reading *ak-kul-li* is suggested by the following *išitu*.

² Cf. *e-ši-ti mâtî* (I R 40 col. IV, 36) by the side of *ešitu* and *i-šit-tu* (see Jastrow, *Religion Babyl. u. Assy.*, I, p. 480 note 12 and II, p. 54 note 7). The general sense is "uproar." "Geschrei" as I rendered it II, p. 54, is perhaps better than "Vernichtung" (I, p. 480), though destruction is also involved.

³ While the restorations in these lines are again purely conjectural, the general context has, I think, been correctly caught with the help of the fragment above (p. 103, note 8) referred to.

⁴ For *tuš-še* in connection with *dikû* see the Hammurabi Code col. VIII, 2 *tu-uš-sa-am-ma id-ki*. The contrast to *dikû* would naturally be *šakânu*.

⁵ The emphatic form *ta-ma-ta-a-ma* conveys the force of deserving death; it is a threat rather than a mere assertion.

⁶ *asannu* is a new word and evidently a description of the dwelling-place of the dead. One is reminded of the *a-šar la a-ri* "unseen place" in the incantation IV R² 16, 47^a which, as l. 51 *a-šar la a-ši-e* shows, refers to the nether world.

⁷ Evidently in the sense of furnishing assistance, as in the passages quoted by Muss-Arnolt, *Assyr. Dict.*, p. 861^a.

⁸ The phrase implies an appeal to the god (as above l. 3)—making the direct statement that Etana opened his mouth etc. superfluous.

Thou hast consumed, o Shamash, the strength(?) of my sheep,
in the whole earth the young(?) of my lambs.¹

The gods I have honored, the shades, I have regarded,
15. The priestesses² have put an end³ to my offerings.⁴

My lambs through slaughter⁵ the gods have put an
end to.

O lord! By thy command may some one go out and give
me the plant of birth!

Show me the plant of birth, tear out the fruit⁶ and [grant
me] an offspring!

Shamash opened his mouth and spoke to Etana.

20. Take the road, pass to the mountain, seek out the hole,
[look] within it.

Wherein the eagle has been thrown, I will show thee the
plant [of birth].

¹ A difficult line. The parallelism with *az-li-ia* leaves no doubt as to the force of *šu-'e-a*. In the Gilgameš epic, *ku-bur* (VI, 123, 147, 188) written as in our passage, occurs in connection with the "horns" and "tail" of the divine bull, and the general sense of "strength" fits the context. The "strength of my sheep" would be equivalent to "my strong sheep." As a parallel to this, I am inclined to take *i-da-am az-li-ia*, connecting the former with *admu* "offspring". Naturally, this is merely offered as a suggestion. To take *idâm* as a verbal form from *da'amu* "dark" gives no good sense. Shamash being addressed could not be the subject, as little as *iršitum* which is feminine. If my interpretation is correct, *idâm* as a parallel to *kubur* would have more specifically the force of "vigorous." Is this perhaps the underlying sense of the stem *adâmu* from which we get *admu* in Assyrian "young, vigorous" and אָדָם in Hebrew, —parallel to *vir* "the strong one" as the designation of "man"—by the side of the other word for man among the Semites إِنْسَان etc. = Assyrian *enšu*, *nišê*, *tenišêti* etc. as the "weak" one?

² Our text shows that "priestesses" are introduced—not priests as Harper assumed—hence the feminine plural *igdamrâ*. The syllabary V R 13 rev. 49 is, accordingly, to be restored [*Šal En-Me-Li* = *ša-il-tu*. In the text IV R 60* B obv. 7 we have the masculine equivalent with *maššaku* as in our case. See Jastrow, *A Babylonian Parallel to the Story of Job* (*Journal of Bibl. Literature*, XXV, p. 159 notes 84—85).

³ *igdamra* I take in the sense of "destroy" as implying the rejection of the offerings. IV R 60* C rev. 99 *šaḥātu* "destroy" is employed in the same way.

⁴ *maš-šak-ki-ia*. Cf. Jastrow ib. note 85.

⁵ Not as a sacrifice but as an actual destruction.

⁶ *biltu* I take as a reference to the tearing out of the plant—not to the birth of a child as Harper assumed.

On the order of Shamash the warrior Etana took [the road
 passed to the mountain],
 Sought out the hole, looked within it, [wherein the eagle
 was cast],
 (Where) recently he had been left to perish.¹

Colophon.

25. The eagle opened his mouth and to Shamash his lord [spoke].
 2nd tablet of the series *ala i-ši tum* (?) — — —
 Palace of Ašurbanapal, king [of the universe, king of
 Assyria],
 Whom Nebo and Tašmit [have granted wide] understanding,
 Endowed with clear vision [for the glorious art of writing]²,
 30. Whereas among the kings before me [none had acquired
 that art].
 [The wisdom of Nebo, the grouping(?)]³ of all extant col-
 lections(?]⁴,
 On tablets I wrote, compiled and revised, to be seen and
 to be read in my palace I placed.^{5]}

¹ II, 1 from *šakâšu*.

² *nisiḫ dupšarruti* is to be taken as a compound term "writing-art" and to be connected directly with the preceding *ēna namirtum*. The latter phrase might be rendered "clear insight." To separate *nisiḫ dupšarruti* from what precedes as Myhrman does (ZA, XVI, p. 167), following Delitzsch, *Assyr. Wörterbuch*, p. 293, is to lose the force of the whole line.

³ *ti-kiḫ*—for which Delitzsch's explanation (*Assyr. Thiernamen*, p. 8), connecting it with talmudic תִּכְיָה "join" still seems to be the most satisfactory. Cf. also II R 49, Nr. 1 obv. 13 and III R 57, Nr. 6, 52 seven *ti-ik-pi* stars = seven "joined" stars.

⁴ *santakku* is certainly to be derived from *satâku* with inserted *n*, as the variant *sa-tak-ki* (V R 51, col IV, 55) shows. My suggestion for *santakku* is based on the circumstance that the ideograph for the word is the sign *Tiṣ* (Meissner, Nr. 7563) in S. A. Smith, *Keilschrifttexte Asurbanipals*, I, p. 112, 15 = V R 13 and elsewhere (see Muss-Arnolt, *Assyr. Dict.*, p. 787^b) in the phrase *šabê santakkika* = "thy collected troops."

⁵ It is of course possible that the colophon contained several additional lines like IV R² 56 and V R 51. A collection of all the various colophons and a careful renewed study of them is much to be desired, as a supplement to Delitzsch's discussion in his *Assyrische Thiernamen*, pp. 6–11 and in the *Assyr. Wörterbuch*, pp. 293–294. Such a study would show that the various classes of texts had distinctive colophons. See Jastrow, *Religion Babyloniens und Assyriens*, II, p. 226 note 1 for the form characteristic of divination texts.

III.

The general character of the contents of the fragment is clear. The obverse evidently opens with a scene between the serpent and the eagle, in the course of which the two agree to form a friendship in order to carry out some plan of attack together. That plan involves the capture and destruction of demons and, apparently also, of placing the entire earth under a ban. The serpent and eagle swear a powerful and binding oath in the name of Shamash who is here viewed in his usual rôle of judge and punisher of those who do wrong.

The next scene leads us to the mountain whither the serpent and eagle have gone. During the one day that they kept the agreement, they succeeded in capturing a number of animals and sharing them together. Then the catastrophe occurs. Prompted apparently by a suspicion of the serpent's fidelity, the eagle plans an attack upon the young of the serpent. At this point, unfortunately, the obverse of the fragment breaks off, and when the thread of the narrative is again taken up on the reverse, we find the eagle thrown into a hole and in a state of utter despair appealing to Shamash to help him out of his predicament. The sun-god reproaches him for what he has done, but acceding to the eagle's prayer to let him live, declares that he will send a man to his assistance. The third scene introduces us to the man who is none other than Etana. He is a shepherd¹ whose flocks have evidently suffered through the ban that has been laid upon the earth. They have failed to bring forth young and Etana, accordingly, appeals to Shamash to show him the plant of birth. Shamash in reply tells Etana to go to the mountain to the hole wherein the eagle has been thrown and there he will see the plant of birth. The fourth scene takes us back to the mountain but with the meeting of Etana and the eagle, our tablet—the second of the series—closes.

¹ See K 2606 obv. 6 *ri-e-um-ši-na* (Harper, *Beiträge zur Assyriologie*, II, p. 399). It is interesting to note that on cylinders representing Etana's flight, a shepherd with his flocks is pictured as looking at the eagle bearing Etana aloft. According to Dr. W. H. Ward's plausible explanation, the accompaniments to a scene on a cylinder stand in a direct connection with the main representation, symbolizing other episodes that belong to it. In this case, therefore, the shepherd would be Etana feeding his flocks.

In order now to understand the purport of these four scenes it is necessary to pass to a consideration of the other fragments of this myth that are known to us. It is the merit of Dr. E. J. Harper¹ to have added to the three fragments dealing with a story of the eagle, serpent and Etana found by George Smith² among the tablets of Ashurbanapal's library, seven others in one way or the other connected with the two. An eleventh fragment—also from this library was published by me as indicated above³ and a twelfth—in the older Babylonian script—by Scheil.⁴

Harper divided his ten fragments into three groups as follows:—(1) containing a story of the serpent and the eagle together with what he calls—erroneously however—a prayer of Etana for his son,⁵ (2) the story of Etana's ride on the back of the eagle, (3) an assembly of the gods. In my publication of the 11th fragment, I suggested⁶ a somewhat different order but Jensen's discussion of the fragments⁷ together with the study of the 13th fragment, herewith published, has led me to a modification of my views. The new fragment shows that Jensen was right in his suggestion that the 11th fragment though ending with the consignment of the eagle to a hole in which he is to die does not necessarily involve the death of the eagle. My contention, therefore, that the episode of the eagle with Etana must be placed *before* the discomfiture of the eagle was erroneous. I now accept Harper's view which is adopted by Jensen that the story of the serpent and the eagle comes *before* that of the eagle and Etana. There is now also no reason for questioning⁸ the connection of K 8578 with Rm 79, 7—8, 43 as proposed by Harper, but on the other hand the new fragment while confirming my suggestion that the first line of K 8578 obv. is to be completed in accordance with the colophon to K 2606 rev., raises the question whether K 8578 represents the 4th tablet of the series?

¹ *Die Babylonischen Legenden von Etana, Zu, Adapa und Dibbarra* (Beiträge zur Assyriologie, II, pp. 391—408).

² Chaldaean Genesis (5th ed.), pp. 138—144. ³ See above p. 101, note 2.

⁴ *Recueil des Travaux*, xxiii, pp. 18—23.

⁵ It is an appeal of Etana to the sun-god.

⁶ *Beiträge zur Assyriologie*, III, p. 371.

⁷ *Keilinschriftliche Bibliothek*, VI, 1, p. 100 note 2.

⁸ As was done by me in *Beiträge zur Assyriologie*, II, p. 370. See Jensen's strictures *KB*, VI, 1, p. 102.

Attention has already been called to the fact¹ that the colophon of our fragment contains as the opening line of the following tablet the same words as in the colophon to K 2606 rev. Moreover, the last line of K 2606 rev. would appear to be identical with the last line of our fragment. In the case of our fragment, however, the colophon states that this tablet is the 2nd of the series, whereas K 2606 is entered as the 3rd tablet of the series.² It follows that we have here two different editions of the text and that what covered only two tablets in the one copy covered three tablets in the other. The marks on the reverse of our tablet indicating the ends of lines in the copy from which our fragment was copied shows, as a matter of fact, that the 12 fragments from Ashurbanapal's library represent different copies. Since K 2606 represents on the obverse the account of the assembly of the gods—Harper's third episode—we would have to assume in order that K 2606 rev. and our fragment should represent duplicates of one another, that the broken off portion of the obv. and the rev. of K 2606 contained considerably more than the episodes which in our fragment cover the obverse and reverse. A consideration of this thesis will show that it is improbable. The new fragment, as will presently be shown belongs to a tablet much longer than any of the others and to assume that K 2606 should represent part of a tablet again twice as long (at least) as the new one is certainly highly improbable. Moreover, if K 2606 belongs to a tablet so much larger than the one of which the new fragment forms a part, we would certainly not expect—since the tablets of any edition of a series are of the same size—that what covered two tablets in the edition of which the new fragment is a part should require three tablets in the other edition but rather the reverse. A simpler solution will be suggested in the course of this discussion.

IV.

The analysis given of the new fragment shows that it belongs to Harper's first group. The next point to be made clear is its relationship to the other fragments of this group.

¹ See above p. 105, note 8.

² A renewed examination of the fragment kindly made by Mr. L. W. King confirms Harper's reading (3 wedges).

Taking up K 1547 first, we note that the reverse is a duplicate of the reverse of the new fragment which we will designate hereafter as the 13th,—ll. 5—20 of the former = ll. 10—20^a of the latter, i. e. 16 lines against 11½ lines, indicating that we have two different copies before us. The indications in ll. 16, 17, 18 and 19 of the ends of lines in the text from which the 13th fragment was copied show that the scribe had an original before him in which the lines agreed with the length of those in K 1547. The obverse of the latter shows no points of agreement with the obverse of the new fragment but corresponds with the rev. of K 2527,—ll. 23—42 of K 2527 = ll. 1—24 of obv. of K 1547. Now, the obverse of K 1547 begins with the appeal of the serpent to Shamash for revenge upon the eagle who has eaten the young of the serpent. The lower edge of the obverse of K 2527 is preserved so that we have on the reverse, as on the obverse of K 1547, the continuation of the story—the advice of the sun-god to the serpent to enter the carcass of a wild mountain bull and to pounce upon the eagle as he swoops down to eat the flesh of the carcass. The immediate continuation of this episode is furnished by the reverse of the 11th fragment. Evidently the first seven lines¹ correspond to K 2527 rev. 35—42 and to K 1547 obv. 17—24. The practical agreement in regard to lines (7 as against 8) shows that these three fragments belong to tablets of about the *same* size.

The strategy succeeds, the eagle is caught, stripped of his feathers and altogether badly battered is thrown into a hole and there left to die. This hole is evidently in the mountain, for it is to this hole to which Etana is sent by Shamash. The two tablets therefore,—K 2527 and the 11th fragment—closed with this episode, while the reverse of K 1547 represents the continuation. The obverse of the 11th fragment contains the incident of the treachery of the eagle and joins on to the end of the obverse of the 13th fragment—ll. 2—5 of the 11th fragment = ll. 29—31 of the 13th fragment, though the lengths of the lines do not correspond. The new fragment thus furnishes a piece of the narrative that takes precedence to what is contained on the other three—namely, the alliance between the eagle and the

¹ Some of my readings must be corrected as Jensen (*K. B.* VI, 1, p. 106 seq.) very properly pointed out.

serpent, and their adventures until the point of treachery. Again, the obverse of K 2527 represents the episode after the destruction of the young of the serpent by the eagle, namely the appeal of the serpent to Shamash, but we have no means of accurately determining the size of the gap between where the obverse of the 11th fragment breaks off and where the obverse of K 2527 takes up the thread, but it was probably not large. At the top of the obverse of the 11th fragment only a few lines are missing, for the end of the reverse represents in all probabilities the last line of the tablet, followed by the colophon. Assuming that K 2527 and the 11th fragment represent parallel texts, both must have begun at the point represented by l. 27 of the obverse of the 13th fragment, which marks a new phase in the narrative—the beginning of the treachery. We thus obtain for these two tablets (a) obverse = 20 lines of the 11th fragment plus 20 lines of K 2527 = 40, to which we may add as a maximum a gap of say 10 lines = 50 lines and (b) reverse = 21 lines of K 2527 plus 17 additional lines of the 11th fragment = 38 lines which with 3 or 4 lines of the colophon would bring the total to about 42 lines. The break of circa 30 lines at the end of the obverse of the 11th fragment and the beginning of the reverse (20 of which are filled up by the obverse of K 2527) must of course be distributed between the two sides. We thus obtain for the total length of each of the two fragments between 90 and 100 lines, both covering the following episodes: (1) treachery of the eagle and destruction of the young of the serpent, (2) appeal of the serpent to Shamash, (3) advice of Shamash, and (4) success of the strategy and the discomfiture of the eagle. The new fragment covers this entire field and, in addition, starts at a point further back—the story of the alliance and of the adventures of the eagle and serpent in the mountain. It also continues the story after the discomfiture of the eagle, furnishing three new episodes: (1) the appeal of the eagle to Shamash for rescue, (2) the appeal of Etana for the plant of birth, (3) the coming of Etana to the place of the eagle in the mountain. The length of this tablet must therefore have been considerably greater, namely, 27 lines till the obverse of the 11th fragment plus 90 to 100 lines, and since at the top of the obverse only a few lines are missing,—inasmuch as we have the close of the reverse preserved—we may estimate the length of the

tablet to which the 13th fragment belongs at about 130 lines—perhaps only 124 lines divided between the two sides. The episode of the alliance and of the adventures of the eagle and serpent with which the obverse of the 13th fragment begins—say from 33 to a maximum of 36 lines—not being sufficient to cover an entire tablet, we are justified in assuming that in the editions to which K 2527 and the 11th fragment belonged, the tablet that preceded began at a point further back than the account of the alliance and the adventures, which could have been narrated on the reverse. In other words the relation of the edition of K 2527 and the 11th fragment, which we may call edition A, to the edition of the 13th fragment, which we may call B, is about the same as the edition of K 1547—the obverse of which = reverse of K 2527, and which we may call C, is to A; i. e.

(a) obverse of A in tablet no x of the series = rev. of B, and

(b) obverse of C in tablet no x of the series = rev. of the preceding tablet in A,

which means that the tablets of edition B contain much more than edition A, and the tablets of edition C much less than A. What therefore would be the 2nd tablet in B would be the 3rd tablet in A, while a part of it in C would even run over into the 4th tablet. The point is of importance for the relationship of the two remaining joined fragments of Harper's first group K 8578 and Rm 79, 7—8, 43.

Before taking these up, attention must be called to the relationship of K 1547 to the 13th fragment. Just as K 2527 and the 11th fragment end with the same episode—the discomfiture of the eagle,—so K 1547 and the 13th fragment end with the coming of Etana to the eagle, but while the first pair represent parallel texts, this is not the case with the latter pair, for the obverse of the 13th fragment begins at a point considerably further back than the obverse of K 1547 which (so far as preserved) starts with the advice of Shamash to the serpent. Since at the most six lines on the bottom of the reverse are missing to bring it to the point where the 13th fragment closes, there are (making allowance for a colophon on the reverse) at the most 10 lines missing at the top of the reverse. As a matter of fact, counting 8 lines back on K 2527, line 22 (= top of obverse of K 1547) would bring us to the beginning of Shamash's answer to the

appeal of the serpent and with which K 1547 in all probabilities began. The total length of K 1547 would thus be $8 + 24 + 17$ (additional lines on the 11th fragment) up to the discomfiture of the eagle = 49 lines. Then the 24 lines of the reverse of the 13th fragment plus a few lines missing at the top would make the total length of this table about 80 lines. The three editions would thus be made up of tablets as follows:

Edition A = Tablets of 90 to 100 lines

Edition B = Tablets of 124 to 130 lines

Edition C = Tablets of about 80 lines.

The calculation is naturally only approximate for the length of the lines differs somewhat also in the three editions but it is close enough for our purposes. The result reached above is thus confirmed that what corresponds to the 2nd tablet of the series in B would reach into the 3rd tablet in A and perhaps into the 4th tablet in C.

Coming now to the two joined fragments, they evidently contained the second address of the eagle to the sun-god promising to do all that was asked of him,¹ and the dialogue that ensued between the eagle and Etana upon the coming of Etana to the hole wherein the eagle lay. Etana asks the eagle to show him the plant of birth² but here, unfortunately, the fragment breaks off. The colophon to the 13th fragment, however, shows that the 3rd tablet of edition B began with an address of the eagle to Shamash and since K 8578 etc. begins with *erû pi-i-šu*, Jensen accepts my suggestion, made at the time of the publication of the 11th fragment, that this line is to be restored according to the colophon of K 2606 which tallies with that of the 13th fragment. Through the contents of this fragment the conjecture is strengthened, if not indeed definitely confirmed, since, as we have seen it contains an episode to which K 8578 etc. naturally joins on. We may therefore with perfect safety assume that K 8578 represents either

¹ ll. 5-6 "whatever he will say to me [I will do], whatever I will say to him [let him do]. See Jensen *KB* VI, 1, p. 110. The reference is to Etana. L. 7 "according to the command of the warrior Shamash, [Etana took the road]" begins the episode of Etana's coming to the eagle, accompanied, apparently, by a young eagle to show him the way.

² Line 12 seq. evidently repeats in substance rev. 17 seq. of the 13th fragment—the same appeal being made by Etana for the plant of birth, but this time addressed to the eagle.

the beginning of the 3rd tablet of edition B or the 4th (or more probably the 5th) of edition C. To which of these two editions it actually belongs, it is of course impossible to say. Dividing the contents of all the fragments of the first group now known to us (KK 1547, 2527, 8578 etc.) and the 11th and 13th fragments into episodes we obtain the following survey:

(1) The alliance between the eagle and serpent and the adventures of the two recounted on the obv. of the 13th fragment ll. 1—26.

(2) The treachery of the eagle proposed and carried out despite the warning of a "very wise" young eagle recounted (a) on the remaining portion of the 13th fragment, ll. 27seq. and (b) on the 11th fragment obverse.

(3) The appeal of the serpent to Shamash for revenge on the eagle, recounted on K 2527, ll. 1—14.

(4) Advice of Shamash to the eagle recounted (a) K 2527 obv. 15—28 (including 6 missing lines), (b) K 1547 obv. 1—9 (circa 8 lines missing).

(5) The carrying out of the strategy proposed by Shamash and ending with the discomfiture of the eagle recounted (a) on the reverse of the 11th fragment (end of tablet) (b) rev. 30—42 of K 2527 (circa 17 lines missing to end of tablet) (c) K 1547 obv. ll. 10—24 (circa 17 lines missing of episode).

(6) The appeal of the eagle to Shamash for rescue and the latter's decision to send Etana to help the eagle out of his plight, recounted (a) on the reverse of the 13th fragment ll. 1—11 and (b) on the rev. of K 1547 ll. 1—6 (circa 6 lines missing).

(7) Etana's lament and request for the plant of birth recounted (a) on the reverse of the 13th fragment ll. 12—18 and (b) on the reverse of K 1547 ll. 7—16.

(8) Address of Shamash to Etana and the order to the latter to go to the hole in the mountain into which the eagle has been cast, recounted (a) on the reverse of the 13th fragment ll. 19—24 (end of 2nd tablet of edition B.) and (b) K 1547 rev. 17—20 (circa 6 lines missing to end of tablet).

(9) Second address of the eagle to Shamash, the coming of Etana and the dialogue between the eagle and Etana recounted on K 8578 + Rm 79, 7—8, 43 (3rd tablet of edition B or 5th(?) tablet of edition C).

Let us now take up the fragment K 2606 which contains in the colophon the indication that it is the third tablet of

the series *ala i-ši* "he left the city". Scheil does not appear to have noticed that the fragment published by him, which I designate as the 12th, runs parallel to a considerable extent with K 2606,¹ so that in part the latter can be restored through comparison with the former,² and vice versa some readings of Scheil can be corrected. But on the other hand the two fragments are not duplicates. Not only do they diverge from a certain point,³ but Scheil's fragment is a large tablet dating from the Hammurabi period with two columns to each side.⁴ The two accounts appear to stand in the relation to each other of the beginning and end of an episode. In both a state of anarchy is described, due apparently to the hostility of the Igigi.⁵ The land is without a ruler. Authority is lacking, habitations and sanctuaries are not built, and the city⁶ is besieged by the Igigi, but while the description of the terror

¹ ll. 10—16 of K 2606 correspond to ll. 1—9 of the 1st col. obv. of the 12th fragment.

² In K 2606 l. 9, we must evidently read [*ra-*]-*bu-tum*; ll. 9—11 can now be restored according to ll. 1—3 of the 11th fragment. In l. 4 of the 12th fragment we must read according to K 2606, 12 *kali-ši-na i-lu i-gi-gu*. For the latter we have in K 2606 the ideographic form. In l. 2 of the 11th fragment read *im-ta-li-ku*. The traces of an additional line seem to have been omitted by Harper between lines 12 and 13. Scheil's reading for the beginning of l. 7 can hardly be correct, while if we substitute *ina u-mi-šu-ma* (like K 2606 l. 14) we get a perfect sense. In l. 9 of the fragment we must read *la ba-nu-u kib-ra-ti ni-iš pa-ra-ak-ki* like l. 16 of K 2606. L. 8 of the fragment evidently contains the phonetic writing *uk-ni-a-am* for the ideograph *Za-Gin* (= *uknu*, Brünnow, Nr. 11776) in l. 15 of K 2606. Cf. Scheil, *Recueil des Travaux*, xxiii, 22 who wrongly, as it now turns out, rejected the proposed reading. At the close of l. 10 of the 12th fragment we must evidently read *e-lu da-ad-nim* = *êlu da-ad-mi* (l. 18 of K 2606). At this point the two texts divide. It should be noted that this 12th fragment now in the J. Pierpont Morgan Collection in New York (see Johns, *Catalogue of the Collection* p. 22) is not only badly preserved but very difficult to read, so that without a parallel text one easily misreads certain signs.

³ See close of preceding note.

⁴ Apart from palaeographic evidence, the tablet has also the ear marks of the Hammurabi period in the expanded phonetic writings like *uk-ni-a am*, *ma-a-tam ši-im-tim* etc. The determinative for deity is omitted before Etana—also characteristic of the Hammurabi period. The tablet is a valuable indication of the age of the Etana story.

⁵ Seven in number. Cf. l. 17 of K 2606 (*il*) *si-bit-tum* with l. 19 (and 12) the ideographic form 5 + 2.

⁶ l. 19 *ala Igigi šu-tas-lu-ru[-u]*. The city is evidently the one referred to in the opening line of the series *ala i-ši*, and where the subject is some god

in regard to which the Annunaki hold counsel is continued in the 12th fragment, in K 2606 the goddess Ishtar¹ is represented as intervening. She looks about for a king and places him in control, while En-lil looks out for the sanctuaries of the gods(?).² It would be in accord with the character of the Babylonian style of poetic composition to repeat at the close of an episode the description of the conditions existing at the beginning, witness the frequent descriptions of *primaeva* chaos in the Babylonian creation myth. Unfortunately, the reverse of K 2606 is not preserved with the exception of the closing line and a part of the last line. The colophon furnishes as the opening of the 4th tablet, a line that agrees with the one given in the 13th fragment for the 3rd tablet, and since the preserved portion of the closing line in K 2606 agrees with the closing line of the 13th fragment,³ it would be too strange a coincidence if the two tablets did not close with the same incident—the coming of Etana to the place where the eagle lies.

On the other hand, if what covered three tablets in one copy corresponds to two tablets in another, the tablets of the former must have been of a smaller size and we cannot therefore assume that from the point where the obverse of K 2606 breaks off to the end of the reverse there should have been included all the eight episodes covering about 125 lines embraced in the 13th fragment. We are thus confronted with a problem for which no definitive solution can be offered until more fragments of the narrative come to light, but the most reasonable conjecture is to assume that various versions of the tale existed, differing considerably from one another and in which episodes were included in one version that were *omitted* in another. So much is clear that the anarchy described in the 12th fragment and in K 2606 must have preceded the rescue of the eagle by Etana, and since the narrative can now be carried back continuously to the alliance

who is represented as deserting the city. If, as is possible from the reference in l. 24, the god is Enlil, the city in question might be Nippur.

¹ Also designated as In-nin-na in l. 22.

² The reading l. 24 *pa-rak-kê ilâni*, seems to me preferable to *parakkê schamê* which Harper proposes. The photograph (p. 505) favors either reading.

³ In the 13th fragment we have as the closing line *ul-la-nu-um-ma ul-taḫ-ḫa-aš-[šu]* and in K 2606 . . . *la-nu-um uš-ta-ḫa-aš-šu*.

between the eagle and the serpent, the state of anarchy must have preceded this incident also. There is every reason, therefore, to believe that Scheil¹ is right in his supposition that the state of anarchy represents the beginning of the entire narrative,² just as the Gilgamesh epic opens with a description of terror and confusion existing in Uruk.

Accepting this as a working hypothesis, we would have to assume that the first tablet of the copy of which the 13th fragment represents the 2nd, contained the episode of the state of anarchy and the restoration of order. Then followed the eight episodes covered by the 2nd tablet, after which came another address of the eagle to Shamash—perhaps a second appeal—then presumably an answer of the sun-god and, finally, the coming of Etana to the eagle. The joined fragments K 8578 + Rm 79, 7—8, 43 represent the beginning of this immediate continuation of either the 13th fragment or of K 1547.

The episode in the 12th fragment and with which K. 2606 begins must therefore be removed from the position assigned to the latter by Harper as a third group and placed before the nine episodes into which we have divided the first group. Harper's second group consisting of the joined fragment and supplemented by three further fragments and recounting Etana's flight on the back of the eagle remains where it is and would thus form the conclusion of the tale. The flight naturally follows the rescue of the eagle by Etana. Taking the joined fragment Rm 2, 454 + 79, 7—8, 280 as one, it is clear that this and K 8563 are duplicates or parallels and that both began with the story of the flight.³ K 3651 of which only a part of the obverse is legible, joins on at l. 18 to the reverse of Rm 2, 454 etc. while Rm 522 (only one side preserved) duplicates K 3651, beginning with l. 12 of K 3651 and extending

¹ l. c. p. 18.

² If this be so, it must be borne in mind, as above pointed out, that K 2606 being the 3rd tablet of the series represents the *repetition* of the description as an introduction to an account of the restoration of order by Ishtar and Enlil.

³ Harper has confused the obverse and reverse of K 8563. In K 8563, the beginning of the obverse is preserved. Lines 6—17 of K 8563 = ll. 1—16 of obverse of Rm 2, 454 etc. The reverse of K. 8563 refers to the "death" of the king(?) Etana (l. 4) and to his shade (*e-dim-mu-šu* l. 7) and therefore furnishes some incident that followed upon the flight.

5 lines beyond the latter, ll. 26—30 of Rm 522 corresponding to ll. 24 to 27 of the reverse of Rm 2, 454 etc.¹ If we are to assume that these two fragments (K 3651 and Rm 522) also began with the account of the flight, we would have to suppose for the former at least 40 additional lines at the top, which would give us a tablet of at least 130 lines and for the latter an addition of 50 lines at the top which would give us a tablet of 160 lines. This is most unlikely and it is much more probable that both fragments began with the second—and fatal—flight to the place of Ishtar, the first ending successfully with the arrival at the gate of Anu, Enlil and Ea.² This second flight forming a new episode would be an appropriate place at which to begin a new tablet. The joined fragment and K 8563 would thus contain both episodes, while the other fragments would begin with the second flight—the same relationship therefore as between K 2527 and K 1547. If we assume (as above suggested), that the story of Etana's coming to the eagle extended into the 5th tablet of edition C, we may suppose that the episode of the first flight was still told in this tablet and that the two fragments therefore represent the beginning of the 6th tablet of this edition—and in all probabilities the last tablet of the series.

The larger size of the tablets of edition B (to which the 13th fragment belongs) warrants us in assuming that both flights were included in one tablet. Rm 2, 454 might, therefore, represent the 4th tablet of edition B though this would assume a long narrative in the 3rd tablet before the actual flight began. Perhaps here too it may be more reasonable to suppose that the other two fragments represent the 4th tablet of edition B and the 5th of edition A, while Rm 2, 454 which is a much broader tablet than the others (see the photographs in Harper, *BA*, II, p. 509 compared with p. 503) would then represent a fourth edition of the narrative—complete perhaps in three or at the most in four tablets. Certainly, the fatal issue of the second flight must bring us to the end of the narrative. The result of our examination thus shows that the fragments so far recovered represent five and probably six different copies of the text:

¹ Note also that ll. 18—23 of reverse of Rm 2, 454 etc. = ll. 17—25 of reverse of Rm 522 = ll. 18—24 of K 3651 obverse.

² ll. 34—36 of reverse of Rm 2, 454 etc. See also below p. 125.

- (1) Edition A in 5 tablets
- (2) Edition B in 4 tablets
- (3) Edition C in 6 tablets
- (4) Edition D in 3 or 4 tablets
- (5) A fragment of an edition (K 2606)

which may not have contained all the episodes. All these are in the Kouyunjik collection, to which is to be added the (6) fragment of the Hammurabi period—a large tablet with two columns to each side—representing the beginning of the story and which probably told the whole story in one tablet.

V.

Combining now to the various fragments of the story and leaving aside the possibility that in some version or versions certain episodes were not included, we may reconstruct the story so far as known to us up to the present as follows. The scene is laid in a city which has been deserted by its patron deity or possibly by the gods in general. A state of confusion and anarchy exists, due apparently to the hostility of the Igigi. The Anunnaki hold a counsel in order to put an end to this state of affairs. The goddess Ishtar and the god Enlil appear to be the ones designated to come to the rescue. A king is put in control on earth by the goddess, while on high Enlil aids in re-establishing order. As in so many of the Babylonian myths, we thus have a correspondence between occurrences on earth and phenomena in the heavens. Confusion and anarchy below is paralleled by disturbances on high. During this state of anarchy, productivity ceases on earth. The sheep do not bear young, the gods are deaf to appeals or powerless to intervene against the ravages committed by hostile powers.

Eagle and serpent are next introduced as forming an alliance to carry on a work of destruction. They defy the authority of Shamash who represents order and justice. From the fact that the king whom Ishtar places in control is also designated as *re'u* "shepherd" and that Etana appears in the story as a shepherd,¹ we may perhaps be permitted to conclude that the king who is installed or possibly re-installed by Ishtar is none other than Etana. However this may be, there is certainly a

¹ See above p. 111.

direct connection between the ravages committed by the eagle and serpent and the distress of Etana, both being due to the general confusion that exists through the lack of control on the part of those higher powers that represent order and the harmonic working of the laws of nature. The state of affairs reminds one somewhat of the conditions that prevail during the period that Ishtar is retained as a prisoner in the lower world, during which time likewise the animals do not bring forth their young.¹ In this case we have, as is generally recognized, a nature myth portraying the change of seasons; and in view of the frequency with which this *motif* reoccurs in Babylonian myths, it is not improbable that the conditions portrayed at the beginning of the Etana story rest on the same general basis—a portrayal of the rainy and stormy season in the heavens and on earth, which could be symbolically represented as a time of confusion and disorder.

All this, however, must be viewed as merely conjectural until a fortunate chance shall bring to light more fragments of this part of the narrative.

The alliance between the eagle and the serpent comes to an untimely end. They go into the mountains to hunt for food. Each is accompanied by a young brood. First the eagle kills an animal and shares it with his young (or with the young of the serpent), then the serpent kills an animal and shares it with his young (or with the young of the eagle), but the eagle seizes the opportunity while the young of the serpent are engaged in eating to pounce down upon them. He does this despite the warning of one of the young eagles, described as "very clever" or "very wise", who urges him not to break the laws of Shamash i. e. not to run counter to the laws of righteousness and justice. The eagle consumes the young of the serpent and the latter appeals to Shamash for revenge for the injury inflicted. Shamash listens to the serpent and proposes a strategy. He advises the serpent to conceal himself within the carcass of a wild bull—one of the animals slain during the alliance between the eagle and the serpent—and then when the eagle swoops down upon it, to seize him and tear him to pieces. The strategy succeeds. Again the young eagle warns the father eagle and again the latter pays no heed to the

¹ Cun. Texts XV, Pl. 46 rev. 6—7.

warning. He lands upon the bull, the serpent jumps out, tears the wings and feathers of the eagle and the latter is left to die in a hole in the mountains. He does not die however. It is now the eagle's turn to appeal to Shamash to whom he promises eternal obedience, if only the sun-god will help him out of his plight. At the same time Etana "the shepherd" daily appeals to Shamash to again bring about fertility among his sheep. He asks the sun-god to show him the plant of birth that he may give it to his flock. Through the new fragment the meeting of the eagle and Etana is for the *first time made clear*. The plant of birth grows in the mountains in the very hollow into which the eagle has been cast. Shamash reveals this to Etana who takes the road to the mountain and, guided by one of the young eagles (if Jensen's restoration *KB VI*, 1 p. 110, 8 is correct), comes across the eagle. The eagle appeals to Etana to release him from the hole and as a reward promises to fly with Etana to the dwelling of the gods. We are unfortunately left in doubt whether Etana secures the desired plant and the gap in the narrative at this point also prevents us from ascertaining the purpose of the flight. In a general way we may conjecture that the eagle holds out the hope to Etana of being placed among the gods, in other words of securing immortality like e. g. Ut-napishtim, the hero of the deluge. This is a favorite theme in Babylonian myths which, it will be recalled is introduced into the Gilgamesh epic.¹ Etana mounts on the back of the eagle and together they fly upwards. They reach the heaven of Anu and at the gate of Anu, Enlil and Ea—i. e. the ecliptic,² they make a halt. So far so good. Again a gap occurs in

¹ See Jastrow, *Religion of Babylonia and Assyria* (English ed.) pp. 494 seq.

² The ecliptic, known as the *ḥarran Šamši* "road of the sun" (see Kugler, *Sternkunde und Sterndienst in Babel*. I, p. 259; Thompson, *Reports of the Astrologers* etc., Nrr. 88, 103; Virolleaud, *L'Astrologie Chaldéenne, Ishtar*, Nrr. XXI, 73; XXV, 57, 58 etc. etc.), is divided into three sections, known as the "road for Anu," "road for Enlil" and "road for Ea" respectively (Virolleaud, *Ishtar* Nr. IV). The gate of Anu, Enlil and Ea is therefore synonymous with the entrance point of the ecliptic. The Etana myth thus assumes the established astrological system, as is also indicated by the goal of the second flight—the station of Ishtar, identified in the astrological system with the planet Venus. See Jastrow, *Religion Babyloniens und Assyriens*, II, pp. 441 and 444 seq. In the Adapa myth, the hero also reaches the gate of Anu (Jensen, *Keilinschriftl. Bibl.*, VI, 1, p. 96).

the narrative and when the thread is once more taken up, we find the eagle urging Etana to continue the journey in order to reach the place where Ishtar—i. e. the planet Venus—dwells. As in the case of the first flight, a distance of three *kasbu* or six hours is covered. Whether at this point the eagle's strength is exhausted or whether the goddess herself intervenes, at all events the precipitous descent begins. The eagle falls through the space of three double hours and reaches the ground. The close of the narrative is missing but clearly the purpose of the flight has failed. We are left to conjecture what happened to Etana and to his ancient "airship."

In view of the composite character of so many of the stories that have come down to us from ancient Babylonia,¹ it will not seem hazardous to assume that in the Etana myth two originally independent tales have been combined, one based on a nature myth and describing a state of anarchy and confusion in a city which was deserted by its patron deity or by the gods in general. During this period all fertility ceases. The Igigi are hostile to the city and among those who suffer from the anger of the gods is Etana, the shepherd whose sacrifices to the gods are of no avail in bringing about fertility among his flocks. Order is restored through the intervention of Ishtar—the goddess of fertility in cooperation with Enlil. After the restoration, Etana appeals to Shamash—or perhaps originally to Ishtar to show him the plant of birth of which he has heard and through which his sheep can again be brought to bear young. The request is granted. Etana, it would appear, is also reinstated as ruler over his people and it is reasonable to suppose that the tale ended with the transfer of Etana as a favorite of the gods—like Ut-napish-tim—to a place among the immortals.

A second tale is that of an alliance formed by the eagle and the serpent, the treachery of the former and his punish-

¹ For the creation story see the author's paper "On the Composite Character of the Babylonian Creation Story" in the Nöldeke Festschrift Vol II, pp. 969—982; for the Gilgamesh epic, the author's *Religion of Babylonia and Assyria* (English edition), pp. 513seq. and Hermann Schneider, *Die Entwicklung des Gilgameschepos* (Leipziger Semitistische Studien, V, 1) who (p. 83) calls attention also to the parallels between Etana and Gilgamesh which led to the later confusion of the two by Greek writers.

ment through the intervention of Shamash—the representative of justice and order. This tale appears to be a piece of ancient folklore rather than a myth, to which there has been added after the manner of folk tales a moral—not to break the decrees of Shamash.

These two tales—the modified nature myth and the folk-tale with a moral—were combined, just as in the Gilgamesh epic the two independent series of tales of Gilgamesh and Etana were combined.¹ The alliance of eagle and serpent who join forces in a warfare against the animals of the mountains is made a feature of the confusion that reigns while the gods manifest their anger or hostility. The serpent's appeal to Shamash for vengeance suggests Etana's appeal to the god for the plant of birth and the complete link between the two tales is brought about by the meeting of Etana and the eagle in the mountain where the sought for plant is to be found. The transfer of Etana to the gods leads to the episode of the eagle carrying him thither as a reward for helping the eagle out of his sad plight. That through the combination both tales underwent a modification is surely natural. So it is a reasonable conjecture that in the story of the eagle and the serpent, the former actually dies after being torn to pieces by the serpent. Indeed if one reads the description, it is difficult to see what else can happen to the eagle except death. There seems to be nothing left of him after the serpent finishes his work. In order to connect the two tales, the eagle is revived and is rescued by Etana. Similarly, in the original tale of Etana, there is every reason to suppose that he was actually placed among the gods. This is shown by the success of the first flight in which the goal is attained, since the heaven of Anu—the highest part of heaven²—is reached. The second flight is clearly a duplicate of the first and betrays in the language used its dependance upon the former. It is a favorite theme with the Babylonian theologians to whom we owe the preservation and final form in which the old folk tales and popular myths were cast, that man cannot come to the gods, nor can he find out what is in store for him after death, beyond the certainty that he will be condemned to inactivity in a

¹ See the references in the preceding note.

² Gilgamesh Epic, XI, 115.

gloomy subterranean cavern. There may be exceptions but that is the general rule. It would be quite in keeping with this spirit if in the combination of the two tales, Etana is pictured as prevented from attaining his goal. Instead of being brought into the presence of Ishtar he is thrown down to the earth. Just as he appears to be approaching his goal, the eagle with Etana on his back falls through the great space of three double hours¹ that he has traversed—just as Gilgamesh after all his wanderings comes back to Uruk whence he started out with his main purpose—the securing of immunity from death—unaccomplished. The two tales thus combined are made to teach a lesson or rather two lessons,—(a) one that the laws of Shamash cannot be transgressed without entailing grievous punishment and secondly—and more important—(b) that man cannot be immortal like the gods. It is this lesson which the Babylonian theologians made the burden of the composite Gilgamesh epic, as is shown by the close of the tale on its present form. It is this lesson likewise which is illustrated by the tale of Adapa who through a deception practised on him forfeits immortality;² and it is this same lesson which, as it seems to me, the Etana myth in its final form was intended to convey.

In view of the new and important fragments of the myth that have been found since Harper published his study of the text fifteen years ago, it would be profitable to reconsider in detail the many parallels of the story found among other nations and to some of which Harper already called attention.³

¹ That the 2nd flight is merely a duplicate of the first is seen in the persistence of the "three double hours" as the distance traversed. In reality the two flights cover six double hours and the eagle ought to fall this distance before reaching the earth.

² See Jensen, *Keilinschriftliche Bibliothek*, VI, 1, pp. 94—101.

³ *Beiträge zur Assyriologie*, II, pp. 404—407. In the story of the Kai Kaus or Kavi Usan, the King of ancient Iran (990 B. C. according to traditional accounts), who attempts to fly to heaven with the help of eagles and comes to grief, we can see the influence of the myth of Etana, transformed and adapted to teach the lesson of punishment for heaven-defying pride. In a paper on this story, read before the American Oriental Society, April 21st, 1909, under the title "A Legend of Aerial Navigation in Ancient Persia," Professor Jackson gave the various Persian and Arabic sources for the tale, viz: The Pahlavi Dinkart 9. 22, 5—12 (translation by West in *Sacred Books of the East*, v. 37, pp. 220—223); Tabari's *Annales* (ed. de Goeje I, pt. 1, p. 603); Firdusi, *Shahname* (ed. Vullers & Landauer 1, 411—412, ll. 461—486; 2, 1638, ll. 2018—2019);

To do so, here, however, would carry us too far and must be left for some other occasion.

Al-Tha'alibi, *Histoire de Rois des Perses* (ed. Zotenberg, Paris, 1900, p. 165), told in connection with Kai Kaus' building of a high tower in Babylon, from which the attempt to reach heaven by means of eagles was made. This interesting combination of the aerial flight with a tale that is evidently suggested by the biblical story of the Tower of Babel, is a direct consequence of the introduction of the moral element in the old nature myth. The biblical story, voicing the same warning against ambitious pride, was associated with the tale of Kai Kaus and the latter made the central figure of the combined tales.

May we perhaps see in the flight of Ganymede with the eagle to the seat of the gods and in Psyche's flight with the winged Cupid and her fall to earth, (as told in Apuleius' beautiful tale of Cupid and Psyche — *Metamorphoseon* V, 104) traces with modifications of the episode in the Etana myth? Cf., moreover, Meissner, *ZDMG.* 48, p. 190, note 5 about the story of Kai Kaus.

Handwritten text in a cursive script, likely a form of shorthand or a specific dialect. The text is organized into numbered sections, with some lines heavily crossed out or scribbled over. The visible text includes:

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30. Obverse ...





Handwritten text in a cursive script, possibly a form of shorthand or a specific dialect. The text is organized into several paragraphs, with some lines numbered on the left margin (10, 15, 20, 25, 30). The script is dense and stylized, with many characters resembling vertical strokes and dots. The text is written on a piece of paper that has been partially obscured by a large, dark, irregular shape, possibly a shadow or a piece of tape. The overall appearance is that of a historical document or a manuscript.

Reverse.

The Origin and History of the Minaret.—By RICHARD J. H. GOTTHEIL, Professor in Columbia University, New York City.

THE minaret is usually considered to be one of the most distinctive features of the Muhammadan mosque and the history of its origin is naturally of interest to the student both of Islam and of the history of architecture. But unlike the Mihrāb (prayer-niche) and Minbar (pulpit), the references to the minaret in Arabic literature are very few; and the traditions that have gathered around it are so scarce as to make one feel that the religious significance that attaches to the Mihrāb and the Minbar are entirely wanting in the Minaret. Indeed, the name itself is strange, and in no way expressive of the purport for which the object was built. The word *منارة* can have meant originally only "an object that gives light". As such, it is used in old Arabic poetry for the oil lamp or rush light used in the cell of the Christian monk, exactly parallel to the Syriac *mēnārtā*;¹ from which, however, it is not necessary to derive the word, as Guidi and Fraenkel² have done, seeing that the formation is perfectly regular. It is then used for a "light-tower" or "light-house";³ the signification "a monk's cell or chamber for retirement", given by Lane⁴ from the *Kanz al-Ma'rūf* must be a late and a local one. Schwally has suggested,⁵ and he is followed by Douttée,⁶ that the application of the word *manārat*^{un} to the tower of a mosque is due to the light held by the Muezzin as he recites the call to prayer at night which gives the onlooker below the idea of a light-tower; but the explanation strikes one as involved and far-fetched. The transfer of the name from a light-tower

¹ Guidi, *Della sede primitiva dei popoli Semitici*, p. 38. Cfr. e. g. Imrulkais (ed. Ahlwardt) 148, 37. Ibid. 152, 20 *منارة* = *مصباح*.

² Guidi, *loc. cit.*, p. 37; Fraenkel, *Aramäische Fremdwörter*, p. 270.

³ See, e. g., the description of the lighthouses of the coast of Syria in al-Muḥaddasi (Ed. de Goeje), p. 177.

⁴ p. 1728.

⁵ ZDMG. 52, 145.

⁶ *Les Minarets et l'appel à la prière* in *Revue Africaine*, 43, 339.

to the tower of a mosque must have been occasioned by the resemblance of the one to the other. It is impossible to fix the time at which this transfer was made. The earlier and more significant designation of the minaret is *mī'dhanah* or *mūdhanah* (pronounced in the language of the street *ma'dhanah*)¹ —“a place from which the time of prayer is *announced*”; but it occurs seldom in the literature of the Middle Ages, and seems to have been driven out completely by the more common word *manārah*.

It is generally conceded that the earliest mosque in Islām had no minarets at all.² The mosques built in the days of Mohammed at Kūbā and Medinah were so simple that there was no place for building anything like a tower, even if the means and the necessary skill had been available. Caetani, in his monumental *Annali di Islam*,³ has shown that the mosque at Medinah was, at first, intended simply as a *dār* or private dwelling for the prophet and his family: there was no intention to build a place of assembly for the faithful. A court with a portico around it, through which one entered into the living-rooms of the family was all that it contained. The whole was surrounded by a wall which was to preserve the privacy of the *dār*. We have here, in embryo, the open *Ṣaḥn* and the closed *Liwān* of the later mosques. Bilāl, the first Muezzin, was in general the herald of Mohammed, not only the caller to prayer. The *Adhān* itself was copied from the Christians and the Jews.⁴ Ibn Hishām tells us that when

¹ Or *mād'na*; Lane, *Cairo Fifty Years Ago*, p. 78. In a story told in *Kitāb al-Aghānī* xx, 85 ماذنة, منارة and صومعة are used promiscuously.

² The historians of architecture, then, go too far when they say, as does Adamy, *Architektonik auf historischer und ästhetischer Grundlage*, II, 16: “Ein oder mehrere Türme, Minarets, waren gleichfalls notwendige Bestandteile für die Moscheen”. So, also, Adolf Fähr, *Grundriß der Geschichte der bildenden Künste* (Freiburg 1897) p. 272: “wesentlich waren endlich die Minarets”; and Lübke, *Grundriß der Kunstgeschichte*, 13th ed. II, 70: “Minarets . . . sind ebenfalls unumgänglich”. The *Adhān*, itself, however, is necessary; Dardir, *Sharḥ aḥrab al-masālik* p. 46: الاذان سنة مؤكدة بكل مسجد.

³ I, 438 et seq.

⁴ Of course, Mohammedans do not admit this: in fact, the Jews are presumed to have been surprised; al-Zurkānī, *Sharḥ al-Muwatta*, 121: وذكر اهل التفسير ان اليهود لما سمعوا الاذان قالوا لقد ابدعت يا محمد شيء لم يكن فيما مضى. Mohammedan Scholastics have all sorts of conceits in regard to the origin of the *adhān*, e. g. that Gabriel was

the first Moslems came to Medinah they prayed without any preliminary *adhān*.¹ But the Moslems heard the Jews use a horn,² and the Christians the *Nākūs* or clapper (the so-called *ἄγια ξύλα* or *σημεντρόν*, a long piece of wood struck with a flexible *wabīl*, the Aramaic *nākōshā*, which is still in use among the Nestorians³); and they wanted something similar for their own use. So Mohammed gave the command "Rise, O Bilāl, and summon to prayer!" Later tradition has embellished this simple account. Al-Nawawī gives the words in this wise "Go to some prominent place and summon to prayer".⁴ It was quite natural that Bilāl should make use of a position from which he could best be seen and heard. Upon one occasion, during the *Umrat al-Ḳaṣā* in the year 7, Mohammed ordered Bilāl to recite the *Adhān* from the top of the Ka'bah;⁵

the first to recite it in heaven (al-Sharkānī, *Hāshiyah* I, 231), and that Adam or Abraham was the first on earth to follow the custom (al-Zurkānī, *loc. cit.*).

¹ ed. Wüstenfeld, p. 347: وقد كان رسول الله حين قدموا اما يجتمع الناس للصلاة بغير دعوة كان المسلمون. al-Ḳaṣṭallānī, *Irshād al-Sārī* II, 3. Cfr. Muslim, *al-Sahīh* (Delhi 1309), p. 164; al-Zurkānī, *Sharḥ al-Muwatta*, p. 121.

² As far as we know, the Jews used the horn (*shōfār*) only on certain festivals. On the Arabic pronunciation of *شُفُور* see al-Ḳaṣṭallānī (*loc. cit.*) ويسمى الشبُور بفتح الشين المعجمة تشديد الموحدة المضمومة (= שפּוּרָא; cfr. Jawālīkī, ed. Sachau, p. 94; Ibn Hishām, ed. Wüstenfeld II, 108). The earlier traditions use the word *قرن* (Muslim, *al-Sahīh*, p. 164) or *بوق* (Ibn Hishām I, 348; al-Zurkānī, *Sharḥ al-Muwatta*, p. 121; al-Ṣi'ūṭī, *al-Ḥaṣā'is al-Kubra*, Hyderabad 1319, I, 196). Another word used appears in various forms: قنق, قنق, قنق (Ibn Hishām II, 108). *Lisān* (X, 131, 174) and *Tāj al-Arūs* (V, 478) decide for قنق, though there are authorities against them. Another, and later, tradition mentions a fire-signal: ذكروا ان يعلموا وقت الصلاة بشيء يعرفونه فذكروا ان يشفع الاذان Muslim *loc. cit.*; al-Bukhārī (ed. Krehl) I, 75; Zurkānī, *loc. cit.*; Ibn Hishām II, 108 (note in one Ms.).

³ Payne-Smith, *Thesaurus Syriacus* 2466. The *Nākūs* was indeed used at first for the early morning *adhān* in Fostat; al-Maḳrīzī, *al-Khiṭa*, 2nd ed., iv, 8. On the use of the word in the older poetry, see Jacob, *Das Leben der vorislam. Araber*, pp. 85, 122 and Doutté, *Les Minarets*, *passim*.

⁴ الى موضع بارز: al-Ḳaṣṭallānī, *ibid.* p. 3; Zain al-'Ābidīn, *al-Baḥr al-Rā'ik*, p. 268. ويسن الاذان في موضع عال.

⁵ Ibn Saad, *Biographien*, ed. Sachau, III, 1, p. 167; Wellhausen, *Mohammed in Medinah*, p. 302. Ibn Hishām, p. 822, says only that Mohammed ordered Bilāl to recite the *adhān*; but see *Die Chroniken der Stadt Mekka*, iv, 109.

which to some of the Meccans appeared to be an unholy act. Upon another occasion, so the tradition runs, Bilāl issued the call from the top of a high house that happened to be in the neighbourhood of the mosque;¹ and in the time of the Umayyads, the poet al-Farazdak still speaks of the *Adhān* as being pronounced "on the wall of every city".² Even in the later law books it was laid down that "the Muezzin, if he is on the road, may call to prayer while riding; if he descends (from his beast) he must halt, but if he is riding, he need not halt".³ The example set by Mohammed, and especially by Bilāl, was followed; even though no formal prescription can be found in reference to the ceremony. If the Mosque is large, says a later authority, "there is no harm if a Muezzin call to prayer from each one of its sides, so that all that are near it may hear him at one and the same time."⁴

There is then, as will be seen, no mention of a special place for the Muezzin. We first hear of minarets in connection with the mosque of Medinah under the Umayyad Walid ibn 'Abd al-Malik (86-96 A. H.).⁵ This holds good, also, for the early mosques built outside of the *Balad al-Ḥarām*.⁶ The mosque of Kufah was built by Sa'd ibn abī al-Waḥḥās in the year 17;⁷ and that of Basra by Abī Mūsa al-Ash'arī in the same year;⁸ but in connection with neither of these is anything said about a minaret. The one attached to the Basra mosque is said to have been added by Ziyād ibn Abī Sufyān during the Caliphate of Mu'āwiyah.⁹ One of the earliest mosques built was that of 'Amr ibn al-Āṣī in Fostat, Egypt. It was,

¹ Ibn Hishām p. 348; Zain al-Ābidīn, *Al Baḥr al-Rā'ik* p. 268 'Abd al-Rahmān ibn al-Kāsim, *Kitāb al-Mudawwanah* I, 60 in the name of Mālik ibn Anas., al-Shāfi', *Risālah* II, 152 وقد رايت بعض المؤذنين يصلى على ظهر المسجد الحرام بصلاة الامام (حدثنا اصحابنا). Cfr., also, al-Ṣi'ūtī, *al-Ḥaṣā'is al-Kubra* I, 196 (but only حدثنا اصحابنا).

² وحتى علا في سور كل مدينة مناد ينادى فوقها باذان; cited on the authority of Ibn Barri, *Lisān* XVI, 150.

³ 'Abdal-Rahmān ibn al-Kāsim in note 1.

⁴ al-Kaṣṭallānī II, 17.

⁵ Schwally in *Z. D. M. G.* LII, 143, citing al-Samhūdī.

⁶ For the mosques built in the Maghreb, see W. and G. Marçais, *Les monuments arabes de Tlemcen* (Paris 1903), p. 46.

⁷ al-Bilādhurī (ed. de Goeje), p. 275; Yāḳūt IV, 325.

⁸ al-Bilādhurī, pp. 346, 347; Yāḳūt I, 640.

⁹ al-Bilādhurī, p. 348.

to judge from the accounts, a very simple building, without even a concave *mihrāb* and with a very low roof:¹ and certainly, it had no minaret. There is a definite tradition that before the time of Maslamah ibn Mukhallid, one of Mu'āwiyah's governors in Egypt (ca. 36 A. H.), there was no elevated place at all for the Muezzin. Mu'āwiyah ordered him to increase the size of the mosque and "to build *ṣawāmi'*" for the *adhān*. So Maslamah constructed for the *jāmi'* four *ṣawāmi'* at its four corners. He was the first one to construct them in it; they having not existed before this time . . . the stairway, by means of which the Muezzins mounted was in the street, until Khālid ibn Sa'īd transported it inside the mosque". What the *ṣawma'ah* was, we do not know. The Arabic lexicographers derive it from a root meaning "to be sharp, pointed" or "to be provided with points or teeth";² but the root is one that is very rare in Arabic and it has no congener in the other Semitic tongues³. The word seems to have come to the Arabs from the name given to the cell of the Christian monk—perhaps in connection with the Stylites who lived on the top of a pillar. At least, both Bar 'Alī⁴ and Bar Bahlūl⁵ gloss

¹ al-Makrīzī, *al-Khiṭaṭ*, 2nd ed. IV, 6; Abu-l-Maḥāsīn I, 76; Lane-Poole, *The Story of Cairo*, p. 42. The same is true of the *Jāmi'* al-Askar, the second mosque built in Cairo.

² *Tāj al-'Arūs* V, 411: الصومعة كجوهرة بيت النصرارى ومغار للراهب . . . سميت لدقة رأسها وقال سيبويه الصومعة من الاصم والصومعة منار الراهب; Lisān X, 76: يعنى المتحدد الطرف المنضم والصومعة المنارة وهى فى Zain al-'Abidin, *al-Baḥr al-Rā'ik*, p. 268: الاصل متعبد الراهب ومن المبحاز قولهم للثريدة اذ ارفع وسطها وحدد رأسه وذقق الصومعة يقال لا تهور الصومعة وجاءوا بثريدة مصمعة وجاءوا عليهم الصوامع والصومعة i. e. a sort of cloak: so, also, al-Jauharī s. v.: الصومعة كجوهرة بيت النصرارى لصومع لدقة فى رأسها والعقاب لارتفاعها والبرنس وذروة الثريد. In some traditions, the word is used for the place of the Muezzin; al-Sarakshī, *al-Masbūt* I, 138: ولا اكره ان ينطوى وفى صومعته

³ Georg Hoffmann (Z. A. IX, 336) connects with it the word زوبعة "a whirlwind of dust". Similar formations are discussed by al-Šif'ūṭī, *Muzḥir* II, 77.

⁴ Ed. Hoffmann, No: 968.

⁵ Ed. Duval 221, 26. Al-Kindī, in his account of 'Ain Shams, says that the figures upon the obelisks are covered by a صومعة; which, of course, can mean only "a pointed hat" or "tapering hood" (Oestrup in *Bulletin de l'Acad. Royale de Danemark*, 1896, No. 4. p. 200) whence the

the Syriac *estōnā* by *ṣauma'ah*; and when the Caliph al-Walīd mounted up to the southern tower of the great Church in Damascus before demolishing it, he found a monk living there in a sort of hermitage (*ṣauma'ah*), which he refused to leave.¹ In the twelfth century the traveller Ibn Jubair found the custom still prevalent; a Mohammedan anchorite inhabited the western minaret,² which place the philosopher al-Ghazālī used as a retreat. It is only in the Maghreb that the term *ṣauma'ah* remained in use among the Mohammedans.³ Ibn Abi Zar' in his description of the mosque of the Kairuanese at Fez uses it interchangeably with *manārah*.⁴ It has gone over into Spanish as "zoma".⁵

Nor does it seem that all mosques, even in later times, had minarets;⁶ and the historians of architecture go too far when they describe them as necessary parts of the building. Al-Nu'aimī, who lived in the fifteenth century (or his epitomizer), in his description of the city of Damascus,⁷ gives us a more or less complete account of two hundred and one mosques; to which he adds twenty-eight by name only. He is very careful to mention the peculiarities of each building. But only twenty of the whole number are said to have had minarets. It is difficult to imagine that he makes mention of the fact only when the minaret was in some way noteworthy:

note has gone, through Ibn Zūlāk, into Yākūt III, 763, and from here into al-Maḥrīzī I, 31, al-Kazwīnī I, 149 and indirectly into al-Ši'ūṭī, *Husn al-Mukhāḍarah* I, 32. Ibn Iyās (in Arnold, *Chrestomathia* p. 56) has صومعة قنسوة for صومعة.

¹ Al-Nu'aimī, *Tanbīh al-Ṭalīb* in *J. A.* ix Ser. VII, p. 189; Muḥammed ibn Shākir, *Uyūn al-Tawārikh* in Quatremère, *Histoire des Mamlouks* II, p. 264. On al-Walīd's activity in building mosques, see de Goeje, *Fragmenta* pp. 4, 3; 12, 7.

² Ed. de Goeje p. 266, 19; Fr. Schiaparelli p. 257.

³ W. and G. Marçais, *Les Monuments arabes de Tlemcen* (Paris 1903), p. 45.

⁴ الانيس المطرب ed. Tornberg, pp. 30-32.

⁵ P. de Gayangos, *History of the Mohammedan Dynasties in Spain* I, notes p. 499; though this is doubtful. The word was entered in the first ed. of Engelmann, *Glossaire des Mots espagnoles* (Leiden 1861) p. 99, but it is omitted in the second ed. (1869) by Dozy.

⁶ Therefore, if there is no minaret, the *adhān* is to be recited at the door; al-Ramlī, *Nihāyat al-Muhtāj* (Cairo 1886) I. 305: لَوْلَمْ يَكُنْ لِلْمَسْجِدِ مَنَارَةٌ سَنَّ أَنْ يُؤْذَنَ عَلَى الْبَابِ.

⁷ See Sauvaire in *J. A.* ix Ser. VI, 409 et seq.

for, in most cases, the mere fact is adduced or the additional note that it was made of wood or was recently constructed. The conclusion to be drawn is that out of the large number of mosques in the city, only very few were provided with minarets.

In the same manner at Jerusalem, neither the *Kubbat al-Sakhrā* nor the *Masjid al-Aḥsā* had a minaret; the style of their architecture, of course, made it impossible. At a later time, four were added on the Ḥaram area. The only author that seems to mention them is Mujir al-Dīn (a late writer of the fifteenth century), who asserts that those that were to be seen at his day occupied the same position as did their predecessors during the reign of 'Abd al-Malik (72 A. H.).¹

The origin of the minaret is not apparent at first sight. Franz Pascha, in his "Baukunst des Islam"² sees no connection with the architecture of any other faith or race: "Ohne Vorbild wurden die Minarete . . . erfunden"; with which Pool is³ in substantial agreement: "With Christians, bells doubtless led to the idea of towers, and with Moslems the call to prayers by the human voice led to minarets". Schwally,⁴ however, looks for some outside influence, but does not find it: "Wahrscheinlich sind die Muslime nicht von selbst auf diese Gebetstürme verfallen. Aber wo sind die Vorbilder, durch die ihre Architekten oder Bauherren bestimmt wurden, zu suchen?"

From what has preceded it is evident that the idea of the minaret arose during the 'Umayyad dynasty and in Syria. In part, it was copied from the towers of the Christian Churches. Whether the *ṣawāmi'* which Mu'āwiyah ordered his lieutenant in Egypt to build on the mosque of 'Amr, were towers of any pretensions, we know not. But the suggestion of a tower as the place from which the call to prayers was to be made, or as belonging to a religious edifice seems to have come from the great church in Damascus which al-Walid finally turned into a mosque. Mohammad ibn Shākir says expressly⁵ that

¹ *Uns al-Jalīl* (Cairo 1283), p. 379.

² *Handbuch der Architektur*, 1886, II, 17.

³ *Studies in Mohammedanism*, 1892, p. 336.

⁴ *Z. D. M. G.* LII, 144.

⁵ Quatrèmere, *Histoire des Mamlukes* II, 273; *J. A.* 1896, ix Sér. VII, 423. In fact "at each angle of this temple there was a small tower erected

the western and eastern minarets existed a long time before the days of al-Walid. Al-Walid built the northern one called *ma'dhanat al 'Arūs*, after a favourite designation of the city as "the bride of the world".¹ What these towers had been used for is not certain; the variations in Mohammedan traditions seem to evidence this uncertainty. The one upon which al-Walid mounted is said to have been called *al-Sā'ah*, which would suggest a clock tower. Yākūt has the tradition that this same minaret was originally a fire-temple and that a flame rose up from it into the air.²

But there was a more general influence at work, of which the towers on the Damascus church are only one expression. The earlier explorations of de Vogüé and the more recent ones of the Princeton expedition to Northern Syria leave little doubt that the Church at Damascus merely followed, in respect of its towers, an older Syrian and (we may add) Mesopotamian tradition. In the basilica of Tafḥa, which competent authorities date from the fourth and fifth centuries, de Vogüé sees the transition from the Roman basilica used for civil purposes to the Christian Church: "to the right of the façade", he says, "there is added a tower in three stages"—a style of architecture common in the Ḥaurān.³ One has only to study the construction of the other Syrian Basilica—e.g. at Ḥāss (fourth century),⁴ at Ḳaṣr al-Banāt (fifth century),⁵ of Kalb-Luzeh and Termānīn (sixth century) to see here the origin of the church steeple.

This Syrian and Mesopotamian tradition leads us back—of course—to the Ziggurats of the old Babylonian and Assyrian shrines. With regard to the Syrian Christians, the evidence is not more direct than that sketched above. Even if such Ziggurats had been standing in their day, they were too fervent anti-idolaters to have adopted anything as specially heathen as a Ziggurat would have appeared to them. In building towers they merely followed the architectural tradition as it

by the Greeks for astronomical purposes"; Guy le Strange, *Palestine under the Moslems*, p. 230.

¹ Muḳaddasī, p. 159.

² II, 596.

³ *La Syrie Centrale*, I, 57; Butler, *The American Archaeological Expedition to Syria*, p. 409.

⁴ See illustration in Butler, *loc. cit.* p. 220; who, however, places it in the sixth century.

⁵ Butler, *loc. cit.* p. 156.

was current in the country; for such towers were not uncommon in other than religious edifices—in large houses and even in connection with funeral monuments.¹ It was different with the Mohammedans. They showed very little distaste to accept ideas, formulas, as well as architectural and other traditions from systems that had preceded them or were even their rivals. What originality Islam possesses lies more in the ethical and religious fervour which they imported into that which they borrowed. The proof of this, in the present connection, is to be seen in the two minarets of Samarra: the so-called Mauliyyah and the minaret of the mosque of Abū Dulaf.

During the last two years, these have been the subject of careful investigation on the part of two travellers—the General de Beylié and Ernst Herzfeld. De Beylié's *Prome et Samarra*² is valuable especially because it gives us, in addition an observant description of the mosque of Abū Dulaf, about fifteen kilometres north of Samarra in the very heart of the desert, and which has, also, a helicoidal minaret. Herzfeld's work is³ strong on the historical and archaeological side. Herzfeld holds that the architects of al-Mutawakkil, in building the minaret of Samarra (850) followed a tradition which they had brought with them from Persia, and that this minaret goes back to the Ziggurat through Persian affiliations—more specifically through the celebrated Tīrbāl of Gōr or Phiruzābād. He seems to deduce this from the fact that this was the only Ziggurat at the time that had retained sufficient of its old form to serve as a model. The point must remain undecided. At least as late as the fourth century—as Herzfeld himself admits—Ammian mentions such a tower at the Nahar Malka near Ctesiphon and Zozimus knew of several at Bersabra, i. e. al-Ambār. The Borsippa tower which was described by Harpocriton in his *Cyranides* 365-355⁴ B. C. and which was in use under the Seleucid kings up to 296 B. C. was still recognized as a Ziggurat by the Jewish traveller Benjamin

¹ De Vogüé, *loc. cit.*; Kraus, *Geschichte der Christlichen Kunst* I, 308 speaks of these small towers as "die zu den Emporen führenden Treppen aufzunehmen."
² Paris 1907.

³ *Samara*, Berlin 1907. An illustration of the Samarra minaret can also be seen in Sachau, *Am Euphrat und Tigris*, p. 86.

⁴ De Miely in *Revue Archaeologique*, 1900, p. 412.

of Tudela in the twelfth century.¹ That which distinguishes the Samarra minarets from the tower at Gôr and from the relics mentioned by the writers of the fourth century is the fact that it is helicoidal or round. Dieulafoy says expressly of the tower at Gôr² that "each of the stages is square and less in size than the preceding one". Ammian compares the tower at the Nahar-Malka with the Pharos at Alexandria, which evidently was not purely helicoidal. The idea that is peculiar to them all is that of a tower with an outside ramp; and it seems evident that we must look for the original of both the helicoidal and the square or staged tower in the Babylonian Ziggurat.

It must, however, be confessed that cogent proof of this statement can not at present be given. Herzfeld believes that the Ziggurat was simply a massive pile of bricks with an outer ascending ramp and that the Babylonians and Assyrians did not build what we are accustomed to call "staged-towers". He also holds that they were not merely portions of the Temple proper or adjunct to it; but that they also served as fortresses and were used for astronomical purposes. But it seems to me that he is mistaken in his interpretation of what evidence we have regarding the Ziggurat. When one commences to sift that evidence, it becomes surprisingly meagre; and we can reasonably doubt whether—as is currently believed—every temple had a Ziggurat. The following, however, seems to me to be sufficient to prove that the Ziggurat was indeed a stage-tower.³

a. The ruins of the so-called "observatory" at Khorsabad. This is distinctly stated to contain evident traces of three stages and a part of a fourth—each stage receding from the one below it.⁴

¹ *J. Q. R.* XVII, 519.

² *L'art antique de la Perse*, IV, 52.

³ I have omitted those remains that have not been definitely examined; e. g. at Kalah Shergat—"Trümmer etwa von einem Tempel, einem Stufenturm oder einem anderen monumentalen Bau"; Sachau, *Am Euphrat und Tigris*, p. 113.

⁴ On the authority of Place, Perrot and Chipiez, *Histoire de l'art dans l'antiquité*, II, 403. At Assur the height neither of the older towers nor of that of Shalmanezer II can now be determined; W. Andrae, *Der Anu-Adad Tempel in Assur* (Leipzig 1909), pp. 13. 64—though in the reconstruction four stages are given.

b. The ruins of the stage-tower at Borsippa brought to light by Sir Henry Rawlinson. Three stages are said to be clearly defined. Hilprecht speaks of the "six or seven stages still to be recognized";¹ but upon what authority, I do not know. Its Babylonian name was E. UR. IMIN. ANKI, which Sumeriologists translate either as "Temple of the seven planets of Heaven and Earth" or "Temple of the seven directions (spheres) of Heaven and Earth" (*bīt sibitti ḥammamē šāmē u'irsitim*).² The name, however, need not necessarily stand in any relation to the architectural features of the tower or Ziggurat.

c. At Mughayyar Loftus³ seems to have found traces of two storeys of the Ziggurat, though his description is not at all clear. The second storey "recedes several feet from the lower wall", though it is closer to the edge of the first at its North-West end than at the South-East. He speaks of a gradual stepped incline between the two storeys, though its connection with the entrance in the lower storey is not defined. Taylor⁴ describes a staircase, three yards broad, leading up to the edge of the basement of the second storey; but no further traces appeared. There seems to be no positive evidence that we are at all in the presence of a Ziggurat.

d. For Birs Nimrūd we are dependent upon the general description given by Rich,⁵ who saw traces of at least four stages, each one receding from the one below. No mention is made of a rampart.

e. At Abu Sharain, also, there is little positive evidence of a Ziggurat. There is a large basal substructure upon which some edifice has been erected, and to which an inclined plane led up⁶. Too little has remained of the upper part to determine its character.

f. At Tell-Loh the excavators are said to have found the remains of some sort of a building with terraces receding one

¹ *Explorations in Bible Lands*, p. 184.

² Schrader, *K. A. T.*³ p. 616. Langdon, *Building Inscriptions of the New-Babylonian Empire* I, 57 translates: "House of the oracular deity of the seven regions of earth and sky".

³ *Travels and Researches in Chaldaea and Susiana*, p. 128.

⁴ *J. R. A. S.* XV, 261.

⁵ *Babylon and Persepolis*, p. 167.

⁶ Taylor in *J. R. A. S.* XV, 404.

from the other.¹ It is quite doubtful whether this is part of a Ziggurat at all.

g. At Nippur Hilprecht assumes that there was a Ziggurat of five stages, but no reason is given for this assumption; and I am not aware that the special monograph on the subject "E-kur, the Temple of Bêl at Nippur" has ever been published. He confesses that very little is left of the higher stages of the Ziggurat of Ur-Gur.² Haynes found only considerable remains of a sloping second terrace. Peters, however, thinks that there is sufficient warrant for supposing an original Ziggurat of two stories, upon which Ur-Gur built one of three.³ He confesses, however, that the two upper stages of Ur-Gur's Ziggurat "were so ruined by water that it was difficult to trace or restore them".⁴ Of the supposed causeway, only so much was found as lead up "to the top of the first terrace of the Ziggurat".⁵

h. At Bismaya, too, the results have been very unsatisfactory and hardly warrant the supposition that traces of a real Ziggurat have been found. According to Banks,⁶ the small amount of the rubbish in the place in which it is supposed to have been would warrant, at best, the conjecture of a Ziggurat of two or three stages. In fact, not more than one stage, in reality, was found with a flight of steps leading up and this may be nothing more than an elevated platform for some building. Further down in the so-called plano-convex temple, the base only of some building was unearthed: nothing compels us to hold that this was part of a temple-tower.

i. The so-called Tîrbâl of Jaur or Gôr (Firuzâbâd). Herzfeld represents this to be also merely a tower "von quadratischem Grundriß mit äußerer Wendelrampe". But Dieulafoy, who has examined the ruins minutely says distinctly that the tower "is composed above the platform, of four stages ... Each stage is square and recedes from the preceding one by a space equal to $\frac{1}{10}$ of the base".⁷

j. The account of the temple of Bel at Babylon given by Herodotus⁸. Whatever value we may place upon his trust-

¹ Perrot and Chipiez, *Histoire de l'art dans l'antiquité*, II, 398; Hilprecht, *loc. cit.* p. 232.

² *Loc. cit.* p. 374.

³ *Nippur*, II, 122, 124.

⁴ *Loc. cit.* p. 162.

⁵ *Loc. cit.* p. 147-8.

⁶ *A. J. S. L.* 1905, pp. 30-32.

⁷ *L'art antique de la Perse*, IV, 79, 85.

⁸ I, 180.

worthiness, there can be no doubt of the idea that he intended to convey. After mentioning the first tower, he speaks of an ἄλλος πύργος = another tower having been erected upon this first one (ἕτερος, i. e. πύργος), and so on up to the eighth.¹ He would hardly have described each one of these as an individual tower, if the whole had been one massive structure. Harpocriton, also, mentions three towers superimposed as still standing in his days; and he did not regard it as one single tower.² And finally, Benjamin of Tudela, though much too succinct in his account, speaks of the outer rampart as if it were not continuous: ובין עשרה ועשרה אמות דרכים ובהם שם עולים בעיגול "and every ten cubits there are ways (or slopes), by means of which one goes in a circle, encircling it until one reaches the top".³ He seems evidently to have a stage-like arrangement in mind. Unfortunately it is impossible to verify these statements. The bricks have all been carried off to be used in other buildings; and all that remains to mark the spot is a depression called by the Arabs *al-saḥn*, "the bowl".⁴

k. Representations in Babylonian and Assyrian art; two of which only have come down to us: the representation on the so-called Loftus boundary-stone and the relief from the wall of the palace of Sargon at Nineveh. The first of these Herzfeld ignores entirely; yet there can be little doubt as to the stage character of the tower it is meant to represent.⁵ As regards the second, Herzfeld⁶ is at pains to prove that it does not represent a Ziggurat at all; but his argument is not at all convincing. The rather crude manner in which the Assyrian artists expressed themselves need not deter us from seeing in the two curves that flank the portal an attempt to picture the inclined planes of a Ziggurat. Herzfeld suggests that they represent two towers; but then there would be no reason for the curves. And the portal reminds us of a similar portal which is part of the Tīrbāl of Gōr, as described by

¹ Zehnfund, *Die Wiederherstellung Nineves* (A. O. V, 4; 1903) p. 23 speaks of six stages; but does not give his authority for the statement.

² *Revue Archaeologique*, 1900, p. 412 et seq.

³ Adler's translation, *J. Q. R.* XVII, 527; *The Itinerary of Benjamin of Tudela* (1907), p. 43 is not quite exact.

⁴ Hilprecht, *loc. cit.* p. 553.

⁵ See e. g. Hommel, *Babyl. Assy. Geschichte*, p. 19; Hincke, *A New Boundary-Stone of Nebuchadrezzar I from Nippur*, Phil. 1907, pp. 17, 239.

⁶ *Loc. cit.* p. 27.

Dieulafoy: "on passait d'abord sous une porte signalée actuellement par les naissances d'un arceau de 60 cm. d'épaisseur, puis on s'engageait sous une galerie recouverte d'un berceau en partie conservé".¹

A reminiscence of the Babylonian stage-tower may also be seen in the stories told about the famous tower in the castle of Ghumdān in Ṣan'ā. The ordinary report was that it was seven stories high; i. e. that it had seven stages;² though al-Hamdānī, in his *Iklil*, is certain that it had twenty, and not seven, stories.³ A glance at the picture of the castle given in the *Corpus Inscriptionum Semiticarum*⁴ will show how the mistake arose. The rock has evidently been built upon in terrace-like formations.

The evidence here adduced does seem sufficient to permit the view that real stage-towers did exist in connection with Babylonian and Assyrian temples. But it may be wrong to assume that these were the only kind of towers constructed there. The two round towers in the mosques of Samarra and Abū Dulaf seem to point to the possibility that some of the Babylonian Ziggurat may have been built in a similar round form.

It is, however, in another part of the Mohammedan world that we are able to trace the further influence of the old Mesopotamian tradition. All through the Middle Ages, Egypt stood in close connection with Irāk and with Persia: until the Ottoman Turks brought the influence of Constantinople to bear upon the land of the Nile. The great centres of literary and of artistic development in Irāk made their influence felt in

¹ I am not able to follow Jeremias in attributing a cosmic character to the Ziggurat; *Das Alter der babylonischen Astronomie*, 1908, pp. 32-34. Max von Oppenheim, *Vom Mittelmeer zum Persischen Golf* II, 240, speaks of the tower of 'Aḡar ('Aḡr) kūf, to the north-west of Bagdad as a relic of the Babylonian period (cfr. also, Niebuhr, *Reisebeschreibung* II, 305; Rich, *Narrative of a Journey to the site of Babylon*, p. 80; Ker Porter, *Travels*, II, 275; Layard, *Nineveh and Babylon* p. 476). But Peters, *Nippur*, I, 188, 354, is probably right in holding that it does not contain the remains of a Ziggurat. The Arabic legends in regard to its origin can be read in Ṭabarī II, 917 etc.; Yāḡūt I, 863; al-Hamadhānī pp. 196, 210; *Hamzae Ispahanensis Annalium Libri* X, ed. Gottwaldt, p. 35.

² Yāḡūt III, 811; al-Ḳazwīnī II, 33. Cfr. Caussin de Perceval, *Essai* I, 75.

³ D. H. Müller, *Die Burgen und Schlösser Südarabiens* I, 13, 15, 56.

⁴ Vol. IV, 1. Tab. 1.

the land which has so seldom been ruled by men of its indigenous races. One of the earliest monuments of Arab architecture is the mosque of Ibn Ṭulūn in Cairo.¹ There can be little doubt of the connection of its "corkscrew tower" on the one hand with the Pharos² in Alexandria, on the other with the minaret of Samarra. We can have some correct idea of the form of the Pharos from the description left us by Arabic writers, from a mosaic in St. Mark at Venice (twelfth century) and from a curious representation found in some manuscripts of two noted Arabic writers—Yākūṭ³ and al-Ḳazwīnī.⁴ It was of three storeys; the first square, the second octagonal and the third round.⁵ The minaret of Ibn Ṭulūn, also, has three storeys, but the forms of the second and the third are reversed. Now, it is quite possible that in building his minaret, Ibn Ṭulūn was partly inspired by the Pharos at Alexandria. We know that he repaired it and added a *Ḳubbah* or dome on the top.⁶ But there is a distinct tradition, upon the authority of al-Ḳudā'ī (died 454-5 A. H.) that Ibn Ṭulūn fashioned both his mosque and its minaret

¹ See e. g. Coste, *Architecture Arabe*, plate XXXVII; Lane, *Story of Cairo* p. 73; K. Corbet, *The Life and Works of Ahmad ibn Ṭulūn* in *J. R. A. S.* 1891, p. 527; De Beylié, *Prome et Samara*, p. 122; Saladin, *Manuel d'art Musulman*, I, 81; Kaiser and Roloff, *Ägypten Einst und Jetzt*, 1908, p. 199. Lane-Poole, *A History of Egypt*, p. 65 adds "Architects, however, throw doubts on the antiquity of Ibn Ṭulūn's minaret"; but no arguments are adduced.

² Alfred H. Butler was the first to suggest that the Pharos served as a model to the workmen of Ibn Ṭulūn; see *Academy*, Nov. 20. 1880; *Arab Conquest of Egypt*, p. 398. Van Berchem (*Corpus*, p. 481) holds the same view. On the other hand, Herzfeld (*loc. cit.* p. 35) thinks that the Pharos was rebuilt in accordance with the form of the minaret of Ibn Ṭulūn.

³ I, 263.

⁴ II, 98.

⁵ Hardly *four*, as Butler, *Arab Conquest of Egypt*, p. 391 asserts. See *Khīṭaṭ*, 2nd ed., I, 254. The earliest coins containing a representation of the Pharos are dated in the year 15 of Domitian, i. e. 80 A. D. Here it has in reality only two stages, seemingly square. On the coins of Commodus the representation is strictly conventionalized: three round towers superimposed. See E. D. J. Dutilh in *Bulletin de l'Institut Egypt.* 1897, p. 24. Herzfeld (*loc. cit.* p. 33) suggests that the form of the Pharos itself is not Greek, but that it was inspired by Babylonian precedents.

⁶ *Khīṭaṭ*, 2nd ed. pp. 253, 254 (cfr. al-Si'ūṭī, *Husn* I, 44). The text is not quite plain: "Ahmad ibn Ṭulūn made some repairs in it and placed on the top a *Ḳubbah* of wood, that whoever entered it (the *manārah*) might be able to go to the top. It was spacious, but without a stairway".

after those of Samarra. There is little reason to doubt the correctness of this tradition, or to call it—as Herzfeld does—“Geschichtskonstruktion”. Al-Ḳudā’ī stood in high renown among Mohammedan historians of Egypt,¹ and his work was used liberally by all who have written on the history and the antiquities of the country. Aḥmad ibn Ṭulūn had spent part of his youth in Samarra;² and when he succeeded in swinging himself upon the throne of Egypt, he kept up connection with his friends in that city.³ It was with him that commenced that artistic influence of Mesopotamia in Egypt which had formerly belonged to Syria. It was one more avenue opened through which that artistic influence of late oriental civilization was to affect the early Middle Ages, on which Strzygowski has dwelt so often.⁴ And one is tempted to see both in the Pharos and in the minaret of Ṭulūn nothing more than a combination of the square or angled Ziggurat and the round one that has been presupposed in order to account for the Samarra towers.

But in one important particular the minaret of Ibn Ṭulūn differed from the Pharos; and here we must see the direct influence of Mesopotamia. In the Pharos, the ascent was covered and was, therefore, an integral part of the building. Yākūt says “It has a wide stairway which a horseman can ascend with his horse”;⁵ “The ascent is roofed over⁶ with slabs that rest upon the two walls that enclose the staircase. One mounts up to an elevated platform with encircling battle-

¹ See Becker, *Beiträge zur Geschichte Ägyptens*, I, 20; idem in *Z. A.* XXII, 430; N. A. Koenig, *The History of the Governors of Egypt by al-Kindi* (N. Y. 1908), p. 23. Strzygowski (*Jahrbuch der Königl. Preuss. Kunstsammlungen*, 1904, p. 246) also accepts the testimony of al-Ḳudā’ī.

² Ṭabarī III, 1670; Vollers, *Fragmente aus dem Muḡrib des Ibn Sa’ād*, p. 7; Abūl-Maḥāsīn II, 6.

³ Vollers, *loc. cit.* p. 47, 15.

⁴ *Loc. cit.* p. 237. Cfr. René Dussaud, *Les Arabes en Syrie avant l’Islam* (Paris 1907), p. 45. On the general question, see Migeon, *Manuel d’Art Musulman* II, 71, 102, 459 et seq.

⁵ Consequently, there were no steps. Ibn Khurdābeh, *Kitāb al-Masālik*, (ed. de Goeje) p. 114, 16 has *بغير درج*, which reminds him of the ascent in the minaret of the Samarra mosque. Mas’ūdī has the same expression; and the doubt of Butler (*Arab Conquest of Egypt*, p. 392, note 2) “it does not seem quite clear whether there were actual steps or an inclined plane for mounting the tower”, is not justified.

⁶ Yākūt has *سقف* and not the unintelligible *سقت* of al-Ḳazwīnī.

ments, from which one has an outlook over the sea. In this there is a space as if it were a square tower which one ascends by another series of steps unto another place from which one can look down upon the roof of the first. It is also surrounded by battlements. In this space there is a pavilion like a watchman's cabin". That he is speaking here of an inner staircase¹ is plain from his statement a little further on that this staircase winds around "something like an empty well"—a fact that is also reported by the Chinese author of the thirteenth century Chao-Yu-Kua in his ethnographic work *Chu-fan-chah*: "in the middle of the tower there was a spring".² Idrīsī (twelfth century) says explicitly: "one mounts by means of a wide staircase, constructed in the interior, just as is the custom in mounting mosques".³ The minaret of Ibn Tūlūn, however, has its ascent outside, in the form of a rampart, just as was the case with the Ziggurat.⁴ The persistence of this tradition in Mesopotamia itself is seen in the tower built at Bagdad by the Caliph al-Muktafi in the eleventh century (the *Kubbat al-ḥimār* or "Cupola of the Ass") "ascended by a spiral stair of such an easy gradient that the Caliph could ride to the summit on a donkey trained to an ambling gait".⁵

The combination of the square or angled base surmounted by a circular tower remained the predominant type of the Egyptian minaret; though the ascent has been placed inside. This general character, of course, admitted of certain variations. The minaret upon the tomb-mosque of Kalā'ūn is made up of a square base, surmounted by another square retrocessing and by a circular top; that on the tomb-mosque of Barḳūk

¹ Hirth, *Die Länder des Islām nach chinesischen Quellen*. Supplément au Vol. V du *T'oung-Pao*, Leiden 1894, p. 53.

² *Description de L'Afrique*, p. 139.

³ Van Berchem, Saladin and de Beylié have correctly described the Pharos as telescopic in form; while the minarets at Samarra and Abū Dulaf are helicoïdal. See *Prome et Samarra*, p. 115, note.

⁴ Guy le Strange, *Bagdad during the Abbasid Califate*, p. 254. A similar tower "up which four horses could be driven" is mentioned by Chao-Yu-Kua as existing at Lu-Mei, which Hirth supposes to be Damascus. If this is so, the author must confound the tower to which he refers with some other—perhaps the Pharos itself, as de Goeje suggests: *loc. cit.* p. 47.

⁵ Coste, Plate IX; Saladin I, 112. Cfr., also, the minaret of al-Ghūrī, Coste, Plate XXXVI; Prisse d'Avennes, *L'Art Arabe*, plate XXVI.

of a square base, followed by a circular construction, and then by a round top resting on pillars.¹ Sometimes the circular part was broken into an hexagonal or an octagonal. The minaret on the mosque of al-Ḥasan has a square base surmounted by an octangular tower; which is followed by a second octangular tower; the whole surmounted by a top piece resting upon columns.² This is also the form of the minaret on the madrasah of Muḥammad ibn Naṣr. The minaret of the tomb-mosque of Kait-Bey has a square base that develops before the first stage is finished into an hexagonal. Upon this is a circular tower, surmounted by a round top resting on pillars.³ At other times the square base was broken as in the minaret of the mosque of al-Mu'ayyid, where it is hexagonal;⁴ or in that of the Azhar where it is also hexagonal—surmounted by a decagonal, and this is crowned by two towers that support the top piece.⁵

Both forms, the square and the round tower, have, however, persisted uncombined in various parts of the Moslem world; the cleavage is rather marked. The square minaret persisted in Syria⁶ (whenever Egyptian influence was not at work), as can be seen in the "Ma'dhanat al-'Arūs" in the Cathedral mosque at Damascus⁷ and even in the general character of the "Minaret of Jesus" there. That of the mosque of Zakariyya (the cathedral mosque) at Aleppo is a simple square all the way up.⁸ The Umayyads carried this form into Spain; the most noted example to day being the Giralda at Sevilla,⁹ which has been copied faithfully in the tower of the Madison Square Garden of New York City. It was also carried into Africa, where, to this day, the usual form of the minaret is square. Witness the Jama Zaitoun at Tunis, the minaret of the Kalaā Beni Ḥammad (the Berber capital of North Africa); the Katubia in Morocco, the Mosque at Oran or the Maṣṣurah

¹ Coste, Plate XIV.

² E. T. Rogers and Miss Rogers in *Art Journal*, 1880, p. 77.

³ Coste, Plate XXXII.

⁴ Coste, Plate XXXI; Saladin I, 144.

⁵ Coste, Plate XXXVII.

⁶ Muḥaddasī (ed. de Goeje), p. 182.

⁷ Saladin I, 72. The top of the "Minaret of Jesus" is evidently a later addition.

⁸ Saladin I, 105.

⁹ Saladin I, 232; Adolf Fähr, *Grundriß der Gesch. der bildenden Künste*, p. 280; Lübke, *Gesch. der Architektur*, p. 81; W. and G. Marçais, *Les Monuments Arabes de Tlemcen*, p. 45.

at Tlemcen.¹ Only in a few cases, as at Hamonda Pasha in Tunis, is the absolute square broken into a hexagonal.

On the other hand, the round minaret is generally found in Mesopotamia and the countries further east.² Some of the great mausoleums, it is true, seem to represent an angular base surmounted by a short,³ pointed tower—such as the tomb of Zubaidah the wife of Hārūn al-Rashīd near Bagdad with its pyramidal stalactite top or the tomb of Ḥasan al-Baṣrī at Zobair near that same city, with its tower curiously formed of eight stages in telescopic arrangement.⁴ Nor are peculiar forms wanting; e. g. the minaret in the Sūk al-Ghazal at Bagdad,⁵ which though round increases in width towards the top where it finishes in a beautiful stalactite top (similar to the minaret at Amadiéh⁶), or the minaret at al-Ānah with its eight regular storeys,⁷ which reminds one forcibly of some of the towers recently found at Axūm.⁸ In some cases, but at a later period, the round form was frankly discarded—as in the minaret of the Bibi Khanūm at Samarcand⁹—that noble structure erected by Tīmūr to his much-beloved wife—which is octagonal in form, or in that of the Royal Tekië at Teheran, which is square.¹⁰ But in general, one will find round minarets of one sort or another from Mesopotamia up to the confines of China. There is, of course, much variety in the details of these round minarets, and their architecture has been affected by local taste and racial traditions. The Minār Kalān (the great minaret) at Bokhara is an immense structure “36 feet at the base and tapering upward to a height of 210 feet”.¹¹ At times a sort of spiral is worked into the tower, as at the Imperial mosque of Ispahan,¹² or at the “Gūr Amīr”, the mausoleum of Tamerlane. In the Minar of

¹ Saladin I, 198, 217, 224, 228 etc.

² Saladin I, 289.

³ Saladin I, 320; de Beylié, *Prome et Samarra*, p. 32.

⁴ *Revue du Monde Musulman* VI, 645.

⁵ De Beylié, *Prome et Samarra*, p. 48.

⁶ Binder, *Am Kurdistan*, p. 207.

⁷ *ibid.*, p. 69.

⁸ *Jahrb. des Kaiserl. deutschen Archäolog. Inst.* 1907, pp. 45, 46. Cfr. *Am. Journ. of Archaeol.* XI, 340.

⁹ Skrine and Ross, *The Heart of Asia*, p. 392.

¹⁰ *Revue du Monde Musulman* IV, 483; Jackson, *Persia Past and Present*, p. 417.

¹¹ Skrine and Ross, *The Heart of Asia*, p. 374.

¹² Saladin I, 397.

the Kutab mosque at Delhi, the smooth surface is broken by projecting ribs which form flutes which are alternately angular and circular up to the first storey;¹ circular in the second and angular in the third. The fourth storey is plainly round.² It is this round form, though much smaller in circumference, that has been adopted by the Turks and which they evidently learned in Mesopotamia. It is this style that is found, again with very few exceptions, in Constantinople and the Balkan Peninsula.³

But it is not only in Mohammedan countries that the idea first expressed in the Babylonian Ziggurat has survived. I should not like to be misunderstood as falling in with the Babylonian exaggerations of some of our most learned Assyriologists and of seeing everything through spectacles coloured by the grandeur of the antique world. But in matters of art and of architecture especially, the borrowings and the influences have been so numerous, that one civilization may be said to stand upon the shoulders of its predecessor. It is a well-known fact that the early Christian basilica had no towers attached or superposed. The same is true of the earliest Byzantine churches in Italy—the classic home of the campanile. Even to this day there are none attached to the cathedral of Parenzo (535-543), of Prado (571-586) or to that of San Lorenzo at Milan (6th century), which are among the earliest examples of church architecture in the West. It is true that some of the old Italian churches have at present campaniles adjoining. This is the case with a number of the Ravenna churches—the Basilica Ursiana, Sant' Apollinare

¹ Ferguson, *History of Indian and Eastern Architecture*, p. 505. A similar method is employed in many of the grand palaces of Mesopotamia and in the Minar, or lighthouse at Beni Hammad in North Africa. See De Beylié in *J. A.* XII (1900) p. 197.

² Ferguson, *loc. cit.* John J. Pool, *Studies in Mohammedanism* (1892) p. 336 "It is not exactly a minaret, that is to say, it is not now, if it ever was, connected with a mosque, but it is a lofty turret or tower which is called a minar".

³ One might go still further and examine the connection that exists between the Babylonian Ziggurat and the stage-temples found in Turkestan, at Turfan, Astana and Syrchab (Grünwedel, *Bericht über archäologische Arbeiten in Idikutschari und Umgebung in Abhandl. Phil. Philol. Klasse der Bayer. Akad.* 1906, p. 49; Regel in *Petermann's Mitteil.* for 1879, 1880 and 1881); but such an examination would be foreign to the scope of the present paper.

Nuovo, Sant Apollinare in Classe. San Vitale is even surmounted by two towers. It must be noted, however, that the towers on San Vitale are not campaniles in the true sense of the term, but merely means for reaching the gallery.¹ As regards the campaniles themselves, all authorities agree that though the main edifices of the churches are of the fifth and sixth centuries, the campaniles were erected at least two centuries later.² The dating of the campanile is in no way affected by the undoubted fact that the bell was used in connection with early Christian churches. Gregory of Tours, towards the end of the sixth century, seems to be the first to mention it as part of the church paraphernalia.³ The Chronicle of the abbots of Fonteinelle, speaking of the years 734-738, mentions the "Campanum in turricula collocandum ut moris est ecclesiarum".⁴ Some of the belfries (e. g. of St. Satyrus) are supposed to be as old as the sixth century.⁵ But belfries are not towers. The oldest campaniles are supposed to date from the beginning of the ninth century—those of Santa Maria della Cella at Viterbo and Sant Ambrogio at Milan: though that of Sant Apollinare in Classe is held by some to be of the eighth century.⁶ The campanile of Sant' Apollinare Nuovo is however reliably dated between 850 and 878.

It is therefore a pertinent question—whence did this addition to church architecture come? The writer of the article "Kirchenbau" in the *Protestantische Real-Encyclopädie*⁷ is of opinion that it was an original conception both in Italy and in the Frankish Empire, and that it had no connection whatsoever with the East. I understand this to be also the meaning of Adolf Fähr's words: "Ein neues Element bilden

¹ "... le torri della basilica di San Vitale, dalla muratura sincrona ad essa, furono erette per dare accesso alla gallerie superiore"; Venturi, *Storia dell' arte Italiana* (Milan 1902) II, 160.

² G. T. Rivoira, *Le origini della architettura Lombardica* (Rome 1901), I, 49 et seq.; Venturi, *loc. cit.*; Ch. Diehl, *Ravenne* (1903) p. 48.

³ Venturi, *loc. cit.* II, 149; *Protest. Real-Encycl.* VI, 704.

⁴ Cited from Eulart, *Manuel d'archéologie française* p. 174 in Arthur Kingsley Porter, *Mediaeval Architecture* (N. Y. 1909) I, 81, note 3.

⁵ Raffaele Sattaneo, *Architecture in Italy* (London 1896) p. 255.

⁶ Dehio and Van Bezold, *Die kirchliche Baukunst des Abendlandes*, I, 135.

⁷ X, 786.

die meist kreisrunden Türme".¹ But one might well ask in return—if they were not necessary as belfries, what purpose did they serve? In Ravenna they could hardly be needed as towers of defence, since the whole city was enclosed by a wall. Nor could they be used as light-houses; for that purpose they were too far distant from the shore. It is certainly peculiar that the rise of the campanile or church tower synchronizes with the coming of the Arabs into the Mediterranean. The first Arab raid upon Sicily is said to have taken place in the year 701;² and though Sicily and certain parts of Southern Italy did not come under their direct rule until the Aghlabites were strong in Africa during the ninth century,³ Arab influence permeated the Eastern Mediterranean long before that. I do not know what authority there is for the statement that the columns for the basilicas at Ravenna were made in Istria by oriental workmen;⁴ but Ravenna was a great centre from which Oriental influences passed on into Europe—not only in art, but also in decoration, in mosaics, and in miniatur-painting as well.⁵ The basilica of St. Mark at Venice, supposed to contain the remains of the saint brought thither in 828 from Alexandria, is adorned with columns garnered in the East; and the campanile has an "ascent by a continuous inclined plane built between an inner and outer wall and turning with a platform at each angle of the tower" which reminds one at once of the ascent in the Pharos at Alexandria. Like the minaret, the campanile could be either round or square. Most of the early examples are round; but square ones are not wanting, e. g. at San Giovanni Evangelista, San Francesco and San Michele in Affricisco in Ravenna. And like the minaret,⁶ the campanile was at first not an integral part of the church building. It was generally placed near to it, sometimes even leaning upon it; until in the church

¹ *Grundriß der Gesch. der bildenden Künste*, p. 228.

² Weil, *Chalifen* I, 478.

³ Weil, *loc. cit.* II, 249; Müller, *Islam* I, 551.

⁴ Baedeker, *Italie Septentrionale* (1892), p. 301.

⁵ Ch. Diehl, *Ravenne*, pp. 107-109; Venturi, *Storia dell' Arte Italiana* II, 110, 127; Corrado Ricci, *Ravenna* (Bergamo 1902), pp. 5, 7, 64.

⁶ Lane, *Cairo Fifty Years Ago*, p. 108 "... not otherwise connected with the mosque than by an arch, over which is a way to the terraces above the arcades".

spire it became almost a necessary part of every Christian place of worship.

It seems to me, therefore, that a possible explanation of the sudden appearance of the campanile in Italy during the eighth and ninth centuries, would be that they are due to Mohammedan influence. Whether this influence came from Egypt, or from Syria and Mesopotamia, or even from the Maghreb, is a point upon which I should not like to insist. But this much does seem to follow from a study of the history of the monuments, that the old idea of the Ziggurat or tower in some way connected with worship at a shrine has filtered down to us through the Mohammedan minaret and finds its expression to day in our church steeple.

April 1909.

The Vedic Dual: Part I., The Dual of Bodily Parts.—By
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NEITHER native nor occidental grammarians have adequately defined the scope of the dual in Sanskrit, but both agree on the general strictness of its use. The great Pāṇini states the general rule for grammatical number with the utmost simplicity,—*bahuṣu bahuvacanam | dvyekeyor dvivacanāikavacane* (I. 4. 21f.), i. e.: In the case of many, the plural; in the case of two (or) one, the dual (or) the singular (is used). As regards the dual he appears to know only two exceptions. In I. 2. 59, he states:—*asmado dvayoḥ ca*, or that the plural of the first personal pronoun may be used of two, and in the next section he adds:—*phalgunīproṣṭhapadānāṃ ca nakṣatre*, or that the plural may be used instead of the dual of the lunar mansions *phalgunī* and *proṣṭhapadā*. We may add that both of the Pāṇinean exceptions are found in Vedic.

Whitney (Sk. Gr. § 265) admits “only very rare and sporadic exceptions” to its strict use “in all cases where two objects are logically indicated, whether directly or by combination of two individuals.” Speijer (Sk. Syn. § 26) states:—“In all periods of the language the dual is the proper and sole number by which duality is to be expressed”. He thinks it not improbable that in the voluminous mass of Sanskrit literature sundry instances may be found of duality expressed by the plural number but he is confident that “the number of such exceptions cannot be but exceedingly small”.

Students of Vedic syntax, however, occasionally observing some of the phenomena to be presented in this study, have had an idea that this strictness of use was not as well maintained in the older period of the language. Professor Delbrück, for instance, in his *Altind. Syn.* (p. 102) asks: „Steht der Plural als allgemeiner Mehrheitskasus auch da, wo man den Dual zu erwarten hätte?“ and adds: „Es giebt unzweifelhaft im Veda Stellen, an welchen der Plural auffallend erscheint“.

The first instance he cites is that of RV. III. 33, which we notice here as it does not recur in the subsequent study. In

this hymn the two rivers, Vipāt and Ātudrī, are described in stanzas 1—3 in the dual. In stanzas 4, 6, 8 and 10, the rivers speak in the first plural, but this is an exception recognized in all periods of the language. (Cf. Pāṇ. l. c.; Speijer, *op. c.* § 25). In 5, 9, 11 and 12 they are addressed in the plural, a not uncommon mark of great respect in the later language, though Speijer (*Ved. u. Sk. Syn.* 10g.) pronounces it post-Vedic and post-Pāṇinean. In the closing 13th stanza the waters are addressed in the plural, naturally enough as *āpas* is *plurale tantum*. The latter half stanza returns to the dual as the address is dropped and the two rivers are compared to two bulls. Surely everything is normal enough, with the exception of the unusual plural of the second person in address in the Vedic. Had we plurals in the descriptive stanzas 1—3 and plural and dual transposed in 13, Delbrück might well have thought the numbers remarkable. He is still less happy in his citation of RV. IV. 38. 3, for he overlooks the fact that the *padbhis* belong to a horse, in which case the dual is hardly to be expected. The other instances he cites are fully considered in § 6 of the present study.

With truer insight Professor Bloomfield has long been of the opinion that for some reason or other the hieratic language of the RV. admitted the dual more freely than the Atharvanic or popular speech. This needed closer definition.

It was, then, to investigate the phenomena associated with the Vedic dual and to determine the extent of the supposed encroachments of the plural upon its domain that this study was undertaken. In its preparation all the dual substantives and adjectives, including participles, have been collected from the entire Rīg and Atharva Vedas. These have been grouped into several parts as follows: 1, The dual of natural bodily parts; 2, the dual in comparisons; 3, the dual of implemental pairs; 4, the dual of cosmic pairs; 5, the dual of conventional, customary or occasionally associated pairs; 6, the elliptic dual; 7, the dual dvandva compounds; 8, the anaphoric dual; 9, the attributive dual. These have been studied each as a unit and also in its relation to the others.

The present paper is concerned only with the first of these, the dual of natural bodily parts, for these have been the center of the doubt and the controversy. The study has for convenience of treatment been subdivided into seven parts, three

of which have to do with the supposed use of the plural for the dual. We shall consider first the duality of bodily parts, naturally dual, (a) when associated with an individual; (b) with a duality of persons; (c) with a plurality of persons:—and then a plurality of bodily parts, naturally dual, associated (a) with a plurality of persons; (b) with a duality of persons; (c) with an individual. The seventh section on a duality of naturally singular parts is added for completeness. The conclusions reached from the study of each section will be presented at the end of the section.

§ 1.

A duality of bodily parts, naturally dual, ascribed to an individual.

āṇsa, 'shoulder'. RV. 0—3—6 (§ 4)¹; AV. 1—6—0.

āṇsāu, RV. I. 158. 5^d, (*dāsāsyā*); AV. IX. 7. 7, (*ṛṣabhāsyā*); X. 2. 5^c, (*puruṣasyā*); X. 9. 19^b, (*aghnyāyās*); XI. 3. 9, (*odanāsyā*): *āṇsābhyām*, RV. X. 163. 2^c = AV. II. 33. 2^c, (*yakṣmīṇas*). See also § 2 (AV.) and § 3 (RV.).

akṣān, 'eye'. RV. 1—0—9 (§§ 4, 6); AV. 0—1—0.

akṣnós, AV. XIX. 60. 1^b, (*mantrakṛtas*).

ākṣi, 'eye'. RV. 1—0—0; AV. 3—2—1 (§ 4).

ākṣiṇī, AV. X. 9. 14^b, (*aghnyāyās*); XI. 3. 2, (*odanāsyā*).

akṣī, 'eye'. RV. 0—7—0; AV. 0—14—0.

akṣī, RV. I. 72. 10^b, (*divās*); I. 116. 16^c, 17^c, (*ṛjṛācvasyā*); X. 79. 2^a, (*agnés*):

akṣyāu, AV. I. 27. 1^d, (*paripanthīnas*); IV. 3. 3^a, (*vyāghrāsyā*); V. 23. 3^a, (*kumārāsyā*); V. 29. 4^a, (*piçācāsyā*); VI. 9. 1^b, (*vadhūyós*); VI. 9. 1^c, (*vṛṣanyāntyās*); XIX. 50. 1^c, (*vṛkasyā*): *akṣībhyām*, RV. X. 163. 1^a = AV. II. 33. 1^a, (*yakṣmīṇas*); AV. XI. 3. 34^{ad}, (*odanādatas*): *akṣyós*, AV. V. 4. 10^b, (*takmagrhitasyā*); VI. 24. 2^a, (*ādyuttasyā*); VI. 127. 3^b, (*āmayaviṇas*). See also § 2 for one RV. and two AV. duals. The remaining dual will be included in pt. II.

¹ For the sake of convenience this section is made a repertory of all the terms indicating parts of the body of which the dual is found in either Veda and a statement is given of the number of times the word is used in each grammatical number. References are given to the following sections or to the parts of the study, for the use of the plurals and of such duals as do not fall within the scope of this section.

anūkyà, "aṁsayor madhyadehasya ca saṁdhī" (Sāy.), AV. 2—1—0.

anūkyè, AV. XI. 3. 9, (odanásya).

anūvr̥j, 'flank'. AV. 0—1—0.

anūvr̥jāu, IX. 4. 12^b, (ṛṣabhásya).

aṣṭhīvát, 'knee'. RV. 0—2—0; AV. 0—8—0.

aṣṭhivántāu, RV. VII. 50. 2^b, (mantrakṛ́tas); AV. IX. 4. 12^c;

7. 10, (ṛṣabhásya); X. 2. 2^b; XI. 8. 14^a, (púruṣasya); X.

9. 21^a, (aghnyáyās):

aṣṭhivádbhyām, RV. X. 163. 4^a=AV. II. 33. 5^a, (yakṣmí-
nas); AV. XI. 3. 45^a, (odanādatas), 45^d, (tváṣṭur).

āṇḍá, 'testis'. AV. 0—1—0.

āṇḍāu, IX. 7. 13, (ṛṣabhásya).

āṇḍí, 'testis.' AV. 0—1—0.

āṇḍyāu, VI. 138. 2^d, (púruṣasya).

īrmá, 'fore-quarter.' AV. 0—1—0.

īrmábhyām, X. 10. 21^a, (vaçáyās).

uchlakhá, 'sole.' AV. 0—1—0.

uchlakhāu, X. 2. 1^d, (púruṣasya).

upásthā, 'lap.' RV. 61—2—0; AV. 15—0—0.

See § 7 and pt. IV.

ūrú, 'thigh'. RV. 1—6—0; AV. 1—13—0.

ūrú, RV. X. 85. 37^c=AV. XIV. 2. 38^c, (vadhūyós); RV.

X. 90. 11^d=AV. XIX. 6. 5^d; RV. X. 90. 12^c, (púruṣa-

sya); X. 162. 4^a, (striyás); AV. VIII. 6. 3^b, (kanyáyās);

IX. 7. 9, (ṛṣabhásya); IX. 8. 7^a, (āmayaviṇas); X. 2. 3^c;

XI. 8. 14^a, (púruṣasya); X. 9. 21^a, (aghnyáyās); XI. 3. 44^b,

(odanādatas): *ūrúbhyām*, RV. X. 163. 4^a=AV. II. 33. 5^a,

(yakṣmínas); AV. XI. 3. 44^a, (odanādatas): *ūrvós*, RV.

VIII. 70. 10^c, (índrasya dāsásya vā); AV. XIX. 60. 2^a,

(mantrakṛ́tas). See § 2 (AV.) for the remaining dual.

oṇí, 'breast'. RV. 0—1—0. Cf. pt. III.

oṇyós, IX. 101. 14^b, (mātúr).

óṣṭhā, 'lip'. RV. 0—1(pt. II.)—0; AV. 1—1—0.

óṣṭhāu, AV. X. 9. 14^a, (aghnyáyās).

kaphāudá, 'elbow'. AV. 0—1—0.

kaphāudāu, X. 2. 4^c, (púruṣasya).

karāsna, 'fore-arm'. RV. 1—2—0.

karásnā, III. 18. 5^d, (agnés); VI. 19. 3^a, (índrasya).

kárṇa, 'ear'. RV. 5—8—3 (§§ 4—6); AV. 2—11—0.

kárṇā, RV. IV. 23. 8^d, (āyós); IV. 29. 3^a; VI. 38. 2^a, (indrasya); VI. 9. 6^a, (mantrakṛtas); VIII. 72. 12^c, (gharmásya); AV. X. 2. 6^b, (puruṣasya); X. 9. 13^b, (aghnyáyās); XII. 4. 6^a, (vaçáyās); XII. 5. 22, (brahmagavyás); XVI. 2. 4, *bis*, (mantrakṛtas): kárṇabhyām, RV. X. 163. 1^b = AV. II. 33. 1^b, (yakṣmīnas); AV. IX. 4. 17^c, (ṛṣabhásya); IX. 8. 2^a, (āmayavīnas): kárṇayos, AV. VI. 141. 2^b, (vatsásya); XIX. 60. 1^b, (mantrakṛtas). See part II. for the other two duals (RV.).

kárṇaka, 'outspread leg'. AV. 0—1—0.

kárṇakāu, XX. 133. 3^a, (kumāryás).

kaçaplaká, 'buttock.' RV. 0—1—0.

kaçaplakāú, VIII. 33. 19^c, (āsaṅgásya).

kukṣí, 'flank, loin.' RV. 4—5—1 (§ 6); AV. 3—5—0.

kukṣí, RV. II. 11. 11^c; X. 28. 2^d; 86. 14^d; AV. II. 5. 4^b, (indrasya); AV. IV. 16. 3^c, (váruṇasya); IX. 5. 20^d, (ajásya); X. 9. 17^b, (aghnyáyās): kukṣíbhyām, AV. II. 33. 4^c, (yakṣmīnas): kukṣyós, RV. III. 51. 12^a; VIII. 17. 5^a, (indrasya).

kulphá, 'ankle.' RV. 0—1—0. Cf. gulphá.

kulphāú, VII. 50. 2^b, (mantrakṛtas).

kroḍá, 'breast.' AV. 2—1—0.

kroḍāú, X. 9. 25^a, (aghnyáyās).

gábhastī, 'hand.' RV. 6—23—0.

gábhastī, VI. 19. 3^a; VII. 37. 3^c, (indrasya): gábhastyos, I. 82. 6^b; 130. 4^a; III. 60. 5^b; V. 86. 3^c; VI. 29. 2^c; 45. 18^a; VIII. 12. 7^b; X. 96. 3^b, (indrasya); IX. 76. 2^a, (sómasya). See § 3 for the other twelve duals.

gavīnikā, 'groin.' AV. 0—2—0.

gavīnike, I. 11. 5^b, (náryās); IX. 8. 7^b, (āmayavīnas).

gavīnī, 'groin.' AV. 0—5—0.

gavīnyós, I. 3. 6^a, (āmayavīnas), V. 25. 10^b—13^b, (náryās).

gulphá, 'ankle.' AV. 0—2—0. Cf. kulphá.

gulphāú, X. 2. 1^b, 2^a, (puruṣasya).

cákṣan, 'eye.' AV. 0—1—0.

cákṣaṇī, X. 2. 6^b, (puruṣasya).

cákṣus, 'eye.' RV. 36—0—1 (§ 4); AV. 78—1—3 (§§ 4, 6).

cákṣuṣī, AV. IX. 5. 21^a, (ajásya).

jaghána, 'buttock, haunch.' RV. 1—1—1 (§ 4); AV. 1—0—0.

The one dual belongs to part II.

jāṅghā, 'leg.' RV. 2—0—0; AV. 0—2—3 (§ 6).

- jāṅghe, AV. X. 2. 2^c, (puruṣasya): jāṅghayos, XIX. 60. 2^a, (mantrakṛtas).
- jānu, 'knee.' RV. 1—0—0; AV. 1—3—0.
- jānubhyām, IX. 8. 21^a, (āmayaviṇas); X. 2. 3^b, (puruṣasya): jānunos, X. 2. 2^d, (puruṣasya).
- dānṣṭra, 'tusk, molar, fang.' RV. 0—1—1 (§ 6); AV. 0—4—1 (§ 6).
- dānṣṭrā, RV. X. 87. 3^a = dānṣṭrāu, AV. VIII. 3. 3^a, (agnés): dānṣṭrābhyām, AV. X. 5. 43^a, (vāiçvānarāsyā): dānṣṭrayos, IV. 36. 2^c; XVI. 7. 3, (vāiçvānarāsyā).
- dānta, 'deciduous middle incisor.' AV. 0—4—0.
- dāntāu, VI. 140. 1^c, 2^d, 3^b, 3^d, (çiços).
- dośān, 'fore-leg.' AV. 0—2—0.
- dośāṇī, IX. 7. 7, (ṛṣabhāsyā); X. 9. 19^a, (aghnyāyās).
- nās, 'nose, nostril.' RV. 0—1—0; AV. 2—1—0.
- nasós, RV. V. 61. 2^c, (āçvasya); AV. XIX. 60. 1^b, (mantrakṛtas).
- nāsā, 'nose, nostril.' RV. 0—1(pt. II.)—0; AV. 0—1—0.
- nāse, AV. V. 23. 3^b, (kumārāsyā).
- nāsikā, 'nose, nostril.' RV. 0—1—0; AV. 1—4—0.
- nāsike, AV. X. 2. 6^b, (puruṣasya); X. 9. 14^a, (aghnyāyās); XV. 18. 4, (vrātyasya): nāsikābhyām, RV. X. 163. 1^a = AV. II. 33. 1^a, (yakṣmīṇas).
- nāḍī, 'retovahe' (Sāy.), 'seminal ducts.' AV. 0—1—0.
- nādyāu, VI. 138. 4^a, (puruṣasya).
- nṛbāhū, 'arm of man.' RV. 0—1—0.
- nṛbāhūbhyām, IX. 72. 5^a, (sotúr).
- pakṣá, 'wing.' RV. 3—5—2 (§ 4); AV. 1—6—1 (§ 6).
- pakṣá, RV. I. 163. 1^c; VIII. 34. 9^b, (çyenāsyā); X. 106. 3^a, (çakunāsyā): pakṣāu, AV. IV. 34. 1^c, (odanāsyā); VI. 8. 2^b, (suparṇāsyā); VIII. 9. 14^b, (yajñāsyā); X. 8. 18^a; XIII. 3. 14^a, (haṇsāsyā); X. 9. 25^c, (aghnyāyās). See § 3 for the other two RV. duals.
- paṭāurá, 'side, costal region.' AV. 0—1—0. See § 3 for the only dual.
- pativédana, 'husband-finder, breast?' AV. 0—1—0.
- pativédanāu, VIII. 6. 1^b, (kanyāyās).
- pád, 'foot.' RV. 16—10—8 (§§ 4—6); AV. 11—13—7 (§ 6).
- pádā, RV. I. 24. 8^c, (súryasya); VI. 29. 3^a; X. 73. 3^a, (indrasya); X. 90. 11^d = pádāu, AV. XIX. 6. 5^d; pádāu, RV. VI. 47. 15^c, (puruṣasya); AV. I. 27. 4^a, (mantra-

kṛtas); VI. 9. 1^a, (vadhūyós); X. 1. 21^a, (kṛtyās); XI. 8. 14^a, (púruṣasya); XIX, 49. 10^a, (stenāsya): padbhyām, RV. X. 90. 12^d, 14^c = AV. XIX. 6. 6^d, 8^c, (púruṣasya); AV. V. 30. 13^d, (āmayavīnas); XII. 1. 28^c, (mantrakṛtas): padós, RV. X. 166. 2^c, (sapatnaghñás); AV. I. 18. 2^a, (striyās); XII. 4. 5^a, (viklīndvas). See also § 6 and pt. II.

pānī, 'hand.' RV. 0—2—1 (§ 6); AV. 1—1—0.

pānī, RV. IV. 21. 9^a, (īndrasya); VI. 71. 1^c, (savitúr): pāṇibhyām, AV. II. 33. 6^c, (yakṣmīnas).

pāda, 'foot.' RV. 2—0—2 (§ 6); AV. 1—5—1 (§ 6).

pādabhyām, AV. IX. 8. 21^a, (āmayavīnas); XI. 3. 46^a, (odanādatas): pādayos, XIX. 60. 2^b, (mantrakṛtas). See also §§ 2 and 3.

pādakā, 'little foot.' RV. 0—1—0.

pādakāú, VIII. 33. 19^b, (āsaṅgasya).

pārçvā, 'side.' RV. 1—0—0; AV. 2—5—0.

pārçvé, IX. 4. 12^a, (rṣabhāsya); IX. 5. 20^d, (ajāsya); IX. 8. 15^a, (āmayavīnas); XI. 8. 14^c, (púruṣasya): pārçvābhyām, II. 33. 3^b, (yakṣmīnas).

pārṣṇī, 'heel.' RV. 1—1—0; AV. 2—3—1 (§ 4).

pārṣṇī, AV. X. 2. 1^a, (púruṣasya): pārṣṇibhyām, II. 33. 5^b = RV. X. 163. 4^b, (yakṣmīnas): pārṣṇyos, VI. 24. 2^b, (ādyuttasya).

prápad, 'forepart of foot.' AV. 0—1—0.

prápados, VI. 24. 2^b, (ādyuttasya).

prápada, 'front part of foot.' RV. 0—1—1 (§ 6); AV. 1—3—1 (§ 4).

prápadābhyām, RV. X. 163. 4^b = AV. II. 33. 5^b, (yakṣmīnas); AV. X. 3. 47^a, (odanādatas); XI. 3. 47^d, (savitúr).

barjahyā, 'nipple.' AV. 0—1—0.

barjahyē, XI. 8. 14^c (púruṣasya).

bāháva. 'arm.' RV. 0—3—0.

bāhāvā, II. 38. 2^b, (savitúr). See § 2 for the other two duals.

bāhú, 'arm, fore-leg.' RV. 2—50—10 (§§ 4—6); AV. 2—19—7 (§ 4).

bāhú, RV. I. 95. 7^a; X. 142. 5^c, (agnés); I. 102. 6^a; III. 51. 12^c; VI. 47. 8^c = AV. XIX. 15. 4^c; VIII. 61. 18^c; 77. 11^c, (īndrasya); I. 163. 1^c, (harināsya); I. 190. 3^b; IV. 53. 3^c. 4^c; VI. 71. 1^b, 5^a; VII. 45. 2^a; 79. 2^d, (savitúr); V. 43. 4^a, (somasútvanas); X. 90. 11^c, 12^b = AV. XIX.

6. 5^a, 6^b, (púruṣasya); X. 102. 4^d, (vṛṣabhásya); X. 121. 4^c; AV. IV. 2. 5^c, (hiraṇyagarbhásya); AV. VI. 65. 1^b, (çátros), VI. 99. 2^c, 3^a; XIX. 13. 1^a, (indrasya); VII. 70. 4^a 5^a, (pṛtanyatás); IX. 4. 8^a, (váruṇasya); IX. 7. 7, (ṛṣabhásya); X. 2. 5^a, (púruṣasya); X. 9. 19^a, (aghnyáyās): bāhúbhyām, RV. II. 17. 6^a; IV. 22. 2^b, (indrasya), VII. 22. 1^c, (sotúr); X. 81. 3^c, (viçvákarmaṇas) = AV. XIII. 2. 26^c, (súryasya); X. 163. 2^d = AV. II. 33. 2^d, (yakṣmīṇas): bāhvós, RV. I. 51. 7^c; 52. 8^c; 63. 2^b; 80. 8^c; II. 11. 4^b, 6^c; 20. 8^c; 36. 5^b; III. 44. 4^d; IV. 22. 3^c; VI. 23. 1^d; 46. 14^d; VII. 25. 1^c; VIII. 96. 3^b, 5^a; X. 52. 5^c; 153. 4^b, (indrasya); V. 16. 2^b, (agnés); VII. 84. 1^c, (yājāmānasya); AV. VII. 56. 6^a, (çarkóṭasya); XIX. 60. 1^d, (mantrakṛtas). For the other duals, six RV. and one AV. see §§ 2 and 3.

bhurij, 'hand, arm.' RV. 0—4—0; AV. 0—1—0.

bhurijos, RV. IX. 26. 4^a, (sotúr). The other four duals belong to part III.

bhedá, 'pudenda.' RV. 0—1—0.

bhedāú, IX. 112. 4^c, (náryās).

bhrú, 'brow.' RV. 0—1—0.

bhruvós, IV. 38. 7^d, (dadhikráyās).

mátasna, 'lung.' RV. 0—1—0; AV. 0—2—0.

mátasne, AV. X. 9. 16^a, (aghnyáyās): mátasnābhyām, II. 33. 3^c = RV. X. 163. 3^c, (yakṣmīṇas).

mušká, 'testis, pudendum.' RV. 0—1—0; AV. 0—7—0.

muškāú, AV. IV. 37. 7^c, (gandharvásyā); VI. 127. 2^b, (āmayaviṇas); XX. 136. 1^c, 2^b, (náryās mahānagnyās): muškābhyām, VIII. 6. 5^c, (kanyáyās): muškāyos, RV. X. 38. 5^d, (indrasya); AV. VI. 138. 4^d, 5^d, (náryās).

? *rají*, 'pudendum?' RV. 0—1—0.

rají, X. 105. 2^c, (pátnyās). So GRV. and BRV. G.W.B. and LRV. take it as some kind of a maned animal. P.W.B. merely cites Sāyaṇa's two guesses—*rajasī dyāvāpṛthivāv iva* or *mahantāu rañjakāu sūryācandrama-sāv iva*.

vártman, 'eyelid.' AV. 0—1—0.

vártmabhyām, XX. 133. 6^c, (kumāryās).

vṛkká, 'kidney.' RV. 1—0—0; AV. 0—2—0.

vṛkkāú, VII. 96. 1^d, (púruṣasya); IX. 7. 13, (ṛṣabhásya).

çíprā, 'lip.' RV. 0—6—2 (§ 4).

- çipre, I. 101. 10^b; III. 32. 1^c; V. 36. 2^a; VIII. 76. 10^b; X. 96. 9^b, (indrasya): çiprābhyām, X. 105. 5^c, (indrasya).
çīrṣakapālú, 'cranial hemisphere.' AV. 0—1—0.
çīrṣakapālé, XV. 18. 4, (vrātyasya).
çīṅga, 'horn.' RV. 2—6—5 (§§ 4, 6); AV. 2—8—1 (§ 4).
çīṅge, RV. V. 2. 9^d = AV. VIII. 3. 24^d; RV. VIII. 60. 13^b, (agnés); IX. 5. 2^b; 70. 7^b; 87. 7^c, (sómasya); AV. II. 32. 6^a, (kṛmes); VIII. 3. 25^a, (agnés); IX. 7. 1, (ṛṣabhāsya); X. 9. 14^b, (aghnyáyās); XX. 130. 13, (pṛdākavas, cf. 129. 9, 10): çīṅgābhyām, IX. 4. 17^a, (ṛṣabhāsya); XIX. 36. 2^a, (maṇés). See part II. for the other RV. dual.
çrónī, 'hip.' RV. 0—1—0; AV. 0—6—0.
çrónī, AV. IX. 4. 13^b; 7. 9, (ṛṣabhāsya); X. 2. 3^c, (púruṣasya); X. 9. 21^b, (aghnyáyās): çrónibhyām, RV. X. 163. 4^c; AV. II. 33. 5^c, (yakṣmīṇas); AV. IX. 8. 21^b, (āmayavīṇas).
çrótra, 'ear.' RV. 2—0—0; AV. 19—4—0.
çrótre, AV. XI. 3. 2^a, (odanásya); XIV. 1. 11^c, (sūryáyās, cf. RV. X. 85. 11^c—çrótram): çrótrābhyām, XI. 3. 33^{ad}, (odanādatas).
sákthi, 'leg.' RV. 1—0—0; AV. 1—1—0.
sákthibhyām, X. 10. 21^b, (vaçáyās).
sákthí, 'leg.' RV. 0—2—0; AV. 0—3—0.
sakthyā, RV. X. 86. 16^b, 17^d = sakthyāu AV. XX. 126. 16^b, 17^d, (indrasya); sakthyāu, AV. VI. 9. 1^b, (vadhūyós).
sāndhī (*jānunos*), 'knee-joint.' AV. 1—1—0.
sāndhī, X. 2. 2^d, (púruṣasya).
stána, 'nipple, teat.' RV. 3—1(pt. II.)—0; AV. 1—3—5 (§ 6).
stánau, AV. IX. 1. 7^b, (madhukaçáyās); X. 2. 4^c, (púruṣasya).
 See § 6 for the other dual.
hānu, 'jaw.' RV. 1—5—1 (§ 6); AV. 1—6—0.
hānū, RV. IV. 18. 9^b; V. 36. 2^a, (indrasya); X. 79. 1^c, (agnés); X. 152. 3^b = AV. I. 21. 3^b, (vrtrāsya); AV. VI. 56. 3^b, (svajāsya); X. 9. 13^b, (aghnyáyās); XIX. 47. 9^a, (vrkasya): hānvos, RV. I. 52. 6^d, (vrtrāsya); AV. X. 2. 7^a. 8^c, (púruṣasya).
hāsta, 'hand.' RV. 29—17—5 (§§ 4, 6); AV. 22—18—4 (§ 4).
hāstā, RV. IV. 21. 9^a; VIII. 68. 3^c, (indrasya); hāstau, RV.

X. 117. 9^a; AV. XI. 8. 14^b, 15^a, (púruṣasya); AV. VI. 81. 1^a, (náryās); VII. 26. 8^c, (víṣṇos); VII. 109. 3^c, (kita-vásya); VIII. 1. 8^d, (āmayavinas); XIX. 49. 10^b, (stenásya): hástābhyām, AV. III. 11. 8^e, (satyásya); VI. 102. 3^c, (bhágasya); XI. 3. 48^a, (odanādatas); XI. 3. 48^d, (ṛtásya); XIX. 51. 2, (pūṣnās): hástayos, RV. I. 24. 4^c, (savitúr); I. 38. 1^b, (pitúr); I. 55. 8^a; 81. 4^e; 176. 3^a; VI. 31. 1^b; 45. 8^a, (indrasya); I. 135. 9^c, (vāyós); I. 162. 9^c, (çamitúr); IX. 18. 4^b; 90. 1^d, (sómasya); AV. I. 18. 2^b, (striyās): XVIII. 3. 12^c, (mantrakṛtas). For the other duals see § 3 (1 RV., 4 AV.) and pt. II. (2 RV.).

In this section are listed 146 of the 191 duals of the natural bodily parts, found in the RV., and 212 of the 225 such duals in the AV.

Of the RV. instances, 96 pertain to the various gods. Indra leads with 65. Savitar follows with 10 and Agni is close behind with 9. Only 39 pertain to human beings, and of these 11 pertain to the *yakṣmín* (consumptive) of X. 163, a hymn distinctively Atharvanic and at home in AV. II. 33. Seven pertain to animals, 3 to demons and 1 to the inanimate *gharmā*.

The different sphere of the AV. is well shown in its contrasts to these numbers. Humanity comes to the front with 124 duals and the sick still lead with 30. The animals get 49 duals and the gods drop to the third place with only 24 duals in all. Indra still leads them, but with a paltry 7. Agni is a close second with his 6 and Savitar has but a single dual. The demons have 5; inanimate objects 9, of which 4 pertain to the *odaná*.

Thus these duals clearly establish the hieratic character of the RV. and the demotic character of the AV. The importance of this distinction will appear later.

Only in 4 instances out of these 358 duals is there the slightest need to comment upon any grammatical usage. In three instances the dual is predicate to a singular—AV. IX. 7. 9—*bālam ūrū* (strength his thighs) and *id.* 13—*kródho vṛkkāu manyúr aṇḍāu* (anger his kidneys, wrath his testes). In RV. X. 85. 11^c—*çrótram te cakré āstām* (thy chariot wheels were an ear) shows the reverse, a singular predicate to a dual. The AV. XIV. 1. 11^c has this *pāda* with the normal *çrótre*.

§ 2.

A duality of bodily parts, naturally dual, associated with a duality of persons.

The RV. has five instances of this phenomenon:—*akṣī* (*açvīnos*), I. 120. 6^c,—*ākṣī çubhas patī dán*, (Hither your eyes, ye lords of splendor); *bāhāvā* (*mitrāvārunayos*), V. 64. 2^a,—*tā bāhāvā sucetūnā prā yantam asmā ārcate*, (Stretch forth with kindly thought those arms unto this one that sings); VII. 62. 5^a,—*prā bāhāvā sisṛtaṁ jīvāse na*, (Stretch forth your arms to grant us life); *bāhúbhyām* (*mitrāvārunayos*), VIII. 101. 4^d,—*bāhúbhyām na uruṣyatam*, (Keep us in safety by your arms); *bāhvós* (*mitrāvārunayos*), V. 64. 1^c,—*pāri vrajēva bāhvór jagan-vānsā svāṇṇaram*, (As in the pen-fold of your arms encompassed ye the realm of light).

The AV. also has five instances:—*ānsāu* (*açvīnos*), IX. 4. 8^b—*īndrasyāújo vārunasya bāhú açvīnor ānsāu marútām iyāṁ kakút*, (Indra's strength, Varuna's arms, the Açvins' shoulders, this Marut's hump); *akṣyāu* (*vadhūyór vadhúaç ca*), VII. 36. 1^a,—*akṣyāu nāu mādhusaṁkāçe, ānikam nau samāñjanam*, (Of honey aspect be our eyes, an ointment be our face); *ūrúbhyām* (*mitrāvārunayos*), XI. 3. 44^d,—*tātaç cāinam anyābhyām ūrúbhyām prāçir yābhyām cāitām pūrva řsayah prāçnan | ūrú te mariṣyata ity enam āha | tám vá °/ mitrāvārunayor ūrúbhyām tábhyām enam prāçiṣaṁ tábhyām enam ajigamam |* ('If thou didst eat this with other thighs than those with which the Rishis of yore did eat it, thy thighs will die', thus says one to him. — — — 'With the thighs of Mitra-Varuṇa, with these I ate this', etc.); *pádābhyām* (*açvīnos*), XI. 3. 46^d,—*tātaç cāinam anyābhyām pádābhyām °/—°/—°/ açvīnoḥ pádābhyām °/ °/* ('If with other feet', etc.— — — 'With the feet of the Açvins, etc.');

bāhúbhyām (*açvīnos*), XIX. 51. 2^b,—*açvīnor bāhúbhyām pūṣṇó hástābhyām prāsūta ā rabhe* (With the Açvins' arms, with Pushan's hands, I, impelled, seize thee).

It will be noticed that nine of these ten passages refer either to the Açvins or to Mitra-Varuṇa. Though it is true that of all the Vedic pantheon the deities of these respective groups are the ones most intimately associated, that Mitra is so closely assimilated to Varuṇa that, as Macdonell (Ved. Myth., p. 27) observes, he has hardly an independent trait left, that only on the rarest occasions are the Açvins separable,

yet there is never a unification of the members of either dual. Nowhere are they invoked in the singular; nowhere described by a singular epithet; nowhere is a singular verb predicated of them. The immediate context in at least seven of our passages would positively forbid such an hypothesis as an explanation of the dual.

Nor are they *metri causa*, as the plural will scan in each of the eight metrical passages. That they are mere grammatical *lapsus linguae* or due to laxity of thought on the part of the Rishis, should be our *dernier ressort*. We hold that this interpretation is unworthy and unnecessary and that a study of the passages, both by themselves and in contrast with those of § 5, in which a plurality of these same bodily parts is associated with these same dual divinities, reveals a conscious purpose in the selection of the grammatical number. In the passages before us this purpose is the dissociation and individualization of the members of the duality. Such an assumption is made imperative by AV. VII. 36. 1, where the eyes and singular face must individualize the bride and the groom. Each *nāu* receives its full interpretation only in "of each of us."

In AV. IX. 4. 8, the phrase *marūtām iyānī kakūt* requires the individualization of the Maruts, for they can possess no collective *kakūt*. The natural extension of this distributive idea to the former part of the pāda gives the clearest and best explanation of the dual, *açvīnor āūsāu*.

If we compare the five RV. passages, each having the idea of duality so strongly explicit in it, with those of § 5, we can hardly decide otherwise than that in the passages with the dual, the Rishis address the deities with an implied 'each of you', and in those passages that have the plural, with an implied 'both of you'.

We have thus a logically consistent and satisfying explanation of the eight such duals found in the metrical portions of the Vedas. In each of the two passages from the *Odana Sūkta* (AV. XI. 3), the same explanation may apply, if not so obvious and compelling, or the duals may in each instance be echoic of the perfectly normal duals of the same words immediately preceding.

§ 3.

A duality of bodily parts, naturally dual, associated with a plurality of persons.

We find twenty instances in the RV.:—(1), *ánsayos (marútām)*, V. 57. 6^a,—*ṛṣṭāyo vo maruto ánsayor ádhi sáha ójo bāhvóṛ vo bálam hitám | nṛmṇá ċīrśásv áyudhā rátheṣu vo viçvā vaḥ ċrír ádhi tanúsu pipiçe ||* (Lances are on your shoulders twain, O Maruts; energy and strength are placed together in your arms; manliness on your heads, weapons on your cars, all majesty is moulded on your forms); (2), *gábhastyos (marútām)*, I. 64. 10^c,—*ástāra iṣum dadhire gábhastyoḥ* (The archers have set the bow in their hands); (3), I. 88. 6^d,—*iṣá syá vo maruto 'nubhartrí prāti ṣṭobhati vāgháto ná vāṇi | ástobhayad vṛthāsām ánu svadhām gábhastyoḥ ||*¹ (This invigorating hymn, O Maruts, peals forth in praise to meet you, as the music of one in prayer. Joyously did Gotama make these sing forth a gift of praise unto your hands); (4), V. 54. 11^c,—*ánseṣu va ṛṣṭāyaḥ patsú khādāyo vākṣassu rukmā maruto ráthe ċúbhaḥ | agnibhrājaso vidyúto gábhastyoḥ ċiprāḥ ċīrśasu vítatā hiraṇyāyih ||* (Lances on shoulders, spangles on feet, gold on your breasts, splendor on your car, fire-glowing lightnings in your hands, visors wrought of gold arranged upon your heads); (5), *gábhastyos (somasútvānām)*, IX. 10. 2^b,—*hinvánāso ráthā iva dadhanviré gábhastyoḥ | bhārāsaḥ kārīṇām iva ||* (Driven on like chariots the Somas flow in the hands, like hymns of the singers); (6), IX. 13. 7^c,—*dadhanviré gábhastyoḥ* (they flow in the hands); (7) and (8), IX. 20. 6^b; 65. 6^b,—*mrjámāno*

¹ The passage is difficult and has no satisfactory explanation in commentator or translator. The principal mooted points are the substantive implied in *a*, the subject and object of *ástobhayad* in *c*, the syntax and reference of *āsām* in *c* and of *gabhastyos* in *d*. Stanzas 4 and 5 are replete with the idea of the excellence and potency of Gotama's former hymns. Here he expresses his confidence of continuing merit and the consequent acceptance and approval of the present effort, the *anubhartrí* of *a*. *Astobhayad* has the Gotama of 4 and 5 for its subject, and its object is implied in *āsām*, the antecedent of which is *eṣā anubhartrí* of *a*. The case of *āsām* is the partitive gen. after the idea of 'give, present' implied in *astobhayad* (cf. Speijer's Sk. Syn. § 119 and E. Siecke, *De gen. in ling. Sansk. imp. Ved. usu* § 7, p. 36). *Gabhastyor* depends upon same idea of 'present' in the verb, and refers to the Maruts. This gives at least a consistent sense and a possible syntax.

gábhastyoḥ (cleansed in the hands); (9) and (10), *IX. 36. 4^b* and *64. 5^b*,—*ḡumbhāmāna rtāyúbhir mrjámāno gábhastyoḥ* (made radiant by pious men, cleansed in their hands); (11), *IX. 71. 3^a*,—*ádribhiḥ sutáḥ pavate gábhastyoḥ* (Soma pressed by the stones becomes clear in the hands); (12), *IX. 107. 13^d*,—*tám im hinvanty apáso yáthā rátham nadíṣv á gábhastyoḥ* (Skilful men drive him as a car, in streams in their hands); (13), *IX. 110. 5^c*,—*ḡaryābhir ná bháramāno gábhastyoḥ* (Borne on by the arrows, as it were, of the hands); (14), *pakṣá (vīnām), VIII. 47. 2^c*,—*pakṣá váyo yáthopári vy ásmé ḡarma yachata* and (15), *VIII. 47. 3^b*,—*vy ásmé ádhi ḡarma tát pakṣá váyo ná yantana* (Spread your protection over us as birds spread their wings); (16), *bāhúbhyām (āṅgirasām), II. 24. 7^c*,—*té bāhúbhyām dhamitām agním áḡmani* (They leave upon the rock the fire enkindled with their arms); (17), *bāhúbhyām (āyūnām), X. 7. 5^c*,—*bāhúbhyām agním āyávo 'jananta* (With their arms did men generate Agni); (18), *bāhvós (marútām)*, see no. 1 above; (19), *bāhvós (nrṇām), VI. 59. 7^b*,—*indrāgnī á hí tanvaté náro dhánvāni bāhvóḥ* (Indra-Agni, men are stretching the bows in their arms); (20), *hástābhyām (mantrakṛtām), X. 137. 7^a*,—*hástābhyām dáḡaḡākḡhābhyām* (With our hands of ten branches we stroke thee).

The *AV.* furnishes these six instances:—(1), *paṭāurāú (strī-ṇām), XI. 9. 14^b*,—*pratighnānāḥ sám dhāvāntu úrah paṭāurāv āghnānāḥ* (Let them run together, without anointing, smiting each her breast and thighs); (2), *pádābhyām (devānām), X. 7. 39^a*,—*yásmāi hástābhyām pádābhyām vācā ḡrótrena cákṣuṣā* [Unto whom (Skambha), with hands, with feet, with voice, with hearing and with sight (the gods continually render tribute)]; (3) and (4), *hástābhyām (mantrakṛtām), IV. 13. 7^a and c*,—*hástābhyām dáḡaḡākḡhābhyām . . . anāmayitnúbhyām hástābhyām tábhyām tvābhí mṛḡamasi ||* (With our hands of ten branches, . . . with hands that banish disease, with these we stroke thee); (5), *VI. 118. 1^a*,—*yád dhástābhyām cakṛmá kilbiṣāṇi akṣāṇām gaṇām upalipsamānāḥ* (If we have committed sins with our hands, in our desire of the troop of the dice); (6), *X. 7. 39^a*, see no. 2 above.

An examination of these passages in detail will readily show in twenty-two of them the same clearly marked individuality of action among the plurality of actors that we found in the preceding section in the case of the duality of actors.

In fifteen of the twenty instances in the RV., it will be seen at once that the specified act naturally and imperatively demands the exercise of both of the given bodily members for its performance. Such are the acts in nos. 2 and 19, aiming the bow; in nos. 16 and 17, kindling fire with the fire-sticks; in nos. 14 and 15, birds spreading their wings; in nos. 5 to 13 inclusive, the pressers cleansing the soma. In all the AV. passages we have evidence of the individual element in the action. In no. 1, the sg. *úras* and dual *paṭāurāu* serve this purpose; in nos. 2 and 6 the singulars of *b* as well as the duals of *a* indicate the individual rather than the collective homage of the gods; in no. 5 the gamblers seek forgiveness each for his own sins, not for their joint offences; in nos. 3 and 4 and in RV. no. 20, it is the shaman that acts. It may be that in AV. nos. 3, 4 and 5 and RV. no. 20, we have a single subject speaking in the first plural and that these really belong in § 1 rather than here.

It remains to show that the same explanation holds in the other four passages. We should remember that the Rishis have all the Oriental exuberance and liveliness of fancy, love of variety and of profuse ornamentation. They excel also in the use of the swift, bold and sometimes startling transition. They were often consummate artists, masters of word-painting. They exhibit their skill now throughout an entire hymn, now in a stanza that is a miniature master-piece, now in a single word that is athrill with poetic concept. The difficulty is for the cool, logical and too often phlegmatic Occidental mind to appreciate the riotous luxuriance of their imagination and the art that is in its expression.

In our no. 4 of the RV. the swift transition from the plurals of *a* and *b* to the duals of *b* and *c* and then back to the plurals of *d* is but a part of the Rishi's artistic equipment, of his professional stock in trade, by which he presents to view now the group, now the individual member of it and now again the group. To us, unfamiliar with the real nature of the *vidyut*, it may seem to accord ill with the imagery of the context and even to make the picturesque almost grotesque, to represent the individual Maruts as clutching with both hands their missile bolts, but surely there is nothing incongruous in this to the Hindoo familiar with that magnificent but appalling electrical display by which the whole arch of

heaven, from zenith to horizon, is made to glow with such continuous flashes of flame that the intense inky blackness of the monsoon night is made to rival the brilliance of the tropical noonday.

In nos. 1 and 18 of the RV., which are from successive *pādas* of the same *ṛc* and separated only by our alphabetic scheme of listing, the transition from the plurals of *a* and *b* to the duals of *c* and *d* may be compared in effect to a painting in which individual Maruts are strongly limned in the foreground and the Marut host sketched in more vague and shadowy outlines in the background. Too fanciful? There are scores of such artistic transitions in the RV. Again as the lances are the *vidyut* flashes the Rishi is not without skill in his art when he makes them in their play rest upon both shoulders of the individual Maruts. In no. 3 of the RV. a like interpretation presents an individualistic touch at the close of the *ṛc* that has opened with a collective plural address. Gotama's gift of song is unto you, O Maruts, yea unto you individually as well as collectively.

So in every instance cited the use of the dual resolves the plurality of persons and presents the component individuals. The art of the hieratic Rishi is pronounced in at least four of the passages and the demotic shaman of the AV. shows no parallel. The results accord with those of § 2 and are the proper contrast to those derived from the study of the next section.

§ 4.

A plurality of bodily parts, naturally dual, associated with a plurality of persons.

We find these thirty-five instances in the RV.:—(1), *ānseṣu* (*marūtām*), I. 64. 4^c,—*ānseṣv eṣām nī mīmṛkṣur ṛṣṭāyaḥ* (The lances on their shoulders beat down); (2), I. 166. 9^c,—*ānseṣv ā vaḥ prāpatheṣu khādāyo* (Spangles on your shoulders in your journeys); (3), I. 166. 10^c,—*ānseṣv étāḥ paviṣu kṣurā ādhi* (On shoulders, buckskins; on fellies, knives); (4), I. 168. 3^c,—*āīṣām ānseṣu rambhīṇīva rārabhe* (On their shoulders rests, as it were, a lance); (5), V. 54. 11^a,—*ānseṣu va ṛṣṭāyaḥ patsú khādāyo* (Lances on your shoulders, spangles on the feet); (6), VII. 56. 13^a,—*ānseṣv ā marutaḥ khādāyo vo* (On your shoulders, O

Maruts, are spangles); (7) *akṣāṇi*, (*pūruṣāṇām*), VII, 55. 6^c,—*yá āste yāç ca carati yāç ca páçyati no jánaḥ | téṣāṃ sám hanmo akṣāṇi* (Of him who sits and him who walks and him who looks on us, of these we close the eyes); (8), *akṣábhīḥ* (*yájamānānām*), I. 89. 8^b,—*bhadrām paçyemākṣábhīr yajatrāḥ* (May we with our eyes behold the good, ye adorable ones); (9) and (10), I. 139. 2^{fg},—*dhībiç caná mánasā svébhir akṣábhīḥ sómasya svébhir akṣábhīḥ* (Not with the thoughts, the mind, but with our own eyes, our own eyes of Soma given, have we behold the golden one); (11), IX. 102. 8^a,—*krátvā çukrébhir akṣábhīr ṛnór ápa vrajáṃ diváh* (With our eyes clear with wisdom unbar the stall of heaven); (12), *apikakṣébhis* (*devānām*), X. 134. 7^c,—*pakṣébhir apikakṣébhir átrābhī saṃ rabhāmahe* (To your wings, to your shoulders, there do we closely cling); (13), *kárṇebhis* (*yájamānānām*), I. 89. 8^a,—*bhadrām kárṇebhiḥ çṛṇuyāma devā* (May we, O Gods, with our ears hear the good); (14), *cákṣūṇṣi* (*pūruṣāṇām*), V. 1. 4^b,—*cákṣūṇṣīva sūrye sám caranti* (As the eyes of men turn to Sūrya); (15), *jaghánān* (*āçvānām*), VI. 75. 13^b,—*á jaṅghanti sánv eṣāṃ jaghánāñ úpa jighmate* (He lashes their backs, lashes their haunches); (16), *pakṣān* (*vīnām*), I. 166. 10^d,—*váyo ná pakṣān vy ánu çriyo dhire* (As birds their wings, the Maruts spread their glory out); (17), *pakṣébhis* (*devānām*), same as no. 12 above; (18), *paḍbhīḥ* (*yájamānānām*), IV. 2. 14^b,—*paḍbhīr hástebhiç cakṛmá tanúbhiḥ* (We have done with our feet, our hands, our bodies); (19), X. 79. 2^c,—*átrāṇy asmāi paḍbhīḥ sám bharanty uttānāhastā námasádhi vikṣú* (With their feet they gather food for Agni, with upraised hands and reverence in their dwellings); (20), *patsú* (*marútām*), see no. 5 above; (21), *bāhavas* (*nṛṇām*), X. 103. 13^c,—*ugrá vaḥ santu bāhavo* (Strong be your arms, O heroes, in battle); (22), *bāhūn* (*yātudhānām*), X. 87. 4^d,—*praticó bāhūn práti bhañdhy eṣāṃ* (Break their arms raised against you); (23), *bāhúbhis* (*marútām*), I. 85. 6^b,—*prá jigāta bāhúbhiḥ* (Advance with your arms); (24), (*agnimánthanānām*), III. 29. 6^a,—*yádī mānthanti bāhúbhir ví rocate* (When they rub Agni with their arms, he shines forth); (25), (*maható mányamānānām*), VII. 98. 4^b,—*sákṣāma tán bāhúbhiḥ çāçadānān* (We shall subdue them confiding in their arms); (26), *bāhúṣu* (*marútām*), I. 166. 10^b,—*bhúrūṇi bhadrá náryeṣu bāhúṣu* (Many goodly things are in your manly arms); (27), VIII. 20. 10^b,—*rukṃáso ádhi bāhúṣu* (Golden ornaments upon their

arms); (28), *çiprās (marūtām)*¹, V. 54. 11^d,—*çiprāḥ çirṣasu vītātā hiraṇyāyīḥ* (Visors of gold arranged upon their heads); (29)¹, VIII. 7. 25^b,—*çiprāḥ çirṣān hiraṇyāyīḥ* (Visors of gold upon their heads); (30), *çṛṅgāṇi (çṛṅgīṇām)*, III. 8. 10^a,—*çṛṅgāṇivēc chrṅgīṇāṁ sām dadṛḡre caṣālavantaḥ svāravaḥ pṛthivyām* (The sacrificial posts set in the earth and adorned with knobs, seem like the horns of horned creatures); (31), (*sakthāni (marūtām)*), X. 61. 3^c,—*vī sakthāni nāro yamuḥ putrakṛthé nā jānayaḥ* (The heroes spread their thighs apart like women in childbirth); (32), *hāstebhis (yājāmānānām)*, see no. 18 above; (33), *hāstair (manīṣīṇām)*, IX. 79. 4^d,—*āpsú tvā hāstair duduhur manīṣīṇaḥ* (Sages have with their hands milked the soma into the waters); (34), *hāsteṣu (marūtām)*, I. 37. 3^b,—*ihéva çṛṇva eṣām kácā hāsteṣu yád vādān* (The whip in their hands is heard as if here, when they crack it); (35), I. 168. 3^d,—*hāsteṣu khādīḡ ca kṛtīḡ ca sām dadhe* (A ring and a dagger are held in their hands).

The AV. has fourteen instances of its own:—(1), *cákṣūṇṣi (çátrūṇām)*, III. 1. 6^c,—*cákṣūṇṣy agnir ā dattām* (Let Agni take their eyes); (2), *cákṣuṣām (puruṣāṇām)*, V. 24. 9^a,—*sūryaḡ cákṣuṣām ádhipatīḥ* (Sūrya is overlord of eyes); (3), *pārṣṇis (durñāmnīnām)*, VIII. 6. 15^b,—*purāḥ pārṣṇīḥ puró mūkhā* (Whose heels are in front, in front their faces); (4), *prápadāni (durñāmnīnām)*, VIII. 6. 15^a,—*yéṣām paçcát prápadāni* (The fore-parts of whose feet are behind); (5), *bāhavas (nṛṇām)*, XI. 9. 1^a,—*yé bāhavo yá iṣavo* (What arms, what arrows!); (6), (*çátrūṇām*), XI. 9. 13^a,—*mūhyantv eṣām bāhavaḥ* (Let their arms fail); (7), (8) and (9), *bāhūn (çátrūṇām)*, III. 19. 2^c, VI. 65. 2^c, XI. 10. 16^c,—*vṛçcāmi çátrūṇām bāhūn* (I hew off the arms of the foemen); (10), *çṛṅgāṇi (durñāmnīnām)*, VIII. 6. 14^b,—*yé pūrve badhvò yanti hāste çṛṅgāṇi bibhrataḥ* (Who go before a bride, bearing horns in the hand); (11), *hāsteṣu (yājāmānānām)*, IV. 14. 2^b,—*krámadhvam agnínā nákam úkhyān hāsteṣu bibhrataḥ* (Stride ye with fire to the vault of heaven, bearing potfires in your hands); (12), (13) and (14), (*brahmānām*), VI. 122. 5^b, X. 9. 27^b, XI. 1. 27^b,—*brahmāṇām hāsteṣu prapṛthák sādāyāmi* (I place these separately in the hands of the Brahmans).

¹ Sāy. glosses the former by *uṣṇīṣāmayyas* (consisting of head-dresses), the latter by *çirastrāṇāni* (head protectors). The name is doubtless due to some resemblance to the real *çiprās*, 'lips'.

The AV. has also three repetitions from the RV.: *ákṣīṇi*, IV. 5. 5^c = *akṣāṇi* RV. VII. 55. 6^c; *bāhāvas*, III. 19. 7^b = RV. X. 103. 13^c; *bāhūn*, VIII. 3. 6^d = RV. X. 87. 4^d.

A comparison of these passages with those of § 3 in which the dual is associated with a like plurality of persons, shows that in these the plural is thought of as general and collective. The Rishis here view the concert rather than the individualization of the action. In nos. 18 and 32 of the RV. *tanūbhis* shows there is no idea of individuality. So do *vikṣū* of no. 19, the plural simile *jānayaḥ* of no. 31, and the context of no. 27, which has *tanūṣu* in 12^b, *rātheṣu* in 12^c and *grīyas* in 12^d. In no. 7 *tēsām* is plainly "of all these", not "of each of these". Nos. 8, 9, 10, 13, 14, 21, 22, 25, 32 and 33 are obviously general and collective, not specific and individual. In nos. 1 to 6, 20, 23, 26 to 29, 34 and 35 the Rishis refer to the Marut host, not to individual members of it. A comparison of no. 15 with the no. 14 of § 3 shows that here the simile looks to the *ensemble* of wings. So the comparison in no. 31 is general. In nos. 16, 24 and 31 the use of both the bodily members is indeed necessary in any single case, but comparison with nos. 16 and 17 of § 3 shows that the Rishis by the plural generalize the act that the dual would individualize. So with the remaining passages, nos. 12, 15 and 17 of the RV. and all of the AV., the plural is general and synthetic where the dual would resolve the group into its components.

§ 5.

A plurality of bodily parts, naturally dual, associated with a duality of persons.

There are but three instances of this phenomenon, all in the RV. The passages are:—(1), *kárṇāis* (*açvīnos*), I. 184. 2^d, —*çrutām me achoktibhir matīnām eṣṭā narā nicetārā ca kárṇāih* (Hearken, ye heroes, to the invocations of my hymns, ye who are worshipped and are observant with your ears); (2), *paḍbhīs* (*mitrāvārunayos*), V. 64. 7^d, —*sutām sōmān ná hastibhir ā paḍbhīr dhāvantaṁ narā bibhratāv arcanānasam* (As to the soma finger-pressed, hither speed with your feet, O heroes, supporting Arcanānas); (3), *bāhūbhis* (*mitrāvārunayos*), VI. 67. 1^d, —*sām yā raçméva yamātur yāmiṣṭhā dvā jānāñ āsa-*

mā bāhúbhiḥ svāiḥ (The peerless twain who by their arms as with a rein, best control the peoples).

Concert of action is clearly indicated in all, but most clearly in the third passage. The invocation of the first and second passages has an implied "both of you." Compare and contrast the passages in § 2.

§ 6.

A plurality¹ of bodily parts, naturally dual, ascribed to an individual.

We expect the plural when a plural numeral is added. There are these instances: RV. *akṣábhīḥ* (*agnés*), I. 128. 3^d,—*çatām cākṣaṇo akṣábhīḥ* (Observant with a hundred eyes); X. 79. 5^c,—*tásmāi sahásram akṣábhīr ví cakṣé* (He looks on him with a thousand eyes); *pádās* (*ghṛtásya*), IV. 58. 3^a,—*catvāri çṛṅgā tráyo asyo pádā* (Four are his horns and three his feet); *bāhūn* (*úrūṇasya*), II. 14. 4^b,—*náva cakhvāṇsam navatīm ca bāhūn* (Showing nine and ninety arms); *bāhūṣu* (*brámāṇḍasya*), VIII. 101. 13^c,—*citréva práty adarçy āyaty āntār daçasu bāhūṣu* (Radiant Uṣas is seen advancing amid the ten arms); *çṛṅgū* (*ghṛtásya*), IV. 58. 3^a,—see *pádās* above; *hástāsas* (*ghṛtásya*), IV. 58. 3^b,—*dvé çīrsé saptá hástāso asya* (Two are his heads and seven his hands).

AV. *padbhīs* (*púruṣasya*), XIX. 6. 2^a,—*tribhiḥ padbhīr dyām arohat* (With three feet he climbed the sky); *cákṣūṇṣi* (*bha-*

¹ The plural is the natural number in the following instances: RV *padbhīs*, IV. 38. 3^c (*āçvasya dadhikrás*); *pāṇībhīs*, II. 31. 2^d (= *çaphá āçvasya*); *pádās*, I. 163. 9^a (*āçvasya*); *prápadāis*, VI. 75. 7^c (*āçvasya*).

AV. *jāṅghās*, IX. 7. 10 (*ṛṣabhásya*); X. 9. 23^a (*aghnyáyās*); *jāṅghābhīs*, IV. 11. 10^b (*anađúhas*); *pakṣāṇām*, IX. 3. 4^c (= *sthūṇā viçvāvārāyas*); *padās*, IV. 15. 14^d, (*maṇđúkasya*); IX. 4. 14^c (*ṛṣabhásya*); *padbhīs*, III. 7. 2^b (*hariṇásya*); IV. 11. 10^a (*anađúhas*); IV. 14. 9^d (*ajásya*); *patsú*, VI. 92. 1^d (*āçvasya*); *pádān*, XIV. 1. 60^a (*āsandyás*); *stánās*, IX. 7. 14; X. 9. 22^b; 10. 7^d (*aghnyáyās*); *stánān*, XII. 4. 18^b (*vaçáyās*); *stánebhyaḥ*, X. 10. 20^d (*vaçáyās*).

Twice in AV. such a plural is resolved into two duals:

pádāu, XV. 3. 4 (*āsandyás vrátasya*).

tásyā grīṣmāç ca vasantāç ca dvāu | pádāv ástām çarāç ca varṣāç ca dvāu. (The summer and the spring were two of its feet, the autumn and the winter were two).

stánān, VIII. 10. 13 (*virájo vaçáyā iva*).

brhác ca rathanítarām ca dvāu stánāv ástām | yajñāyajñīyam ca vāmadevyām ca dvāu. (B. and R. were two of her teats, Y. and V. were two).

vāsya) XI. 2. 5^b,—*yāni cákṣūṃṣi te bhava*¹ (To the eyes that thou hast, be homage, O Bhava). In this latter instance the numeral is expressed in the *sahasrākṣa* of 3^d, 7^b and 17^a.

That these plurals are due to poetic tropes or to mythic or mystic creations of Hindoo fancy admits of no question. No one thinks of a literal interpretation. The hundred or the thousand eyes of Agni are the bright flames that dart forth beams of light in all directions. The metaphor requires the plural. The numeral is intensive. By its use Agni is represented as sharp-sighted or omnivident. The nine and ninety arms of the Asura Uraṇa mean only that the demon is many-armed or strong-armed. The ten arms of *brahmāṇḍa* are, as Sāyaṇa says, the ten *diśas* or regions of the universe.

It is liturgical mysticism that turns the *ghṛta* into a *gāura*, or Indian buffalo, and then proceeds to invest it with the symbolism of such an odd plurality of natural members, four horns, three feet, two heads and seven hands. Speculation as to the interpretation of these symbolic members was rife among the native commentators² and their inability to think the Rishi's thoughts after him is shown in the great variety of conclusions reached. Without undertaking to decide among them we know that the plural members are mystic and symbolic and that the Rishi had no conscious conception of the resultant zoomorphic incongruity of his fancy. The addition of the hands shows that the idea of an actual *gāura* is not present to his consciousness.

In AV. XIX. 6, the shifting mythic symbolism produces an almost continuous change in the anatomy of the cosmic *pūruṣa*. In 1 he has a thousand arms, a thousand eyes and a thousand feet; in 2, three feet; in 4, four feet; in 5 and 6, two arms and two feet; in 7, one eye. There are similar changes in the corresponding RV. X. 90, but they do not come so apace.

Of the same nature are the plurals implied in *dvigu* compounds. Thus in RV. I. 31. 13^b, Agni is *caturākṣá*; in I. 79. 12^a, *sahasrākṣá*; in V. 43. 13^d, a *tridhātucṛṅgo vṛṣabhás*; in V. 1. 8^c,

¹ Bhava is identified with Rudra. Cf. VS. 16. 18. 28; 39. 8 and GB. 6. 1. 3. 7. In RV. 2. 1. 6; AV. 7. 87. 1; TS. 5. 4. 3. 1; 5. 5. 7. 4 and GB. 1. 7. 3. 8; 6. 1. 3. 10 this deity is identified with Agni.

² Vid. TA. 10. 10. 2^a; GB. 1. 2. 16; Sāyaṇa on RV. *l. c*; and Mahādhara on VS. 17. 91. The last is especially rich in alternatives.

a *sahásraçrñgo vṛṣabhās*; in VIII. 19. 32^b, a *sahásramuṣko devās*; in I. 97. 6^a, he is *viçvátomukha*; in III. 38. 4^d, *viçvárūpa*; etc., etc. These *dvigu* compounds are figurative allusions to the phenomena of fire, celestial or terrestrial. A similar interpretation explains all such in either Veda.

Closely akin to these plurals with numerals are those in metaphors and poetic symbolism in which the number is obviously determined by the figure. A clear instance is RV. X. 127. 1,—*rātrī vy ākhyad āyati purutrā devy ākṣábhīḥ* (The goddess Night, as she approaches, looks about in many a place with her eyes). Her eyes are the stars and the plural is as natural here as is the dual in RV. I. 72. 10^b, in which *akṣī divās* (eyes of the sky) are the sun and moon.

A number of such instances cluster about Agni. In RV. I. 146. 2 he is transformed into an *ukṣā mahān* that *urvyāḥ padó nī dadhāti sánāu* (Plants his feet upon the broad earth's back). The tauropœia justifies the plurality of feet. In III. 20. 2, the Rishi says to Agni—*tisrás te jīhvā . . . tisrá u te tanvò* (three are thy tongues, . . . three also thy bodies), in which the plurals are due to the symbolism of the metaphors. Sāyaṇa identifies the three tongues as the three sacrificial fires, *gārhapatya*, *āhavanīya* and *dakṣiṇa* and makes the three bodies *pāvaka*, *pavamāna* and *çuci*. Other interpretations have been given but none that impugns the figure which justifies the plurals. Our principle becomes clear, if we compare two such passages as V. 2. 9^d—*çīçīte çrñge rákṣase viníkṣe* (He whets his horns to gore the Rakṣas) and I. 140. 6^d—*bhīmó ná çrñgā davidhāva durgrbhis* (Like one terrific he tosses his horns). In the former the tauropœia is complete and the duality of horns naturally follows; in the latter the simile in which Agni is compared to a bull rampant in the jungle suggests the metaphor by which the tips of flame are called his horns. The flames are uppermost in thought and the plurality of horns inevitably follows. Sāyaṇa well says *çrñgā çrñgavad unnatā jvālās* (flames shooting up like horns) and Yaska (Nir. I. 17) gives *çrñgāṇi* as one of the eleven synonyms of 'flames.' In II. 2. 4^c,—*pr̥çnyāḥ patarām citáyantam akṣábhīḥ pāthò ná pāyúm jánasī ubhé ánu* (The bird of the firmament, observant with his eyes, as guard of the path looks at both races). The first metaphor avifies the celestial Agni and suggests the second, in the transition to which the first

fades away as the plurality of phenomena comes to the front in thought and leads to the plural eyes in the new metaphor. Sāyaṇa's *svakīyāir jvālārūpāir avayavāḥ* (his own members having the form of flames) expresses the idea.

Similar is RV. X. 21. 7^{cd},—*ghṛtāpratīkam mānuṣo vi vo māde gukrām cētiṣṭham akṣābhir vīvakṣase* (With butter-smeared face you are merry in spirit, bright, observant with your eyes, you wax great). In *a* Agni is an *ṛtvij* (priest); in *c* the personification is fading from thought in the transition to the new figure in *d*. Sāyaṇa's *vyāptāis tejobhis* (far-extending, radiant flames) well explains the metaphor in *akṣābhis* and its plural form. Parallel to this is VIII. 60. 13,—*çīçāno vṛṣabhō yathā agnīḥ çṛṅge dāvidhvat | tigmā asya hānavo na pratidhṛṣe sujāmbhaḥ sāhaso yahūḥ* (Like a bull Agni doth whet and toss his horns. Sharp are his jaws and not to be withstood, with good teeth, strong and swift). The simile in *a* and *b* shows the proper duality of horns. In *c* comes the new figure and its natural resultant in the plural *hānavo*. So in X. 79 we have a shift from *hānū* in 1^c and *akṣī* in 2^a to *sahāsram akṣābhir* in 5^c.

The sacrificial aspect of Agni in II. 13. 4^c,—*āsinvan dānṣṭrāḥ pitūr atti bhōjanam* (Insatiate with his tusks he eats his father's food) should be contrasted with the zoomorphic Agni of X. 87. 3^{ab},—*ubhōbhayāvinn ūpa dhehi dānṣṭrā hīnsrāḥ çīçāno 'varam pāram ca* (Apply thy tusks destructive, whetting both, the upper and the lower). The dual of the latter is required by the personification; the plural of the former is as necessary to the metaphor of the consuming flames. In it the personification is arrested and the metaphor predominates. There is no need of disregarding the usual distinction between *dānṣṭra* and *dānta*, as is so often done in the interpretation of the former passage.

One passage relating to Agni remains. This is the much mooted ¹ IV. 2. 12,—*ātas tvām dṛçyāñ agna etān paḍbhīḥ paçyer*

¹ For a summary of the earlier discussion of this passage and of the word *paḍbhīḥ*, see M. Bloomfield in A. J. P. XI. 350 ff. and in Actes du XIV^e Congrès International des Orientalistes, I., or the Johns Hopkins University Circulars, 1906, no. 10, p. 15 ff. In the latter paper Professor Bloomfield concludes:—"Shocking as may seem the paradox, we shall, I think, have to endure it, that Agni is here said to see with his feet; of course, the pun as well as the paradox between *paḍbhīḥ* and *paçyer*

adbhutāṇ aryā évāṇiḥ. We believe that Sāyaṇa's gloss on *padbhīḥ*—*pādāis svatejcbhiḥ paçya* (He sees with his feet, his own bright flames)—embodies the Rishi's meaning so far as the noun itself is concerned. We do not, however, feel compelled to construe it with *paçyer*. It is not so unusual for words at the beginning of successive *padas* to be syntactically connected that we may not construe *padbhīḥ* with *átas* or with the implicit idea of motion in *átas*. The passage would then mean:—Hence (speeding) with thy feet (*i. e.*, thy nimble jets of flame) mayst thou, O Agni, noble one, behold those wondrous ones (*i. e.*, the gods) in visible presence (*i. e.*, go thither carrying our oblations and prayers). In either case the passage swings right into line with all the others considered relative to Agni and the metaphor affords ample explanation of the plural. In the latter case the paradox and supposed difficulties of the passage vanish.

We shall next consider the passage X. 99. 12 that has so long proved a puzzle for the commentators: *evā mahó asura vakṣáthāya vamrakāḥ padbhīr úpa sarpad índram | sá iyānāḥ karati svastim asmā iṣam úrjanī suksitīm víçvam ábhāḥ* || (Thus, Asura, for his exaltation did the great Vamraka crawl upon his feet up to Indra. That one, when supplicated, will give him a blessing; food, strength, secure dwelling, all will he bring him).

Bloomfield has shown (*ll. cc.*) that *padbhīs* everywhere means primarily "with the feet" and has argued plausibly for an occasional secondary meaning, "quickly, nimbly, briskly, etc." Cf. our colloquial "with both feet." This word may, then, be considered to lie within this range of meaning. *Vamraka*, too, is a mooted word. Its possibilities are, however, either an ant,¹ or a Rishi, or a demon. In a study to be published separately the writer has maintained that *Vamraka* is here Ant, the personified type of his genus. If, then, *vamraka* is ant, the plural *padbhīs* is natural; if Rishi or demon, the plural is

may have invited an unusually daring poet to this *tour de force*. Of itself the likening of the nimble jets of flame to moving feet is not out of the Rishi's range. The exact sense of the passage is not quite clear, but its obscurities are not likely to affect our judgment of *padbhīḥ* either one way or another."

¹ So PWB. and GWB. Sāyaṇa, Griffith and Ludwig take it as name of a Rishi; GRV. as that of a demon.

the intensive with Bloomfield's secondary meaning or else due to a paronomasia upon the literal meaning of his name. In any case the difficulty of the plurality of feet is removed.

In I. 163. 11^{cd}, it is said of the horse:—*táva ṣṛṅgāṇi viṣṭhitā purutrā āraṇyeṣu jārbhurāṇā caranti* (Tossing thy horns outspread in all directions, thou rangest in the wildernesses). With this we must compare 9^a preceding:—*hīraṇyaṣṛṅgō 'yo asya pādā* (Golden-horned is he, of iron are his feet). Sāyaṇa explains the implied *ṣṛṅgāṇi* of 9^a by *unnata ṣirasko hrdaya-ramaṇa ṣṛṅgasthānīya ṣiroruho* (Prominent hairs of the head made fast at its centre and occupying the usual place of horns) and the expressed *ṣṛṅgāṇi* of 11^c by *ṣiraso nirgatāḥ ṣṛṅgasthānīyāḥ keṣāḥ* (Hairs growing out from the head in the usual place of horns). Sāyaṇa is thus consistent and we believe him alone of the commentators¹ to be correct. He undoubtedly means the foretop. As *hari* is the predominant color of the Vedic horse, *hīraṇya* is a natural epithet for the foretop. What could better suggest the comparison in 11^{cd} than the waving, tossing hairs of a heavy, shaggy foretop? The metaphor alone is ample reason for the plural horns. We have also the additional reason that in this hymn the horse is a celestial animal actually identified in 3^a with Āditya, the sun, and coursing the heavens in 6 and 7. This identification is more or less prominent throughout the hymn. The foretop, then, represents also the beams of the sun.

In IX. 15. 4^{ab}, the Rishi says of Soma in the press:—*eṣā ṣṛṅgāṇi dódhuvac chiṣītē yūthyò vṣā* (He brandishes his horns; he whets them as a bull of the herd). Oldenberg's identification of the horns of soma here with the horns of the moon affords no explanation for the plural and seems otherwise in-

¹ LRV. renders 9^a "mit goldenem [vorder] hufe erz die beiden [hinter] füsse" and in 11^c renders *ṣṛṅgāṇi* by "hufen." We believe the *pādā* of 9^a is the *pādās* of the *padapāṭhi*, not the dual of LRV. GRV. renders 9^a "Goldhufig ist er, Eisen seine Füße" and *ṣṛṅgāṇi* of 11^c by "Hufe". This reduces the poetic figure to a mere comparison of material composing horn and hoof. Wilson renders 9^a "His mane is of gold," etc., and 11^c "The hairs of thy mane," etc. This does not render Sāyaṇa properly. On top of the head "in the usual place of horns," i. e. between the ears, is the foretop, not the mane. Griffith translates literally "horns" in both passages, citing Sāy. in 9^a for "mane" and commenting on 11^c "Meaning, here, perhaps, hoofs." The meaning must, of course, be the same in both passages.

consistent with the entire context. Occidental commentators are silent. Sāyana glosses *ṣṛṅgāṇī* by *ṣṛṅgavad unnatān aṅgūn abhiṣavakale* (Stalks or filaments of the soma plant that project like horns at the time of the pressing). This suits the case admirably. The figure explains the number and leads on naturally to the simile of *b*.

The omnific Viṣvakarman is the universal father and the architect of the world. In X. 81. 3 the Rishi says:—*viṣvātaṣ-cakṣur utā viṣvātomukho viṣvātobāhur utā viṣvātaspat | sām bāhūbhyāni dhāmati sām pātatrāir dyāvābhūmī janāyan devā ékaḥ* || (With eyes and face on every side, and arms and feet on every side, with twain arms and with wings he kindles the fire, that lone god creating heaven and earth). The implied plurals of the compounds of *a* and *b* are hyperbolic and intensive. Cf. our "He is all eyes, all ears," etc. The dual of *c* is noticeable. Though the god may have multiple arms yet in twirling the fire-sticks naturally but two are used. The plural *pātatrāir* may best be considered as poetic hyperbole again, akin to the implied intensive plurals of *a* and *b*. With two arms Viṣvakarman starts the fire; with many wings he fans into fervent heat the flames that are to fuse heaven and earth for his welding. There is the prosaic alternative that *pātatrāir* may mean "pinions," i. e. "wing-feathers" rather than "wings."

There is a poor imitation of the passage in AV. XIII. 2. 26—*yō viṣvācarṣaṇir utā viṣvātomukho yo viṣvātaspaṇir utā viṣvātasprthaḥ | sām bāhūbhyām bhāratī sām pātatrāir dyāvāprthivī janāyan devā ékaḥ* || The diversity of bodily members in *c* may mean that the god, Sūrya this time, bears heaven and earth in his two arms and that the poet gives him the hyperbolic plurality of wings to indicate the swiftness and strength of his flight.

In a description of Indra in RV. III. 36. 8 we have: *hradā iva kukṣāyaḥ somadhānāḥ sām ī vivyāca sāvanā purūṇi* (Like lakes are his flanks, soma-containing; verily he holdeth full many a libation). In the RV. *kukṣi* occurs only in connection with Indra. It is found five times in the dual and only here in the plural. This unique plural may be considered as a hyperbole in thorough keeping with 6^c, in which the soma-filled Indra is too vast for heaven to contain him.

But one more instance remains. This is the AV. XI. 6. 22^c

—*yā devīḥ pāñca pradiṣo yē devā dvādaśa ṛtāvāḥ | samvatsarāśya yē dānīṣṭrās té naḥ santu sādā śivāḥ* || (The five divine regions, the twelve divine seasons—the fangs of the year, let these ever be propitious to us). The numerals in *a* and *b* and the metaphor sufficiently warrant the plural. There is the alternative of taking *dānīṣṭrās* as the equivalent of *dantās*. So V. Henry, Les Livres X, XI et XII de l'Atharva Veda, has: "En totalisant probablement, soit donc $5 + 12 = 17 \times 2$ (parce que toute entité céleste a son double terrestre et réciproquement) = 34, ce que qui donne une denture à peu près normale".

Excluding from the count the natural plurals, the plurals with numerals attached and those implied in the *dvigu* epithets, we have left in the RV. a total of thirteen instances in which a plurality of bodily parts, naturally dual, is ascribed to an individual. The AV. contributes one independent instance and one adaptation from the RV. These include in their number nearly all the mooted instances of plural for dual in Vedic.

It was some of these that raised Delbrück's question¹ and led him to remark:—"Es ist merkwürdig, daß vom Soma gesagt wird *śṛṅgāṇi dodhuvat*², 9. 15. 4, während es von Agni³ 8. 60. 13 heißt *śṛṅge davidhvat*. In derselben Stelle wird von den *hānavas* des Agni gesprochen. Ich möchte dahin auch *paḍbhīs*⁴, 4. 38. 3, rechnen, bemerke aber, daß Ludwig das Wort durch 'Schlingen' übersetzt. Diese und ähnliche Fälle ließen sich wohl so erklären, daß man sagt, der Dual stehe eben nur da, wo die Beidheit hervorgehoben wird, man könne *śṛṅgāṇi* sagen, wenn nur die Mehrheit ausgesprochen werden soll, *śṛṅge* wenn man 'beide Hörner' sagen will".

Our study of the passages shows how utterly unsatisfactory is Delbrück's conclusions. As there was need of caution in entering upon this disputed matter we have considered each instance separately and in detail and we think an ample reason for the plural has been found. The numerical plurals and the *dvigu* compounds furnished the key as their figurative interpretation is beyond question. The next advance was the extension of a like exegetical method to the interpretation of

¹ See p. 1 above.² See p. 39. Cf. RV. I. 140. 6, p. 36.³ See p. 37.⁴ See n. on p. 34. The reference is to the feet

of the mythical horse, Dadhikrā.

the passage referring to the eyes of Rātrī, which is indisputably correct; then to the seven passages referring to the plural members of Agni, and then to the remaining five passages of the RV. and the two of the AV. Every instance yields readily to the same solvent. The poetic figure,—metaphor, paronomasia, hyperbole, etc., or a combination of these,—that flits before the Rishi's mind at the moment or the mythic concept of his imagination, fixes the plural. In not a single instance could the dual have been used without a decided poetic loss.

It is in this section alone that any plural of bodily parts could be considered as an encroachment upon the domain of the dual. So far as these fifteen instances out of the entire five hundred and fifteen considered in these pages are concerned, the encroachment, if it may be so termed, is purely artistic and not syntactical.

The disparity of instances between the RV. and the AV. is but another indication of the enormous difference between these two Vedas in poetic power and artistic skill. The study of the "Dual in Comparisons" reveals the same striking difference in the use of figurative language. We have in this section the same principles operating in metaphors that we find there to be operative in similes. The two studies illumine each other and together show that the mooted use of plural for dual in Vedic is simply the difference between the highly figurative and richly poetic language of the hieratic Rishi and the more prosaic diction of the Atharvan Shaman, the difference between the imaginative conceptions of a poet and the mechanical composition of a versifex.

It is but simple justice to the much-contemned Sāyaṇa to note that, whatever may be his lack of merit in some other respects, in several of these passages he alone of all commentators has caught the spirit and meaning of the ancient Rishis. Our method of interpretation was wrought out before reading his commentary, but we are glad it is supported by him.

§ 7.

A duality of bodily parts, naturally singular, associated with a duality of persons.

The RV. has these eight instances:—(1), *upāsthā* (*pitrōr uṣāsas* = *divāspṛthivyōs*), I. 124. 5^d,—*ōbhā prnānti pitrōr upās-*

thā (Filling both laps of her parents); (2), *tanvā* (*açvīnos*), I. 181. 4^b,—*arepāsā tanvā nāmabhiḥ svāiḥ* (Unblemished bodies, with marks their own); (3), VII. 72. 1^d,—*spārḥāyā çriyā tanvā çubhānā* (Radiant in body with an enviable beauty); (4), *tanvā* (*ménayos*), II. 39. 2^c,—*méne iva tanvā çumbhamāne* (Like two dames adorning their bodies); (5), *tanvā* (*uṣāsos*), III. 4. 6^b,—*ā bhādamāne uṣāsā ūpāke utā smayete tanvā virūpe* (Night and Dawn, closely united, come hither beaming and smile; different in hue are their bodies); (6), *tanvā* (*divāsprthivýos*), IV. 56. 6^a,—*punāné tanvā mitháḥ* (Making pure their bodies alternately); (7), *tanvā* (*indrāgnyós*), X. 65. 2^b,—*mithó hinvánā tanvā sāmokasā* (Speeding each the other, having bodies with one dwelling); (8), *çépā* (= ¹ *hārī yájamānasya*), X. 105. 2^b,—*hārī yásya suyújā vívratā vér árvantānu çépā* (Whose twain dun steeds, well-yoked, swerving apart, thou seekest after, fleet stallions).

There is no clear instance in the AV., as the *tanū* of IV. 25. 5^b, like that of RV. X. 183. 2^b, is better taken as a loc. sg. Some consider *tanvā* in our nos. 2 and 3 to be inst. sg.

These eight duals are obviously normal and need no comment in explanation or justification. They make the list of the duals of the bodily parts entirely complete for the two Vedas.

Our study of the dual of the natural bodily parts has been based only upon the two oldest monuments of the language, the Rig and the Atharva Veda. Among the results we may repeat by way of summary the following.

We have found 191 such duals in RV. and 225 in AV., also 62 plurals in RV. and 37 in AV. referring to the same bodily parts. Of the duals, 158 in RV. and 212 in AV. pertain to individuals and the dual expresses in each instance the natural number of the bodily parts specified. Of these as duals, there is no need of comment, as they are admittedly characteristic of the language at all periods. Their numerical distribution, however, has been found to indicate strongly the

¹ A much mooted passage. Because of the close similarity of *a* to I. 63. 2^a,—*yád dhārī indra vívratā vér*—we prefer Bergaigne's (II. 256) interpretation, and incline to modify it by accepting Sāyaṇa's *çepavantānu* as the sense of *çépā*. Cf. *hastin* as an analogous synecdochical metonym.

marked contrast between the hieratic character of the RV. and the demotic nature of the AV. An attentive scanning of the list will reveal many interesting and not unimportant details which neither our space has permitted nor our special theme has required that we should indicate. These have been thought an ample justification for the publication of the entire list, which is also more complete than Grassmann's and contains several corrections of his.

We have found only eight duals, all in RV., of bodily parts naturally singular, referring to a duality of persons. The number of such "pure" duals seems rather surprisingly small, less than two per centum of the Vedic duals. Their entire absence from the AV. is also striking.

We have found only two instances, both in AV., of a phenomenon natural enough, yet so rare, duals arising from the resolution of natural plurals.

We have found that of the naturally dual parts of the body, both duals and plurals are used in reference to a duality or a plurality of individuals, that the dual resolves the group and presents the acts of the component individuals, that the plural merges the individual into the concert of the group, that of a dualic group the dissociative dual is far more frequent than the synthetic plural (10 to 3), while of a plural group the plural is just twice as frequent as the dual (52 to 26), that the resolution of a plural group is far more numerous (20 to 6) in the RV. than in the AV. and is sometimes attended by distinctively hieratic and artistic characteristics and that its "ambal" nature is very marked.

We have found that 24 plurals in RV. and 20 in AV. refer to individuals, but in 4 instances in RV. and 16 in AV. this plural expresses the natural number of bodily parts and in 7 in RV. and 2 in AV. plural numerals are attached showing the figurative or symbolic nature of the plurals. For the remaining 15 instances we have found a simple logical and consistent explanation, based not upon any preconceived notions but upon ample evidence furnished by the Vedas themselves. Contrary to the impression of eminent scholars we find that Vedic Sanskrit does not admit plurals for duals with any marked freedom and that the supposed encroachment of plural upon dual is purely an artistic phenomenon in

every instance and one characteristic of the higher reaches of hieratic art.

Incidentally we have given a new or a modified interpretation to several passages, the more important of which have been briefly noted.

Finally, and by way of anticipation also, we may add that the conclusions drawn from the remaining parts of our study give ample confirmation to our main conclusions from the foregoing.

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The Kashmirian Atharva Veda, Book Two.—Edited, with critical notes, by LEROY CARR BARRET, M.A., Ph.D., Dartmouth College, Hanover, N.H.

Prefatory.—The second book of the Kashmirian AV. is here presented, elaborated upon about the same methods and principles as was the first book, published in volume 26 of this Journal. As in the first book so here the transliteration is regarded as of first importance: the publication of Bloomfield's *Vedic Concordance* makes it unnecessary to report variants in full as was done for the first book, but if a hymn or a stanza appears in the *Concordance* then at least one reference is given, so that practically all the new material is immediately evident.

It will be noted that sometimes the transliteration of an entire hymn is given followed by an emended version, while again transliteration and emendation proceed stanza by stanza: no strong objection will be made to this freedom, if it is remembered that the work is still in an experimental stage. But it may be objected that while the word "experimental" is used here in the preface, further on the emendations are proposed with an air of considerable certainty: for I am sure it has not been possible to indicate successfully just the shade of certainty I feel concerning the proposed readings. Let us discuss the situation. Here is a manuscript, the sole and only one of its kind, written in such a slovenly fashion and so corrupt that in many places the true reading can never be attained: some of the hymns it presents are known in other texts, the rest are not known in any other text. In editing a hymn which appears both here and elsewhere one is constantly tempted to think that the Paipp. reading is only a corruption of the reading given by the other text, because one gets to feel that any and all mistakes are liable to appear in this manuscript. The easy thing then is simply to set down the reading of the other text as the correct reading of

the Pāipp., but just because it is easy it creates a tendency that needs to be restrained. When we take up new hymns there is always a temptation to indulge freely in conjectural emendation, which is indeed a pretty pastime, but not productive of firmly founded results: when a pāda or a stanza seems senseless (a conclusion which may sometimes be reached too readily) it would not be difficult, at least in some cases, to write one sensible and suitable to the context. But this is not criticism. Emendations are suggested here which are pure conjecture and not to be regarded in any other light; surely here if anywhere conjectural emendation has its opportunity but here as everywhere its value is very slight. Such are the principles I have tried to follow in editing this text: this statement of them may be taken too as a protest against certain methods of textual criticism, the methods of those who so gaily chop or stretch texts to make them fit a preconceived theory.

The transliteration is given in lines which correspond to the lines of the ms.; the division of words is of course mine, based upon the edited text. The abbreviations need little explanation: Q. is used to refer to the AV. of the Qāunikiya School, and ms. (*sic*) is used for manuscript to avoid confusion with the other abbreviation MS. The signs of punctuation used in the ms. are pretty faithfully represented by the vertical bar (= colon) and the "z" (= period): in transliteration the Roman period stands for a *virāma*. The method of using daggers to indicate a corrupt reading is that familiar in the editions of classical texts.

Introduction.

Of the ms.—This second book in the Kashmir ms. begins f. 29b, l. 6 and ends at the bottom of f. 48b,—19½ folios; of these f. 43 is badly broken and from f. 42a the larger part of the written surface has peeled off: other than this there is practically no damage to the ms. in this part. There are as many as 20 lines to the page and as few as 15, but the most of the pages have 17 to 19 lines.

Numbering of hymns and stanzas.—In this book there are no stanza numbers and furthermore the end of a stanza is not regularly indicated by a mark of punctuation; often a visarga or virāma is the only indication of the end of a hemistich. Most frequently the colon is the mark used if any

mark appears. Except when rewriting a stanza corrections of punctuation have not been mentioned regularly.

The hymns are grouped in anuvākas, all properly numbered save the tenth. The anuvākas consist of five hymns each save that the sixth has six. Practically all the hymns are numbered,—only three times is the number omitted and only five times is the wrong number written. At the end of No. 49 stands a sort of colophon, imaṁ rakṣāmantram digdhandhanam (*sic*); after some formulae which are thrust into the middle of No. 50 stands iti agnisūktam; and after No. 69 stands iti ṣaḍṛtasūktam (*sic*).

Accents.—The accentuation in this book is about as poorly done as the punctuation. Accents are marked more or less fully on 30 stanzas of 12 different hymns, not counting a very few cases where an accent stands lonesomely on one single word: in no hymn is the accentuation marked on all the stanzas. No marks appear after f. 36b. I have marked the accents in transliterating, but have not attempted to edit them in the emended portions because they seem to have no value.

Extent of the book.—This book contains 18 anuvākas each having 5 hymns, except that anu 6 has 6, so that I have numbered 91 hymns: but hymns 1 and 2 of anu 17 seem to be in reality only one. The lacunae in f. 42 and f. 43 have not concealed the fact that anu 12 and anu 13 had 5 hymns each,—provided of course that the numbers written are correct, as they seem to be. The mutilation of the two folios has taken away No. 63 entire and parts of Nos. 60, 61, 64, and 65.

The word “hymn” means kāṇḍa whether verse or prose, and there are at least 20 hymns that are non-metrical. The 90 hymns as they now stand in the ms. present approximately 470 stanzas, thus showing an average of 5 stanzas which is clearly the norm here as well as in Ç. 2 for 65 hymns here certainly have 5 stanzas each; only 4 have more than 6 stanzas.

1 hymn has	3 stanzas	=	3 stanzas
3 hymns have	4 ” each	=	12 ”
65 ” ”	5 ” ”	=	325 ”
10 ” ”	6 ” ”	=	60 ”
1 ” ”	7 ” ”	=	7 ”
1 ” ”	8 ” ”	=	8 ”
2 ” ”	11 ” ”	=	22 ”
83 hymns			437 stanzas

83 hymns have	437 stanzas
2 hymns possibly have 6 stanzas each =	12 stanzas
5 hymns (uncertain) show about	17 „
1 is entirely lost	
91 hymns	466 stanzas.

Counting in the 5 formulae which appear in the middle of No. 50 we have the approximate total of 470 stanzas.¹

In Book One we saw that 67 out of 112 hymns clearly had 4 stanzas so that it seems that the verse-norm for Books One and Two is the same in Ç. and Pāipp.

New and old material.—In Book One about 150 stanzas out of 425 were new material: here in Book Two about 270 out of the 470 are new. There are 50 hymns which may properly be called new though a number of them contain pādas or even stanzas which are in the *Concordance*. The greater part of the new material is in the second half of the book; 17 of the first 46 hymns are new and 33 of second 44 are new. Perhaps it is also worth while to note here that of the 36 hymns in Ç. 2 18 appear in Pāipp. 2 in fairly close agreement just as 19 of the 35 in Ç. 1 appear in Pāipp. 1.

This book contains hymns and stanzas which appear in Books 1—7 and 19 of Ç.;—1 hymn of Ç. 1; 18 of Ç. 2; 3 of Ç. 3; 2 of Ç. 4; 8 of Ç. 5; 4 of Ç. 6; 2 of Ç. 19; and some scattered pādas of Ç. 7. Of the RV. there are 2 hymns and some stanzas, of MS. 2 hymns and some stanzas, of TB., Vait., and Kāuṣ. 1 hymn each.

ATHARVA-VEDA PĀIPPALĀDA-ÇĀKHĀ.

BOOK TWO.

1. [f. 29 b l. 6.]

Ç. 4. 7. 2—6.

oṁ nama sti:

lotamāyāi z z oṁ rasam prācyam viṣam arasam yad
udīcyam yatheda:

¹ It will be understood that the figures given are not minutely exact, —could not be and need not be: the total, 470 stanzas is a minimum. The ms. shows about 900 stanzas for Books 1 and 2; from this we may roughly estimate 5500 stanzas for the entire manuscript.

s adharācyam karambheṇa vi kalpate karambham kṛtvā
 turīyam pivassāka:
 m udāhṛtam kṣudhā kṛtvā juṣṭano jakṣivīpyasya nu rūrupaḥ
 vi te madam:
 sarayati çantam iva pātayāmasi | pari tvā varmive çantam
 varcasā:
 sthāpayāmasi | pari grāmyavācitam pari tvā sthāpayāmasi |
 tva:
 ṣṭā vṛkṣāiva sthāsam abhiṣāte na rūrupaḥ pavastvam yas
 tvā pary akrī:
 ṇam duruṣebhir ajanīr uta | prakrīr asi tvam oṣadhī atiṣāta
 na rū:

namaḥ z 1 z

The invocation may be read om̐ namo 'sti lotamāyāi. The stanzas may be read thus: arasam prācyam viṣam arasam yaḍ udīcyam | athedam adharācyam karambheṇa vi kalpate z 1 z karambham kṛtvā turīyam pivaspākam udāhṛtam | kṣudhā kila tvā duṣṭano †jakṣivīpyasya na rūrupaḥ z 2 z vi te madam sārāyati çarum iva pātayāmasi | pari tvā varmeva çantvam vacasā sthāpayāmasi z 3 z pari grāmam ivācitam pari tvā sthāpayāmasi | tiṣṭhā vṛkṣa iva sthāman abhriṣāte na rūrupaḥ z 4 z pavastvam tvā pary akrīṇan dūrçebhir ajināir uta | prakrīr asi tvam oṣadhe 'bhriṣāte na rūrupaḥ z 5 z 1 z

2. [f. 29b l. 14.]

āvidyad dyāvāpṛthivī āvidya bhagam açvinā | :
 āvidya vrahmaṇaspatim kṛṇomy asam viṣam

Read āvedya in a, b, and c; arasam in d.

vaso hedada viṣam yaḍ ena:
 d aham āçitham utāir adadyāt praruṣo bhavādi jagadaṣ punaḥ
 Pāda d may be read bhavāmi °, but for the rest I see nothing.

mā bibhe:
 r nā mariṣyasī pári tvā māsī viçvātaḥ rasam viṣasya nāvidam
 udhna:

[f. 30a.] ṣ phena madann iva z

Read pāmi in b, ūdhnaṣ phenam in d. Pāda a = Ç. 5. 30. 8a;
 c = SMB. 2. 6. 18c.

apāvocat apavaktā prathamō dāivya bhiṣak. sam aga:
 cchasindragā yavayāva co viṣadūṣaṇiḥ

In VS. 16. 5 and elsewhere is a variant of ab; a possible reading for cd is sam u gacchāsindrajā yavayāvā ca viṣa-dūṣaṇaḥ: read dāivyo in b.

yaç ca piṣṭam yaç cāpiṣṭam :
yady agraṃ yaç ca dehyam devās sarvasya vidvam so
rasam kṛṇutā viṣam | :

z 2 z

Read: yac ca piṣṭam yac cāpiṣṭam yac ca gṛhyam yac
cādehyam | devasya sarvasya vidvān so 'rasam kṛṇutām viṣam
z 5 z 2 z

3. [f. 30a l. 4.]

Ç. 2. 10.

kṣettriya tvā nirṛtyā jahāsiçamsa druho mūñcasi:
váruṇasya páçāt. | anāgasam vrāhmaṇā tvā kṛṇomi çiva te:
dyāvāpṛthiviha bhūtām çan te agnis saha dhībhir astu mam
gāvas sa :

hoṣadhībhiḥ çam antarikṣam sahavātam astu te çam te
bhavantu pradī :

çaç cātasraḥ yā devīṣ pradīçaç catasro vatapattīr abhi
sūryo vi :

çaṣṭe | tāsṽ edam jarasa ā dadami pra kṣyam eta nirṛtiṣ
parācaḥ :

sūryam ṛtam camaso grāhyā yathā devā muñcantu asṛjan
pare :

tasah évā tvām kṣettriyaṃ nirṛtyā jahāmiçamsā drúho mūñcā:
mi váruṇasya páçā ahómóci yākṣmā duritā vadadyād druhaḥ :
pātrad grāhyāç cod amóci juhārivartim avidat syūnām apy
abhūta :

bhadre sukṛtasya loke z 3 z

This hymn appears also in TB. 2. 5. 6. 1—2, and all but the fifth stanza in HG. 2. 3. 10; 4. 1: it will be noted that our version is more like these than the Ç. version. For Ppp. version read:

kṣettriyaṭ tvā nirṛtyā jamiçamsād druho muñcāmi varuṇasya
pāçāt | anāgasam vrahmaṇā tvā kṛṇomi çive te dyāvāpṛthiviha
bhūtām z 1 z çam te agnis saha dhībhir astu çam gāvas
sahāuṣadhībhiḥ | çam antarikṣam sahavātam astu te çam te
bhavantu pradīçaç catasraḥ z 2 z yā devīṣ pradīçaç catasro
vātapatnīr abhi sūryo vicaṣṭe | tāsṽ etam jarasa ā dadhāmi

pra yakṣma etu nirṛtiḥ parācāḥ z 3 z sūryam ṛtaṁ tamaso
grāhyā yathā devā muñcanto asṛjan paretāsaḥ | evā tvāṁ
kṣetṛiyan nirṛtyā jāmiçānsād druho muñcāmi varuṇasya pāçāt
z 4 z amoci yakṣmād duritād avadyād druhaḥ pātrād grāhyāç
cod amoci | ahā avartim avidat syonam apy abhūd bhadre
sukṛtasya loke z 5 z 3 z'

4. [f. 30 a l. 14.]

Q. 2. 14.

nissālām dhiṣṇyam dhiṣaṇam ekāvā :

dyām jighatsvam sarvaç caṇḍama napatiyo nāçayāmas
sadātvā | yā :

devāgha kṣetṛiṇyād yadi vā puruṣeṣitā | yad astu daçvibhyo
jātā :

naçyatetas sadātvā pari dhāmāny āsām āsrar gāṣṭhām
ivāsaram || :

[f. 30 b.] ajīṣo sarvān ājin yo naçyatetaḥ sadātvā 'nira vo
goṣṭhād ajāmasi :

nir yonin nṛpānaça | nir vo magumdyā duhitaro gr̥hebhyaç
cātayāmasi | :

amuṣminn adhare gr̥he sarvāsvant arāyaḥ | tatra pāpmā ni
yacchatu sa :

rvaç ca yātudhānyaḥ z 4 z

Read: nissālām †dhiṣṇyām dhiṣaṇām ekavādyām jighatsvam |
sarvāç caṇḍasya napyo nāçayāmas sadānvāḥ z 1 z yā devā
aghāḥ kṣetṛiṇyā yadi vā puruṣeṣitāḥ | yadi stha dasyubhyo jātā
naçyatetas sadānvāḥ z 2 z pari dhāmāny āsām āçuḥ kāṣṭhām
ivāsaram | ajāiṣam sarvān ājin vo naçyatetas sadānvāḥ z 3 z
nir vo goṣṭhād ajāmasi nir yoner nir upānasāt | nir vo magun-
dyā duhitaro gr̥hebhyaç cātayāmasi z 4 z amuṣminn adhare
gr̥he sarvās santv arāyyaḥ | tatra pāpmā ni yacchatu sarvāç
ca yātudhānyaḥ z 5 z 4 z

Our ms. offers no help towards solving the troublesome
st. 1a.

5. [f. 30 b, l. 4.]

Q. 2. 12.

dyāvāprthivī urv āntárikṣam kṣé :

ttrasya pattrír gāyo dbhūtaḥ utántarikṣam úrvātagopaṁ
teṣu tápyantām ma :

yí tasyamāne z

For b read kṣetrasya patny urugāyo 'dbhutaḥ; in c d read uru vātagopam te 'nu ° ° tapyamāne.

yadam indra ṣṇuhi somapa ya tvā hṛdā ṣocatā :
johavīmi | vṛcāsi tam kuliṣeneva vṛkṣam yo smākam mana i :
dam hinasti |

In a read idam and ṣṇuhi, in b yat tvā, in c vṛcāmi, and in d 'smākam.

idam devāḥ ṣṇute yajñiyā sta bharadvājo ma :
hyam uktyāni ṣaṁsatu | pāḥ sa baddho durite bhy ucyatām
yo smākam :

mana idam hinasti

In a read ṣṇuta ye yajñiyā stha, in b ukthāni, in c 'bhi yujyatām, and in d yo 'smākam.

aṣṭibhis tiṣṭbhis sāmagebhir ādityé :
bhir vāsubhir āṅgīrobhiḥ | iṣṭāpūrtam āvatu naḥ pītṛnām
āmum :

dade harāsā dāivyéna

In c read iṣṭāpūrtam and pītṛnām.

dyāvāpṛthivī anú mā dīdhyatām :
viṣvé devāso anu mā rabhadhvaṁ | āṅgirasas pitáras
somyāsaḥ | :

pāpas āricchatv apakāmasya kartā z

In a read dīdhyāthām, in d pāpam ārcchatv.

atīva yo maruto manyate no :
vrahma vā yo nindviṣataḥ kriyamāṇam tapūṁṣi tasmāi
vrajanāni santu vra :

hmadviṣām abhi tam ṣoca dyāuḥ

In b read nindviṣat kriyamāṇam, in c vṛjināni.

ā dadāmi te padam samiddhe jātavedasi | :
agni ṣarīram veveṣtu imam gacchatu te vasu |

In a read dadhāmi, in c agniḥ and veveṣtv.

sapta prāṇān aṣṭāu majña :
[f. 31 a.] s tāṁs te vṛcāsi vrahmaṇā yamasya gaccha mā-
danam agnito araṅkṛtaḥ z z :

z 5 z prathamānuvākaḥ z z

Read: sapta prāṇān aṣṭāu majjñas tāṁs te vṛcāmi vrah-
maṇā | yamasya gaccha śādanam agnidūto araṁkṛtaḥ z 8 z 5
z prathamānuvākaḥ z

6. [f. 31 a, l. 2.]

Ç. 2. 1.

venás tát paçyantá páramam padaṁ yátra :
viçvam bhávaty ékanaḍām | idaṁ dhenur aduhaj jāyamānās
svarvido bhyanukti :

r virāt.

The simplest emendation in a would be venās, but to let venas stand and read paçyat as in Ç. is possible. In b read ekanāḍam. Reading idaṁ dhenur aduhaj jāyamānā we have the same pāda as RV. 10. 61. 19d. I am inclined to think that the reading of d in our ms. is only a corruption of Ç. abhy anūṣata vrāḥ.

prthag voced amṛtaṁ na vidvān gandharvo dhāma paramaṁ
guhā yat. || :

trīṇi padāni hatā gúhās* vás tāni véda sá pitúṣ pitāsat.

In a read pra tad and nu, in c nibitā guhāsyā, and in d yas.

sa no :

bándhur janitá sá vidhartá dhāmani véda bhúvanāni viçvā
yátra devā :

amṛtām ānaçānā samāne dhāmann addhīrayanta |

In b read dhāmāni, in c amṛtam ānaçānās, and in d dhāmany adhy āirayanta. In the margin the ms. gives "to ba."

pari viçvā bhúvanā :
ny āyam úpāçaṣṭe | prathámajá ṛtasyá vācas ivāktri bhuva-
neṣṭhā dhā :

sramn eṣa ṇatv eṣo agniḥ

In b read upātiṣṭhe, in c vācam iva vaktari, and for d dhāsyur eṣa nanv eṣo agniḥ.

pari dyāvāprṛthi sadyāyam ṛtasya ta :
ntum vitataṁ dr̥keçam | devo devatvam abhirakṣamāṇas
samānam bandhum :

vi pariçchad ekaḥ z 1 z

Read: pari dyāvāprṛthivī sadya āyam ṛtasya tantum vitataṁ
dr̥ce kam | devo devatvam abhirakṣamāṇas samānam bandhum
vi pary āicchad ekaḥ z 5 z 1 z

7. [f. 31a, l. 11.]

Ç. 2. 5 (in part).

indra juṣasva yāhi çūra pivā su :
taçca madhoç cakāna cārun madathaḥ | ā tvā viçantu mutāsa
indra :

prṇasya kuksī viḍhy açatrū dhehy ā naḥ indra jaṭharam
prṇasva madho :

rasya sutasya || upa tvā madeṣu vājo stu | indras turāṣād
jaghāna :

vṛtram sāsahā çatrūr mamuç ca | vajrīr made somasyāç*
ti hava me :

kiro juṣasya indra syagubhin matsa madāya mahe raṇāya
z 2 z :

Read: indra juṣasvā yāhi çūra pibā sutasya madhoç ca |
cakānaç cārur madāya z 1 z ā tvā viçantu sutāsa indra
prṇasva kuksī | viḍhy açatro dhiyehy ā naḥ z 2 z indra
jaṭharam prṇasva madhurasasya sutasya | upa tvā madās suvāco
'sthuh z 3 z indras turāṣād jaghāna vṛtram sasahe çatrūn
†mamuç ca | vajrīr made somasya z 4 z çrudhī havām me giro
juṣasvendra svayugbhir matsva | madāya mahe raṇāya z 5 z 2 z

8. [f. 31b, l. 1.]

Ç. 4. 3.

ud itye kramam trayo vyāghraḥ puruṣo vṛkaḥ hṛg veda
sūryo hṛg devo :

vanaspatir hṛṇ maṇavantu çattravaḥ parameṇa pathā vṛka
pare :

ṇa stenor arṣatu | tato vyāghraḥ paramā akṣāu ca te hanū
ca te vyāghram :

jambhayāmasi | āt sarvān vṛṇṣatin nakhām yat saṁnaso
vi yan na :

so na saṁnasa | pūrṇā mṛgasya dantā upaçīrṇā u pariṣṭayaḥ
vyāghram :

datutām vayan prathamam jambhayāmasi | ād iku stenam
ahyam yātu :

dhānam atho vṛkam. | nāivaraspaśān na gṛhaḥ paraç cara
dvipāc catu :

ṣpānto mā hiṁsīr indrajās somajāsīḥ z om indrajās somajā :
asiḥ z 3 z

Read: ud ito ye 'kraman trayo vyāghraḥ puruṣo vṛkaḥ | hṛg devas sūryo hṛg vanaspatir hr̥ṇ me namantu çatravaḥ z 1 z paramēṇa pathā vṛkaḥ pareṇa steno arṣatu | tato vyāghraḥ paramēṇa z 2 z akṣyāu ca te hanū ca te vyāghra jambhayāmāsi | āt sarvān viṇçatiṁ nakhān z 3 z yat saṁnamo na vi namo vi yan namo na saṁnamah | mūrṇā mṛgasya dantā upaçirṇā u prṣṭayaḥ z 4 z vyāghraṁ datvatām vayaṁ prathamāṁ jambhayāmāsi | ād ittha stenam ahiṁ yātudhānam | atho vṛkam z 5 z †nāivaraspaśān na gr̥haḥ paraç cara dvipāc catuṣpānto† mā hiṁsīr indrajās somajā asi z 6 z 3 z

In st. 1 hiruk, as in Ç., might just as will be written. If st. 2 and 3 were combined we would have a hymn of five stanzas, the norm of Bk. 2. In st. 6 we get good meaning by writing dvipāc catuṣpān no mā ° °; the meter is correct without no: paraç cara is a good ending for pāda b, but the rest seems hopeless.

9. [f. 31 b, l. 9.]

Ç. 1. 34. 1 (partly).

yam vīru madhujātā madhune tvā panāmāsi |
madhor adhi prajāto si sā no madhumadhas kṛdhiḥ jihvā-
yāgre me :

madhu jihvāmūle madhulakam | yathā mām kāmīny aso
yam vā :

vā mām anv ā yasī pari tvā paritannuteyakṣanākām avi :
dviṣe | yathā na vidvāvahi na vibhavāva kadā cana rājñi :
vrūhi varuṇāyāçvāya puruṣāya ca | pathā me pathye revati :
jāyām ā vaha sādhunā | jāyām me mittrāvaruṇā jāyām :
devī sarasvatī | jāyām me açvināubhā dhattām puṣkarasṛja :
z 4 z

Read: iyaṁ virun madhujātā madhune tvā khanāmāsi |
madhor adhi prajātāsi sā no madhumataḥ kṛdhi z 1 z jihvāyā
agre me madhu jihvāmūle madhulakam | yathā mām kāmīny
aso yam vā mām anv āyāsi z 2 z pari tvā paritatnuneḥṣuṇāgām
avidviṣe | yathā na vidviṣāvahe na vibhavāva kadā canā z 3 z
rājñe. vrūhi varuṇāyāçvāya puruṣāya ca | pathā me patye revati
jāyām ā vaha sādhunā z 4 z jāyām me mitrāvaruṇā jāyām me
devī sarasvatī | jāyām me açvināv ubhā dhattām puṣkarasrajā
z 5 z 4 z

For st. 5 cf. below, 35. 5.

10. [f. 32a, l. 1.]

Ç. 2. 9.

daçavṛkṣa saṁcemam ahiṁsro grāhyāç ca | atho yenaṁ
vanaspate :

jīvānāṁ lokam un annayā |

Read muñcemam in a, enaṁ in c, and lokam unnaya in d.

yaç cakāra mu niṣkarat sa eva suviṣa :
ktamā sa eva tubhyaṁ bheṣajaṁ cakāra bhiṣajāti ca |

Read sa (for mu) in a, subhiṣaktamaḥ in b, and bheṣajāni
in d (or possibly with Ç. bhiṣajā çuciḥ): but bhiṣajāti ca
might stand.

cātaṁ te devāvi :
daṁ vrāhmāṇam ud vīvr̥dha cātaṁ te bhy ottamām avidaṁ
bhūmyām adhi |

Read devā avidan in a, vrahmāṇa uta vīrudhaḥ for b; 'bhy
uttamam avidan in cd.

āgā :
d ud agād ayaṁ jīvānāṁ vrātam apy agāt. abhūta putrā-
ṇāṁ pitā :

nṛṇāṁ ca bhagavattamā

Read abhūd u in c, and bhagavattamaḥ in d.

adhītam adhy agād ayam adhi jīvapurāgāt. :
çataṁ te sya vīrudhas sahasram uta bheṣajaḥ z 5 z anu-
vākaṁ 2 z :

Read: adhītim adhy agād ayam adhi jīvapurā agāt | çataṁ
te 'sya vīrudhas sahasram uta bheṣajā z 5 z 5 z anuvākaḥ 2 z

11. [f. 32a, l. 8.]

Ç. 2. 4.

dīrghāyutvātha vṛhate raṇāya ṛṣyāmbho ṛkṣamāṇās sadāiva |
ma :

ṇis sahasravīryaṣ pari ṇaṣ patu viçvataḥ

Read in a 'yutvāya, in ab raṇāyāriṣyanto rakṣamāṇās;
pātu in d.

idāṁ viṣkandhaṁ sāte :
ayaṁ rakṣopa bādhate | ayaṁ no viçvabheṣajo jaṅgiṇaṣ
pātv aṇha :

saḥ |

Read saḥate in a; rakṣān apa seems best in b. Our ms. here spells the name of this amulet with a nasal instead of jaṅgiḍa as in C.; I am retaining it as possible peculiarity of the Ppp.

devāir dattena maṇinā jaṅginena mayobhuvāḥ viṣkandhaṁ
sarvā :

rakṣānsi vyāyama sāmahe |

For b read jaṅginena mayobhuvā; for d vyāyāme saḥāmahe.

khaṇaḥ ca tvā jaṅgiṇaḥ ca viṣkandhād a |
bhi muñcatām | araṇyād aty ādyataḥ kṛṣyānyo rasebhyaḥ
z 1 z :

Read: ḥaṇaḥ ca tvā jaṅgiṇaḥ ca viṣkandhād abhi muñcatām |
araṇyād anya ābhṛtaḥ kṛṣyā anyo rasebhyaḥ z 4 z 1 z

In a ḥaṇas, the reading of C., seems better; but khanas is not impossible.

It will be noted that our st. 1 is composed of hemistichs which are st. 1ab and st. 2cd in C.; Whitney suggests that the two hemistichs between have fallen out in the ms.: inserting them would bring this hymn to the norm of five stanzas. They read maṇim viṣkandhadūṣaṇam jaṅgiḍam bibhṛmo vayam, and jaṅgiḍo jambhād viḥarād viṣkandhād abhiṣocanāt.

12. [f. 32 a, l. 14.]

C. 2. 26.

yeha yantu paḥavo yeyur vāyur yaśām mahatāram tujoṣā |
tvaṣṭā ye :

śām rūpayeyāni veda asmiñs tām goṣṭhe savitā ni yacchāt. | :

Read eha and ye pareyur in a, yaśām saḥacāram jujoṣa in b; in cd rūpadheyāni vedāsmiñ tām.

imam goṣṭham paḥavas sam sravantu vṛhaspatir ā nāitu
prajānām. | si :

nīvālī nayatv agram eṣām ājinmukhe anumatir ni yacchāt. | :

Read nayatu prajānan in b, āgram in c: probably ājinmukhe in d.

sam sām sravantu paḥavas sām āḥvā huta pāūruṣāḥ sam
dhānyasyā sphā :

tibhis samsrāveṇa haviṣā juhomi |

In b read āḥvā uta pūruṣāḥ; in c we probably have only a corruption of dhānyasya yā sphātis, which is the reading in C.

saṁ siñcāmi gavāṁ kṣī :

[f. 32b.] raṁ saṁ[̄]ājyana balaṁ rasaṁ saṁsiktāsmākāṁ vīrā
mayi gāvaḥ ca gopa :

tāu

Read siñcāmi in a, ājyena in b, saṁsiktā asmākāṁ in c.

In the top margin of f. 32 b is written gāṁ ṛcāṁ°.

ahnāmi gavāṁ kṣīram ahaṛṣaṁ dhānyaṁ rasaṁ ahariṣam
asmākāṁ :

vīrān ā patnīm edam astakam z 2 z

Read: ā harāmi gavāṁ kṣīram āhārṣaṁ dhānyaṁ rasam |
āhārṣam asmākam vīrān ā patnīm edam astakam z 5 z 2 z

13. [f. 32 b, l. 3.]

Ç. 3. 14.

sām vat sṛjātv aryamā sām pū :

ṣā saṁ vṛhaspātiḥ sām indrá yo dhanañjaya ihá puṣyati
yád vasu | :

In a read vas, in c dhananñjaya; in d read puṣyata as in Ç.,
or puṣyatu as Whitney suggests.

ihāiva gāva yeneho ṣakā iva puṣyata | iho yad ya pra
jāyadhvaṁ ma :

yī saṁjñānam astu vaḥ

In ab read etaneho; in c I would incline to the reading
gāvaḥ for yad ya.

mayā gāvo gopatyaṣ sacadhvaṁ mayi vo goṣṭha iha :
poṣayāti | rāyas poṣeṇa bahulā bhavantīr jīvā jīvā :
ntīr upa vā sademā |

In a we might read gopatayas (= bulls), but gopatinā as in
Ç. is better; read jīvantīr upa vas sadema in d.

saṁ vo goṣṭhena suṣadā saṁ rayyā saṁ sapuṣṭyā a :
harjātama yaṁ nāma tena mas saṁ sṛjāmasi |

Read aharjātasya in c, and tenā vas in d.

saṁjñānāṁ vihratā a :

smīn goṣṭhe karīṣiṇīm bibhratīḥ somya havis svāveçā sa éta :
naḥ z 3 z

Read: saṁjagmānā avihrutā asmin goṣṭhe karīṣiṇiḥ | bibhratīḥ
somyaṁ havis svāveçā mā etana z 5 z 3 z

This stanza and the first appear MS. 4. 2. 10; the readings
of st. 5a and d are similar to those in MS.

14. [f. 32b, l. 11.]

Q. 2. 32.

udyánn adityáś krimīn hantu sūryo nimrocañ raçmi :
bhir hantu ye ntaś krimayo gavī naḥ

Read ādityaś in a, nimrocan in b, and 'ntaś and gavi in c.

yo dviçīrṣā caturakṣaś krimi :
ç çārgo arjunaḥ hato hatatrātā krimin hatamahatā hataçvasā |

In b read krimis sāraṅgo, in c hatabhrātā krimir, and for d hatamātā hatasvasā.

hato rājā krimīṇām 'utāi*ām sthapacir' hataḥ | hatāso sya
veṣa :

so hatāsaś pariveçasaś

In b read utāiṣām sthapatir, in c 'sya veçaso; in d pariveçasaḥ.

pa te çṛṇāmi çṛṅge yābhyā yattañ vi :
tadāyasi | atho bhinaddi tañ kumbhañ yasmin te nihatañ
viṣaṁ | :

In a read pra te çṛṇāmi, for b yābhyāñ vitudāyasi; in c bhinadmi, and in d nihitañ viṣam.

a :

ttrivat tvā kṛme hanmi kaṇvavaj jamadagnivat. agastyam
vrahmaṇā :

sarve te krimayo hataḥ z 4 z

Read: atrivat tvā kṛme hanmi kaṇvavaj jamadagnivat |
agastyasya vrahmaṇā sarve te krimayo hataḥ z 5 z 4 z

15. [f. 32b, l. 18.]

Q. 2. 31.

indrāda yā mahi dṛṣa :
[f. 33a.] t krimer viçvasya tarhaṇī tayā pinaçma sañ kṛmīñ
dṛça vakhalvāñ iva | dṛ :

ṣṭam adṛṣṭam adruham atho kurīram adruhām | algaṇḍūna
sarvā çalūlāna :

krimaṇa vacasā jámbhayāmi | algaṇḍūna hanmi mahatā va-
dena :

dunāddunārasā bhuvan | sṛṣṭām asṛṣṭī ny akilāsi ^{manācā} ^{vācān} ya :

thā krimīṇām nyakhilaçhavātāiḥ atvāhamtnyahan̄m çīrṣa-
ṇyam a :

tho pārçvayaṁ kṛmīm̄ avaskavaṁ yaraṁ krimīṇa vacasā
jāmbhayāma :

si | ye krimayaṣ parvateṣu ye vaneṣu | ye oṣadhīṣu paçuṣv
apsv antaḥ :

ye smākām̄ tanno sthāma caktrir indras tān hantu mahatā
vadhena | 5 z :

z a 3 z

Read: indrasya yā mahi dr̥ṣat krimer viçvasya tarhaṇi |
tayā pināsmi saṁ krimīn̄ dr̥ṣadā khalvāṇ̄ iva z 1 z dr̥ṣtam
adr̥ṣtam adruham atho kurīram adruham | algāṇḍūn sarvān
çalūlān krimīn̄ vacasā jāmbhayām̄asi z 2 z algāṇḍūn hanmi
mahatā vadhena dūnā adūnā arasā abhūvan | sṛṣṭān asṛṣṭān
ni kirāmi vācā yathā krimīṇām̄ †nyakhil açhavātāiḥ† z 3 z
anvāntnyam̄ çīrṣṇyam̄ atho pārṣṭeyaṁ krimīn̄ | avaskavaṁ
vyadhvaraṁ krimīn̄ vacasā jāmbhayām̄asi z 4 z ye krimayaṣ
parvateṣu ye vaneṣu ya oṣadhīṣu paçuṣv apsv antaḥ | ye 'smākām̄
tanvo sthāma cakrur indras tān hantu mahatā vadhena z 5 z
5 z anuvākaḥ 3 z

The reading of our ms. in st. 3c does not force upon us
anything different from the reading of Q., — çīṣṭān aciṣṭān
ni tirāmi; and in st. 3d we probably have only a corruption
of the reading of Q., — nakir ucchiṣātāi.

16. [f. 33a, l. 9.]

Q. 2. 27.

yaç catṛṇ sañjayāt sahamānābhibhūr̄ asi | sāmūn̄ pratiprāço :
jayarasā kṛṇv̄ ovadhe | suparṇas tvām̄n̄ avidadat sukhacas
tvākhanam̄ na :

sā | indras tvā cake hvo asurebhyas tarītave | pāyas indro
vy āṣṇān̄ ha :

ntavā asurebhyah̄ | tayāham̄ catṛṇ̄ sakṣīye indraç cālāvṛkān̄ i :
va rudra jalājabheṣaja nīlaçitva karmakṛt. pr̥ṣṇam̄ durasyato :
jahi yo smāñ̄ abhidāsati | tasya pr̥ṣṇam̄ jahi yo na indrā-
bhidā :

sate | ādhi no vrūhi çāktibhiṣ̄ prāçi mām̄ uttaram̄ kṛdhi
z 1 z :

Read: yā çatrūn̄ sañjayāt sahamānābhibhūr̄ asi | sāmūn̄
pratiprāço jayārasān̄ kṛṇv̄ oṣadhe z 1 z suparṇas tvānv̄ avindat

sūkaras tvākhanan nasā | indras tvā cakre bāhāv asurebhyas
 staritave z 2 z pātām indro vy ācṇād hantavā asurebhyaḥ |
 tayāham chatrūn sākṣya indras sālāvṛkāñ iva z 3 z rudra jalāṣa-
 bheṣaja nilaṣikhaṇḍa karmakṛt | prāçaṁ durasyato jahi yo
 'smān abhidāsati z 4 z tasya prāçaṁ tvam jahi yo na indrā-
 bhidāsati | adhi no vrūhi çaktibhiṣ prāçi mām uttarām krdhi
 z 5 z 1 z

In Ç. the second hemistich of st. 1 is used as a refrain for
 six stanzas to which our st. 5 is added as a seventh; it is not
 beyond our ms. to fail utterly to indicate a refrain, but I have
 preferred to arrange in five stanzas. For st. 1a Ç. has nec
 chatrūn prāçaṁ jayāti; elsewhere our ms. follows it closely.

17. [f. 33a, l. 16.]

Ç. 2. 30.

yathedaṁ bhūmyādi vātas tṛṇaṁ mathāyathi | eva maçṇāmi
 te mano ya :

thā mām kāmity aso evā mam atvāyasi |

In a read bhūmyā adhi, in b mathāyati; in c mathnāmi, in
 d kāmīny, and in e mām abhyāyasi.

yemagaṁ patikāmā :
 janikāmo ham āgamām. açvaṣ kanikradad yathā bhagenāham
 sahā :

gamam |

In a read eyam agam, in b 'ham āgamam; in d sahāgamam.
 sa cen nayātho açvinā kāmīnā saṁ ca neṣiṭaḥ sarvāñ
 ma :

[f. 33 b.] nāsy agmata mām cakṣūñṣi sama vratā |

In a read saṁ cen, in b neṣiṭaḥ; for cd we may read
 saṁ vām manāṁsy agmata saṁ cakṣūñṣi sam u vratā.

yād antāraṁ tadā bāhyaṁ yad bāhyaṁ tad anta :
 ram. kanyānām viçvarūpāṇām mano grṇādh oṣadhe |

In a read tad; in d grṇītād is probably nearest to the
 reading of the ms.;—Ç. has grbhāya.

yas suparṇā rakṣā :
 ṇa vā na vakṣaṇa vā ttrātānpitaṁ manah | çalyeva gulma-
 lūm yathā | :

z 2 z.

Read: yās suparṇā rakṣaṇā vā yās suparṇā vakṣaṇā vā |
tatra ta arpitaṁ manaḥ çalya iva kulmalaṁ yathā z 5 z 2 z

This version of this stanza is fully as good as the version in Ç. but it does not help to relieve the obscurity.

18. [f. 33b, l. 4.]

Ç. 6. 38.

siṁhé vyāghrá utá yá pṛdākāu tviṣir ágnāu vrahmaṇé sūrye :
yá | índraṁ yā devī subhágā vavárdha sá á nāitu vārcasā
saṁvi :

dānā |

Read vrāhmaṇe in b; in d we might read sā ā na etu, but
sā na āitu, as in Ç., seems much better.

yá hastīni dvīpīni yá yá hiraṇyayé tviṣir áçveṣu pú :
ruṣeṣu goṣú | índraṁ yā devī subhagā vavardha sā ā nāitu
varca :

sā saṁvidānā |

In a read dvīpini yā hiraṇye: d as in st. 1.

yá rājanyè dundubhāv áyātāyām tviṣi :
r áçvenāyām stanáyitná goṣu yá índraṁ yā devī subhagā
vavá :

rdha sā ā nāitu varcasā saṁvidānā |

In b we may safely read stanayitnor ghoṣe, but for açvenāyām
I find nothing satisfactory,—unless perhaps āçvināyām; to omit
yā after ghoṣe would improve the metre. Read d as in st. 1.

ráthe ákṣīṣu paribhāsva vā :
je parjánye vāte váruṇasya çúṣme | índraṁ yá divī subhá :
gā vavárdha sá á netu vārcasā saṁvidānā |

In a read akṣeṣu vṛṣabhasya vāje; d as in st. 1.

yā rudreṣu yā :
vasuṣv ādityeṣu marutsu yā | tviṣir yā viçveṣu deveṣu sā nāi :
tu varcasā saṁvidānām. z 3 z

Read: yā rudreṣu yā vasuṣv ādityeṣu marutsu yā tviṣir viç-
veṣu deveṣu | indraṁ yā devī . . . saṁvidānā z 5 z 3 z

This restoration of st. 5 is not entirely satisfactory but is
fairly plausible; it has no parallel in Ç. or in TB. 2. 7. 7. 1
and 2 where the rest appears.

19. [f. 33 b, l. 14.]

yadi gādānām yadi nā :
 vyānām nadīnām pāre nṛpatis sakhā naḥ viṇve devāso abhi :
 rakṣatemaṁ yathā jīvo vidatham ā vidāsi | yady avāre ya :
 di vāgha pāre yadi dhanvini nṛpatis sakhā naḥ yady at sudṛ :
 tyām yadi samṛtyām nṛpatis sakhā naḥ adhasparmyatām
 adhane :

[f. 34 a.] bhavānv ena sūryām maghavānam pṛtanyām viṇve
 devāso bhi rakṣatemaṁ | yā :
 thā jīvo vidātham ā vidāsi | imam mṛtyu mānam hiṁsīr
 yo mām :
 hṛdām anu sāca gopā | yo maham pipanti yom aham pi-
 parmi su :

prajasā vām maghavām sūrīr astu z 4 z

Read: yadi gādhānām yadi nāvyānām nadīnām pāre nṛpatis
 sakhā naḥ | viṇve devāso abhi rakṣatemaṁ yathā jīvo vidatham
 ā vidāsi z 1 z yady avāre yadi vāccha pāre yadi dhanvini
 nṛpatis sakhā naḥ | viṇve devāso ° ° z 2 z yady āt svadhṛtyām
 yadi samṛtyām nṛpatis sakhā naḥ | viṇve devāso ° ° z 3 z
 †adhasparmyatām adhane bhavānv ena sūryām maghavānam
 pṛtanyām† | viṇve devāso ° ° z 4 z imam mṛtyo mānam hiṁsīr
 †yo mām hṛdām anu sāca gopā | yo mām pipanti yam aham
 piparmi† suprajasām maghavān sūrīr astu z 5 z 4 z

For st. 4ab we might perhaps write adhaṣ pātyantām
 adhare bhavantu ye nas sūrīm maghavānam pṛtanyān; but one
 could hardly insist upon it.

20. [f. 34 a, l. 4.]

imā nāvam ā rohatā :
 ācchidrām pārayiṣṇūvam nārācaṁsasya yā grhē ṇatāritrā
 bhāgasya :

ca | upadho gulgunā yakṣmas saṁtv aghnyā | rudrasyeṣvā
 yātudhānā :

n atho rājño bhavasya ca rudrā vāiṇate dvipadām catuṣ-
 padām taylor va :

yam aguvāke syāma | paktrīr vithvī pratibhūṣantī no vyaṁ de :
 vānām sumatāu syāma | pratīcī nāma te mātā ṇatavāro ha te :
 pitā | tato ha jajñiṣe tvam amirity arundhatī mātā nāmā :
 si mātṛtāu amṛtasyāiva vāsi arundhati tvām sarvam abhijī :
 vam adhāyudham. z 5 z anu 4 z

For the first stanza we may read, *imām nāvam ā roha-tācchidrām pārayiṣṇvam | narācaṁsasya yā grhe çatāritrā bhagasya ca.* With much hesitation the following is proposed for the second stanza: *upabaddhā gulgulunāyaksmās santv aghnyāḥ | rudrasyeṣvā yātudhānān atho rājño bhagasya ca.*

To emend the rest and divide it into stanzas seems impossible; but a few points are clear. A stanza probably ends with *vayaṁ devānām sumatāu syāma*, and for the first pāda of this we might read *rudro vā içāte catuṣpadām*; for the other two pādas I can suggest nothing. Beginning with *praticī* we have three good pādas of eight syllables each; in the rest, which amounts to about one stanza I can suggest only the possibility of reading *mātrto amṛtasyāivāsi*.

We seem to have here a charm for protection of cattle; and there are indications of the use of an amulet.

21. [f. 34 a, l. 12.]

Ç. 2. 36.

ā no agne sumatiṁ ska :

ndaloke idamām kumāryām mā no bhagena juṣṭā vareṣu suma-neṣu valgur oṣaṁ patyā bhavati snumbhageyam |

In *ab* we may probably read with Ç. *saṁbhalo* gamed *imām kumārīm saha no*; in *c* read *samaneṣu* and in *d* *bhavāti subhageyam*.

yam agne nārī pa :

tiṁ videṣtas somo hi rājā subhagaṁ kṛṇotu suvānā putrā : n mahiṣī bhavāsi gatvā patiṁ subhage vi rājā |

In *a* read *iyam* and *videṣta*, in *b* *subhagaṁ kṛṇoti*; in *d* *vi rājāḥ*.

somoju :

[f. 34 b.] *ṣṭo aryamnā saṁbhṛto bhaga dhātur devasya satyena kṛṇomi patirvedanam. || :*

For *ab* read *somajuṣṭam vrahmajūṣṭam aryamnā saṁbhṛtaṁ bhagam*, and in *d* *pativedanam*. Perhaps however the nominative may stand in *ab*.

yathākhaṁraṁ maghavaṁ cārur eṣu priyo mṛgāṇām suṣadā babhūva | yam :

vayaṁ juṣṭā bhagasyāstu saṁpriyā patyāvīrādhayantī

For *a* read *yathākharo maghavaṁc cārur eṣa*; in *c* *iyam vadhū*.

bhagasya nā :

vam ā ruha pūrṇām anuparasvatīm trayopaḥ pūṣāhitam
yaṣ pati :

ṣ patikāsyam

In a read roha, in b anupadasvatīm; for c tayopa pūṣāhito,
and in d pratikāmyaḥ.

idam hiraṇyam gulguluv ayas ūkṣo atho bhaga | e :
te patibhyas tvām adhuḥ patikāmāya vettave z 1 z

Read: idam hiraṇyam gulgulv ayam āukṣo atho bhagaḥ | ete
patibhyas tvām aduṣ pratikāmāya vettave z 6 z 1 z

22. [f. 34 b, l. 6.]

Ç. 3. 17 (in part).

yunākta :

sīrā vī nu yugā tanotu kṛté kṣéttre vāpatehá bájam | vīrā-
jas su :

nīṣṭas sabharāçchin no nediya it sṛṇyaḥ pakvām ā yuvaṁ sī :
rā yuñjānti kavāyo yugā vī tanvate pṛthak. dhīrā devēṣu su :
mnayo anuḍvāhāṣ puruṣā ye kṛṇanti | lāṅgalam phālam su :
mana jisphātyā çunam kenāço anv etu vāhām çunam phālo
vina :

dann ayatu bhūmim çunāsīrā haviṣā yó yājātrāi supíppalā :
óṣadhayas santu tasmāi çunán naro lāṅgalena ánaḍúdbhiḥ :
parjanyo bījam irya do | hinotu çunāsīrā kṛ :

ṇutam dhānyena índraḥ sītam ni gṛhṇātu tām pūṣā máhyam
rakṣa :

[f. 35 a.] ntu sá naḥ páyasvatī duhām úttarām uttarām sá-
mām | úd asthād rathajíd go :

jíd açvajíd dhíraṇyajít sūnṛtayā párīvṛtaḥ | ékaçcakreṇa savi :
tá ráthanorjo bhāgāiṣ pṛthivín ety āpṛṇām z 2 z

There are just 24 pādas here but they do not fall readily
into stanzas; the first two are st. 2 and 1 in Ç. but our second
adds a pāda to Ç. 1: our third must end with santu tasmāi
but this gives five pādas the first of which seems out of place
here; in st. 4 it seems almost necessary to insert a pāda b in
accord with MS. We may read as follows:

yunakta sīrā vī nu yugā tanota kṛte kṣetre vapateha bījam |
virājaç çnuṣṭis sabharā asan no nediya it sṛṇyaḥ pakvam ā
yuvan z 1 z sīrā yuñjanti kavayo yugā vī tanvate pṛthak | dhīrā
deveṣu sumnayāv anadvāhaṣ puruṣā ye kṛṇvanti z 2 z †lāṅ-
galam phalam sumanaji sphātyā† çunam kīnāço anv etu vāhān

ṣuṇaṁ phālo bhindann etu bhūmim | ṣuṇāsīrā haviṣā yo yajātāi
supippalā oṣadhayas santu tasmāi z 3 z ṣuṇaṁ naro lāṅgale-
nānaḍudbhīr bhagaḥ phālāiḥ sīrapatir marudbhīḥ | parjāno
bījam irayā no hinotu ṣuṇāsīrā kṛṇutaṁ dhānyaṁ naḥ z 4 z
indrah sītāṁ nī grhṇātu tāṁ pūṣā mahyaṁ rakṣatu | sā naḥ paya-
svatī duhām uttarām-uttarām samām z 5 z ud asthād rathajid
gojid aṣvajid dhiranyaṁ sūnṛtayā parivṛtaḥ | ekacakreṇa savitā
rathenorjo bhāgāiḥ pṛthivīm ety āprān z 6 z 2 z

Stanzas 1, 2, 3, and 5 here are 2, 1, 5, and 4 in Q.; the other two appear MS. 2. 7. 12 and elsewhere. The omission of 4b can easily be accounted for by the similarity of endings. It might be a better arrangement to put the colon after sum-nayāu and take lāṅgalaṁ ° ° in as st. 2e.

23. [f. 35 a, l. 3.]

gavām grhā :

nām rasam oṣadhīnām anujyeṣṭham varca āyur vikalpyas
ma mā hiṁsiḥ :

pitāro vārdhamāno bhadrā gacchāṁsim abhi lokam ehi |

Read oṣadhīnām in a, vikalpayah in b: for c I am inclined to propose mā mā hiṁsiḥ pitaro vārdhamānā, although the second person in d makes somewhat against this; in d I believe aṅgam is the third word so we might read bhadra gacchāṅgam abhi lokam ehi, though bhadraṁ would seem better in some respects.

yādīdam bhaktam :

yadi vā vibhaktam kṣetram devānām yadi vā pitṛṇām |
ud u sūrya :

ud ite divā manuṣyavaḥ chivā no stū pṛthivī uta dyāuḥ.

With kṣetram in b the first hemistich may stand: at the end of c one naturally thinks of the contrast, gods and manes, so we might read ete devā manuṣyā vā or ud it te ° °; for d chivā no 'stu pṛthivy uta dyāuḥ.

ūrjo vām :

bhāgo varā pṛthivyām devāir dvāro vrahmaṇā vām dhāra-
yāmi | civaṁ cha :

gmam avasānam no stu ratim devebhiḥ pitṛbhir manuṣyāiḥ

In a I think bhāgam should be read, and varāya seems possible; in b perhaps devīr would be good: read 'stu in c, and in d rātir might stand.

viçvāvaso :

stv āsadanam kulāyām gandharvā sovedaso mahyam ūcuḥ
ma mā hiñ :
siç cheva dhīyanta heto çantam himāṣ pari dadhmo manu-
ṣyam

In a I think we may read 'stv āsadanam kulāyam, in b gandharvās suvedaso: in c if we have second person we should write mā mā hiñsiç çivā, but hiñsiç chivā if third person; I do not think hetoç is possible; at the beginning of d çatam himān is probable.

rudrā utse sa :

dam akṣīyamāṇe devā madanti pitaro manuṣyāḥ yam bhāgo
bhā :

gapateç ca devā urvīras taryā çaradas taremā z 2 z.

Read: rudrā utse sadam akṣīyamāṇe devā madanti pitaro manuṣyāḥ | yam bhāgo bhāgapatiç ca devā †urvīras taryā† çaradas tarema z 5 z 3 z

In some respects these stanzas seem to have a connection with funeral rites, but their meaning and intent is wholly unclear; the corrections proposed are based almost entirely on palaeographic possibility and cannot be regarded as compelling, or even satisfactory.

24. [f. 35a, l 13.]

yam a :

smin yakṣmaṣ puruṣe praviṣṭa iṣitam dāivyam saha | agniṣ
tam ghṛ :

tavodano apa skandayatv atidūram asmāt. | so nyena sap
ṛçchatām :

tvam asmāi pra savāmasi | yas tvā yakṣmo deveṣita iṣitaṣ
pi :

[f. 35 b.] tṛbhiç ca yaḥ tasmāt tvā viçve devā muñcantu pary
aṇhasaḥ te te yakṣma :

m apa skandayatv adhi | ya tvam eno nyakṛtam yadā tvam
akṛtam āhṛtaḥ ta :

smāt vā viçvā bhūtāni muñcantu pary aṇhasaḥ | tāni te
yakṣmam apa :

skandayatv adhi yad vā sādṛçā yad vā cakāra niṣṭyā tasmāt
tvā pṛ :

thivī mātā muñcatu pary aṇhasaḥ sā te yakṣmam apa
skandayatv ādhi | :

apaskandena haviṣā yakṣman te nāçayāmasi | tad agnir
āha tad u :

soma āha vṛhaspatis savitā tad indraḥ te te yakṣmam apa
skandaya :

tv adhidūram asmāt. so tyena mapṛçchatām tvam asmāi
pra suvāmasi z :

z 3 z.

Read: yo asmin yakṣmaṣ puruṣe praviṣṭa iṣitaṁ dāivyaṁ
sahaḥ | agniṣ taṁ ghṛtabodhano apa skandayatv atidūram
asmāt | so 'anyena samṛçchatām tvām asmāi pra suvāmasi z 1 z
yas tvā yakṣmo deveṣita iṣitaṣ pitṛbhiḥ ca yaḥ | tasmāt tvā
viçve devā muñcantu pary aṇhasaḥ | te te yakṣmam apa skan-
dayantv atidūram asmāt z 2 z | yat tvam eno 'nyakṛtaṁ yad ā
tvam akṛtaṁ āhṛtaḥ | tasmāt tvā viçvā bhūtāni muñcantu pary
aṇhasaḥ | tāni te yakṣmam apa skandayantv atidūram asmāt
z 3 z yad vā dadarça yad vā cakāra niṣṭyam | tasmāt tvā
prthivī mātā muñcatu pary aṇhasaḥ | sā te yakṣmam apa skan-
dayatv atidūram asmāt z 4 z apaskandena haviṣā yakṣmaṁ te
nāçayāmasi | tad agnir āha tad u soma āha vṛhaspatis savitā
tad indraḥ | te te yakṣmam apa skandayantv atidūram asmāt |
so 'nyena samṛçchatām tvām asmāi pra suvāmasi z 5 z 4 z

The first stanza appears in the Pariçiṣṭas of the AV. 1 b.
1. 5. In stanza 3ab the sense seems to be "whatever sin or
evil has laid hold on thee;" as a possibility consider yat tvām
eno 'nyakṛtaṁ yad ā tvām akṛtaṁ āhṛtaṁ. The two pādas
which stand at the end of 1 and 5 should doubtless stand at
the end of the others also.

25. [f. 35 b, l. 9.]

agne agrā indra balā ādityā ya ido iduḥ yudho :
idhi pratiṣṭhitāya hotā jāitrāya juhuti | abhiyuktasya pradhane :
naya vo rdhāram icchatām haviṣy agre vidyatām prati-
grhṇāta juhvatām :

jayatrā rājñā varuṇena jayatrā rudreṇa keçinā | bhavena ji :
ṣṇunā jayeta parjanyaena sahīyasā astrā tām preṇa vṛnhatā :
astrā sarvyē ni yudhyatā | gandharveṇa tviṣīmatā rathenā
upayo :

dhinā | sinīvāly anu matir vāhāçvān iṣaṅgiṇaḥ jayanto
bhi :

prathatāmitrām sākam indreṇa medinā z 5 z anuvākam
5 z :

For the first hemistich of st. 1 no reconstruction works out satisfactorily but for the second hemistich we might read yudho adhi pratiṣṭhitāya hotā jāitrāya juhōti. Pāda a of st. 2 seems good as it stands but the rest seems past mending. For the other three stanzas the following reading may be found acceptable: jāitrā rājñā varuṇena jāitrā rudreṇa keçinā | bhavena jiṣṇunā jayeta parjanyaena sahiyasā z 3 z astrā †tām preṇa† vṛṇhatastrā sarveṇa yudhyatā | gandharveṇa tviṣimatā ratheno-payodhinā z 4 z sinivāly anu matin vāhāçvān iṣāṅgiṇaḥ | jayanto 'bhi prathatāmitrān sākam indreṇa medinā z 5 z 5 z anuvā-kaḥ 5 z

Possibly mandreṇa might stand in st. 4a; and in st. 5b iṣvaṅgiṇaḥ might seem a good reading. This is surely a charm for success in battle.

26. [f 35 b, l 17.]

yat swapne ni jagattha yad vā çepiṣe nṛtam agniṣ tāt tas-
mād enaso :

[f. 36 a] vrahmā muñcatv aṇhasaḥ yad akṣeṣu dudrohitam
yad vā mitrebhyas tvam somas
tvā :

tasmād enaso vrahmā muñcatv aṇhasaḥ yada kumāraṣ
kumāreṣu yad vā jyāya :

s tareṣu nimeta kṛtvā çepiṣe taçat kṛṇvo agadam çivam |
pratīdīniphalam :

ha tvām apāmārga babhūvyathaḥ sarvām gaccha pathām
adhi maryo yāvayā tvam | :

prā apāmārga oṣadhīnām viçvāsām eka ut pati tena te
mr̥jum āsthi :

tam atha tvam agadaç caraḥ z 1 z

Read: yat swapne ni jagantha yad vā çepiṣe 'nṛtam | agniṣ
tvā tasmād enaso vrahmā muñcatv aṇhasaḥ z 1 z yad akṣeṣu
dudrohitam yad vā mitrebhyas tvam | somas tvā tasmād . . .
z 2 z yat kumāraṣ kumāreṣu yad vā jyāyāns tureṣu | †nimeta
kṛtvā çepiṣe †taçat kṛṇvo† agadam çivam z 3 z praticīnaphalo
hi tvam apāmārgo babhūvitha | sarvān mac chapathān adhi
variyo yāvayās tvam z 4 z apāmārga oṣadhīnām viçvāsām eka
it patiḥ | tena te mr̥jma āsthitam atha tvam agadaç cara
z 5 z 1 z

In st. 2d it would probably be safe to read *kṛṇve*. St. 4 occurs Q. 7. 65. 1, and st. 5 is Q. 4. 17. 8.

27. [f. 36 a, l. 6.]

Q. 19. 36.

çatavāro anīnaçad rakṣamām rakṣān :
si tejasā | ārohaṁ varcasā saha maṇir dunāmaçātanaṁ

In b read yakṣmān rakṣānsi, in c ārohan, and in d durṇāmacātanaḥ.

çṛṅgabhyām rakṣo :
nudate mūlena yātudhānyaḥ | madhyena yakṣmaṁ bād hate
nāinaṁ papmāti tatrati | :

In a read çṛṅgabhyām, and in d papmāti tarati.

ye yakṣmāso arbhakā mahāmco ye ca çapathinaḥ | sarvān
dunnāmahā maṇi :

ç çatavāro anīnaçat.

In b read mahānto, and perhaps we should read çabdinah as in Q.; in c read durṇāmahā.

çataṁ vīrāṇi janayaç chataṁ yakṣmann amāvapat :
dunnāstris sarvās triḍhvā apa rakṣānsy apakramīm. |

In a read vīryāni janayañ, as suggested by Whitney; for b çataṁ yakṣmān apāvapat: for cd durṇamnas sarvāñs trḍhvāpa rakṣānsy apākramit.

çataṁ ahaṁ dunnāmaṇi :
nām gandharvāpsarasām çataṁ çataṁ sunvatīnām çata-
vāreṇa vāraye z 2 z :

Read: çataṁ ahaṁ durṇāmnīnām gandharvāpsarasām çataṁ |
çataṁ ca çvanvatīnām çatavāreṇa vāraye z 5 z 2 z.

28. [f. 36 a, l. 13.]

Q. 6. 71, with additions: TA. 2. 6. 2.

viçvaṁ vijmi pṛthivava puṣṭam āyad āyatu prati gṛhṇāmy
annaṁ vāiçvānarasya ma :
hato mahimnā agniṣ ṭad viçvā suhitaṁ kṛṇotu |

For this stanza cf. MS. 4. 11. 1. In a read vivyajmi pṛthivīva, in b anyad āyat; in cd mahimnāgniṣ ṭad viçvaṁ suhutaṁ.

yad annam adbhīr bahudhā :
 virūpaṁ vāsu hiraṇyam açvam uta gām ajām avim yad
 annam admy āṇṛtena de :
 vā udāsyān uta vā kariṣyan. |

In a read admi, in b vāso and avim; in c anṛtena, and in d dāsyann adāsyann uta °.

yan mā hutaṁ yad ahutam ājagāma ya :
 smād anna manasod rārajīmi z yad devānām cakṣuṣāka-
 cīnāgniṣ ṭad dho :

tā suhutaṁ kṛṇotu |

In b read annān; in cd it seems best to read with TA cak-
 ṣuṣy āgo asty agniṣ ° °.

jamadagniṣ kasyapas sādva etad bharadvājo madhv annaṁ || :
 kṛṇotu | pratigṛhitre gotamo vasiṣṭho viçvāmitro naḥ prati-
 ranty āyuh :

pāṭhena pratirady āyuh zz 3 zz :

Read: jamadagniṣ kaçyapas sādva etad bharadvājo madhv
 annaṁ kṛṇotu | pratigrahitre gotamo vasiṣṭho viçvāmitro naḥ
 pra tirantv āyuh z 4 z 3 z

29. [f. 36 b, l. 1.]

ágne yajñásya cakṣur edaṁ vidāmi yathedaṁ bhaviṣyāti
 svāhā | ágne yajñasya :
 çrotram agne yajñasya prāṇa | agne yajñasyāpanaḥ agne
 yajñasyātmaṁ agne :
 yajñasya sarva idaṁ vidāmi yathedaṁ bhaviṣyati svāhā
 z 4 z :

Read: agne yajñasya çakṣur edaṁ vidāmi yathedaṁ bhavi-
 ṣyati svāhā z 1 z agne yajñasya çrotram edaṁ ° ° ° z 2 z agne
 yajñasya prāṇa edaṁ ° ° ° z 3 z agne yajñasyāpāna edaṁ ° ° °
 z 4 z agne yajñasyātman edaṁ ° ° ° z 5 z agne yajñasya sar-
 vam edaṁ vidāmi yathedaṁ bhaviṣyati svāhā z 6 z 4 z

In the margin the ms. has agni ṛcām.

30. [f. 36 b, l. 4.]

RV. 1. 89. 2, 3; 10. 15. 2 (= Ç. 18. 1. 46); MS. 4. 14. 17.

devānām bhadrá sumatír ṛjuyatām devānām rātrír abhī nu
 ni vārtatām. :

devānām sakhyām úpa sedimā vayām devānām āyus prā
tirantu jīvā :

se |

In a read ṛjūyatām, in b rātir abhi no; and in d devā na
āyus.

tán pūrvayā nividā hūmate vayām bhagam mittrām aditir
dākṣam asrī :
dhīm áryamnām váruṇam somam açvínā sárasvatī nas
subhágā máyas karat. | :

In a read hūmahe, in b mitram aditiṁ and asridham; in c
aryamaṇam.

idām pitṛbhyo námo astv adyá yé pūrvāso yé párāsas
pareyúḥ yé párthi :
ve rájasy á niṣatā yé vā nūnam súvrjínāsi vikṣú

In b read ye 'parāsas pary iyuh; in c niṣattā, and in d
suvrjanāsu.

pratyañco agne sarvaḥ :
patantu kṛtyākṛte ripave martyāyaḥ kravyād etṛṇa sā me
mr̥ḍa krivi :

-ṣṇu mā dhehi nirṛter upasthe

In a read sarvāḥ, in b martyāya. In c kravyād and me
mr̥ḍa seem clear, and probably kraviṣṇo at the end of c;
perhaps a subject for dhehi should be supplied before mā.
This stanza has no parallel.

jāyassaç çáñsād utá vā kánīyasaḥ sajā :
taççañsād utá jamiçañsā ánādiṣṭam anyákṛtam yád énas
tán nas tásmā :

j jātavedo mumugdhi z 5 z

Read: jyāyasaç çañsād uta va kanīyasaḥ sajātaçañsād uta
jāmiçañsād | anādhr̥ṣṭam anyakṛtaṁ yad enas tan nas tasmāj
jātavedo mumugdhi z 5 z 5 z

31. [f. 36 b, l. 13.]

imāu pādāu pra harāmy ā gṛhebhyaḥ tvāsta :
yendraṣ paçcād indraṣ purastād indro naṣ pātu madhyataḥ
Read svastaye in b; indraṣ paçcād in c.

indram bhayaṁ viçva :

taḥ çūdrā ca nāryā ca indraḥ pathibhir adrava asaṁṛddhā-
ghāya :

vaḥ

Read bhayan in a, cānāryā in b; in cd ā dravat asaṁṛddhā aghāyavaḥ.

indram haṣyatām vidhi vi naṣ pāçān ivā carat. | idamaṁ
panthā :

m adukṣāma sugo svastivāhanam |

In a we might read hr̥ṣyatām vidhir, or possibly harṣayatām; for b vir naṣ °: for cd emam panthām arukṣāma sugam °, which is Ç. 14. 2. 8 cd.

yatra viçvā pari dviṣo vṛṇakti :

nindatesv āntam ety anāhataḥ parāvrajata kiṁ tat tava
kām vakṣana :

nn iva |

Read viçvān in a, and with ninditeṣv in b we have a possible reading. In the rest I see no good reading; perhaps parāvṛṇjata is intended.

viçvañco yantaḥ çaphalā viçvañcaḥ parimanthinaḥ viçvak. :
[f. 37 a.] punarbhavā mano asāṁṛddhāghāyavaḥ z

Read: viṣvañco yantu †çaphalā viṣvañcaḥ paripanthinaḥ |
viṣvak punarbhuvā mano asaṁṛddhā aghāyavaḥ z 5 z.

In a çabalā would seem very good: pādas cd occur Ç. 1. 27. 2 cd which has connections into which our stanzas evidently fit (cf. Whitney's Trans.).

svasti vyacākaçam svasti pratyucā :

kaçam svasti paridigdham ny apa svasty apsaṁtaḥ pari-
vrajam svariya svastena sa me :

bharad vājam svasti punarāyaṇam z 6 z anu 6 z

In the top margin the ms. gives svasty rca °.

Out of this I have been unable to make anything more than the division of words may indicate, except that apsaṁtaḥ is probably for apsv antah.

32. [f. 37 a, l. 3.]

ye uttarā rjā :

yate madhugo madhugād adhi vedāhe tad bheṣajam jihvā
 madhumatī piva | :
 madhumat ye pāurnamāsi madho ṣṛṅgo adho puṣpakam
 madhumān parvatām asi | :
 yato jātasy oṣadhe | garbho sy oṣadhīnām apām garbha
 utāsitaḥ atho soma :
 sya trātāsi madhurā prāva me vaca | ṣṛṇam vahaṁ madhu-
 gasya pitṛṇām eva :
 jagrabhaḥ yo mā hiraṇyavarcasam kṛṇomi pāuruṣam priyam |
 priyam mā kṛ :
 ṇu deveṣu priyam rājasu mā kṛṇu priyam sarvasya paçyata
 uta çūdra u :

tārya z 1 z

Read: ya uttarād ājāyate madugho madughād adhi | vedāmahe
 tad bheṣajam jihvā madhumatī piba z 1 z madhumatī pāurnā-
 māsī madhoṣ ṣṛṅgo atho puṣpakam | madhumān parvatām asi
 yato jātasy oṣadhe z 2 z garbho 'sy oṣadhīnām apām garbha
 utāsitha | atho somasya bhrātāsi madhunā prāva me vacaḥ
 z 3 z ṣṛṇam vahaṁ madughasya pitṛṇām eva jagrābha | yo
 mā hiraṇyavarcasam kṛṇoti pūruṣam priyam z 4 z priyam mā
 kṛṇu deveṣu priyam rājasu mā kṛṇu | priyam sarvasya paçyata
 uta çūdra utārye z 5 z 1 z

In st. 1a the ms. might be transliterated uttarād ajā °.
 The last stanza occurs Ç. 19. 62. 1.

33. [f. 37 a, l. 10.]

udnā vana hṛdā vana mukhena jihvayā vana | prapīnā :
 payasā vanam

Read ūdhnā in a, vana in c.

vāccha se padāu tatvam vācchakṣyāu vāñccha śaktāu |
 vīccham a :

nu pra de vano nimnam vār iva dhāvatu z

Read: vāñccha me padāu tanvam vāñcchakṣyāu vāñccha
 sakthyāu | vīcim anu pra te vano nimnam vār iva dhāvatu z 2 z

For ab see below No. 90. 2 and Ç. 6. 9. 2; for cd cf. Ç.
 3. 18. 6.

ūrdhvāni te lomāni tiṣṭhanty akṣāu :
kāmena ṣiṣyatām simida vatsena gāur iva udhnā surāiva
paṣyatām |

In a read tiṣṭhantv, for b akṣyāu kāmena ṣiṣyatām; in c
ṣimivatā and probably gor, in d ūdhnas and sṛjyatām rather
than paṣyatām.

imā :
gāvas sabandhavas samānam vatsam akrata | hiññati kani-
kratīr āddhārā ni :

ravid vasā

A possible reading for c would be mahimnābhikanikratīr,
which carries one on to think of something like arāvīd vṛṣā
at the end of d.

ṣṛṅgopasā galabhūṣā aghnyāṣ carmavāsini | gavo ghṛta :
sya mātaraṣ tā vatsevā nayāmasi z 2 z

Read: ṣṛṅgāupaṣā galabhūṣā aghnyāṣ ṣarmavāsiniḥ | gāvo
ghṛtasya mātaraṣ tā vatsa ivā nayāmasi z 5 z 2 z

34. [f. 37a, l. 16.]

yaṣ ca varcaṣ kanyāsu yaṣ ca :
hastiṣv āhitam hiraṇyeṣu tad varcas tasya bhakṣī iha var-
casaḥ

Read yac ca in a and b; in d bhakṣīya or bhakṣīha.

yaṣ ca :
varco rājarather yaṣ ca rājasv āhitam niṣke rukṣe yad
varcas tasya bhakṣī i :

ha varcasaḥ

Read yac in a and b; d as 'above; in a rājarathe seems
good.

yad apsu yad vanaspatāu yad agnāu yaṣ ca sūrye |
yajñe dakṣi :

ṇāyām varcas tasya bhakṣī iha varcasaḥ

Read yac ca in b; d as above.

varcasvān me mukham astu va :
[f. 37 b.] rcasvatāṁdu me ṣiraḥ varcasvām viṣvataṣ pratyān
varcasvām varṇo stu me z

Read varcasvan in a, varcasvad uta in b; varcasvān and
pratyān in c, and varcasvān varṇo 'stu in d.

subhagaṁ :

me mukham astu subhāgam uta me çiraḥ subhāgo viçvataḥ
pratyāṇ subhāgo va :

rṇo stu me z 2 z

Read: subhagaṁ me mukham astu subhagam uta me çiraḥ |
subhago viçvataḥ pratyāṇ subhago varṇo 'stu me z 5 z 3 z

35. [f. 37 b, l. 3.]

ud amāu sūryo agāt sahavat ta nāma ma | ahaṁ te madhuma :
tī madhugāṁ madhumattarā |

Read asāu in a, tan nāma mama in b; madughān in d.

yad giriṣu parvateṣu goṣv açveṣu yan madhu | :
surāyāṁ sicyamānāyāṁ kilāle madhu tan mayi |

Read giriṣu in a.

yathā surā ya :

thā madhu yathākṣā adhidevane yathāha gavyato mana
evā sām abhi te :

manah

Read mām in d. Cf. Ç. 6. 70. 1 for ab.

yā te padam padena ṛṣyataṁ manasā manah pratyāṁcam
agrabhaṁ tvā a :

çvam ivāçvābhidhānyā |

Read yathā in a, padenarṣyatām in ab; pratyāṁcam in c,
and tvāçvam in cd.

mahyaṁ tvā dyāvāpṛthivī mahyaṁ devī sarasva :
tī | mahyaṁ tvā madhyaṁ bhūmyā ubhāv antāu sam
asyatām z 4 z

Read: mahyaṁ tvā dyāvāpṛthivī mahyaṁ devī sarasvatī |
mahyaṁ tvā madhyaṁ bhūmyā ubhāv antāu sam asyatām z 5 z 4 z

For this last stanza cf. below, No. 90 st. 5, and Ç. 6. 89. 3.

36. [f. 37 b, l. 9.]

yā vāiçvade :

vīr iṣāvo yā vasūnām yā rudrasya somasya yā bhagasya |
viçve devā i :

ṣavo yāvatīr vas tā vo agninā çarmaṇā çamayāmi |

Read iṣavo in a.

yā ādide :

vīr iṣavo yā vasūnām yā rudrasya açvino yāvatīs tāḥ viçve
devā iṣa :

vo yāvatīr vas tā vo devas savitā çamayāti |

Read in b rudrasyāçvinor; the visarga indicates that the hemistich ends with tāḥ and yāvatīs seems out of place here, where another genitive would be appropriate; a possible reading might be yā vṛhaspateḥ.

yas te gñiṣavo vāta yā:

te apām uçchrityām uta vā marutsu | indrasya sāmṇā
varuṇasya rājā tā:

vat sūryo vṛhatā çamayāti |

Read for a yās te 'gna iṣavo vāta yās te, in b probably utsrṣṭyām; in c rājñā, and in d tā vas seems better than tāvat.

mā vṛhy ādityo mā vasubhyo mā rudrāyā:

gnaye pāktivāya | indrasya çuco varuṇasya yā çucis tā vo
devy a:

ditiç çamayāti |

In a mā bibhṛhy āditya seems possible, in b pārthivāya.

yaç ca vāte viçvagrāte yaç ca rudrasya dhanvani | agni:
ṣ ṭva vasor irāçānas tvā sarvā bheṣajaṣ karat. z 5 z anuvā 7 z:

Read: yāç ca vāte viṣvagrāte yāç ca rudrasya dhanvani |
agniṣ ṭvā vasor içānas tvā sarvā bhiṣajaṣ karat z 5 z 5 z
anuvā 7 z. In cd ṭā and tās would improve this very un-
certain reconstruction.

37. [f. 37 b, l. 19.]

cittim yaktāsi manasā cittin devāñi ṛtāvṛdhaḥ jātavedaṣ pra
ṇas ti:

[f. 38 a] ra agne viçvāmarudbhiḥ

In view of MS. 2. 10. 6 it seems clear that in yaktāsi we have the root yaj; yakṣasi might be the reading, but yakṣyāmi may be worth consideration. If viçvāmarudbhiḥ is not acceptable, we might read vidvan or viçvān.

yavayāyavayāssad dveṣāñsi yavamaye:

na haviṣā yas te mṛta dviṣvapnīyasya bhāvas sa te tudanta
etaṁ pra:

hinmaḥ

In a read yavayāsmad; in c dussvapnyasya, and perhaps mṛto rather than mṛta. In Ç. 19. 57. 3 occurs the phrase sa mama yaḥ pāpas taṁ dviṣate pra hinmaḥ; imitating this we might reconstruct dviṣate tudanta °°, and this would call for bhāvo.

yathā kalām yathā çapham yatharṇo son nayanti | evā:
dussvapnyam sarvas apriye sun nayāmasi z

This is Ç. 6. 46. 3 (= 19. 57. 1); read yatharṇam sam in b, sarvam in c and sam in d.

araro hiç çatam adya ga:
gavām bhakṣīya çatam ajānām çatam avīnām çatam açvā-
nām puruṣā:

nām tatrāpi bhakṣayāmum āmuṣyāyaṇam amuṣyāḥ patram
tam aham:

nirṛtaye prekṣyāmi tam mṛtyoḥ pāçaye badhnyāmi sa baddho
hato stu | :

sa tato mā mociḥ z 1 z

This prose portion falls into two parts thus giving the normal five stanzas to this hymn. At the beginning araro might be vocative of araru (cf. Ç. 6. 46. 1) and hiç might conceal some form of the root hīd: read †araro hiç† çatam adya gavām
• • • puruṣānām tatrāpi bhakṣiya z 4 z

For the rest there are similar passages in Ç. 16. 7. 8 and 8. 1ff. Read: amum āmuṣyāyaṇam amuṣyāḥ putram tam aham
nirṛtaye prekṣyāmi tam mṛtyoḥ pāçe badhnāmi | sa baddho hato
‘stu sa tato mā moci z 5 z

With this hymn cf. Ç. 6. 46 and 19. 57.

38. [f. 38a, l. 8.]

ye naç çapanty apa te bhavantu vṛkṣān va:
vṛhṇām api tām jayāma | bhrājīya āyus pratiram dadhānām va:
yam devānām sumatāu syāma

In b I think we must read vṛkṇām api tām; the margin corrects to drāghīya in c, and we must read dadhānā: pādas cd occur frequently but not together.

kṛtyākṛtam payasvān adarçata agneḥ | :
pratyasva nu dhuddhyasva prati sma rāivatam dahah |

For b, a possible reading is ā dharṣāta agniḥ; in c prathasva and yudhyasva are probable; d can stand, but riṣato, or the like, would seem better.

yas tvā kṛtye pratighā:
ya vidvān aviduṣo grham. | punas tvā tasmā dadhimo
yathā kṛ:

kṛtam hanah

In pratighāya, I think, lies the verb of the first hemistich and we might read pra jaghāna as a possibility: in c it would seem safe to restore tasmāi dadhmo, and in d kṛtyākṛtam hanat.

punaṣ kṛtyāṁ kṛtyākṛte hastigrhya parā ṇaya uto tva:
m uttamā punas tatarmāiva sudanaṁsvaṁ |

Read hastagrhya in b; uto tvam uttamā punas is probably
a good pāda but for d I see nothing. Pādas ab occur Ç. 5.
14. 4 ab.

kṛtyā yantu kṛtyākṛtaṁ vṛkī:
vāvimato grhaṁ stokaṁ pākasva vardhatāṁ ma vṛvṛṣṭa |
oṣadhīr iva | :

Read: kṛtyā yantu kṛtyākṛtaṁ vṛkīvāvimato grham | stokaṁ
pākasya vardhatāṁ samvṛṣṭa oṣadhīr iva z 5 z 2 z

Ç. 6. 37. 1 d reads vṛka ivāvimato grham.

39. [f. 38a, l. 16.]

Vāit. 24. 1.

yat te grāvā bāhucyuto cakro naro yad vā te hastayor
adhuksaṁ tat tāpyā:

yatām ut te niṣṭyāyatām soma rājan. z

In a read 'cucyon, in b adhuksan; ta āpyāyatām tat in c.

yat te grābṇā cicṛdas so:
ma rājin priyāṇy aṅga sukṛtā paroṇi | tat samjatsvājeneto:
vardhayasvā anāgamo yathā sadam it samkṣiyema z z om
anā:

[f. 38b] gamo yathā sadam it samkṣiyema

In a read grāvṇā cicchidus and rājan, in b purūṇi; for cd
tat samdhatsvājyenota vardhayasvānāgaso * *.

yām te tvacaṁ babhrutām ta yonir hr̥dyām:
sthānā pracyuto di vāsuto si tasmāi te soma luptam asmākam
etad u:

pa no rājan sukṛte hvayasva |

In a read bibhidur yām ca yonim, in b sthānāt and yadi
vāsuto 'si with yad vā (as in Vāit.) for hr̥dyām; in c we may
read gupṭam as in TB. 3. 7. 13. 3.

saṁ prāṇāpānābhyām saṁ cakṣuṣā saṁ:
çrotreṇa gacchasya soma rājan. | yat te viliṣṭaṁ sam u tanv
ayattaj jā:

nītām nas saṅgaṁanī pathinām.

In b read gacchasva; in c viriṣṭaṁ sam u tat ta etaj, in d
jānitān and saṅgamane.

ahaç çarīraṁ payasā sam etv a :
 nyo nyo bhavati varuṇosya | tasmāi tado haviṣā vidhemaḥ
 vayaṁ syāma:
 patayo rayīṇām.

In a read ahāç and sam ety, in b anyo 'nyo and varṇo 'sya;
 in c ta indo and vidhema.

abhyakṣaranti jihvo ghr̥tenāgā parūṇṣi ta:
 vardhayantī | tasmāi te soma nasa yad viṣaṭ vapa no rāja
 sukr̥te hvaya:

sva z 3 z

Read: abhikṣaranti juhvo ghr̥tenāngā parūṇṣi tava vardhay-
 anti | tasmāi te soma nama id vaṣaṭ copa no rājan sukr̥te
 hvayasva z 6 z 3 z

40. [f. 38 b, l. 9.]

ihata devīr ayam astu pantha ayam vo lokaç çaraṇāya :
 sādhuḥ idaṁ havir juṣamānā ud ita kṣiprā jñā varuṇena
 prasūtā z :

In a read ihāita and panthā; in d kṣiprā rājñā and prasūtāḥ.

ihata rājā varuṇo dadābhīr devo deveṣu haviṣo juṣātāḥ kṛṇu :
 ṣva panthā madayān dūrdibhir anena babhro mahatā pṛthi-
 vyām.

In a the reading of the ms. may be rdābhīr. Read in a
 ihāitu; in this context dadhabhir seems to be possible but it
 is hard to give up the thought of some form or compound of
 ṛta; in MG. 2. 11. 17 occurs prāitu rājā varuṇo revatibhiḥ:
 in b juṣatām ought to stand. In c read panthām, and we
 might consider dṛtibhir as a possibility.

pri :
 yad dhriyad va madayān abhuñja tirokoghānām iha rāṇītu | a :
 neneve gām mṛjata dviṣīmato jahy osrām çabhūm ajanān
 adhṛṣṇataḥ | :

Out of this all I can get is tviṣīmato jahy and perhaps
 çatrūn ajanān ādhṛṣataḥ.

ye pārato madhyato ye ca yanta ye apsumado nihatās tīre
 agnayah :
 te devajā iha no mṛdunn āpaç cā jihvan ubhaye saban-
 dhavaḥ

Opposite the first of these lines the margin gives samcayam, and there is a correction to jinvan over jihvan. In a read yanti, in b apsuṣado nihitās; in c mrdann and in d ta ā jinvan.

idaṁ :

vāpo hṛdayam ayaṁ vasv aritāvarī iha tvām eta ṣakvarī
yatrāivam :

veçayāmasi z 4 z

Read: idaṁ va āpo hṛdayam ayaṁ vatsa ṛtāvarīḥ | ihettham
eta ṣakvarir yatrāivam veçayāmasi z 5 z 4 z

This is Q. 3. 13. 7; we might read idaṁ vasv in b; for d Q. has yatredam veçayāmi vaḥ.

41. [f. 38b, l. 18.]

RV. 10. 159; ApMB. 1. 16.

ud asāu sūryo agād ud ayaṁ māsako :

bhagaḥ tenāham vidvalā patim abhy a :

[f. 39 a.] sākṣi viṣāsahīḥ |

Read māmako in b.

aham ketur aham mūrdhvā aham ugrā viṣāda :
ni | named apa kradaṁ patis sehānāyā upacarā |

Read mūrdhāham in a, viṣādanī in b; mamed apa kratum
in c and upā carāt in d.

mama putrā :

ç çattruhaṇo vo me duhitā virāt. | utāham asmi samjayā :
patyār me çloka uttamaḥ

Read çattruhaṇo 'tho in ab; patyur in d.

yena devās surebhyo bhavanti marmattarā :

idaṁ utakra devāsapatrā kilābhavam

In a a good reading would be devā asurebhyo; for b read
bhavanty amarantārāḥ, and for cd idaṁ tad akri devā
asapatnā kilābhavam.

sapatrā sapatnyagnī :

jayaty abhibhūvarī muṣṇāmy anyāsām bhagaṁ vāmo yaste-
yaçā :

m iva z 5 z anu 8 z

Read: asapatnā sapatnyagnī jayanty abhibhūvarī | muṣṇāmy
anyāsām bhagaṁ varco astheyasām iva z 5 z 5 z anu 8 z

In d vāmam would be about as good as varco. This hymn
has a sixth stanza in the other texts.

42. [f. 39 a, l. 7.]

Cf. Ç. 2. 24.

ṣarabhaka ṣeraṣabha punar bho yā :
nti yādavaṣ punar hatiṣ kimīdinaḥ yasya stha dam atta yo
va prā :

hī tam utta mmā sāmsāmany atā ṣevṛka ṣevṛdha sarpān-
sarpa :

srokān mro jyarnyatro jarjunva paprado punar vo yanti
yādavaḥ | :

punar jūtiṣ kimīdinaḥ yasya stha dam atta yo na prā |° hī
tam utva :

smā mānsāny attā z 1 z

Read: ṣerabhaka ṣerabha punar vo yantu yātavaṣ punar
hetiṣ kimīdinaḥ | yasya stha tam atta yo vaḥ prāhāit tam atta
svā mānsāny attā z 1 z ṣevṛdhaka ṣevṛdha punar vo ° ° | ° z
2 z sarpānusarpa ° ° | ° z 3 z mrokānumroka ° ° | ° z 4 z
†jyarnyatro jarjunva paprado† punar vo yantu yātavaṣ punar
jūtiṣ kimīdinaḥ | yasya stha tam atta yo vaḥ prāhāit tam atta
svā mānsāny attā z 5 z 1 z

At the beginning of 5 it would be impossible to emend with any certainty; it is barely possible that jūrṇi (Ç. st. 5) is there and perhaps also arjuni (Ç. st. 7); yet it is fairly clear that these should all be grouped in one stanza, and that they are names of male demons. Cf. our No. 91 and the comments.

43. [f. 39 a, l. 12.]

Ç. 2. 16.

dyāvapṛthivī upaṣrute mā :
pātaṁ svāhā | dhanāyāyuṣe prajāyāi mā pātaṁ svāhā | prāṇā :
pānau mr̥tyor mā pātaṁ svāhā | sūrya cakṣuṣī mā pāhi svā :
hā | agne viṣvambhara viṣvato mā pāhi svāhā |

Read dyāvapṛthivī upaṣruter: the kāṇḍa is no. 2.

44. [f. 39 a, l. 15.]

Cf. Ç. 2. 17.

āyurmā :
agni āyur me dhā svāhā varcodāgner varco me dhā svāhā tejo :
dāgnis tejo me dhā svāhā | sahodā agnes saho me dhā svāhā | :
baladā agnir balam me svāhā z 3 z

Read: āyurdā agna āyur me dāḥ svāhā z 1 z varcodā agne varco me dāḥ svāhā z 2 z tejodā agne tejo me dāḥ svāhā z 3 z sahodā agne saho me dāḥ svāhā z 4 z baladā agne balam me dāḥ svāhā z 5 z 3 z

45. [f. 39 a, l. 18.]

Ç. 2. 17.

āyur asyā ā :

[f. 39 b.] āyur me dhehi svāhā | varco si varco mayi dhehi svāhā | tejo :

si tejo mayi dhehi svāhā | saho si saho mayi dhehi svāhā | : ballam asi balam mayi dhedhi svāhā | 4 z

In 1 read āyur asy āyur mayi; in 2, 3, and 4 read 'si; in 5 balam and dhehi.

46. [f. 39 b, l. 3.]

Ç. 2. 18.

piçācaksī :

nam asi piçacajambhanam asi svāhā | yātudhānakṣīnam a : si yātudhānajambhanam asi svāhā | sadānvākṣīnam asi : sadānvājambhanam asi svāhā | sapattrakṣīnam asi sapattra : jambhanam asi svāhā | bhrātrvyakṣīnam asi bhrātrvyajaja : mbhanam asi svāhā z 5 z a 9 z

Read °kṣayaṇam in each formula, piçācajambhanam in 1, sapatna° in 4, and bhrātrvyajambhanam in 5. The kanda is no. 5.

In the margin the ms. has rakṣāmantram vā agniḥ.

47. [f. 39 b, l. 8.]

ā te sāuvīryam :

dade mayi te sāuvīryam | a sāuvarco dade mayi te sāuvarcaḥ | : a sāutejo dade mayi te sāutejaḥ a sāunṛmṇam dade mayi : te sāunṛmṇam | ā te sāuṇukram dade mayi te sāuṇukram z 1 z :

At the beginning of 2, 3, and 4 read ā te.

48. [f. 39 b, l. 12.]

Ç. 2. 19.

om̐ agna yat te tapas tena tam̐ prati tapa yo smān dveṣṭi
 yaṁ ca vāya :
 n dviṣmaḥ z te haras tena tam̐ prati hara yoḥ te çocis
 tena tam̐ prati :
 çoca te rcis tena tam̐ praty arca | agne yat te jyotis tena
 tam̐ prati da :
 ha yo smān dveṣṭi yaṁ ca vāyaṁ dviṣmaḥ z 2 z

Read: agne yat te tapas tena tam̐ prati tapa yo 'smān
 dveṣṭi yaṁ ca vāyaṁ dviṣmaḥ z 1 z agne yat te haras tena
 tam̐ prati hara . . . z 2 z agne yat te çocis tena tam̐ prati
 çoca . . . z 3 z agne yat te 'rcis tena tam̐ praty arca . . . z 4 z
 agne yat te jyotis tena tam̐ prati daha yo 'smān dveṣṭi yaṁ
 ca vāyaṁ dviṣmaḥ z 5 z 2 z

49. [f. 39 b, l. 15.]

prācī di :
 g gāyatraṁ devatā yad deveṣu pitṛṣu manuṣyeṣu naç çakā-
 rāya :
 ttaṁ tasyāvedanam asi z svaṁ cemam asmād yakṣa tas-
 mād āma :
 [f. 40 a.] yetu svāhā | dakṣiṇā dig rathantaraṁ devatā pratīcī
 dig vāmadevaṁ :
 devatā udīcī dig yajñāyajñiyaṁ devatā ūrdhvā dig vṛhaddeva :
 tā yad deveṣu manuṣye | çva naç cakārāyattaṁ tasyāvedanam
 asi z muṁ :
 cemam asmād yakṣa tasmād āmayatu svāhā z 3 z imaṁ
 rakṣā :
 mantraṁ digdhandhanaṁ z z

Read: prācī dig gāyatraṁ devatā yad deveṣu pitṛṣu manu-
 ṣyeṣu naç cakārāyattvaṁ tasyāvedanam asi | saṁ cemam asmād
 yaccha tasmād āmayatāt svāhā z 1 z dakṣiṇā dig rathantaraṁ
 devatā . . . z 2 z pratīcī dig vāmadevaṁ devatā . . . z 3 z
 udīcī dig yajñāyajñiyaṁ devatā . . . z 4 z ūrdhvā dig vṛhad
 devatā yad deveṣu pitṛṣu manuṣyeṣu naç cakārāyattvaṁ tasyā-
 vedanam asi | saṁ cemam asmād yaccha tasmād āmayatāt
 svāhā z 5 z 3 z

These formulae are suggestive of the sphere of the Yajur Veda. The emendation proposed is open to a number of objections, but it is fairly close to the ms. and offers a reasonable meaning. In the colophon we might read digdhanam.

50. [f. 40 a, l. 5.]

agnim vayam trātāram havāmahe imam trāyā :
tāsmād yakṣmā tasmād āmayata juṣāṇo agnir ājyasya trātā :
trāyatām svāhā |

Read ya imam trāyate 'smād yakṣmāt tasmād āmayatāt |
juṣāṇo ° ° z 1 z

mitrāvaruṇāu vayam trātārāu havāmahe yā :
v ayimam trāyīte smād yakṣma tasmād āmayata juṣāṇāu
mitrā :

varuṇāv ājyasya trātārāu trāyetām svāhā |

Read yāv imam trāyete 'smād yakṣmāt tasmād āmayatāt |
juṣāṇāu ° ° z 2 z

marutān vayam trātrī :
n havāmahe imam trāyānta smād yakṣmād āmayata |
juṣāṇāu maru :

tājyasya trātāras trāyantām svāhā z

Read maruto vayam trātṛn havāmahe ya imam trāyante
'smād yakṣmāt tasmād āmayatāt | juṣāṇā maruta ājyasya °
° z 3 z

agnaya ghṛtapataye svāhā | :
agnināgni gr̥hebhya svāhā | vājasyān agniye svāhā | agnim :
vayam svāgnaya svāhā | tena vrahmaṇā tenaṣ chandasā
tayā devatayā :

ṅgirasvad devebhyas svāhā z z iti agnisūktam. z z :

It is almost impossible to believe that these formulae belong in this place, thrust into the midst of five stanzas so symmetrical; but we cannot throw them out entirely. The first and last are in the Concordance: in 1 read agnaye, for the second perhaps agnināgne gr̥hebhyas svāhā can stand, vājasya is good at the beginning of 3 and agnaye should be read, in 4 svagnayas is probable, and in 5 read tena for tenaṣ; perhaps in 5 we should insert dhruvās sidata (or the like) before devebhyas, as these words appear in the numerous occurrences of this formula.

pitṛṇ vayam bhrātṛṇ havāmahe | imam trāyantāmmābh
yakṣmā tasmā :

d āmayata | juṣaṇāṣ pitarājyasya trātāras trāyantām svāhā z :
Read vayam trātṛṇ and the rest as in st. 3 except juṣaṇāṣ
pitara.

vṛhaspatiṁ vayam trātāram havāmahe imam trāyātāsmād
yakṣmā :

tasmād āmayata juṣāṇo vṛhaspatir ājyasya trātāram trā :
yatām svāhā z 4 z

Read : vṛhaspatiṁ vayam trātāram havāmahe ya imam trāyate
'smād yakṣmāt tasmād āmayatāt | juṣāṇo vṛhaspatir ājyasya
trātā trāyatām svāhā z 5 z 4 z

51. [f. 40 a, l. 19.]

agnim vayam trātāram yajāmahe meni :

[f. 40 b] hana valagahanam juṣāṇo agnir ājyasya menihā
valagahā :

trātā trāyatām svāhā z indram vayam juṣāṇa indra ājyasya z :
somaṁ vayam trātāram yajāmahe menihalam valagahanam
juṣā :

ṇas soma ājyasya menihā valagahā trātā trāyatām svā :
hā z viçvān devāñs vayam trātṛṇ yajāmahe menighno valaga :
ghnās trātāras trāyantām svāhā z vṛhaspatiṁ vayam trātāram :
yajāmahe menihalam valagahanam juṣāṇo vṛhaspati | :
r ājyasya menihā valagahā trātā trāyatām svāhā z 5 z :
z anu z

Read: agnim vayam trātāram yajāmahe menihanam valaga-
hanam | juṣāṇo agnir ājyasya menihā valagahā trātā trāyatām
svāhā z 1 z indram vayam ° ° | juṣāṇa indra ājyasya ° ° z 2 z
somaṁ vayam ° ° ° | juṣāṇas soma ājyasya ° ° z 3 z viçvān
vayam devāñs trātṛṇ yajāmahe menighno valagaghnah | juṣāṇā
ājyasya menihano valagahanas trātāras trāyantām svāhā z 4 z
vṛhaspatiṁ vayam trātāram yajāmahe menihana valagahanam
juṣāṇo vṛhaspatir ājyasya menihā valagahā trātā trāyatām svāhā
z 5 z 5 z anu 10 z

52. [f. 40 b, l. 9.]

T.B. 2. 7. 17.

ye keçinaṣ prathamās satram asita yebhir ābhṛtam :
yad idam vi rocate bhyo juhomi haviṣā ghṛtena açvān goma :
mān ayam astu vīrāḥ

In a read āsata, in c tebhyo; in cd ghr̥tenāçvavān gomān ° °
vīraḥ. Our pāda d is very nearly Ç. 6. 68. 3 d; TB. has rayas
poṣeṇa varcasā sam̐ sr̥jātha.

nante rānās tapaso mucyate ṣudvinā:
vnīyam̐ dīkṣām̐ viçanīyam̐ hy etat. prāpya keçāstuvate kā:
nyano bhavantu teṣām̐ vrahmeçe vapanasya nāmnyā

In a read narte vrahmaṇas, and ṣudvinām̐nyām̐ vaçinīyam̐
hy etat would give a good pāda b; TB has dvinām̐nī dīkṣā
vaçinī hy ugrā. For the rest it seems best to read with TB
pra keçās suvate kāṇḍino bhavanti teṣām̐ vrahmed içe vapanasya.
nānyaḥ z 2 z

yenāvapat sa:
vitā çirṣṇo agre kṣureṇa rājño varuṇasya keçān. | :
tena vrahmāṇo vapatedam̐ asyāçyāmo dīrghāyur ayam astu :
vīraḥ z

In cd asyāyuṣmān seems the most satisfactory. Cf. Ç. 6.
68. 3 and Whitney's Translation.

ma te keçām̐ anugada vanta etat tayā dhātā dadhā :
tu te | tubhyam̐ indro varuṇo vṛhaspatis savitā varco dadham̐ | :
In a read mā te keçān anugād varca, in b tathā; in d 'dadhan.
This stanza appears MG. 1. 21. 8.

ā roha proṣṭham̐ viṣahasya çatṛñ ājasrādīkṣām̐ vaçinī :
hy ugrā | dehi dakṣiṇām̐ vrahmaṇebhyo atho mucyasva varu :
nasya pāçāt. z 1 z

Read: ā roha proṣṭham̐ viṣahasva çatrūn̐ ājasraṁ dīkṣā
vaçinī hy ugrā | dehi dakṣiṇām̐ vrahmaṇebhyo atho mucyasva
varuṇasya pāçāt z 5 z 1 z

53. [f. 41 a, l. 1.]

MS. 2. 6. 3.

ye devās purassado gninetṛā rakṣohaṇas te naṣ pā :
ntu tebhyo namas tebhyas svāhā | ye devā dakṣiṇāsado
yamanetrā rakṣohaṇa :
s te naṣ pāntu tebhyo namas tebhyas svāhā | ye devās
paççātsado marunnetṛā rakso :
haṇas te naṣ pāntu tebhyo namas tebhyas svāhā | ye devā
uttarātsadas somanetrā :

rakṣoḥaṇas te naṣ pāntu tebhyo namas tebhyas svāhā | ye
devā antarikṣāssado :
vṛhaspatinnetrā rakṣoḥaṇas te naṣ pāntu te no vantu tebhyo
namas tebhyas svāhā || :

z 2 z

In 1 read 'gninetrā in 2 dakṣiṇātsado, in 5 antarikṣātsado
vṛhaspatinetrā and 'vantu; it seems probable that the phrase
te no 'vantu should be read in each formula as it occurs in
each one in MS.

54. [f. 41 a, l. 7.]

KS. 15. 2; MS. 2. 6. 3.

agnaye purassade rakṣoghna svāhā | yamāya dakṣiṇātsa :
de rakṣoghne svāhā | marudbhyaṣ paçcātsadbhyo rakṣohā-
bhyas svāhā | somāya :
uttarāsade rakṣoghne svāhā | avaspate divaspate rakṣoghne
svāhā || :

vṛhaspataye antarikṣasade rakṣoghne svāhā z 3 z

In 1 read rakṣoghne, in 3 rakṣohabhyas, in 4 somāyottarātsade;
a possible reading in 5 is avaspataye divassade; in 6 read
antarikṣātsade.

55. [f. 41 a, l. 10.]

divo jāto diva :
s putro asmāj jātaṁ sahat saha aṣvattham agre jāitrāyāt
sahadevaṁ dāma :
si | taṁ tvām ā yathā ratham upa tiṣṭhantu rājānas suma-
tibhyo vi vabhuve | :
tvayā vayaṁ devajātas sarvāṣ prā çocayāmasi | uta satyā
utānṛ :
taḥ yo aṣvatthena mittreṇa sumatīr iva gacchati jayaç ca
sarva :
ṣ pṛtanā yāç ca satyā utānṛtaḥ adharāñco ni druvantu
sumatyā :

ululākṛta | aṣvattham mittraṁ puruṣaṁ ye vātā pṛdanyā z 4 z :

The following seems a possible reading: divo jāto divas
putro asmāj jātaṁ sahat sahaḥ | aṣvattho agre jāitrāyāt saha-
devaṁ dāmāsi z 1 z taṁ tvām ā yathā rathaṁ upa tiṣṭhantu
rājānaḥ | samṛtibhyo vāi vibhuve z 2 z tvayā vayaṁ devajāta
sārvāṣ pra çocayāmasi | uta satyā utānṛtāḥ z 3 z yo aṣvatthena

mitreṇa samṛtīr iva gacchati | jayac ca sarvāṣ prtanā yāc ca
satyā utānṛtāḥ z 4 z adharāñco ni dravantu samṛtyā ulu-
lākṛtāḥ | aṣvattha mitram puruṣam ye 'vātāṣ prṭanyanti z 5
z 4 z

The emendations are rather bold but in keeping with the
evident intent of the charm: cf. Q. 3. 6.

56. [f. 41 b, l. 1.]

Cf. TS. 5. 5. 10. 3 and 4; Q. 3. 26 and 27.

ugrā nāma stha teṣām vaṣ puro grahāḥ prācī dik teṣām vo
agnir iṣavaḥ:
te no mṛdāta dvipade catuṣpade teṣām vo yāny āyudhāni
vā iṣavas tebhyo:
namas tebhyas svāhā z kravyā nāma stha teṣām vo dakṣiṇād
grhā dakṣiṇā di:
k teṣām va āpa iṣavaḥ virājo nāma stha teṣām vaḥ paṇṇad
grhā prācī:
dik teṣām vaṣ kāsa iṣavaḥ avasthā nāma stha teṣām vā
uttarād grhā udī:
cī dik teṣām vo vāta iṣavaḥ uttare nāma stha teṣām va
upari grhā:
ūrdhvā dik teṣām vo varṣam iṣavaḥ te no mṛduta dvipade
catuṣpade te:
ṣām vo yāny āyudhāni yā iṣavas tebhyo namas tebhyas
svāhā z 5 z:
z anu 11 z

Read: ugrā nāma stha teṣām vaṣ puro grahāḥ prācī dik teṣām
vo agnir iṣavaḥ | te no mṛdata dvipade catuṣpade teṣām vo
yāny āyudhāni yā iṣavas tebhyo namas tebhyas svāhā z 1 z
kravyā nāma stha teṣām vo dakṣiṇād grhā dakṣiṇā dik teṣām
va āpa iṣavaḥ | te no . . . z 2 z virājo nāma stha teṣām vaḥ
paṇṇad grhāṣ prācī dik teṣām vaṣ kāsa iṣavaḥ | te no . . .
z 3 z avasthā nāma stha teṣām va uttarād grhā udīcī dik teṣām
vo vāta iṣavaḥ | te no . . . z 4 z uttare nāma stha teṣām va
upari grhā ūrdhvā dik teṣām vo varṣam iṣavaḥ | te no mṛdata
dvipade catuṣpade teṣām vo yāny āyudhāni yā iṣavas tebhyo
namas tebhyas svāhā z 5 z 5 z anu 11 z

57. [f. 41 b, l. 9.]

yadīdam divo yady avājagāma yady antarikṣād ya:
di pārthivoyaḥ yadi yajño yajñapate sargas tebhyaḥ sarvebhyo
manasā:

vidhema |

Read ava jagāma in a, perhaps prthivyaḥ at end of b;
yajñapates in c, and namasā in d.

yam indram āhur yaṁ mitram āhu yama somam
āhuḥ yam agnim ā:

hur yam āhus tebhyaḥ sarvebhyo namasā vidhema |

Read āhur at end of a, yaṁ somam āhur yam agnim āhuḥ
for b; for c we might read yaṁ varuṇam vṛhaspatim āhus.

yad indriyā jalpyāḥ:
prordhnavanti svapunaṁ durbhūtam abhi ye śinanti | ye
devānām ṛtvijo:

yajñiyānām tebhyaḥ sarvebhyo namasā vidhema |

For a yad indriyā jalpyā prārdhnavanti would seem pos-
sible; in b read svapnaṁ.

ye csaṇā nanama:
sā ni yanti sūryasya raçmīr anu saṁ caranti | ye devānām
dharmadhṛto babhū:

vus tebhyaḥ sarvebhyo namasā vidhema |

In a read csaṇā namasā, in b raçmīr.

svarbhisiyer abhi ye bhāyanti yebhyaḥ:
[f. 42 a] kṛṇvānti yo rodanti ye vā strīṇām pratirūpā babhū-
vus tebhyaḥ sarvebhyo namasā:

vidhema z 1 z

Read: sūriṣu ye rabhanti ye bhānti †ye bhyaḥ kṛṇvanti†
ye rodanti | ye vā strīṇām pratirūpā babhūvus tebhyaḥ sar-
vebhyo namasā vidhema z 5 z 1 z

The reading suggested for pāda a is of course only a bare
possibility. Several of the pādas of this hymn occur elsewhere
also but in dissimilar context.

58. [f. 42 a, l. 2.]

vyāvṛttāu payāu gāvāu viçvāu vijñātata vidveṣaṇaṁ kilāsi:
tayatāināu vy ata dviṣaḥ vi kilīnāv ata dviṣat vāsatiḥ
samābhyāḥ atho:

Imukam iva khādiram agnir vām astv antarā siṅhas te
cakṣuṣo vyāghraḥ pari:
ṣum jane agnir vastv anterā yathā vām naçāsati vi dyāur
vy ata tad vayās tata ka:
paṭyavaḥ vyā oṣadhe praraspasy agnir iva tam dahaḥ |
vyavāyyamtu hṛdayāni vi ci:
ttāni manānsi ca atho ya tamno saṅgataṁ tad vām astu
vidhulakam | asti vāiṣāṁ:
vidviṣam ubhāu sannetarā viçvañcāu pary ā vartayetām
yathā vām naçāsati:

z 2 z

The transliteration praraspasy in line 5 is not certain.

It seems pretty clear that the six stanzas are intended here, the first to end *vy ata dviṣaḥ* but out of it I get nothing. Pāda a of st. 2 I cannot reconstruct out of *vi kilīnāv ata dviṣat* but for *bcd* it seems possible to read *vāsantibhyas samābhyaḥ | atholmukam iva khādiram agnir vām astv antaraḥ*. The second hemistich of st. 3 is probably to be read *agnir vām astv antaro yathā vām naço asati*. St. 4d is clear as it stands *agnir iva tañ dahat* and for pāda a *vi dyāur vy ety tad vayas* seems possible. For st. 5 we may read *vy ava yantu hrdayāni vi cittāni manāṃsi ca | atho yat tanvo saṅgatañ tad vām astu vidhulakam*; it seems possible to connect *vidhulakam* with *vidhura*. Though not wholly satisfactory we may read for st. 6cd *viṣvañcāu pary ā vartayetañ yathā vām naço asati*; and the words *ubhāu sannetarā* seem good in pāda b.

Other than the above I am unable to suggest anything; it is fairly clear that this is a charm to drive away a disease or demon, perhaps one afflicting cattle.

59. [f. 42 a, l. 9.]

Q. 5. 28. 3—11, 1, 12.

trayaṣ poṣa trivṛtaṣ ṣṛayantās anaktu pūṣā payasā ghr̥tena | :
 anyasya bhāumā puruṣa bhāumā bhūmā paçūnām dahi
 ṣṛayantām z

In a read poṣās and çrayantām, for c annasya bhūmā puru-
ṣasya bhūmā, and in d ta iha çrayantām.

imam ā :
dityā vasunā sam akṣatesam agne vardhayāmāvṛdhānaḥ
yasmim ttrivṛṣ chetām :
pūṣayisnur imam indra sam srjā vīryena |

Read in ab ukṣatemam, in b vardhaya vāvṛdhānaḥ; in c trivṛc chrayatām poṣayiṣṇur.

bhūmiṣ ṭvā pātu haritena viçva:
bhir agniḥ pipartu payasā majāiṣā vīrudbhis te arjuno saṁ-
vidānaṁ va:

rco dadhātu sumanasyamānaṁ

In a read viçvabhṛd, in b sajoṣāḥ; in c arjunam, °mānam at end of d.

dvedhā jātām janmanedaṁ hiraṇyam agner ekaṁ:
priyataṁ babhūvaḥ somasyāikāṁ hiṁsitasya parāpatad apām
ekaṁ ve:

daso retāhus tat te hiraṇyam trivṛtāstv āyuṣe

In a read tredhā and hiraṇyam, in b priyatamaṁ babhūva, in c somasyāikaṁ and parāpatat (before colon); in d vedhaso reta āhus, in e trivṛd astv.

triyāyuṣaṁ jamadagneṣ ka:
çyapasya triyāyuṣaṁ tredhāmṛtasya cakṣaṇaṁ trīṇy āyūṁṣi
nas kṛdhi |

In b read triyāyuṣam, in d naṣ.

tra:

yas s*parṇās travitāyam ekākṣaram abhisambhūya çakrā
praty ūha mṛ:

* * * * * na viçvā z divas tvā pātu haritaṁ ma:

In a read suparṇās trivṛtā yad āyann, in b çakrāḥ; for the second hemistich praty āuhan mṛtyum amṛtena sākam antar dadhānā duritāni viçvā.

'Inasmuch as f. 42 b is badly defaced I give now all that is legible on it.

* na viçvā z divas tvā pātu haritaṁ ma
* ya pātu pra harād devapurāyaṁ imāsti
* taḥ tāns tvaṁ bibhratāyuṣmān varcasvān utta
* amṛtaṁ hiraṇyam yābhedeḥ prathamo devo a
* ṇomy anu manyatām trivṛtā vadhena | nava prā
* īr * āyutvāya çataçārādāya harite trī
* ṇ * rajasāviṣṭitāni | a ta tritattva
* harjātassa yan nāma tena te ci çṛ
* z 3 z yajñentam tapasā vṛ
* y * niḥ upah * tāgne jarasaṣ parastā
* pati gṛhṇāti vidvān vṛ
* s * ād a

Drawing on Ç. to fill the lacunae we may read the remaining stanzas as follows: divas tvā pātu haritaṁ madhyāt tvā pātv arjunam | bhūmyā ayasmayaṁ pātu prāharad devapurā ayam z 7 z imās tisro devapurās tās tvā rakṣantu sarvataḥ | tās tvaṁ bibhrad ayuṣmān varcasvān uttaro dviṣitaṁ bhava z 8 z puram devānām amṛtaṁ hiranyaṁ ya ābedhe prathamodevo agre | tasmāi namo daça prāciḥ kṛṇomy anu manyatām trivṛd ābadhe me z 9 z nava prāṇān navabhis saṁ mimate dīrghāyutvāya çataçāradāya | harite trīṇi rajate trīṇy ayasi trīṇi rajasāviṣṭitāni z 10 z ā tvā çrtatv aryamā pūṣā vṛhaspatiḥ | aharjātasya yan nāma tena te 'ti çrtāmasi z 11 z 3 z

60.

Ç. 6. 122. 4 and 1.

The visible fragments of the last four lines of f. 42b (given above) are clearly parts of Ç. 6. 122; Whitney reports st. 2 and 3 as being in Pāipp. 16. Drawing from Ç. we may get the following possible reconstruction: yajñaṁ yantaṁ tapasā vṛhantam anv ā rohāmi manasā sayoniḥ | upahūtā agne jarasaṣ parastāt tṛtiye nūke sadhamādaiḥ madema z 1 z taṁ prajānan prati grhṇāti vidvān vṛhaspatiḥ prathamajā ṛtasya | asmābhir dattam jarasaṣ parastād acchinnaṁ tantum anu saṁ tarema z 2 z * * * * *

61. [f. 43a, l. 1.]

* * * * *
ne | paspāri viçvā bhuvanāni g^{*}pā antarikṣasya *** vi ***
nā bilaṁ te ghr̥taçcutaṁ nadīnām pathe suçrutam juhomi |
pravidvān * *
mumugdhi pāçānyasya pattri vidhavā yathāsat. | anātureṇa
varuṇ* *
the no svastibhir ati durgāṇi veṣyat. | tam açvinā pratigr̥hyā
svast*

doṣavena pūṣa se saṁ pra yacchāt. z 5 z anuvākam 12 zz

Read: * | paspāra viçvā bhuvanāni gopā antarikṣasya mahato vimānaḥ z z * * nā bilaṁ te ghr̥taçcutaṁ nadīnām patye suçrutam juhomi | pravidvān * * mumugdhi †pāç anyasya patni vidhavā yathāsat z z anātureṇa varuṇ * * the no svastibhir ati durgāṇi vikṣat | tam açvinā pratigr̥hyā svastaye †doṣavena pūṣa me saṁ pra yacchāt z z 5 z anuvākam 12 z

Of course it is impossible to know how many stanzas preceded these, but it seems probable to me that the hymn originally contained five; for six, or possibly seven, lines stood after the last line visible on f. 42 b and probably not more than two lines are broken from the top of f. 43: about that amount of space would be required for the last three stanzas of no. 60 (if it had five) and the first two and a half of no. 61.

62. [f. 43 a, l. 5.]

ye piç*

cā imām vidyam ākūtiṁ mohayantu naḥ teṣāṁ tvam agne
nāçaya varca*
ttam atho prajāṁ nāçayāgne piçācānaṁ varçaç cittam atho
prajānām yath*
çām mahyaṁ dhārayathāhaṁ kāmāyantu me | āçām myahaṁ
rādhatv indriyeṇa
* * tām tvam agne kravyādas sārvaṁ piçācāṁ arciṣā daha
prati dah*
* * dānāṁ sūra devāṁ vicarṣaṇa yo no durasyād veṣaṇa
yathāçām
* * naḥ enaṣ paçugmitsanty āçāyām puruṣeṣu ca | tāṁs
tvam sahasra
* * * pi* * i* s̄ā* * ha z * z* * * * *

Read: ye piçācā imām vidyām ākūtiṁ mohayanti naḥ | teṣāṁ
tvam agne nāçaya varçaç cittam atho prajāṁ z 1 z nāçayāgne
piçācānām varçaç cittam atho prajāṁ | yathāçām mahyaṁ
dhāraya yathā ha kāmāyantu me z 2 z āçām mahyaṁ rādha-
yatv indriyeṇa * * * tām | tvam agne kravyādas sārvaṁ piçācāṁ
arciṣā daha z 3 z prati daha yatudhānāṁ sūra devāṁ vicar-
ṣaṇīṁ | yo no durasyād veṣaṇaṁ yathāçām * * * naḥ z 4 z
ye naṣ paçūṇ agna icchanty āçāyām puruṣeṣu ca | tāṁs tvam
sahasracakṣasaṣ piçācāṁ arciṣā daha z 5 z 1 z

64. [f. 43 b, l. 1.]

* * * * *

mi rekṣatiṁ devānām sarveṣāṁ sajātānā * d*v* nirṛtir h* * *:
* açyapasya pratisaro dyāuṣ pitā pṛthivī mātā yathābhi
cakru devā:
s tathābhi kṛṇutā punaḥ yāṣ kṛtyā nīlavatī yāṣ kṛtyāṣ
paçyāvatīḥ :

kr̥tyā yāç cakrun lohinīs tā ito nāçayāmasi | yadivā yad i :
mā jāhur ime bhadrāsi sunvati | kr̥tyāsi kalyāṇy asi sāmum
kartā :

rasvaṁ jahi z 3 z.

Beginning with the second line visible on this page we have the last three stanzas of the third hymn in anuvāka 13; the first one of these is very near Ç. 3. 9. 1. The following gives some emendations which seem possible: kaçyapasya pratisaro dyāuṣ pitā pr̥thivi mātā | yathābhi çakra devās tathābhi kr̥ṇutā punaḥ z z yāṣ kr̥tyā nilavatir yāṣ kr̥tyāṣ peçyavatir | kr̥tyā yāç cakrur lohinīs tā ito nāçayāmasi z z †yadivā yad imā jāhur ime† bhadrāsi sunvati | kr̥tyāsi kalyāṇy asi sāmum kartāramyam jahi z z 3 z

The first stanza varies decidedly from Ç in pāda a, where Ç has karçaphasya viçaphasya. The form peçyavant is not in the lexicon, but it seems a possible formation from piç. For pāda a of the last stanza we might read yad devā yad imāç cāhur; aramyam in pāda d is not satisfactory. The general sphere of the hymn seems to be indicated in the second stanza.

65. [f. 43 b, l. 6.]

vṛhat te varçaṣ pr̥thatām apa dyām mittrebhy eti :
sudubhis suvarçaḥ ṛte rājā varuṇo vravītu tasmāt tvam
haviṣā bhāga :

dāma z çataṁ heman tān daçayā sapattrān viças tvā sarvān
guṇguvo bhava :

ntu z ya stotipānām praty ut pātayas tvā sujāto vilahā
tvam n*ica z :

indras tvam yoktre adhime vinakty asmāi yas tvā yacchan-
dam pratyum si* * :

sbhā jigīṣām pr̥tanas saparye vṛhas tam avajāṅghanī* * * :

* rāsyā te baliṁ soma srjātān upa saṁ* * * :

* * * * * * * * * * * * * *

[f. 44 a.] ro abhya prayuṅga damayā sapatnān. | ṛte rājā
varuṇo vravītu tasmāt tvam :

haviṣā bhāgadāsa z çataṁ heman tān damayā sapatnān
viças tvā sarvā :

n guṇguvo bhavantu z 4 z

The number of lines lost from f. 43 cannot be ascertained, but it is probable that this hymn contained not less than six stanzas. In the last stanza it may be possible to read in b

bhāgadhā asaḥ, in c hemān tān damaya, in d viṣas tvās sarvā guṅgavo. In the first stanza in pāda a it seems possible to read prathatām abhi, in b mitro bhy and suvarcāḥ (but I see nothing for sudubhis), and the next two pādas as in the final stanza. Further than these I cannot make suggestions: this seems to be a charm for the increase of a king's glory and dominion.

66. [f. 44 a, l. 3.]

bhagāya rājñe prathamam juhomi viṣve devā :
uttare mādayantām z uçam patnībhya uṣatībhya ābhyah
patim agni ā vaha :

rātahavyā |

In b read mādayantām followed by colon; in d agna and rātahavya.

patim vṛṇīṣva haviṣā grṇānas tam ā vahat savita tam te a :
gniḥ tam imdra masmi ṣataṣārādāya bhagabhaktā bhaga-
vatī suvīrāḥ | :

In a grṇānā is probably the better reading, in b savitā: in c we seem to have indra but masmi I cannot solve; in d read suvīrā.

yam arṣā sam patim asye dideṣita janed icchantam tam iyā
vahāsi | :

sumaṅgaly apatighnī suṣevā rāyas poṣeṇa uciṣā sutasva

In a we may read asyāi dideṣitha, but for arṣā I have nothing; in b it seems clear that we must read tam ihā vahāsi and icchantam fits the connection very well, but jane dhitsantam is a possibility, I think. In d we may read sam iṣā srjasva.

yat te pa :

tim aryamā jāyamānām yām dhātā ca kalpajam ihā vahāsi | a :
bhi vareṇa haviṣā juhomī | prajāṁ nāitu sumanasyamānām

In a read jāyamānam, in b yam and kalpajam; in d nayatu.

patim te dyā :

vāpṛthivī a dhātām patim mittrāvaruṇā vāto gniḥ saptar-
ṣayo di :

tis soma indras te tvā devāṣ pativatnī kṛṇvantu z 5 z anu

Read: patim te dyāvāprthivī ā dhātām mitrāvaruṇā vāto
 'gniḥ | saptarṣayo 'ditis soma indras te tvā devāḥ pativatīm
 kṛṇvantu z 5 z 5 z anu 13 z

67. [f. 44 a, l. 13.]

yaç tvārāya pra viveça jānur jānivāt uta | atho tanvaṁ
 pasprça ta :

m ito nin nayāmasi.

The ms. is slightly cracked and the first of pāda a is not clear. In a read yas tvārāyaḥ, for b I have no suggestion: in c read pasparça, in d nir.

niṣ ṭvārāya nayāmasi | ya imān pra vive :
 çataḥ ātmānam asya mā hiṁsīr anyatra cara meha bhūḥ |

For b read ya imān pra viveçitha, with colon following: in c asyā.

yejarā :

yemām upāyasi dhehasyāi rayipoṣaṇam. prajāṁ ca tasyā
 mā hiṁ :

sīr anyatra cara meha bhūḥ |

In a I think we must read yo 'rāyemām, in b dhehy asyāi
 rāyas .

yejarāye viḥāyasi hanāmi vī :

rudhā tvā | atho khanatramīs tvā varṣeṇa yathā bhagaṁ

For a we might read yo 'rāyemām vyāyasi; for the second hemistich I have no suggestions.

yejarāyā :

[f. 44 b.] sūryam strīṣu yam āvato kyaṁ yat pāutrṣadyam
 dāurbhāgyam tam ito ṇir nayāmasi z 1 :

For a we might read yo 'rāyas sūryam strīṣu, but b seems hopeless and so leaves us uncertain about a: with pāutrasadyam the second hemistich can stand. The stanza is number 5, the hymn number 1 (in anu 14).

68. [f. 44 b, l. 2.]

agner vo balavato balena manyu vya nayāmasi | indrasya
 vas somasya vaḥ vṛhaspa .

ter vaḥ prajāpater vo balavato balena manyur va nayāmasi |
 yat te sūryam divi deve :

ṣu varcas tasya no dehi tamasi pracetām ahaṁ ca vigras
 tviṣitas tviṣimān i :

mām vācam vi çākṣīya z 2 z

Read: agner vo balavato balena manyum ava nayāmasi |
 indrasya vo ° ° | somasya vo ° ° | vṛhaspater vo ° ° | prajāpater
 vo balavato manyum ava nayāmasi | yat te sūrya divi deveṣu
 varcas tasya no dehi tamasi pracetasah z aham ca vigras
 tviṣitas tviṣimān imām vācam vi cakṣīya z 2 z

We might also read vi nayāmasi, and dhehi might be even
 better than dehi. If the formulae are to be numbered it seems
 that we must count six.

69. [f. 44 b, l. 5.]

vātaṣ purastāt pavamena bhasvān namas te :
 vidma te nāmadheyam mā no hiṁsīḥ tapodaṣ puro dak-
 ṣiṇataḥ pavamena bhasvā :
 n namas te vidma te nāmadheyam mā no hiṁsīḥ | viçvāyur
 viçvajanīnaṣ prati :
 cyā diçaṣ pavamena bhasvān. namas te vidma te nāma-
 dheyam mā no hiṁsīḥ z :
 çivo vāiçvadeva udīcyā diçaṣ pavamena bhasvān. namas
 te vidma te nāmadhe :
 yam mā no hiṁsīḥ z atiṣṭhāvā bārhaspatya ūrdhvāyā diçaṣ
 pavamena bha :
 svān. namas te vidma te nāmadheyam mā no hiṁsīḥ z 3 z
 iti ṣaḍṛta :

sūktam. z z

Read: vātaṣ purastāt †pavamena bhāsvān namas te vidma
 te nāmadheyam mā no hiṁsīḥ z 1 z tapodāṣ puro dakṣiṇataḥ
 †pavamena ° ° z 2 z viçvāyur viçvajanīnaṣ praticyā diçaṣ
 †pavamena ° ° z 3 z çivo vāiçvadeva udīcyā diçaṣ †pavamena °
 ° z 4 z atiṣṭhāvā bārhaspatya ūrdhvāyā diçaṣ †pavamena
 bhāsvān namas te vidma te nāmadheyam mā no hiṁsīḥ z 5 z
 3 z iti ṣaḍṛcasūktam z z

In the margin opposite this hymn is written ṣaḍṛtasūktam
 vātā purastāt. Probably pavamanena should stand for pava-
 mena.

70. [f. 44 b, l. 12.]

apa dyor apā utanaḍ apaskadya vaded ahim kalyāṇy āyatāḥ :
 smṛtaṁ sumanas santu vidyataḥ |

In a it seems possible to read apo dyor apa uttarād, in b
 apaskandya vadhed ahim: in c I think we should have kalyāṇī,
 followed by āyatāḥ rather than āyatāḥ; smṛtaṁ is hardly

satisfactory and I have thought of retaining, but no suggestions can be made with confidence; for it seems as if we must read *sumanasas santu vidyutaḥ*.

yat parjas tayitnussa saṁ saṁ vyatate jagat. pa :
tantu dvitīyā trayāvatī pṛthivī prati modate |

The transliteration of pāda a is not certain owing to a crack in the ms. We may read for ab *yat parjanyaś tanayit-nus saṁ saṁ vyathate jagat*: in c *patanti* would seem better, and if a form of *dvitīya* is to stand it would probably be *dvitīyās*; *trayāvatī* cannot stand, I think, and *trīyāvatī* would be a pretty emendation though the change to twelve syllables for d is rather sudden; if *trīyāvatī* seems worth consideration I would be inclined to push conjecture a little further and read in c *udanvatīr yās*. Cf. RV. 5. 83. 9.

eṣenābhy arkam dīvrkāṣve :
dhenum kām iva ahiṁś tvaṁ vidyutām jahi māsmaḥ
puruṣām vadhīḥ |

Pāda b seems to end with *iva*, before which *gām* is probable though *dhenukām* is possible; one may suspect that the syllables *rkāṣve* are a corruption of *ṛṣabho* or else of a verb-form from the root *arc*, while the letters *dīv* could lead us in several directions: I think the import of the hemistich is 'the thunders roar lustily.' For cd we may read *ahiṁś tvaṁ vidyutām jahi māsmaḥ puruṣām vadhīḥ*.

abhikra :
ndāḥ stanayitnor avasphūrjad aṣanyā uta | devā maruto
mr̥data naḥ pātu no :

duritād avadyāt.

Read *abhikrandaḥ* in a and *avāsphūrjad* in b; the hemistich in this form is slightly asymmetrical but it results from the simplest emendation: in c read *mr̥data* (the ms. so corrects), in d *pātu*.

vīcite pari ṇo nama ādityaḥ carma yacchata | yūyata :
parṇino ṣaram utāparṇo ṛṣādaḥ z 4 z

Read: *vṛjīte pari ṇo nama ādityaḥ carma yacchata | yuyota parṇinaḥ ṣaram utāparṇaḥ ṛṣādaḥ z 5 z 4 z*.

The first pāda is a variant of Q. 1. 2. 2a.

71. [f. 44b, l. 18.]

Cf. Q. 5. 14.

kṛtavyadhana vidva tam yaç ca :
 kāra tam ij jahi da tvām icakliṣe vyaṁ vadhāya çam sasī-
 mahe yathā :
 [f. 45 a] tvā devy oṣadham̐ prātīcīnam̐ phalam̐ kṛtam̐ evā tvām̐
 kṛtyane kṛtam̐ hastigrīha parā :
 yanaḥ punaḥ kṛtyām̐ kṛtyākṛte prātīcīnam̐ phalam̐ kṛtam̐.
 evā tvaṁ kṛtyane kṛ :
 tam̐ hastigrī parā nayaḥ punaḥ kṛtyā kṛtām̐kṛti go dhenukā
 vaṭum̐ mum̐ nayat. | :
 çaktur vyaçaktupeçyam̐ prātīcīṣ prati tad vasat. yān te
 cakrur vantaneṣu va :
 ntā kūkhur vratāsu ca maṇḍūke kṛtyām̐ yām̐ cakrus tayā
 kṛtyākṛto jahi :
 agnir vāituṣ pratikūlām̐ anukūlam̐ ivodakam̐ çuke rathāi-
 vartatām̐ kṛtyekṛtyā :

kṛtam̐tāḥ z 5 z anu 14 z

It will be noted that the ms. writes the four pādas begin-
 ning prātīcīnam̐ phalam̐ twice; evidently a dittography. Stanzas
 1 and 5 here are 9 and 13 of Q. 5. 14, and Q. 5. 14. 4ab also
 appears; with st. 4 cf. Q. 4. 17. 4.

Read: kṛtavyadhani vidhya tam yaç cakāra tam ij jahi | na
 tvām̐ acakruṣe vyaṁ vadhāya sam̐ çiçimahi z 1 z yathā tvaṁ
 devy oṣadhīnam̐ prātīcīnaphalam̐ kṛtam̐ | evā tvaṁ kṛtyena kṛtam̐
 hastagrīhya parā nayaḥ z 2 z punaḥ kṛtyām̐ kṛtyākṛte gāur dhe-
 nukā † vaṭum̐ mum̐ † nayat | † çaktur vyaçaktupeçyam̐ † prātīcīṣ
 prati tad vasat z 3 z yām̐ te cakrur vartaneṣu † vantā kūkhur
 vratāsu ca † | maṇḍūke kṛtyām̐ yām̐ cakrus tayā kṛtyākṛto jahi
 z 4 z agnir ivāitu pratikūlam̐ anukūlam̐ ivodakam̐ | sukho ratha
 iva vartatām̐ kṛtyā kṛtyākṛtam̐ punaḥ z 5 z 5 z anu 14 z

In st. 2b the neuter is difficult but not impossible, I think.
 In st. 3b vatsam̐ nayat would be a good reading; and in 3d
 perhaps prātīcī would be better.

72. [f. 45 a, l. 7.]

agnir dyumnena sūryo jyotiṣā dyāur mahi :
 mnā antarikṣa vyacasā diçāçābhiṣ pṛthivī payobhir idam̐
 rāṣṭram̐ vardhaya :
 ntu prajāvat. |

Read antarikṣam, diṣa ācābhiḥ and payobhiḥ, punctuating after each pair of words down to idam.

tvāṣṭā rūpeṇa savitā savena ahar mittreṇa varuṇena rātrīḥ
pūṣā puṣṭīr bhagaṁsena bhagaday idam rāṣṭram vardhay-
antu prajāvat.

Read mitreṇa, puṣṭibhiḥ, and possibly bhāgadheyena bhā-
gadhā.

yāni viḥ
çvakarmāṇi jaghāna medimāntarā dyākāpṛthivī ubhe | ta-
syāhuḥ kṣaḥ :

ttriyaṁ garbham pari mā vapathā mūrdhani cārayasva

We may feel certain in reading dyāvāpṛthivī, kṣatriyaṁ and
dhārayasva; viçvakarmā ni would seem a better reading: it is
probable that antarā stands before dyāvā°, and sedima is
possible palaeographically, giving sedimāntarā.

çchandānsy ābhito mayūkhāstoḥ
mā tumā ya jarasyāḥ purīṣam tasyāhuḥ kṣattriyaṁ nirmitam
pari mā vaḥ :

patthā mūrdhani dhārayasva |

We might read: chandānsy ābhito mayūkhās stomān †tumā
ye jarasyāḥ | purīṣam tasyāhuḥ kṣatriyaṁ nirmitam ° ° z 4 z

parāṇi tasya vratathā yāpi mahati madaspaḥ
dam kṛṇuṣva durdharāya vā mā tvā dabham sapattrā dip-
satus tava rāṣṭraḥ :

m uttamam dyumnam astu z 1 z

Read: parāṇi tasya †vratathā yābhi sahate sadaspadam
kṛṇuṣva durdharāya vā | mā tvā dabhan sapatnā dipsatas tava
rāṣṭram uttamam dyumnam astu z 5 z 1 z

73. [f. 45a, l. 16.]

idam tam mittrāvaruṇā havir vām yenāgreḥ
devā amṛtatvam āyan. | yenāsmāi kṣattram adhi dhārayojo
sapattrāḥ praḥ :

diṣas santv asmāi |

Read tan mitrā° in a, kṣattram in c, and dhārayāujo 'sap-
atnās in cd.

ghṛtasya dhārā mittrāvaruṇā duha vām dhenur anupa :
[f.45 b] sphurantī deva savitota vāyur agnir bhūtasya patir iha
çarma yacchāt. |

Read mitrā° in a, duhe in b; devas in c.

çam nas tam :
mittrāvaruṇā gr̥ṇītām tredhā mitrā bahudhā vaçerām jayate
seno apa gho :
ṣa etat pr̥thak satvāno bahudhā bhavantām

In a read tan mitrā°, in b vaçeran; in c read eti, and if seno (= senā) does not seem acceptable we will have to read senāpa or jayante senā.

hanāma mitrāvaruṇā samitrām bha :
vāsa bhadre sukṛtasya loke pārāyān nas savitā devo agnir
jayāmedam ha :

viṣā kaçyapasya |

In a it almost seems that we must read amitrān; in b read bhavāma, in c parāyan.

vāto yaṁ mittrāvaruṇā tad āha haviṣy antaram
nirmitam ka :
çyapasya adhvaryavo marutā yasyāsan tena devebhyo varu-
ṇāni cakruḥ :
om tena devebhyo varimāṇi cakruḥ z 2 z

Read: vāto yan mitrāvaruṇā tad aha haviṣy antaram nir-
mitam kaçyapasya | adhvaryavo maruto yasyāsan tena devebhyo
varimāṇi cakruḥ z 5 z 2 z

74. [f. 45 b, l. 7.]

Ç. 3. 3.

asikrat svapā iha bhava :
d agne dambha rodasī urūcī | amuṁ naya namamā rāta-
havyo yuñjanti supraja :
sam pañca janāḥ |

For this stanza cf. RV. 6. 11. 4 and MS. 4. 14. 15. Read in a acikradat, in b dambhaya where Ç. has vyacasva; in c namasā rātahavyam.

dūre diçchantam arçāsa indram ā çyāvayantu
sakhyāya ri :
pum yadi gāyatriyam vṛhatīm arkam asmāi sāutrāmanyā
dadṛçantu devāḥ | :

In a read cit santam aruṣāsa, in b cyāva° and vipram; in c yad gāyatrīm, and in d dadhrṣanti.

adbhyas tvā rājā varuṇo juhāva somas tvāyaṁ hvayati par-
vatebhyaḥ indras tvā :

yaṁ hvayati vidbhyābhyaḥ çyeno bhūtvā viṣā patemaç

In c read vidbhya ābhyaç, and in d viça ā patemāḥ.

çyeno havin nayatv ā para :

smād anyakṣetre aparuyāṁ carantaṁ açvināṁ panthāṁ

kṛṇutām sajan te garbhaṁ :

sajātā abhi saṁ saṁ viçadhvaṁ

In a read havir, in b anyakṣetre aparuddhaṁ carantaṁ; in c açvinā and sugaṁ, in d abhi saṁviçadhvaṁ.

çyeno haviṣ kaçyapasyopa çikṣe indraṁ vātaḥ pra :
hito dūtā vā viṣi ya catrun. | senāgrāi viṣo vṛṣaṇāno adharā
kāsi :

Reading çikṣaty we can get a good pāda a; and for pāda d we might consider as a possibility viço vṛṣan ā no adharāṇ carāsi: the form viṣi is probably for viçi, and senāgrāi for senāgre, but for the rest I have nothing.

yas te havaṁ prati niṣṭyāt saajātā uta niṣṭyā z 2 z apāta
indra tāṁ :

mītvāyatheham ava gāyaḥ

Read: yas te havaṁ prati tiṣṭhat saajātā uta niṣṭyaḥ | apāñ-
cam indra tāṁ mītvāthemam ava gamaya z 6 z

hvayanti tvā pañca janyāḥ pati mitrāvarṣa :
ta indrāgnī viçve devā viçi kṣemam adhīdharaṁ z 3 z

Read: hvayantu tvā pañca janāḥ prati mitrā avṛṣata | indrāgnī
viçve devās te viçi kṣemam adīdharan z 7 z 3 z

75. [f. 45 b, l. 18.]

prajāpatir a :

nuvartis sa prajābhīr anuvantiḥ sa mānuvarti anuvantiṁ
kṛṇotu | :

[f. 46 a] indro nuvantis sa vīryeṇanuvartis somo nuvantis sa
oṣadhībhīr anuvantiḥ :

āpo nuvartayas tāṣ parjanyaenānuvartayaḥ tā mānuvartayor
anuvantiṁ kṛṇo :

tu | devānuvartayas te mṛtenānuvartayaḥ te mānuvartayor
anuvartiṁ kṛ:

ṇotu z 4 z

Read: prajāpatir anuvartis sa prajābhir anuvartiḥ | sa mānu-
vartir anuvartiṁ kṛṇotu z 1 z indro 'nuvartis sa vīryeṇānu-
vartiḥ | sa z 2 z somo 'nuvartis sa oṣadhibhir anuvartiḥ |
sa z 3 z āpo 'nuvartayas tāṣ parjanyenānuvartayaḥ |
te mānuvartayo anuvartiṁ kṛṇvantu z 4 z devā anuvartayas
te 'mṛtenānuvartayaḥ | te mānuvartayo anuvartiṁ kṛṇvantu
z 5 z 4 z

76. [f. 46 a, l. 4.]

payo mahyam oṣadhayaṣ payo me vīrudho dadhaṁ |
apāṁ payasvā:

d yat payas tenve varṣantu vṛṣṭayaḥ

In b read dadhan, in c payasvad and in d tad me.

payo mahyam parasvanto hastino me payo da-
dhaṁ | pa:

yaṣ patatriṇo mahyam vīṇayā me payo dadhaṁ |

In b read dadhan, also in d.

payasvāndre kṣettram astu paya:
svad ṛtu dhām | ahaṁ payasvān bhūyāsaṁ gāvo mota
payasvatīḥ

For ab read payasvan me kṣetram astu payasvad uta me
dhāman; read ma uta in d.

payo mahyam a:
psarasam gandharvā me payo [dadhaṁ | payo me viṣvā
bhūtāni vāto dadhātu me pa:
yaḥ

In a read apsaraso, in b dadhan.

payo mahyam dyāvāpṛthivī antarikṣam payo dadhat. | payo
me viṣvā bhū:
tāni dhātā dadhātu me payaḥ

payas pṛthivyām paya oṣadhīṣu payo dhi:
vy antarikṣa payo dhaḥ payasvatīṣ pradiṣas santu ma-
hyam. z z:

z 5 z anu 15 z

Read: payaṣ pr̥thivyāṁ paya oṣadhīṣu payo divy antarikṣe
dhāḥ | payasvatīṣ pradiṣas santu mahyam z 6 z 5 z anu 15 z
For the last stanza cf. VS. 18. 36; MS. 2. 12. 1, and others.
In the margin opposite st. 1 is written payaṣ pr̥thivyāṁ .

77. [f. 46a, l. 12.]

aham bibharmi te mano aham cittam aham vra :
vratam mamed apa kratāv aso mamāsaṣ ced asīdapi | āmnā-
sāistrā sāmhi :
te ramatām mano mayi te ramatām manah āñjanasya
madhuṣasya kuṣṭhasya na :
latasya ca | vīrodikasya mūlena mukhena mardanam kṛtam
madhu me antar ā :
sya mukhena mandanam kṛtam. | tatro tvam vivartasva
narācī iva vartasi | :
yathā nemī rathacakram samantam pari śasvaje evā pari
śasva mā yathā :

[f. 46b] sam payite manah z 1 z

The sphere of this is clear, it is a love-charm; cf. Ç. 6. 102 and the many others. The division of the pādas presented by the ms. into stanzas, and the details of emendation raise many difficulties which cannot be convincingly settled. The last stanza is perfectly clear and is equivalent to Ç. 6. 8. 1: read śvajasva mām in c and payate in d. We may feel sure, I think, that the next to the last stanza begins madhu me; it seems possible to read for the first hemistich madhu mayy antar ā syān mukhena mardanam kṛtam: in pāda c, read tatra, and at the end of d perhaps vartāse, but for narācī I can suggest nothing unless we take an entirely different turn and read the hemistich tatra tvam vāi varcasvān araṇī iva vartasi.

Another stanza is as follows: āñjanasya madughasya kuṣṭhasya naladasya ca | vīrudhas tasyā . . kṛtam; but the emendation in pāda c is not very forceful. To start now with the first words, reading vratam in b and mamed aha in c we get three pādas of st. 1, and in view of Ç. 1. 34. 2 I think we might read for d mama cittam ā sīdasi (Ç. . upāyasi). In the remaining part we find a whole pāda written twice, the correct form being mayi te ramatām manah (Ç. 6. 102. 2d has veṣṭatām) which would be a good fifth pāda for st. 1 were it not for the intervening letters āmnāsāistrā and these seem beyond emendation.

78. [f. 46 b, l. 1.]

yathedam açvinā triṇaṁ vāto havatu bhūmyām e :
vā vayaṁ vahāmasi yām vayaṁ kāmayāmahe |

Read triṇaṁ in a, vahati bhūmyām in b.

utvā mātā sthāpayatu pra :
tvā nudatām açvinā | dā çvaçur iva mātaram mām evājotu
te manaḥ

Read ut tvā in a, probably sā çvaçrūr in c and evārjotu in d.

yathā :
kṣīram ca sarpiç ca manuṣyāṇām hr̥ye priyam. | evāham
asyā nārīyā :

hr̥do bhūyāsam uttamaḥ

Read hr̥de in b, nārīyā in c.

agneṣ tvā tapas tapatu vātasya vr̥jī mā spr̥kṣa tā :
ni ṣadanāni mād̥hava ut tiṣṭha prehy agnivat te kṛṇomi
In b read dhr̥ājir mā spr̥kṣat, in c sād̥hāva.

sūryas tvā tapas tapa :
tu vātasya vr̥jī mā spr̥kṣa tāti ṣadanāni mād̥hava ut tiṣṭha
prehi sū :

ryavat te kṛṇomi z z z

Read: sūryas tvā tapas tapatu vātasya dhr̥ājir mā spr̥kṣat |
tāni ṣadanāni sād̥hāva ut tiṣṭha prehi sūryavat te kṛṇomi z 5
z 2 z

79. [f. 46 b, l. 8.]

hiraṇyapuṣpī subhagā rūpaç cāyaṁ sumañgala :
tāv enām bhadrayā dattām amṛtāv amṛte bhage

Read sumañgalaḥ in b.

hiraṇyapiḍvaṁ haritaṁ tat te aṅge :
ṣu rohati tenemām açvinā nārī bhagenābhi ṣiñcatām
In a read hiraṇyapiḍvaṁ, in c nārīm, in d siñcatām.

yathā rūpasudhr̥ta :
s tṛpyanto yanti kāmīnaḥ evā tvā sarve devarāḥ petayo
yantu kāmīnaḥ :

In d read pretāro yantu.

hiraṇyākṣa madhuvarṇo hiraṇyaparicantane aṅkaṁ hiraṇya
yas tuva tenā:

syāiḥ patim ā vaha

Read: hiraṇyakṣo madhuvarṇo hiraṇyaparicchandanaḥ | aṅko
hiraṇyo yas tava tenāsyāi ° °.

yadi vāspa dirocanam yadi vā nabhyas tirā | yaṁ
tvā ma:

hyam oṣadhir aṅkena ma nyānaya z 3 z

This stanza appears Ç. 7. 38. 5, which has tirojanam in a;
this seems to me better than the tirocanam of the commen-
tator. Read: yadi vāsi tirojanam yadi vā nadyas tiraḥ | iyaṁ
tvā mahyam oṣadhir aṅkena me nyānayat z 5 z 3 z

80. [f. 46 b, l. 14.]

punaṣ prāṇam punar apānum a:
smāi punar vyānam uta soma dhehi | ātmānam cakṣur udite
samānas tam anu pā:

hi tam anu jīva jāgavi |

Read apānam in a, adite in c and probably samānam; in d
jīvaṁ jāgrhi: the omission of the second anu would improve
the metre.

tvāṣṭā rūpeṇa savitā savena ahar mitreṇa:
varuṇena rātrī indro jyeṣṭhena vrahmaṇāya vṛhaspatiḥ
pūṣāsmāi puna:

[f. 47 a] r asaṁ dadhātu

Read asuṁ in d; dadātu would be better too, in view of
st. 5d and RV. 10. 59. 7a punar no asuṁ pṛthivī dadātu.

yathādityā vasavo ye ca rudrā viçve devā aditir yā
ca rā:

trī yajño bhagas savitā ye ca | devā yamo smāi punar asaṁ
dadhātu |

Read 'smāi and asuṁ in d; the colon should follow rātrī.

somo rājā:

asucit te punar mā indro marudbhir aṇvinā te bhiṣaj yad
agnī rudro vasuvi:

t ta punar dāt.

The first pāda of this stanza seems to have been lost; for
pāda b I read somo rājā vasuvit te punar dāt: pāda c begins
with indro; read te in d.

punar dyāur devī punantarikṣam agnir vātaḥ pavamāno
 bhiṣajya:
 tu | grāhyāṣ pāçām nirṛtyāṣ pāçām mṛtyoḥ parçād vāk ca
 devī punar da:

dātu z 4 z

Read: punar dyāur devī punar antarikṣam agnir vātaḥ pava-
 māno bhiṣajyatu | grāhyāṣ pāçān nirṛtyāṣ pāçān mṛtyoḥ pāçād
 vāk ca devī punar dadātu z 5 z 4 z

81. [f. 47 a, l. 6.]

idaṁ cakṣur patāvarī mā hiṁsīt purāyusaḥ yad vām :
 tamo yad u lapiṣam apa vācam ni dadhmasi |

Read ṛtāvarī in a, in b pura āyusaḥ might be better: at
 the end of c I would read yat kilbiṣam, in d vācā (with
 apavācam as an alternative).

idaṁ dhehy ada gaṇam yatho :
 rmāti rohati | ayasmayas tarāṇkuço akṣāur aram saṁ apu
 lampatu z

In a we may read adhiguṇam or adhi gaṇam, in b yathor-
 myādhi or better yathormir adhi: in d upa limpatu seems
 probable, and the locative dual might stand at the beginning;
 I would suggest then akṣyo rasam upa limpatu.

yama :
 hy ābhyam ujayam nṛcakṣā yaṁ çaṁsenaç çakta nir yaṁ
 suparṇā ud āhuç cakṣu :

r uditer anantaṁ somo nṛcakṣā mayi tad darmaṁ dhātu |

The first two pādas do not connect well with either the
 preceding or following, and it is possible that they were pādas
 cd of a stanza whose first hemistich has fallen out: a possible
 reading would be yamo hy ābhyām uj jayan nṛcakṣā yaṁ
 çaṁsena. It seems possible to read nir ayan suparṇā with
 some form of çakti at the beginning of the pāda; read uditeḥ
 and insert colon; the last two words are probably dharmaṁ
 dadhātu.

yathā cakṣus suparṇa :
 çca yathā çvaçrū yathā çunaḥ evā me açvinā cakṣuṣ kṛṇu-
 taṁ puṣkara :

sraja |

Read suparṇasya in a, çvaçror in b; kṛṇutām puṣkarasrajā
 for d: with this stanza cf. Ç. 3. 22. 4.

yasyas suparṇam prapataç cakṣuṣā cakṣur ā dadhe
tasyāha samu :

draje uva cakṣuṣā cakṣur ā dadhe z 5 z anu 16 z zz :

The second pāda looks as if pāda d had displaced a more appropriate pāda b; yet if we might read for a yas suparṇasya prapātaç perhaps b could stand: in c we might read samudram jetave. This is stanze 5 of hymn 5 in anu 16.

There are suggestions in the first two stanzas of healing some disease of the eye, in the last two the suggestions are rather of a charm for keenness of vision; of course both could stand in the same hymn.

82 and 83. [f. 47 a, l. 14.]

agnis te hāras siṣaktu yātudhāna svāhā vātam te prāṇas
siṣaktu :

sūryam te cakṣus siṣaktu antarikṣam te çrotram siṣaktu
paramām te parāvataṁ :

manas siṣaktu yātudhāna svāhā z 1 z apas te rasas siṣaktu :
yātudhāna svāhā | oṣadhīs te lomāni siṣajantu samudram
de vā :

s siṣaktu yātudhāna svāhā z 2 z

Read: agniṁ te hāras siṣaktu yātudhāna svāhā z 1 z vātam
te prāṇas siṣaktu ° ° z 2 z sūryam te cakṣus siṣaktu ° ° z 3 z
antarikṣam te çrotram siṣaktu ° ° z 4 z paramām te parāvataṁ
manas siṣaktu yātudhāna svāhā z 5 z 1 z

apas te rasas siṣaktu yātudhāna svāhā z 1 z oṣadhīs te
lomāni siṣajantu ° ° z 2 z samudram te † vās siṣaktu yatu-
dhāna svāhā z 3 z 2 z

In 83. 3 vāk would seem a good reading.

The ms. so clearly separates these formulae into two groups that I have not felt it advisable to unite them in spite of their unity as regards content. Opposite 83 the margin has rakṣāmantram ha 4.

84. [f. 47 a, l. 18.]

idam te çiro bhinadmi yā :
tudhāna svāhedam te mastiṣkam ni taraṇanaddi bhūmyām
te hano bhina :

[f. 47 b.] dmi yātudhāna svāhedam te jihvā ni te grīvā
bhinaddi yātudhāna svāhedam :

te skandhā ni idam te sāu bhinadmi yātudhāna svāhedam
 te bāhū ni te hṛda :
 yam bhinaddi yātudhāna svāhedam te pariśūr ni te çronī
 bhinaddi yātudhā :
 na svāhedam te klomā ni te prṣṭhe bhinadmi yātudhāna
 svāhedam te vastā ni :
 idam ta ūrū bhinaddi yātudhāna svāhedam te jaṅghe
 bhinaddi yātudhāna svā :
 hedam te gulhāu bhinaddi yātudhāna svāhedam te pādau
 ni te tvacam bhinaddi :
 yātudhāna svāhedam te prāṇam ni idam te parūṇṣi bhinaddi
 yātudhāna svā :
 hedam te majjo ni tarāṇenaddi bhūmyām z 3 z

Read: idam te çiro bhinadmi yātudhāna svāhā | idam te
 mastiṣkam ni tarhaṇena bhinadmi bhūmyām z 1 z idam te
 hanū . . | idam te jihvām ni . . . z 2 z idam te grīvām . . |
 idam te skandhān ni . . . z 3 z idam te hastau . . | idam te
 bāhū ni . . . z 4 z idam te hṛdayam . . | idam te parçūr
 (Wackernagel, *Altind. Gr.* § 51) ni . . . z 5 z idam te çronī
 . . | idam te kloma ni . . . z 6 z idam te prṣṭhe . . | idam
 te 'vastham ni . . . z 7 z idam te ūrū . . | idam te jaṅghe
 ni . . . z 8 z idam te gulhāu . . | idam te pādau ni . . .
 z 9 z idam te tvacam . . | idam te prāṇam ni . . . z 10 z
 idam te parūṇṣi bhinadmi yātudhāna svāhā | idam te majja
 ni tarhaṇena bhinadmi bhūmyām z 11 z 3 z

85. [f. 47 b, l. 8.]

nandasodalam anta :
 kajiṣṇu hāparajitā amuṃ bhruṇāny arpayā svayam pāçān
 yāyatī a :
 srar āitu sahakratur ātu mā prāṇo ātho balaṃ mano dadhātu
 bhadrayā agni :
 r viçvād vāsu mā svastaye dakṣiṇā mā dakṣiṇato dakṣiṇā
 pātu sa :
 vyataḥ paçcād anam vyadhāt pātu sarvasyā bhavahebhya
 çatam āpo divyā mittra :
 sya ca dakṣiṇaḥ | dhātā savitā rudras te no muñcantv
 aṇhasaḥ | çatam pāçā :
 tu varuṇasya vrahmanaspateç ça te māntan pāçām no viçya
 çatāt pāçe :
 bhyo vayantām z 4 z

This seems little more than words and phrases put together without connection, though there is in several places indication of prayer for protection; such as vyadhāt pātu, muñcantv añhasaḥ. It does not seem to be metrical.

At the very beginning I think nandasodaram is not improbable, then probably antakajisṇum and aparajitam, these being in agreement with amuṁ; doubtless we should read bhrūṇāny, but it seems hardly possible to construe two accusatives with arpaya. If asrar is a verb, as seems possible, we would want to read yāyaty asraḥ (followed by a period). Reading āitu mā prāṇo and bhadrayāgnir we would get a fairly good sense for āitu saḥakratur . . . viçvād vasuḥ (followed by period), though it would be quite possible to put the period after bhadrayā and then read vasur mā °; enaṁ vyadhāt pātu would be the last words which can stand, but it seems that a full stop comes after bhavahebhya. Of course dhātā . . . añhasaḥ is good but of the rest I can make nothing though many of the words are obvious.

The above suggestions really offer no help in solving this hymn, for there is nothing in it that gives a solid base from which to work; at least I cannot see it.

86. [f. 47 b, l. 15.]

prācīm diçam āsthām agnir māvatv ojame ba :
lāya diçām priyo bhūyāsām anu mitvā me diço bhavantu
ghṛtapratikā :

dakṣiṇām diçam āsthām indro māvatv ojase balāya pratī-
cīm di :

çam āsthām varuṇo māvatv āujase balāya udīcīm diçam
āsthām :

somo māvatv āujase balāya dhruvaṁ diçam āsthām viṣṇur
māvatv āuja :

[f. 48 a] se balāya ūrdhvām diçam āsthām vṛhaspatir māvatv
āujase balāya :

diçām priya bhūyāsām anu mittrā me diço bhavantu ghṛta-
pratikā z :

z 5 z a 17 z

Read: prācīm diçam āsthām agnir māvatv ojase balāya |
diçām priyo bhūyāsām anu mitrā me diço bhavantu ghṛta-
pratikāḥ z 1 z dakṣiṇām diçam āsthām indro māvatv . . |

diçām . . . z 2 z pratiçīm diçām āsthām varuṇo māvatv . . |
 diçām . . . z 3 z udīçīm diçām āsthām somo māvatv . . |
 diçām . . . z 4 z dhruvām diçām āsthām viṣṇur māvatv . . |
 diçām . . . y 5 z ūrdhvām diçām āsthām vṛhaspatir māvatv
 ojase balāya | diçām priyo bhūyāsam anu mitrā me diço
 bhavantu ghṛtapratikāḥ z 6 z 5 z anu 17 z

87. [f. 48 a, l. 3.]

Kāuṣ. 107.

manāyī tantu prathamam paçced anvyātanvata tam :
 nārī pra vṛvīmi va çādīr nā santurvarī sādurvyas tantur
 bhavati sādhu :
 n oḍur ito vṛkaḥ atho horvarīr yūyam prāttar voḍheva
 dhāvajā kharga :
 lā yurva paturīr apā agram ivāyanam | patantu pratvarīr
 ivorvarīḥ :
 sādhunā pathā avacyu tāutubhyete tedeṇāçvatarāv iva |
 pra stomas u :
 rvarīṇām khaṣayānām astvāviṣam | nārī pañcamāyoṣam
 sūtravat kṛ :
 ṇutam vasu ariṣṭo sya vasthā priyamāda vāsi tatāutira z 1 z :
 Read: manāyāi tantuṇi prathamam paçyed anyā atanvata |
 tan nārīḥ pra vṛvīmi vas sādhuṇi vas santūrvārīḥ z 1 z sādhuṇi
 vas tantur bhavatu sādhuṇi otu etu vṛtaḥ | atho horvarīr yūyam
 prātar voḍheva dhāvata z 2 z khargalā iva patvarīr apām
 ugram ivāyanam | patantu patvarīr ivorvarīḥ sādhunā pathā
 z 3 z avācyāu te totudyete todenāçvatarāv iva | pra stomam
 urvarīṇām çaṣayānām astāviṣam z 4 z nārī pañcamayūkham
 sūtravat kṛṇutam vasu | ariṣṭo 'sya vastā † priyamāda vāsi
 tatāutira † z 5 z 1 z

The reading of 2b may not seem good but I regard it as
 probable; Bloomfield reports sādhuṇi otu as the reading of
 three mss. but reads in his text sādhuṇi etu ratho. In 2d Bl.
 reads voḍhave. In 5b Bl. reads kṛṇute vasu, though all but
 one of his mss. have kṛṇutam; in his note he suggests the
 reading here given. For priyamāda in 5d we should probably
 read prendra as in Kāuṣ. but for the rest our reading seems
 as hopeless as that of Kāuṣika.

88. [f. 48a, l. 10.]

RV. 10. 152.

çāsa itthā mahan̄ asy āmittrakhāghāto adbhutaḥ na yasya
hanya :

te sakhā na jīyate kadā cana

In a read mahān̄, and in b amitrakhādo.

vṛkṣo vi mavṛdho jahi vi vṛtrasya :
hanū ruja vi manyumanyu vṛtrahann amittrasyābhidāsati |

Read: vi rakṣo vi mṛdho jahi vi vṛtrasya hanū ruja | vi
manyum indra vṛtrahann amittrasyābhidāsataḥ z 2 z

vi nī :
ndra vi mṛdo jahi nīdā yatsva pradhanyataḥ adhaman̄
gamayā taso yo :

asmā abhi dāsati |

Read: vi na indra mṛdho jahi nīcā yaccha pṛtanyataḥ |
adhaman̄ gamayā tamo yo asmān̄ abhi dāsati z 3 z

svastidā viçān̄ pati vṛtrahā :
vi mṛdo jahi vṛṣendraṣ pura etu nas somapā abhayañkaraḥ :
In a read patir, in b vṛtrahā and vi mṛdho or vimṛdho; jahi
does not fit in well here, and the reading of RV. is much
preferable • vimṛdho vaçī.

apendra dviṣato mano pa jījyāsato vadham vi mahaç çarma
yaccha va :

rīyo yavadhā vadham z 2 z

Read: apendra dviṣato mano 'pa jījyāsato vadham | vi mahac
çarma yaccha varīyo yavayā vadham z 5 z 2 z

89. [f. 48a, l. 17.]

yo titaro mañis tenāti taru :
ṣva saḥ sapattrān̄ dviṣato mañe pṛnutasva pṛdanyataḥ |

In a read devo yo 'titaro; in b I think taruṣva dviṣaḥ is the
best of several possibilities: in c read sapatnān̄, and for d pra
nutasva pṛtanyataḥ.

pṛṇu :
[f. 48b] tasva pra dahasva sapattrān̄ dviṣato mañe tarāpi
mahataḥ duṣvasān̄ varco bhañkti :
pradanyatām

In a read pra nutasva, in b sapatnān; in b ati or ava would be better and then mahatvām dviṣām is at least possible; in d read bhañdhi prṭanyatām.

varco jahi manyum jahy ākūtim dviṣatām maṇe | devo
yo ti:
taro maṇis tenāti tara dhūrvatā |
In c read 'titaro and in d dhūrvataḥ.

ye dhūrvanti ye druhyanti ye dviṣanti pra:
tanyataḥ | sarvān sapattrās te manir ṇa manyum dviṣatas
karat.

In b read prṭanyantaḥ; in cd sarvān sapatnāns te maṇir nir.
tava citte ta:
va vrate tavāivādhaspadam carām | devo yo nyataro maṇis
tenāti tara duṣvamā:

z 3 z

Read: tava citte tava vrate tavāivādhaspadam karam | devo
yo 'titaro maṇis tenāti taruṣva dviṣaḥ z 5 z 3 z

For 5d and 1b tenāti tara duṣtarān might seem as good as the reading given above.

90. [f. 48b, l. 6.]

Q. 6. 9.

ā te manaḥ cakṣuḥ ca ā mā te hṛdayam dade padoṣ
te padyam ā:

dade yathā tiṣṭhāsi me vaḥ vaḥ

In ab read manaḥ cakṣuḥ cā; in c pādoṣ, and in d vaḥ only once. This stanza and the last one do not appear in Q., nor elsewhere.

vānccha se pādāu tanvām vācchākṣūr vān:
ccha sakṣnyū akṣo vṛṣaṇyantyāṣ keṇā oṣṭhāu mām te kāmēna
āṣyatām

For a read vānccha me , for b vāncchākṣyāu vānccha sak-
thyāu; in c akṣyāu and in d ṣyatyām: the sign transliterated
ā in āṣyatām might be a poorly formed çu.

māi tvā:
dūṣanimṛgām ṇomi hṛdayasprgam mamed apa kratāv aso
mamāsa:

ç ced asaḥ ced asīdapi

For the first hemistich I think we may read mayi tvā doṣaṇispr̥cam kṛṇomi hr̥dayaspr̥cam; in c read aha, and for d see hymn 77 where I suggested mama cittam ā sīdāsi.

yasām nābhīr ārohaṇam hr̥di samvananam kṛtam | :
gāvo ghṛtasya mātaro amu sam vānayantu me
In a read yāsām, in d amūh.

mahyam tvā dyāvāpr̥thi:
vī sahyam devī sarasvatī mahyam tvendraç cāgniç cāhoratre
ni yacchatām. z:

Read: mahyam tvā dyāvāpr̥thivī mahyam devī sarasvatī
mahyam tvendraç cāgniç cāhorātre ni yacchatām z 5 z 4 z
For st. 5 cf. above Nos. 9. 5 and 35. 5.

91. [f. 48b, l. 13.]

Cf. Ç. 2. 24.

bhūlir mūly arjunī punar vo yanti yādavaḥ punar jūtiṣ
kimīdinī:
yasya stha [dam atta yo va prahīt tam utta ma sāmsāny
attaḥ acchavo jigha:
cchavaḥ haviṣyavaḥ pāçyavaḥ sphātīhārī ramahārī vāta
jūte sa:
nojavaḥ punar vo yanti yādavaḥ punar jūtiṣ kimīdinī yasya
stha da:
m atta yo va prāhīt tam utta māmsāny attaḥ z z om̐ tvam
utta smā:
māmsāny attaḥ zz 5 z anuvā 18 z z iti atharva:
[f. 49a] ṇi pipalādaçākḥāyām dvitīyaḥ kāṇḍas samāptaḥ
z z

Ç. 2. 24 is a hymn of eight stanzas divided between male and female kimīdins; above in No. 42 we have a hymn, seemingly of five stanzas, devoted to the male kimīdins and here are the stanzas against the females. An arrangement in five stanzas may be made with some degree of reason, but to emend the words which are supposed to be names of the demons is not possible: feminine vocatives are called for, and I can only suggest as more or less plausible arjunī, jighatsavaḥ, sphātīhārī, ramahārī, manojavāḥ. Taking up these suggestions we may read as follows: bhūli mūly arjunī punar vo yantu yātavaḥ

punar jūtiṣ kimīdiniḥ | yasya stha tam atta yo vaḥ prāhāit tam
 atta svā māṅsāny atta z 1 z acchavo jighatsavaḥ punar ° ° °
 z 2 z haviṣyavaḥ pāçyavaḥ ° ° ° z 3 z sphātihāri ramahāri
 ° ° ° z 4 z vātajūte manojavāḥ punar vo yantu yātavaḥ punar
 jūtiṣ kimīdiniḥ | yasya stha tam atta yo vaḥ prāhāit tam atta
 svā māṅsāny atta z 5 z 5 z anu 18 z z ity atharvaṇi pāippa-
 lādaçākḥāyāṁ dvitīyaḥ kāṇḍas samāptaḥ z z

Notes on Village Government in Japan After 1600, I.—

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Introduction.

IN the year 1600, Tokugawa Ieyasu, through his victory at the battle of Sekigahara, became the virtual ruler of feudal Japan, and proceeded to elaborate that careful system of government which, with remarkably few changes, continued to exercise an undisputed sway over the nation till the middle of the nineteenth century. In this system culminated, and with it ended, the feudal régime of Japan. Each of the larger phases of the system,—its relation to the Emperor and civil nobility, to religious institutions, and to the military, agricultural, and mercantile classes of society, and its moral, intellectual, economic and institutional contributions to the present era of Japanese history,—presents a field of fruitful study. It is the aim of this essay to analyze some of the leading features of the rural aspects of the great system.

Generally considered, the main objects of this system can hardly be said to have been entirely selfish. Coming after nearly three centuries of continual civil war, Ieyasu was as eager to restore at last the peace and order for which the nation had long yearned, as to perpetuate the political power of his own family. It was in fact the primary motive of his policy that the power of his house should depend upon the stability of the realm¹. It may indeed be said that every important phase of the political system which he built was so designed as to subserve this double purpose.

It is this full consciousness of its aims that characterizes the Tokugawa régime and distinguishes it from its predecessors in the history of feudal Japan. Ieyasu and his councillors would run no risk and leave nothing to nature, wherever their human intelligence guided them. They made every effort to

avail themselves of the wisdom to be derived from the study of the past political experience of both Japan and China², and sought to adapt it to the peculiar conditions prevailing in the feudal Japan of the early seventeenth century,³ always with the steadfast purpose of insuring peace and of perpetuating the new régime.

The general system so framed was characterized, in all its phases, by a studied balance of two elements seemingly contradictory to each other, namely, government by rigid laws and government by discretion. The historian who sees only the former, in which an elaborate machinery was set in motion, as it were, regardlessly of the men operating it, would be puzzled to meet everywhere almost an excess of liberty that was left for the exercise of the personal sense of equity and proportion of the individual administrator. Nor would one succeed in regarding the latter element the only basic principle of the Tokugawa rule. It would seem that largely by a harmony of the two, the one not less important than the other, was served the primary aim of Ieyasu's government.

1. Government by rigid laws, which one might term institutionalism, may be conveniently discussed as in the following analysis. In the first place, a Chinese political idea was used to explain and emphasize the actual division of social classes. The nation was conceived as falling into two main classes, rulers and ruled, with a broad division of labor between them: the rulers to govern and in return to be supported, and the ruled to support and in return to be governed.⁴ True to the feudal nature of the society, the rulers were mostly warriors,⁵ and the ruled were mostly tillers of the soil. The separation between the noble functions of the former and the ignoble services of the latter was distinct and decisive, each class living a separate life from the other, with its own laws, education, taste and views of life.⁶ Less than two millions of the fighting class were thus superimposed upon more than twenty-four millions of the producing class.⁷

In the second place, let it be noted that in each of the two classes, and in their mutual relationship, there had developed in the course of previous history an ill-defined but important division of sub-classes, which the Tokugawa rulers now organized in a minute and rigid gradation of rank. To enumerate but a few of the chief steps in the hierarchy, such

as concern the subject of this essay. The Suzerain^s appointed about forty Intendants⁹ with regular salaries over his own Domain Lands.¹⁰ He also received allegiance of more than two hundred large and small Barons,¹¹ who, with some of their vassals, ruled over their respective Fiefs.¹⁰ The suzerain's domain lands were assessed as equivalent to about a fourth of the aggregate of the fiefs of all the barons.¹⁰ His intendants stood in their respective districts in immediate relation with representatives of the peasants, but the barons and their larger land-holding vassals were removed from the rural population under them by one or more intermediate grades of officials,¹² whom we might conveniently designate Bailiffs.

The peasants of each Village^{13 & 14} were themselves divided into classes, according to their tenures.¹⁵ They, however, were all under their Village-Head,¹⁶ usually one but sometimes more, either elected or hereditary, and, holding office annually, for a term of years, or for life. He was assisted by several Chiefs,¹⁶ and was, with the latter, under the counsel and supervision of one or more selected Elders.¹⁶ In larger fiefs there frequently were District-Heads, who, being also of the peasant birth, each discharged in a group of villages functions similar to those of the heads of individual villages.¹⁷

In the third place, all these grades were held together by a carefully studied system of checks and balances. These were evidently conceived in accordance with the two familiar principles that have characterized many a bureaucratic government in history, and were especially developed in China,¹⁸ namely, the principles of responsibility and of delegation,—the delegation of the suzerain's powers to his subordinate officials, and the responsibility of each functionary for his official conduct to those above him. Each official was inviolable,¹⁹ so long as he acted within the powers delegated to him, and each law was sacred,²⁰ so long as it embodied the just will of the highest authorities. Every person, however high, was answerable for his act to his superiors, and the suzerain's punishment for wrongs committed by even the greatest baron was swift and was witnessed by all men under him.²¹ It was very common that the officials or even all the members of a corporate body were punished for a grave offence committed by one of the latter, or otherwise held responsible for the due performance of public duties enjoined on them. This was especially

the rule with rural communities, with city wards, and with merchant and artisan gilds.²² It would not be difficult to see that the double chain of delegation and responsibility was forged in order to hold the society solidly together.

2. Beside these rigorous institutional arrangements of the Tokugawa régime, the latitude it carefully and generously left to the individual administrator for the exercise of his sense of equity and right proportion is all the more remarkable by contrast. Unless the suzerain's motive of deliberately balancing these two opposite principles is thoroughly appreciated, the story of his government is apt to baffle us at every turn, and has in fact betrayed many writers into inevitable errors. Rule by discretion should be absent in no form of government, and is likely to play a large part in a feudal government, which usually comprises arrangements essentially private and personal in origin. In the Tokugawa régime, discretionary conduct of affairs formed a predominant feature of its operation, and, what is more important, was maintained side by side with a rigid institutionalism, some phases of which we have analyzed, both elements supplementing and rectifying each other. The law was framed, or, at least, such was the ideal, with the conscious intention at the same time to guide the blind magistrate by its provisions and to allow the wise magistrate to supply them with his wisdom.²³ Once promulgated, therefore, the law was a ready instrument in the hands of benevolent and experienced rulers.²⁴ Not seldom was it expanded, bent, or even overridden, to give free play to a higher sense of equity.²⁵ This was, in short, a system of government one half of whose success depended upon the skill and the justice of the individual official, the other half being provided for by minute laws. The first half, it is easy to see, was ever liable to be turned to abuses by corrupt men, and the second always tended to become mechanical and unwieldy. The careful combination devised by the Tokugawa rulers served their aims with rare success, but failed them in the end, for, indeed, no human hand could strike an even balance and effect a complete organic union of the two factors for all time.

So much for the general system. We are now ready to devote our attention to that part of the Tokugawa régime which concerned the rural population, and observe how it

illustrates the general reflections we have made, and how its peculiar conditions reacted upon the entire system.

The peasants were a class destined, as has been said, to be ruled by warriors and in return to support them with fruits of their labor. It was first of all necessary to keep them submissive. There was no thought of ever allowing them to take part in the government of the country or even of the fief. Not only would they be incapable of the work, but it would in all probability result in breaking the very fabric of feudal society. Nor was it a difficult problem to enforce passive obedience upon the peasants, for, habitually employing dull wood and metal as tools, as they do, and depending on mute but irresistible forces of nature, the peasants are always the mildest and most patient class of people. The rank and dignity of the authorities command from them more genuine respect than from merchants in the cities. Political ideas grow but slowly among the peasants. Their mental horizon is apt to be limited to their own interests, which are at once circumscribed and protected by custom. Only when these interests, their only citadel, are unreasonably attacked, they would be seen to lose their equanimity and become as ferocious as an enraged ox. So long as their interests are safeguarded, however, peasants would be a malleable material in the hands of a wise ruler. This was especially the case with the Japanese peasants. They had for centuries been inured to passivity. They were in most instances accustomed to a gregarious mode of living in old hamlets,—a fact which tended to develop fixed social forms and sanctions and a cordial spirit of mutual dependence and assistance among themselves. It will be seen later that this tendency was promoted by the Tokugawa rulers with extreme care. Altogether, this was not a life conducive to independence of thought and action.

Obedience, however, might not be contentment. It was necessary to control the peasants in such a way as to render them, not only submissive, but also contented,—so contented, if possible, that they would counterbalance whatever unstable elements of society there existed in and out of their circle, and throw the weight of their native desire for order and conservatism in the interest of peace and of the perpetuation of the régime.

This double task was at once imperative and difficult, for the Japanese peasants of the seventeenth century were less easily contented and should therefore be appeased with all the greater solicitude, than the serfs of the thirteenth. Not only did they form the bulk of the nation, and were, from the economic standpoint, the support of the entire body politic;²⁶ not only was there a degree of community of interest between them and the warriors, as against the rising burgher class;²⁷ but also, more important than these circumstances, the peasants' position in relation to the land they tilled and to the warriors who drew revenues from the land had materially risen since the earlier period. Under the stress of the continual civil strife that raged before 1600, warriors found that they could no longer retain their rôle of seigneurs over landed estates, where they had for generations lived, in time of peace, amid their serfs, and, in time of war, defended their castles with their retainers. They were now obliged to betake themselves to the castles of the greater lords, to remain in their immediate neighbourhood, and to leave their land to be managed largely by the tillers themselves. From this time on, political conditions²⁸ accelerated the change already begun. By the beginning of the seventeenth century, most serfs had turned freer tenants, and many of the latter had become proprietors employing tenants and laborers.²⁹ A long experience had led the peasants to feel that the lord—and the lord became an impersonal being in the eyes of the peasants living on the suzerain's domain lands—cared much less for the land they tilled than for the dues levied upon it. This was in fact a fundamental point: the fiscal obligation of land, rather than the land itself, was now a controlling principle of the institutional life of the peasant. Between the lord and his land, the tilling of which he had overseen, had now stepped forth the peasant, who had formerly stood behind the land, and the lord's eye had turned perforce from the land to what the peasant should bring to him from it. The peasant had become the virtual, though not theoretical, owner³⁰ of cultivated land.³¹ This was a transitional state of things betokening a greatly advanced social position of the tiller of the soil. For although the process could not in all cases have resulted in his improved material condition, he must nevertheless under these circumstances have become more mindful of his rights and interests.

To illustrate. The lord's right of seizure over land³² had vanished, and even his right of escheat or mortmain, as the medieval jurist of Europe would call it, was very imperfect.³³ Succession by testament was common;³⁴ a collateral relative of the deceased to whom the latter had willed his holding inherited it without purchase-money ever being paid to the lord, and was, in default of a will and of a nearer relative, even compelled to do so, in order that the same dues as before would be forthcoming from the estate. As regards these dues, they were almost all levied on the productive capacity of each holding,³⁵ capitation or house taxes being unpopular and unimportant, a fact indicating how far was the peasant removed from personal servitude to the lord. Regulations concerning alienation of land by sale, gift, or mortgage,³⁶ and its division, were primarily actuated by the motive that the act should not affect the fiscal issues of the land.³⁷ In matters of personal rights, also, the same consideration largely prevailed. Change of residence between different parts of the country was discouraged, mainly because it might introduce elements tending to disturb the unity of village customs, and thereby conduce to unrest and a consequent fiscal derangement.³⁸ Marriage³⁹ was in no way interfered with, so long as it did not directly or indirectly tend to diminish the public revenue of the village. When, in later years of this period, the running away of impoverished peasants became frequent, the lord seldom exercised a right of pursuit,⁴⁰ provided the land deserted by the absconders was taken care of by their relatives or by the village and yielded the same dues as before.

All this points to a condition that deeply and radically affected all classes of the feudal society, and exercised a specially profound influence upon the rural policy of the period. The peasants were, indeed, still the "ruled" class, but it is easy to see that their interests called for the most scrupulous consideration of the suzerain's government. The barons, too, on their part, would court the good-will of the village population within their fiefs, for no lord could hope to wield influence for a long time over discontented peasants. The latter would often find a ready listener in the suzerain himself, who, while openly discountenancing popular riots and direct appeals, would eagerly punish the baron for maladministration and

indirectly right the wrongs of the aggrieved peasantry. Whether the suzerain or the baron, the inevitable criterion of distinguishing a good from a bad lord was the one's regard and the other's disregard for rural interests.⁴¹ And these interests could be studied only with sincere zeal and sympathy, for the peasants would not express themselves until it was too late—until their long pent-up grievances burst forth in violent mobs. The greatest stress was, therefore, laid everywhere upon the need of studying agricultural conditions and ministering to them with justice and skill.⁴² Under these circumstances, it was exceedingly difficult at once to secure from the peasants the degree of submission, and to grant them the degree of satisfaction, which were both absolutely necessary for the success of the régime. The ingenious and thorough manner in which this delicate work was generally contrived to be done by the feudal authorities is worthy of a careful study.

In the first place, the Tokugawa's village administration was an example of extreme paternalism at once kind and stern. It was here that the greatest care was taken in balancing law and equity, inflexible justice and generous discretion. The fundamental conception was that the peasant was at once too passive and too ignorant to provide for the morrow, so that his ills should receive official attention even before he himself perceived their symptoms.⁴³ It was unnecessary, and sometimes dangerous, that he should understand what the authorities were doing for him, for they were afraid that his too much knowledge might interfere with their exercise of equity and arbitrary adjustment. He "should be made to follow," as said Confucius, and as was habitually repeated by the Tokugawa rulers, "but should not be made to know".⁴⁴ The peasants, accordingly, should not be allowed to become over-wealthy, for "if they grew too rich," said a practical administrator, "they would cease to work, and employ poor warriors to till their land, and so the distinction between the classes would pass away;"⁴⁵ yet the moderate holdings of the peasants were zealously protected by law and by precept, so that they would not become too poor. They should know in general, but not in exact detail, how their lands were valued, how their taxes were remitted or reduced in hard years, and what were the finances of the entire fief or domain land.⁴⁶

Nor was the penal law given publicity among them,⁴⁷ and most legal provisions came to them in the form of moral admonitions.⁴⁸ Yet the peasants were fairly well advised as to the general nature of the rights and obligations of their own class and of the officials directly concerned with their affairs. This knowledge was further reinforced by a qualified right granted the peasants to appeal from an unjust official to the baron or intendant, and thence to the suzerain's council.⁴⁹

Much of this paternalism and this limited publicity and protection was extended to the rural population by the rulers, and was utilized by the latter, in a manner at once effective and characteristic of their general policy. Ever since the Reform of 645, the Chinese village institution known usually as *pao* or *lin* had been familiar to Japan. It consisted in dividing the inhabitants of each village into groups each comprising a certain number of house-fathers, who were held responsible for the order, the good behavior, and the performance of the political obligations of all the members of the respective groups.⁵⁰ The institution was copied in Japan after the seventh century,⁵¹ and, despite the general social changes which followed, lingered till the beginning of the seventeenth. Then the early Tokugawa government seized upon it, and forced it on the lower warrior classes and the entire village and municipal population throughout the realm.⁵² The normal group of peasants, usually termed the five-man group, consisted of five land-holding house-fathers living near together, with all their family-members, dependents, and tenants.⁵³ It was continually ordered, and the order was well carried out, that every inhabitant in the village, no matter what his status or tenure, should be incorporated into the system.⁵⁴ That this old institution should now be, as it was, so eagerly resuscitated and so universally extended, was evidently due to a belief based upon the past experience in China and Japan, that the system would enable the rulers to attain with the least possible cost and friction a large part of the aims of village administration—to secure peace and order, to afford the exact degree of control and freedom that was deemed necessary, to insure a prompt return of the taxes, to inculcate the moral principles most desirable in an agricultural society under a feudal régime, and, above all, to hold the people responsible for most of these results.

Let us observe how these things were done through this simple institution. The responsibilities and the rules of conduct of the villagers were made known to them through edicts, public sign-boards, and also oral exhortations given by the intendant or bailiff and the village-head.⁵⁵ The more important of these rules were re-iterated to the peasants with great persistence.⁵⁶ Gradually, from about the middle of the seventeenth century, the older custom of certain warrior-officials to present to their lords written pledge under oath to fulfil their orders, repeating them as nearly as was practicable in the form they had been given, was extended to the five-man group in the village with respect to its duties. By the end of the eighteenth century, there probably were few villages in Japan that did not keep their so-called group-records (*kumi-chō*).⁵⁷ The record began with an enumeration of such laws and precepts as had been repeatedly given to the villagers, and ended with an oath that those would be strictly obeyed and enforced in the village. All the house-fathers put their names and seals after the oath in the order of their groups in the village. The record was then periodically—in some instances as often as four times in the year or even once a month—read and fully explained by the village-head to all the people in his charge. As new laws were enacted, or as the village population changed, the record was revised and made anew, with the usual oath and affixed seals.⁵⁸

These laws,⁵⁹ which were thus published among the people through edicts, sign-boards and group-records, and for the execution of which the peasants were held responsible by means of the system of the five-man group, are among the important sources for the study of our subject. Attempts may be made to reconstruct the rural government under the Tokugawa upon the basis of these laws. It should be noted, however, that they were never the whole of the laws relating to village administration. As has been stated, the penal side of the laws was, except in a few rare cases, carefully concealed from the peasants, the latter being merely told what to do and what not to do.⁴⁷ Nor should it be forgotten that, even after studying penal laws from other sources, we could not be certain that all the law thus collected presented a sound basis for a discussion of the entire subject. In order to obtain a comprehensive survey of the institutional life of the village, it

would seem that one should do three more things from a vastly greater amount of materials. The laws should be interpreted in the light of the social and political conditions which called them forth. Then it should be studied how far the laws were actually enforced, how much they accomplished the result they were purported to bring about, and how they reacted upon the society. Finally, one should carefully examine if there were not certain conditions in the life of the village and of the nation that were too universal or too vital to find expression in the laws or to be materially affected by their operation.

From these points of view, it may almost be said that the first problem of the village administration under the Tokugawa,—of the paternal rule over the responsible village and the five-man group,—concerned its financial affairs, and that most of its other features were so modelled as to facilitate the collection of the taxes. Simple morals were inculcated for the sake of peace and order, and economic life was carefully regulated for the maintenance of moderate prosperity, but the peace and the prosperity subserved steady fiscal returns of the village. Nor is this strange when we consider that the peasants constituted the large class of people whose foremost part in the life of the State was to furnish the means to carry on the government of the nation. The warriors ruled the peasants, and the peasants fed the warriors and themselves. Few provisions of the laws for the village had no bearing, direct or indirect, upon the subject of taxation; few phases of the entire structure of the feudal rule and of national welfare were not deeply influenced by the solution of this fundamental problem. It is, therefore, not impossible, as we are about to do, to treat the whole subject of village government with its financial problem as its center.

If we might be allowed to anticipate a conclusion of this discussion, we should venture to say: it was probably inevitable, but it was none the less a tragic outcome of the Tokugawa régime, that, between the mounting expenses of the government and the falling or, at best, stationary productivity of the soil, the taxes should, as they did, grind upon the peasants with increasing weight, and that this fundamental malady should gradually sap the vitality, not of the nation, but of the whole system of government. It has often been said that had there

been no pressure from foreign Powers causing the downfall of the Tokugawa government in 1868, its days had then been all but numbered, and the statement seems the most tenable on the financial side of the question. That such a result was inevitable appears to have been due primarily to the fact that, from the economic standpoint, the feudal system in general was costly, and that the Japanese feudalism after 1600 was particularly wasteful.

It needs no reminder that feudalism as such would afford too inefficient an economic organization for a government whose growing budgets must be supported only by an increasing wealth of the nation. Agriculture, upon which the feudal society was built, was at the mercy of natural forces, and at its best could not support a large population. What few people subsisted therein could not hope to increase their wealth at a rapid rate or on a large scale, because they were encumbered by regulations designed to maintain rigid and stable classes of society, and by customs which frowned upon sudden departures from the settled routine of life, and because the intercommunication between the fiefs was inadequate, if not restricted. Even when it was tolerably free, its economic value was small, in proportion that money was scarce, credit undeveloped, and capital immobile. Under these conditions, both the population and the wealth of a normal feudal society would, as long as it retained its character, remain almost stationary.

It will, however, require an explanation that the economic organization of Japan under the Tokugawa was abnormally wasteful even as a feudal society. Out of the many circumstances that may be thought to have contributed to this state of things, we may introduce three at this stage of discussion, namely:—the separation of the warrior from land; an exhaustive degree of paternalism, attended by some serious errors, in the economic policy of the government; and finally, a long reign of peace breeding luxury and extravagance. The first of these conditions awaited the Tokugawa at their accession to power in 1600.

(1) Separation of arms from land. It has already been alluded to that the continual turmoil during the period of feudal anarchy in the fifteenth and sixteenth centuries had forced many a warrior to become a professional fighter, and to leave

the country and to live near his lord's castle. The introduction of gun-powder about 1543, and the consequent progress in organized tactics, accelerated this process. A further impetus was given by Nobunaga and Hideyoshi, who for political reasons forced large bodies of warriors to migrate from one place to another. During the period of civil wars, the military service of the vassal was often compensated for in money or in rice. When a baron apportioned a piece of land to his vassal, it often meant that the latter was granted the right over the dues from the land (所當の知行), instead of over the land itself (下地の知行). In this case, he was far from overseeing its cultivation in person, for he lived in his lord's castle-town.

This custom had so long been established in 1600, was so strongly reinforced by the increase of dispossessed warriors of the Osaka party in that and subsequent years, and indeed so much facilitated the control of the warrior class, that the Tokugawa found it not only impossible, but also impolitic, to return to the older system of feudal arrangement.⁶⁰

It was a natural order of things that the congregation of warriors in the castle-towns, and, as it was now required of a large number of warriors in each fief, in the assigned quarters in Edo, should tend toward a greater cost of living than before. What was more important, the separation of arms and land made the collection of taxes more indirect and expensive than in former days. It was common in the early years of the fourteenth century that a knight with his attendants on foot could be maintained on seven acres of the average rice-land. Such a condition was, however, regarded unthinkable in the Tokugawa period,⁶¹ and the difference was generally attributed⁶² to the greater cost of living and of tax-collection due to the warrior's absence from the country. It will be seen later how the otherwise expensive system of indirect collection through several grades of officials led, also, to inevitable leakage and corruption.⁶³

(2) Economic paternalism. In their zeal at once to secure rural tranquility and to insure steady returns of the taxes, the Tokugawa rulers continued throughout the period to enact and enforce minute regulations of agriculture, which must have had a benumbing effect upon the economic sense of the people. In one fief, the hereditary estate of the peasant

family was limited to between 500 and 5000 *momme* in productive value, representing probably about 1.25 to 12.5 acres of the average rice-land, and in few places in Japan estates smaller than 10 *koku* in assessed productive value, or perhaps about 2.5 acres of the same quality of land, were allowed to be divided amongst children.⁶⁴ Agriculture was encouraged with great care. The villagers should look after the fields of those who were unable to work, and all should equally share the disaster of a drought or an inundation. Subsidiary occupations, especially the production and manufacture of silk, were in many places fostered and controlled.⁶⁵ Careless cutting of bamboo and trees,⁶⁶ the raising of useless and harmful crops, including tobacco,⁶⁷ the building of new houses upon cultivated land, and a host of other actions, were forbidden on pain of joint punishment of the village or the group. Public granaries⁶⁸ were established everywhere, and the manufacture of *sake*⁶⁹ was kept within bounds.

Other occupations received perhaps more interference and certainly much less fostering care than did agriculture. The change of a peasant into a merchant was not permitted.⁷⁰ The dimensions of woven fabrics, the output of merchandise, and the scale of wages of several forms of labor, were often fixed by law, while commercial transactions at rates higher or lower than current prices were declared illegal.⁷¹ The repeated debasing of coins by the Edo government, and the unfortunate custom of allowing certain cities to issue copper coins and many fiefs to circulate paper currency,⁷² must have seriously interfered with the growth of credit and legitimate commerce, and reacted unfavorably upon the economic life of the village.

Most stringent were restrictions relating to communication. There were many barriers at strategic points on the approaches to Edo, and, besides, minor passes impeded travel between and even within fiefs.⁷³ Indeed, the very village could be considered a barrier in itself, for no unknown character should find in it even a night's lodging, it being illicit even for a hotel to keep an unaccompanied stranger for more than one night. Nor should the peasant go out of the village to pass a night elsewhere without an explicit understanding with village officials. There is reason to believe that the regulations of communication were enforced with a large measure of success.⁷⁴

It would be unjust, however, not to appreciate the probable motives which had compelled the authorities to issue these paternal measures of economic control. The prosperity of the warrior and the peasant depending on the success of the rice harvest, their interests were, especially in bad years, largely common, but antagonistic to that of the rice merchant.²⁷ If, in years of rich crops, the peasant rejoiced and the warrior suffered, for the latter's income in rice would sell cheap, even then the merchant, who bought the grains at a low price, pleased neither the one nor the other. It was considered essential for the officials to insure the steady, mild prosperity of the farmers, and, at the same time, to prevent the merchants from profiting at the expense of the rulers and the bulk of the ruled. Few things were more dreaded as a dissolvent force of social organisation, than the passing of the control of the economic life of the nation from the warrior to the merchant.^{74a} It is an important phase of the history of this period, which falls beyond the scope of this paper, that this perilous situation steadily grew up despite all the effort of the feudal government to arrest its progress. The presentiment felt by the authorities of this impending crisis is reflected in the nervous zeal with which they continually issued strict economic measures, some of which have been described.

(3) Peace and luxury. It would be difficult to gauge the evils of so extreme a form of economic paternalism, for, immense as they must have been, they were largely negative. Flagrant, positive evils resulted from the long period of peace lasting for more than two and a half centuries,—the golden peace for the creation of which the founders of the Tokugawa régime had exhausted their wisdom, with so large a degree of success, and which enabled the brilliant civilisation of the Edo period to rise.

We have space enough merely to allude to the enormous expenses which the peace policy of the suzerain entailed upon all the barons throughout Japan. The baron's own income, after deducting from it the emoluments for his retainers, was seldom large, and yet he had to bear sundry expenses very onerous in proportion to his means, and, besides, render his regular, though seemingly voluntary, dues to the suzerain. Other occasional requisitions from the latter for special purposes were a source of continual embarrassment to the baron.

Many a baron was thus obliged to borrow heavily from his vassals, who could rarely expect reimbursement. Unfortunately, when the circumstances of the baron and the vassals became more straitened, their luxurious habits had advanced too far to be checked, much less to be eradicated. What had greatly tended to bring about this condition was the fact that each baron was obliged to pay his annual visit to the suzerain's court at Edo with his full retinue, and to maintain two establishments worthy of his rank, one at the Capital and the other at his castle-town. Edo was the fountain-head of luxury and extravagance, and its fashions were through this system of continual communication quickly diffused into all the chief centers of culture. There was little doubt that the system helped the prosperity of the Capital and of the towns on the high roads, but at the expense of the warriors and peasants. It was the suzerain's policy to impoverish the barons, and it was the barons' part to replenish their coffers from the peasants. The periodic absence of the baron and some of his vassals at Edo had also resulted in many a case in conspiracy or corruption among the retainers in the fief, which again bore heavily upon the tax-paying class.⁷⁵

In the meantime, the suzerain's own finances at Edo, despite the great care with which the fiscal administration of his domain lands through his intendants was supervised, showed deficits that swelled as the luxury of his court progressed. They were barely balanced by the seigniorage derived from an increasing adulteration of the gold and silver currency.⁷² Many of the suzerain's immediate vassals residing at Edo were plunged into abject poverty.⁷⁶

Nor should it be forgotten that there was something radically anomalous in the very idea of a perpetual tranquillity of a feudal society—an "armed peace," or, peace of an agricultural community guarded exclusively by a warrior class which did neither fight nor produce. All the numerous sumptuary laws⁷⁷ enacted during this period for the warrior classes could not check the growth of luxury and extravagance of the unproductive and unoccupied men of arms. Indeed, sumptuary laws in a society where one class produces at best a fixed amount of wealth, and the other spends it on an increasing scale, are highly significant. Here they are always necessary and always ineffective.

All these evils were greatly intensified by the luxurious habits that had seized upon the peasants themselves. Before we discuss the effects of peace and luxury upon the economic life of the village, let us first observe how the peace itself had been secured therein.

Here, again, the paternalism of the government was, for evident reasons, hardly less exhaustive than in other matters of village administration. The family institutions—marriage, adoption, succession, and inheritance—were well guarded and controlled. The group and the entire village were made to be actively interested in the peace and in the maintenance of each household.⁷⁸ The peasants should watch and correct one another's conduct,⁷⁹ and disputes should as far as possible be adjusted by mutual conciliation.⁸⁰ Private expulsion of an unruly member was rarely permitted,⁸¹ while sales of persons were illegal.⁸² Virtues which were inculcated among the villagers, and for the practice of many of which they were made responsible, were: filial piety, concord within the family, diligence, patience, obedience, charity, and mutual helpfulness in the hamlet.⁸³ It was a common duty of the village to provide necessary measures for preventing and extinguishing fires, and arresting robbers and disorderly persons.⁸⁴ Most heinous were riots of all kinds; for the mobbing of an intendant's office, for example, not only were the culpable parties beheaded, but also the village-officials were fined, deprived of land-holdings, or banished.⁸⁵ Peasants were strictly forbidden to own fire-arms or to carry swords.⁸⁶ It has already been shown that no one might without permission lodge a stranger or himself stay out of the village even for one night.⁷⁴ All the servants hired into the village had personal sureties responsible for their good behavior.⁸⁷ Catholic converts were excluded most rigorously.⁸⁸ Dealings in smuggled foreign wares were forbidden.⁸⁹ No books interdicted by the censor were to be admitted,⁹⁰ while the study of Confucian classics by the peasants was discouraged.⁶ Festivals should not be celebrated on a larger than the usual scale, and no novel religious sects or practices should be initiated. The Buddhist church, whose rights were very narrowly circumscribed, was utilized as an agent of peace and contentment.⁹¹ It is not possible to enumerate other details of the careful measures which were provided for the purpose of maintaining the unity of village customs and population.

It is more important to know that not only did these measures successfully insure the social stability for which they were intended, but the effects they produced contained evils which could not have been entirely foreseen, but which, once grown, no new laws could eradicate. The artificial, dead peace, together with the debased currency of the period, had continually tended to breed luxury even among the toiling population of the village, and, furthermore, luxury did often so operate as to reduce the productive capacity of the peasant family. The logic of this serious condition is clearly shown in an outspoken memorial⁹² written in 1790 by a man in the Sendai fief who was familiar with rural conditions of the period and strove to improve them.

"Formerly", says he in one passage of this interesting document, "when the farmer could bring up two, three, four or five sons, all the younger sons were hired out by other farmers as soon as they were old enough, saved their wages, and married or were adopted into families. There was everywhere an abundant supply of cheap labor for the field. The farmers could also keep horses, which yielded manure. The productive power of the soil was therefore large, and rice was plentiful. They could likewise afford daughters. Marriage was inexpensive, the population increased at the normal rate, and the Heavenly Law was fulfilled." But now, continues the writer, marriages cost the man nearly 30 *kwan* and the woman's family almost 40. It being increasingly hard to maintain a household, the average peasant seldom had more than three children, and the poorer tenant only one child. Labor was scarce and dear, having risen from 5 or 6 *kwan* to more than 10, and rising every year. Horses were fewer, and manure less. It being in many instances impossible to take care of one's own holding, it was rented to some one else who seemed willing to till it, but who would be inclined to neglect the land that was not his own. In recent years most land yielded on the average only 15 to 16 *koku* per *chō* (74.5 to 79.5 bushels per 2.45 acres), instead of the former average of 20 (nearly 100 bushels). Yet the peasants understood little the cause of their trouble, and did not abate their thoughtless extravagance.

It is true that this document speaks of conditions in a particular fief, but, while some districts fared better, there

were others whose lot was still worse.⁹³ The universal and persistent enactment of sumptuary regulations for the rural population⁹⁴ has led some writers to fancy that the Japanese peasants must have been a model of frugality, but it is another evidence of the prevailing trend for needless luxury and the increasing difficulty of checking it. The village life under the Tokugawa would, of course, be considered extremely simple, according to the modern standard, but it was in many places positively extravagant in proportion to their limited earning capacity.¹¹⁵

To sum up the forgoing discussion of the wastefulness of the Tokugawa feudalism. Peace and luxury led the peasants to spend, and the same condition, added to the peculiar feudal arrangement of the period, impelled the warriors more and more to absorb, the wealth of the nation that, owing to the exclusion of foreign trade and to the inadequate economic organisation of society, could not be increased correspondingly, and did in many instances diminish. We shall discuss briefly how these conditions influenced the system of taxation, and how the latter reacted upon the life of the village.

The taxation of the Tokugawa period clearly reflects the important characteristics of its feudal system. The separation of the warrior from land had resulted in the peasant's financial obligations acquiring the general appearance of being public taxes to the government, rather than personal dues to the lord. The State as a whole was largely feudal, but smaller districts were more bureaucratic than feudal, and it is here that one has to discover the working of the system of taxation. There was very little in the whole system that savored of obligations due directly from the peasant to the lord. There were no banalities; whatever corvée originated in the personal relationship had become overshadowed by or incorporated into the corvée for the public; the peasant had no opportunity to entertain the lord at his own house, and was explicitly forbidden to entertain his agents; and confiscations of land were rare and meant merely changes of cultivators.

The principal tax was the land-tax, levied, as has been said,³⁵ not upon each peasant as an individual person, but on the officially determined productive capacity of each holding. From the purely fiscal point of view, the peasant would be

considered an instrument to make the holding continue to yield what it should.

The Tokugawa inherited this system from the earlier feudal ages, which in their turn had accepted, though with serious changes, the Chinese notion of land-tax adopted in Japan in the seventh century. We are unable here to trace the interesting evolution of this tax in Japanese history, but the following data would be necessary for an understanding of the Tokugawa system. The land-tax was originally, when it was copied from China, a capitation-tax, paid by the head of each family as a unit, but assessed on the basis of the equal pieces of land allotted to all the peasants in the family above five years of age. From thus being a personal imposition levied through the family, the tax changed, during the transitional and the first feudal periods, into a tax still levied through the family (now nearly identical with the house)⁵¹ but assessed on its land-holdings. From this point on, this fundamental nature of the tax remained constant, but the method of its assessment, which had been made uncertain at the aforesaid change in the nature of the tax, gradually tended to become uniform and definite. At length, under Hideyoshi, at the end of the sixteenth century, the principle had been firmly established that the tax on each holding should be assessed at a certain rate upon the annual productive capacity measured and recorded in terms of hulled rice.⁹⁵

In the meantime, the ratio between the tax on land and its annual productivity, which in the eighth century was at most 5 per cent., had risen high during the thirteenth, due largely to the fact that the land-tax superseded other taxes, and then remained substantially the same till 1600 at 50 per cent. more or less. A strong tradition had grown up that the tax should not be raised much beyond this limit. Nor could this rate, high as it may seem, be considered extortionate from the point of view of the period. For, it should be remembered that, in the conception of the feudal lawyer, the peasant was the virtual but not the theoretical owner³⁰ of the land he tilled, and his land-tax was rather a rent than a tax. Even as a rent, the rate could not be said to have been always excessive. When, after the fall of the feudal government, a complete survey of the cultivated area of Japan was made between 1873 and 1881, it was discovered that an

annual tax of 3 % of the average assessed value of agricultural land would give a sum equal to the land-tax levied under the feudal rule.⁹⁶

In 1600, when the Tokugawa came to power, they accepted in general the current method of assessing the productivity of land and the prevalent tax-rate, and modified and elaborated them with their characteristic care. While they were in no position to initiate a much lower rate of taxation, they showed an unmistakable disposition to lighten the burden of the peasant by various devices, some of which follow.

(1) The annual productive power of each land-holding was measured with scrupulous care, and determined usually a little below its actual capacity.⁹⁷ What was more, there was a constant tendency to make the tax-rate itself definitely fixed beyond the caprice of the collector. This rate, even including the minor levies⁹⁸ connected with the main tax, was, at least in the domain land, often below 50 %.⁹⁹ The assessment was probably at the time considered as not unreasonable. The apparent iniquity of the feudal tax arose, not so much from its rates, as from the method of its collection, and from the too infrequent revision of the recorded productivity of the holdings. The former of these difficulties will be discussed in the Notes^{102 & 103}. As regards the latter, the probably complete records made during the first half of the seventeenth century, and the confessedly partial revision of the early eighteenth century, seem to have remained unaltered except in cases of urgent need. It is easy to see that both the area and the productivity of most pieces of land must have changed much during the more than two centuries of the régime. That such was the case was abundantly proved during the recent survey just referred to.¹⁰⁰

(2) The Tokugawa government allowed a greater freedom than in the earlier period of partially commuting the land-tax into money. Local customs varied on this point, but frequently as much as half the tax was thus paid in money.¹⁰¹ That this was an important gain for the peasant will be seen when we note that the village was held responsible for the collection¹⁰² of the tax, and for its transportation, either to Edo, if the village was situated in a domain land, or to the lord's store-houses, if it formed a part of a fief.¹⁰³ This burden remained oppressive, for no region was permitted to commute

all its taxes into money, but the burden would have been greater but for the limited commutation allowed.

(3) The old system of remitting taxes for special reasons was minutely elaborated under the Tokugawa. Remissions partial or entire, temporary or permanent, were granted to wood and waste land, land reserved for public purposes, newly tilled land, land once recorded but long since non-existent, land wasted by natural calamities, and the like.¹⁰⁴ In this connection may also be mentioned the loans of seed-rice and rice for food issued by the authorities in bad years.¹⁰⁵

In fact, the land-tax could not, from its very nature and from the strength of the customary law, be increased beyond, say, 60 per cent., at most, of the estimated productivity of the soil. There were other items of taxation, however, which could be and were, especially in fiefs, expanded almost indefinitely. These were: corvées, sundry customary taxes, and special taxes on products and occupations. Generally speaking, all the three kinds of taxes were apt to be more uniform in the domain land than in the fief, and, within the latter, in the baron's own land than in the land granted to the vassal.

The corvées were of two different kinds: labor for the baron or his vassal, whichever it may be, who had the superior right over the land in which the peasant lived, and labor for the public. The former was rendered in repairing the fences and thatched roofs of the lord's buildings, transporting his wood for fuel, and the like; the latter consisted mainly in repairing roads, bridges and other public works. The corvées were levied either on the holding in land or on the adult peasant, and were often commuted in money. They were sometimes, in the first part of the period, partially paid for, and the expenses for extraordinary public works, as, for example, after a flood or an earthquake, continued to be supplied by the authorities. The general tendency in the fiefs was, however, toward a gradual increase of the imposition of unpaid labor. In 1616, the corvée in the Akita fief was 236 day-men per 100 *koku*; in 1845, it was in the Sendai fief as high as 6000 or more day-men. In 1799, the Mito fief employed nearly two million day-men out of the peasant population of two hundred thousand.¹⁰⁶ These figures do not include the poorly paid service of the post-horse system, which proved a great burden to peasants near the high roads.¹⁰⁷

Of the customary taxes, some, as, for example, straw, bran, hay, and wood for fuel, seem originally to have been used, at least in part, in connection with the *corvée* for the lord, but were later commuted into rice and money, and became independent dues. There were several other taxes, including dues for the baron's groceries, for the bait for his hawks and fodder for his horses, for the performance of Shinto ritual services at Ise, and the like, which, beginning as incidental or local dues, became customary and universal within the fief. The villages of the domain lands paid fixed taxes whose issues were intended for the maintenance of the post-horse system, of the officials in charge over the suzerain's store-houses in Edo, and of men employed in his kitchen, all levied on the peasant holdings. On the same basis were imposed, in both domain lands and fiefs, dues paid in beans, a kind of sesame, millet, and glutinous rice, as well as those levied nominally on certain domesticated plants, on the use of grass on wasteland and of ponds and rivers, and many other items. These taxes would be considerable in the aggregate, even if each was small and did not increase, but in many a fief some of them were neither small nor fixed. At Mito, for instance, the bean, sesame, and millet taxes alone amounted to nearly 10 per cent. of the recorded annual productivity of land; at Akita, the bran, straw, and hay taxes, converted into money, increased from 4.8 lbs. of silver per 100 *koku* of the productive value of the holding about 1650 to 32.3 lbs. about 1860. These were conspicuous, but not extreme, examples. Perhaps not the least objectionable feature of the customary taxes was that frequently they were collected by officials specially despatched to the villages at a time when the latter had already paid their annual land-tax and were again almost as poor as before the harvest. The fear that the main tax might suffer if the customary dues were collected at the same time with it was so great that the latter were usually preceded by the former. Nor were they always consolidated, as they sometimes were, to a large saving of the expense of collection. Commuting in money was not always a blessing, for the rates would be unfavorable, particularly when the taxes had been, as they often were, farmed out to private collectors.¹⁰⁸

The evils of farming were probably more frequent with the taxes on various secondary occupations and products other

than the grains. These dues were extremely numerous in every fief or domain land. They did not always fall directly on the farmers, but nevertheless redounded to them in the form of increased prices of articles. As we come nearer the end of the period, especially after 1800, we see barons' governments recklessly multiplying the kinds of taxes of this class.¹⁰⁹

Over and above these multifarious taxes, there were expenses of the village administration to be borne, including the salaries of village-officials, repairs of the public works of the village, cost of policing the village against fire and robbery, of entertaining visiting officials, of making petitions, and the like. They were levied either on the holding, on the individual peasant, or on each peasant family. They were at first almost negligible, and, in the suzerain's domains, where the accounts of the village were to be open to the inspection of the peasant, continued to be comparatively light. In some fiefs, however, it was not uncommon that, owing to the venality of village and higher officials, the village expenses equalled or exceeded the total amount of taxes for the fiefs.¹¹⁰

That the bribery of the officials was a frequent and serious evil is reflected in the continuous repetition of the instructions issued to them on this point and in the persistent order to the peasants to impeach corrupt officials. Unfortunately, however, there was every temptation for corrupt practices to grow up between the feared but ill-paid official on the one hand and the passive and blindly self-interested peasant on the other. For a considerate though illegal act of an official at the assessment or collection of a tax, a farmer would be induced to entertain him at his house, to bribe him, to sell him things at a nominal cost, or to borrow from him at usurious rates. Examples of self-denying rural administrators were not wanting, but more frequently both people and officials came to regard taxation as a field for secret dealings and understandings.¹¹¹ These easily escaped the notice of special supervisors that the suzerain and the baron occasionally sent in circuit about villages,¹¹² and continued to raise the expenses of the peasant.

Moreover, it should be noted that, both the suzerain and the baron ordered special irregular requisitions in addition to the regular taxes. Indeed, it was one of the suzerain's favorite methods of weakening the barons to impose requisitions upon the fiefs for extraordinary needs, such as the building

and repairing of the temples at Nikkō and Edo and of the Imperial palace, his own journeys to Kyōto, the reception of foreign envoys, and, in the later years, the defense of the coast against European aggression. Besides these requisitions from Edo, which were borne ultimately by none but the tax-payers, the people of specially ill-governed fiefs were subjected to illegal and irregular exactions by warrior-officials, some of whom even went to the extent of collecting the next years' taxes in advance.¹¹³

All these numerous taxes—levied in so complex a manner on the peasant holdings, families and individuals, paid at so high rates in money, labor, rice and other products, and, above all, increased so continuously in many of their secondary items,—were, nevertheless, insufficient to meet the growing expenditures of the government.¹¹⁴ Still more unfortunately, when the tax-rates, originally high enough, were being raised, the productive power of the peasant family was, as will be remembered, already declining. If, in 1650, from his holding of 1 *chō* (2.45 acres) of rice-land, a peasant paid out of the average crop of 20 *koku* (about 100 bushels), 5 *koku* of the land-tax, 2 or 3 of the other taxes, and netted the remaining six-tenths of his income, he would, in 1800, be able to raise but 15 *koku* on the same land, while his land-tax and other dues had risen to 10 or more and village expenses absorbed at least 5. He had become a mere tool to move the spade.¹¹⁵ How was he to provide for his farming implements, horse and harness, incidental expenses, irregular imposts, sickness, and calamity? Where was the money to buy the very manure? This last question was serious, for although, it is true, the Japanese peasant was fortunate in being able to rely so largely on human labor and human manure, it was none the less becoming more and more difficult to go without buying other manure, as new land was tilled, rotations of crops were discarded, and the farming was growing yearly more intensive.¹¹⁶ When the farmer wished to borrow, he had to submit to rates of interest as high as 25 or 30 per cent. per annum, so that, it was said about 1720, a debt of five *ryō* would ruin his family in five years.¹¹⁷ That the average peasant did subsist despite these alarming conditions was due to the sundry crops of cereals and vegetables he was obliged to raise, and to such subsidiary industries, including the silk-culture, as he was

compelled to pursue.¹¹⁸ These, of course, if they brought to him the needed income, also made his otherwise arduous life toilsome to the extreme.¹¹⁹ Signs of his weariness, both material and moral, are visible from the early years of the régime, and continued to multiply through the period.¹²⁰ Conservative as he naturally was, his fortune altered and his land changed hands with much ease.¹²¹

One will now be able to appreciate the deeper significance of those minute measures of economic and moral paternalism of the feudal authorities which were discussed earlier in this paper. It was by dint of these measures that the meagre prosperity of the peasant might be maintained at all. The government was not, however, content with negative orders alone, but also eagerly encouraged the tilling of new land, putting restrictions only where they were necessary,¹²² and, it must be admitted, succeeded in making the acreage of cultivated land probably twice as large at the end of the period as at the beginning.¹²³ It would be difficult to overestimate the importance of this great fact, and yet it was not a pure gain to the peasant. The consequent decrease of waste-land deprived him much of the manure which Nature had afforded in the form of decayed hay, while at the same time more manure than before was needed in his increasingly intensive farming.¹¹⁶ Also, enlarged crops of rice throughout Japan tended, except in years of famine, to check the price of this cereal, which the farmer sold, from advancing in proportion to the continual adulteration of coins and rise of prices of other things, which he bought.¹²⁴ Unfortunately, too, there was little outside market to which surplus rice could be exported, for Japan's door was closed almost totally against foreign trade. Nor should it be forgotten that so long as the principal form of agricultural labor remained manual, the very limit of the working capacity made an indefinite expansion of the cultivated area a physical impossibility. Small as was the average landed estate in Japan, it seemed in general to have been even too large for the holding peasant to manage.¹²⁵ It is highly interesting to see that this fundamental condition served to make Japan persist as a country of essentially small farming, in spite of the universal need for more wealth. This condition not only tended to limit the size of the estate of the average peasant, but also, together with the taxes too

high in relation to the rent, made it an unprofitable investment for the rich to enlarge their landed properties.¹²⁶ This natural equilibrium was only the more strongly insured by the restrictions imposed by law upon the alienation of land.

The selling and mortgaging of land was, indeed, a necessity for the penurious peasant. The authorities, in their anxiety to prevent aggrandisement by the rich few, forbade a permanent sale of old land, and restricted mortgage.¹²⁷ However, "without free sale of land," wrote Tanaka Kyūgu, about 1720, "what province or what district, whether in a fief or in a domain land, would be able to pay all its taxes?" Mortgages often meant permanent transfers, and always were attended with high rates of interest. Hence, illicit or specially permitted sales were effected under all conceivable devices to elude the law.³⁶ It should not be imagined, however, that the peasant cheerfully parted with his hereditary holdings of land. On the contrary, few things were done more reluctantly than this extreme measure, which deprived the farmer of the only material basis of his humble status, lowered him in the eyes of his neighbours, and disgraced him in the memory of his ancestors. Thus the peasant struggled on between his family pride and his penury, and between the restrictions of sale and mortgage and the forced necessity of modest livelihood. The general tendency among the rural population was not towards a greater inequality, but towards a continual change of fortune within limited bounds.

The loss of the peasant estate was liable to be followed by more regrettable circumstances. While the poor peasant might be hired by a more fortunate neighbour as farm-hand, he oftener chose to migrate to a city and take service under a warrior or a merchant, for it would give him a higher wage with less labor than on the farm. When he returned, he would have acquired the speculative point of view and the extravagant habits that ruled in the larger cities. He thus carried about him a certain restless and flippant air, and the half-exhausted inhabitants of the village contained elements susceptible exactly to this sort of influence. Soon every part of the country came to feel a longing for easy money and easy life. From the end of the seventeenth century, the supply even for menial service in the warrior's or merchant's household was growing

scarce. In order to remedy this difficulty, the authorities, who in the earlier years had taken great pains to forbid sales of persons and to limit the terms of personal service, were now obliged to modify the law to a considerable extent.¹²⁸ Every district, if not every village, contained landless persons who would live rather by speculation, trading on popular superstitions, contracts, gambling, fraud, or robbery, than any from of honest labor.¹²⁹ Especially, provinces near Edo were infested with the most desperate classes of brigands.¹³⁰

These dangerous elements in the rural population made themselves felt in years of famine. They led or joined discontented peasants, hundreds or thousands of whom would rise in mobs, as it often happened in different parts of Japan, and everywhere in 1787—8, and destroy and rob merchants' establishments and demand radical changes of prices. As was characteristic with uneducated peasants, they were on these occasions extremely foolhardy, coarse and cruel, but, when confronted with strong armed forces, broke down abruptly.¹³¹ It was in order to prevent these events that good rulers filled public granaries in ordinary years, and in famines opened them and fed poor peasants on generous scales.¹³² A success of these measures was always considered a mark of wise rural administration, for it was tacitly understood that the people should not be expected to be able to provide for their own needs in hard years.

Riots took place only at unusual times. What was of continual occurrence in all parts of Japan from the beginning to the end of the Tokugawa period was the desertion of the impoverished peasant of his ancestral home and hamlet. In ordinary years, the estate of the runaway would be cultivated and its taxes paid by his relatives or village,^{33, 40} but at every slight increase of hardship such large numbers would abscond that, despite the rigorous laws of the joint responsibility of the village, much cultivated land would be laid waste, or at best be thrust into unwilling hands and decline in productivity. A literal enforcement of law would only increase the number of runaways. Nothing is more significant of the rural government under the Tokugawa than this subject of the desertion of the peasant.¹³³

The peasant wishing to run away was apt to find a ready solution of his problem in the multiplicity of land tenures that

prevailed in feudal Japan. There were, besides the estates of civil nobles and of religious institutions, the suzerain's domain lands, the baron's fiefs, and lands apportioned to some of their vassals, with a great diversity of financial laws and customs.¹³⁴ The deserter from a fief might pass into a domain land, as it often took place, or the reverse. He might also pass from the baron's own land to land held by one of his vassals. It was not uncommon that a vassal's land was situated adjacent to, or even in the same village with, a holding of his lord. A destitute peasant in the latter would either in some manner transfer the title over what little patches of land still remained in his hands to a person in the vassal's territory, preferably to its manager, who was generally regarded one of the most sinful of all men, or else himself move into the territory. The process of removal might also be reversed, according to the circumstance.

One remarkable fact in the economic history of this period is the apparently slow increase of population beside a great extension of the area of cultivated land. The latter increased from perhaps 5000000 in 1600 to more than 11500000 acres at the end of the régime,¹²³ while the former rose from 26060000 in 1721 to only 26900000 in 1847.¹³⁵ Allowing for the probable inexactness of the official statistics,¹³⁶ it is worthy of note that, after the middle of the eighteenth century down to 1867, cases of considerable increase of population in the provinces are rarely met with.¹³⁷ Evidently the terrible famines which visited Japan repeatedly at the end of the eighteenth and the beginning of the nineteenth century decimated the people.¹³⁸ For under no condition would an isolated agricultural community be so helpless as under a universal failure of crops and famine. Yet it is striking that the nation should have been so slow, as it was, to recuperate. The successive famines reducing the population raised the wages, it was complained, but the natural equilibrium which should be expected did not follow. In a few fiefs, the population slowly increased between the famines and the end of the period, but their taxable population actually decreased.¹³⁹ An explanation would suggest itself that it was the small land-holding peasantry, rather than the total population, that did not increase. It has already been shown that circumstances led peasants in many places to have recourse to illicit

sales and mortgages, to menial service to the merchant and warrior classes, to irregular modes of life, and to desertion. Not a few turned peddlers and petty merchants, much against the policy of the government,⁷⁰ and thereby created more intermediate steps between the producer and consumer, raising prices and producing nothing.

There were not absent certain forces that counteracted the tendency of the taxable population to remain stationary. Among these may be mentioned the conscious measures adopted in many districts to increase their peasant population, either by generally good administration, by forbidding infanticide and giving bounties for births, by inducing people of other classes and districts to settle down as farmers, or by encouraging the opening of hitherto uncultivated land.¹⁴⁰ Besides, the laws restricting changes of residence and sales of land, the high taxes of land discouraging aggrandisement by the rich, the general economic conditions still too little advanced to make the comparative disadvantage of the agricultural occupation overwhelming, and, also, the tenacious family institutions breeding conservative views of life,—these circumstances, too, must have tended to make the peasant think twice before abandoning his status. In the main, however, nothing could resist the two mighty forces that silently but surely carried the régime to its destiny. The first was the fundamental question of land *versus* population. If the average rice-land, such as formed the basis of taxation under the Tokugawa, was capable of supporting the population at the rate of one person on every one and a quarter acres,¹⁴¹ it would have taken thirty million acres, instead of the five to eleven and a half millions of the cultivated area during this period,¹²³ to maintain Japan's rural population of about twenty-four million souls. The actual rate was only one half acre per head.¹⁴² It is true that potatoes, oranges, grapes, cotton, and a few other crops more valuable than rice were raised in some districts, but these were, except the first, purely local, and their cultivation was generally not allowed to encroach upon that of rice. It is also true that the government was alive to the danger of over-population, and forbade indefinite divisions of estates,^{36 & 45} but this measure created undesirable social conditions among the younger sons of the peasant.¹⁴³ It must be admitted, too, that the peasant family could and

usually did undertake the silk-culture and other secondary occupations, and, indeed, these were the saving elements of the rural life. Nevertheless, one can hardly avoid the general conclusion that the Japan under the Tokugawa contained a population as large, if not too large, as could be supported by her intensive agriculture.

The second fundamental question was the productive power of the soil *versus* the expenditures of the government, the latter increasing and the former relatively decreasing though perhaps absolutely increasing.¹⁴⁴ The economics of the nation were inadequate to support the finances of the State. One has but to remember with what unceasing effort, though with ultimate failure, the paternal rulers strove to bridge the widening gap with the labor of the peasant, whom they caressed, exhorted, threatened, and wearied.

In conclusion, let us, from the historical point of view, suggest a few other lines of criticism of the régime than have already been touched upon. One may attempt to judge the merit of a movement by comparing its final results with its original objects. Ask, therefore, if the ingenious and elaborate polity of the Tokugawa, so far as it concerned village administration, succeeded in attaining its primary object: namely, to secure the submission and the contentment of the peasant population to a degree that it would cheerfully and without friction contribute the fruits of its labor to the maintenance of the warrior class, and to the perpetuation of the power of the Tokugawa.

To this general question no impartial student would hesitate to return an affirmative answer. It was nothing short of genius in statesmanship that wove the great fabric of the Tokugawa government; it completely overwhelmed the lawless elements of which the Japan of the seventeenth century was full, and continued without serious interruptions to exercise an almost absolute control over national affairs during the rule of fifteen successive suzerains. The profound peace thus brought about enabled a large part of Japan's arable land to be turned to cultivation, numerous arts and industries to be built up, and a highly diversified civilization to be developed

and diffused among the people. If this wonderful régime failed to prevent the rise of certain evils, they would be found to have been largely due to the fact that the government was essentially feudal, and that it had to be built upon the existing conditions of the family and society. Nor did the evils harm any one so much as they did the suzerain's own government.

It would, however, be unjust to ignore the evils, even if we lay aside the question how much they were within the moral control of the suzerain. They were many, and some of them have been of immense magnitude. To be brief. Just as the suzerain's policy toward the feudal classes had subdued them at the cost of their true vigor and their genuine loyalty to himself, so his control of the peasants stifled their enterprise, limited their wealth, and levelled down their conditions. If they did not rise in a general revolt, it was because they were thoroughly deprived of not only the opportunity, but also the energy, to protest. When at last the national crisis came in the middle of the nineteenth century, just as the feudal classes chose to make no serious effort to defend the waning power of the Tokugawa, but, on the contrary, furnished men to efface it, so the peasants, also, proved surprisingly indifferent. The great Revolution was begun and consummated by discontented warriors, with the rural population too weary and too meak to lift a finger in the cause of their own liberation. It has been said that the great reform was accomplished without a drop of the peasants's blood being shed, but the fact does not reflect honor upon them. They are still largely passive under the new rights¹⁴⁵ that have been heaped upon them. What has been training them since the Revolution is not so much their new political power, for as yet hardly one in every forty farmers has a vote,¹⁴⁶ as the national system of education, their amalgamation with the other classes of society, which is growing apace, and the object lessons in public interest taught by the stirring events that have transpired about them in the East.

If, however, the peasant has emerged from the feudal régime with little added wealth and energy, he has also inherited from it two important legacies: a moderate but secure holding in land, and a wonderful capacity for discipline. These are the great material and moral debts of the new age to the old. History will probably tell of what immense value the heritage has been for the upbuilding of a steady and collected nation.

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No attempt has been made to translate the title of each work, but its nature is briefly indicated in square brackets.

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57. *Wata ken-mi shi-yō chō*, 巳々檢見仕様帳, [notes on measuring the productive power of cotton-land in Yamato, Settsu, Kawachi, and Idzumi], compiled by Ōno Chū-sai, 大野忠齋. No date. Manuscript. 1 vol. (o. s.)

58. *Chi-so kai-sei hō-koku sho*, 地租改正報告書, [report to the Prime Minister Sanjō on the reform of the land-tax], by (now Marquis) Matsukata Masayoshi, 松方正義, then Minister of Finance. Tokyo, 1882. 1 vol., 197 pages.

59. *Fu-ken chi-so kai-sei ki-yō*, 府縣地租改正紀要, [reports of the three Cities and thirty-six Prefectures on the change of the land-tax], compiled by the Department of Finance. Tokyo, [1882?]. 1 vol., 39 sections.

60. *Go-nin-gumi sei-do no ki-gen*, 五人組制度の起源, [on the origin of the five-man group system], by Prof. Miura Shūkō?, 三浦周行. The *Hō-ri ron-sō* 法理論叢 series, No. 9. Tokyo, 1900. 1 vol., 83 pages.

60a. *Go-nin-gumi sei-do*, 五人組制度, [on the five-man group system], by Prof. Hodzumi Nobushige?, 穂積陳重. The same series, No. 11. Tokyo, 1902. 1 vol., 241+38 pages.

61. *GO-NIN-GUMI CHŌ I-DŌ BEN*, 五人組帳異同辨, [parallel articles of several five-man group records], compiled by the Department of Justice. Tokyo, 1884. Manuscript, copied from the original in the Department archives. 1 vol., 120 leaves.

62. *MURA SHŌ-YA KOKORO-E BEKI JŌ-JŌ*, 村庄屋可心得條條, [general instructions to village-heads], by the government of Kyōto, 1869. 1 vol. (o. s.)

63. *MURA SHŌ-YA TOSHI-YORI YAKU KOKORO-E BEKI JŌ-JŌ*, 村庄屋年寄役可心得條條, [general instructions to village-heads and village-chiefs], by the government of Ōsaka, 1872. 1 vol. (o. s.)

64. *Ō-SHŌ-YA YAKU KOKORO-E BEKI JŌ-JŌ*, 天庄屋役可心得條條, [general instructions to district-heads], by the government of Ōsaka, 1872. 1 vol. (o. s.)

65. *GUN-CHŪ-SEI-HŌ*, 郡中制法, [general instructions to peasants], by the government of Kyōto, 1869. 1 vol. (o. s.)

These four works are interesting as survivals in early years of the new era of the old method of village government.

66. *BI-HAN TEN-KEI*, 備藩典刑, [orders of Ikeda Mitsumasa, 池田光政, lord of Okayama 1642—71], compiled by Yuasa Zhō-zan, 湯淺常山 (1708—81). Manuscript. 4 vols. (o. s.)

67. *BI-HAN TEN-ROKU*, 備藩典錄, or, *YŪ-HI ROKU*, 有斐錄, [life and laws of Ikeda Mitsumasa], by Mimura Nagatada, 三村永忠. No date. Manuscript. 1749. 4 vols. (o. s.)

68. *Tsugaru Nobumasa kō*, 津輕信政公, [life of Tsugaru Nobumasa, lord of Hirosaki 1646—1710], by Tozaki Satoru, 外崎覺. Tokyo, 1902. 1 vol., 362 pages.

69. *En-kyō fū-setsu shū*, 延享風說集, [rumors about Matsudaira Norimura, 松平乗邑, lord of Sakura and councillor to the suzerain 1723—45]. Anon. Manuscript. 1 vol. (o. s.)

Gossipy.

70. *Gin-dai i-zhi*, 銀臺遺事, [notes on the life of Hosokawa Shigekata, 細川重賢, lord of Higo and Bungo, 1718—85]. Anon. Manuscript. 4 vols. (o. s.)

71. *YŌ-ZAN KŌ SEI-KI*, 鷹山公世紀, [life of Uesugi Harunori, 上杉治憲, lord of Yonezawa, 1751—1822], compiled by Ikeda Nariaki?, 池田成章. Tokyo, 1906. 1 vol., 1056 pages.

72. *NOZOKI TAI-KWA Ō*, 荏戸太華翁, [life and writings of Nozoki Yoshimasa, 荏戸善政, 1735—1803 twice councillor to Uesugi Harunori], compiled by Suibara Ken?, 杉原謙. Tokyo, 1898. 1 vol., 926+84 pages.

73. *U-YŌ SŌ-SHO*, 羽陽叢書, [writings of Uesugi Harunori, with notes on his life], compiled by Yaoita Bai-setsu, 矢尾板梅雪, Nozoki Tai-kwa, Hara Raku-zan, 原樂山, and Asaoka Nan-koku, 朝岡南谷. Yonezawa, 1879—83. 3 series, (*kan-tō*, *gyō-so*, and *sei-toku*), in 6 vols. (o. s.)

Largely superseded by the last two works.

74. *Uesugi Yō-zan kō*. [life of the same lord], by Kawamura Makoto?, 川村惇. Tokyo, 1893. 1 vol., 364 pages.

75. *Sei-zan kan-wa*, 青山閑話, [notes on the life of Hosoi Hei-shū, 細井平洲, once tutor and councillor to the same lord]. Anon. Manuscript. 1 vol. (o. s.)

76. *Shirakawa Raku-ō kō to Tokugawa zhi-dai*, 白河樂翁公と徳川時代, [life and times of Matsudaira Sadanobu, 松平定信, lord of Shirakawa and councillor to the suzerain, 1759—1829], by Professor Mikami Sanzhi, 三上參次. Tokyo, 1891. 1 vol., 198 pages.

77. *Egawa Tan-an*, 江川垣庵, [life of Egawa Tarozaemon, hereditary intendant of Nirayama, Idzu, 1801—55], by Yada Shichitarō, 矢田七太郎. Tokyo, 1902. 1 vol., 243 pages.

78. *KWAI-KYŪ KI-ZHI*, 懷舊紀事, [life of Abe Masahiro, 阿部正弘, lord of Fukuyama, once chief councillor to the suzerain, 1819—58], compiled by Hamano Shōkichi, 濱野章吉. Tokyo, 1899. 1 vol., 872+157 pages.

79. *Gei-han san-zhū-san nen roku*, 藝藩三十三年錄, [an account of the financial experiences of the Hiroshima fief between 1833 and 1863], by Kotakagari Gen-gai?, 小鷹狩元凱. Tokyo, 1893. 1 vol., 184 pages.

80. *Hiroshima Mō-gyū*, 廣嶋蒙求, [stories from the Hiroshima fief], by the same author. Tokyo, 1905. 1 vol., 139 pages.

81. *AIDZU KYŪ-ZHI ZAKKŌ BASSUI*, 會津舊事雜考拔萃 [documents and notes relating to Aidzu, being an abridgement of the *AIDZU KYŪ-ZHI ZAKKŌ*, compiled by Mukai Yoshishige, 向井吉重, 3 vols.]. Dated 1662. Manuscript. 1 vol. (o. s.)

82. *ON KE-MI TE-TSUDZUKI*, 御毛見手續, [how to measure the productive power of land, in the Okayama fief]. Anon. No date. Manuscript. 1 vol. (o. s.)

83. *DAI-ZEN ON KE-MI YŌ-SHŪ*, 大全御毛見用集, [guide to measuring the productive power of land, in the same fief]. Anon. No date. Manuscript. 1 vol. (o. s.)

84. *SEN-DAI HAN SO-ZEI YŌ-RYAKU*, 仙臺藩租稅要略, [documents relating to the financial administration of the Sendai fief], edited by Yamada Ki-ichi, 山田揆一, of the prefectural government at Sendai. [Sendai, 1888]. 5 vols., 255 leaves.

85. *Shū-gi wa-sho*, 集義和書, [notes on philosophy, ethics, and politics], by Kumazawa Ban-zan, 熊澤蕃山 (1619—91). 16 bks. In the *Ni-hon rin-ri i-hen* 日本倫理彙編 series, (10 vols., Tokyo, 1901—03), I, 255—600.

86. *Shū-gi gwai-sho*, 集義外書, [sequel to the above], by the same author. 16 bks. In the same series, II. 9—332.

87. *Min-kan sei-yō*, 民間省要, [notes on rural administration], by Tanaka Kyūgu-emon Nobuyoshi? 田中休愚右衛門喜吉. Prefaces dated 1720 and 1721. Manuscript. 2 series, 7 and 8 vols. (o. s.)

Fearless criticisms by a practical administrator of the rural government of domain lands. The work attracted the attention of the wise suzerain Yoshimune, who gradually raised the author to the position of intendant. See *To*, XIII. 962, XIV, 278.

88. *Kei-zai roku*, 經濟錄, [views on government], by Dazai Shun-dai, 太宰春臺 (1680—1747), 1729. Manuscript. 10 vols. (o. s.)

Thoroughly Confucian.

89. *Shun-dai zatsu-wa*, 駿臺雜話, [miscellaneous notes on history, morals, and literature], by Muro Kyū-sō, 室鳩巢 (1658—1734), 1732. 5 bks. In the *Ni-hon rin-ri i-hen* series, VII. 81—309.

90. *Sō-bō ki-gen*, 草茅危言, [political and social criticisms], by Nakai Chiku-zan, 中井竹山 (1730—1804), 1789. Kyōto, 1868. 5 vols., 280 leaves.

91. *Byō-kan chō-go*, 病間長語, [miscellaneous notes], by Inoue Kin-ga, 井上金峨 (1733—84). In the *On-chi sō-sho* series, XI, 70 pages.

92. *Ama no taku mo*, 延の焼く藻, [miscellaneous notes], by Morikawa Takamori 森川孝盛, c. 1790. In the same series, XI, 122 pages.

93. *Ō-mei-kwan i-sō*, 嚶鳴館遺草, posthumous ethico-political works by Hosoi Hei-shū, once tutor to Uesugi Harunori and other barons, (1728—1801). 6 bks. In the *Ni-hon rin-ri i-hen* series, IX. 9—161.

Good examples of the great influence of Confucian ideas on rural government.

94. *Hō-toku gwai-roku*, 報德外錄, views by Ninomiya Takanori (Son-toku), 二宮尊徳 (1786—1856), compiled by his pupil Saitō Takayuki, 齋藤高行. 2 bks. In the same series, X. 397—439.

95. *Ninomiya sen-sei go-rui*. 二宮先生語類, sayings of Ninomiya Takanori, compiled by the same pupil. 4 bks. In the same series, X. 440—542.

96. *Chi-so ron*, 地租論, [on the land-tax and its relation to the life of the peasantry], by the late Fukuzawa Yukichi, 福澤諭吉, about 1893. In the *Fukuzawa Yukichi zen-shū* (全集), V.

97. *Hō-sei ron-san*, 法制論纂, [seventy-eight essays and addresses on the institutional history of Japan by various scholars], edited by the Koku-gaku-in, 國學院. Tokyo, 1903. 1 vol., 1446 pages.

98. *Hō-sei ron-san zoku-hen* (續編), [sequel to the above, containing fifty-seven more essays and addresses], edited by the same. Tokyo, 1904. 1 vol., 914 pages.

99. *Tokugawa sei-kyō kō*, 徳川政教考, [evolution of political-philosophical ideas during the Tokugawa period], by Prof. Yoshida Tō-go, 吉田東伍. Tokyo, 1894. 2 vols., 206, 212 pages.

100. *Dai Ni-hon chi-mei zhi-sho*, 大日本地名辭書, dictionary of Japanese historical geography, by the same author. Tokyo, 1900—07. 4 vols., cxxxiv + 288 + 4752 pages.

101. *Koku-shi dai zhi-ten*, 國史大辭典, [dictionary of Japanese history], by Yashiro Kuniiji?, 八代國治, Hayakawa Zhunzaburō, 早川純三郎, and Inobe Shigewo, 井野邊茂雄. Tokyo, 1908. 2 vols., 2390 and 220 pages.

102. *Shi-gaku zasshi*, 史學雜誌, [monthly journal devoted to history]. Tokyo, 1890—.

Abbreviations.

The following abbreviations are used in the Notes for those works which receive frequent reference. Two capitals, (for example, 'BR'), are used for each old work which consists primarily of sources; a capital and a small letter, (for example, 'Mi'), for each old secondary authority; three capitals, (for example, 'DSR'), for each recent work consisting mainly of sources; and a capital and two small letters, (for example, 'Hrs'), for each recent secondary authority.

AI	81. AIDZU KYŪ-ZHI ZAK-KŌ BASSUI.	Ggs	60a. Go-nin-gumi sei-do.
BG	55. BAN-SHŪ GO KWAI-MAI	Gi	70. Gin-dai i-zhi.
BK	66. BI-HAN TEN-KEI.	GK	35. GO KATTE-GATA O SADAME-GAKI.
Bms	6. Baku-matsu shi.	GS	65. GUN-CHŪ SEI-HŌ.
BO	54. BAN-SHŪ . . . OSAME-HARAI	Gsr	79. Gei-han san-zhū-san nen roku.
BR	67. BI-HAN TEN-ROKU.	GT	29. GO TO-KE REI-JŌ.
Chk	58. Chi-so kai-sei hō-koku sho.	Hmg	80. Hiroshima mō-gyū.
Chr	96. Chi-so ron.	Hrs	97. Hō-sei ron-san.
Dch	100. Dai Ni-hon chi-mei zhi-sho.	Hrz	98. Hō-sei ron-san zoku-hen.
De	47. Den-en rui-setsu.	Ht	94. Hō-toku gwai-roku.
DKM	1. DAI NI-HON KO-MON-ZHO.	JG	52. JI-KATA-GAKARI A-TSUKAI-HŌ SHŪ-SEI.
DNR	7. DAI NI-HON NŌ-SEI RUI-HEN.	Jh	48. Ji-kata han-rei roku.
DNS	8. DAI NI-HON NŌ SHI.	JK	33. JI-KATA KŌ-SAI RO-KU.
Dns	44. Dai Ni-hon so-zei shi.	Jk	51. Ji-kata kō-shō roku.
DO	83. DAI-ZEN ONKE-MI....	Jo	49. Ji-kata ochi-bo shū.
Dse	45. Den-so en-kaku yō-ki.	Jt	50. Ji-kata tai-gai shū.
Dsg	10. Dai Ni-hon san-gyō zhi-seki.	KB	23. KEN-PŌ BU RUI.
DSH	46. DEN-SEI HEN.	KH	41. KWA-HEI HI-ROKU.
DSR	2. DAI NI-HON SHI-RYŌ.	KK	20. KEN-KYŌ RUI-TEN.
En	69. En-kyō fū-setsu roku.	KKK	78. KWAI-KYŪ KI-ZHI.
Eta	77. Egawa Tan-an.	Km	18. Kei-zai mon-dō hi-roku.
Fuk	59. Fu-Ken chi-so kai-sei ki-yō.	KR	22. KWA-JŌ RUI-TEN HON-MON.
GGI	61. GO-NIN-GUMI CHŌ I-DŌ BEN.	KRE	11. KO-ZHI RUI-EN.
Ggk	60. Go-nin-gumi sei-do no ki-gen.	Ksd	101. Koku-shi dai zhi-ten.
		Kw	16. Kwan-nō waku-mon.
		KY	28. KU-ZHI-KATA YŌ-REI.
		Kz	88. Kei-zai roku.
		Mi	87. Min-kan sei-yō.
		MK	62. MURA SHŌ-YA KYŌTO.

Mkr	37. Min-zhi kwan-rei rui-shū.	Shr	76. Shirakawa Raku-ō kō
MO	63. MURA SHŌ-YA ŌSAKA.	Shz	102. Shi-gaku zasshi.
Ng	12. Nō-gyō zen-sho.	Smw	19. Simmons-Wigmore, Notes
Ngh	14. Nō-gyō hon-ron.	Sw	85. Shū-gi wa-sho.
Nn	95. Ninomiya sen-sei go-rui.	Tbf	5. Tokugawa baku-fu zhi- dai shi.
Nns	9. Ni-hon nō-gyō shō-shi.	Tk	15. Tokugawa baku-fu ken- ji yō-ryaku.
NTK	72. NOZOKI TAI-KWA Ō.	TKR	21. TOKUGAWA KIN-REI KŌ.
Ny	13. Nō-gyō yo-wa.	TMK	36. TOKUGAWA MIN-ZHI KWAN-REI SHŪ.
Nz	17. Nō-sei za-yū.		z zhin-zhi hen, d dō-san hen, f fu-dō-san hen, s so-shō hen.
OK	82. ON KE-MI TE-TSU- DZUKI.	Tnk	68. Tsugaru Nobumasa kō.
Om	93. Ō-mei-kwan i-sō.	To	3. Tokugawa zhikki.
OO	64. Ō-SHŌ-YA ŌSAKA.	Tsk	99. Tokugawa sei-kyō kō.
OT	53. ON TORI-KA KOKO- RO-E GAKI.	Tt	56. Ta-hata ken-mi
RD	26. RITSU-REI DAI HI- ROKU.	US	73. U-YŌ SŌ-SHO.
RH	24. RUI-REI HI-ROKU.	Uyz	74. Uesugi Yō-zan kō.
RR	32. RITSU-REI ROKU.	Wa	57. Wata ken-mi
Sb	90. Sō-bō ki-gen.	Wig	38. Wigmore, Materials
SCR	39. SUI-CHIN ROKU.	YZS	71. YŌ-ZAN KŌ SEI-KI.
SCY	40. SUI-CHIN YO-ROKU.	Zo	4. Zoku Tokugawa zhikki.
Sd	89. Shun-dai zatsu-wa.		
SDS	84. SEN-DAI HAN SO-ZEI YŌ-RYAKU.		
Sg	86. Shū-gi gwai-sho.		

(Note: The Notes accompanying this article will appear in a subsequent number of the Journal.)

Complete Induction for the Identification of the Vocabulary in the Greek Versions of the Old Testament with its Semitic Equivalents: Its Necessity and the Means of obtaining it.—By MAX L. MARGOLIS, Philadelphia, Pa.

(NB. The sigla for the Septuagint codd. are, in the book of Genesis, those of the larger Cambridge edition; for the other books, those of Swete's manual edition or those used in his *Introduction*; the figures refer to manuscripts in the edition of Holmes-Parsons. Λ = Lucian. The abbreviations of the Biblical books are for the most part the same as in the Oxford Concordance.)

THE first of the canons laid down by the The first Lagar-
noted Septuagint scholar LAGARDE requires on dian Canon
the part of the student who aims at recovering the original
text of the Greek translation of the Old Testament, a "know-
ledge of the style of the individual translators," with which
is coupled a "faculty of referring variant readings to their
Semitic original, or else of recognizing them as inner-Greek
corruptions." It is obvious that LAGARDE has reference merely
to the material side of the task and ignores the formal
questions of orthography and grammar altogether. It is a
matter with which the future editor will have to grapple,
whether, for example, he should admit forms with anaptyxis,
as ἀγανρίαμα, ἀγανριᾶν, -ᾱσθαι.¹ He will have to choose between
ἦγαν and ἦγον², ἡγάσαν and ἡγαγον³, συνῆξε and συνήγαγε⁴, φάγη
and φάγεσαι⁵, ἐργᾶ and ἐργάση⁶, διανοιχθήσονται and διανοιγήσονται⁷.
With a view to all such questions the editor will have to study
the grammatical evidence presented by the papyri and other

¹ ἀγανρίαμα is found Jb 4¹⁰ 253; 13¹² B*^C. 160. 161. 250. 252. 253. Compl.; Is 62⁷ AB⁸ c. b Q. 22. 51. 86. 87. 91. 93. 97. 109^{mg}. 147. 233. 302^{mg}. 306. 309. Compl.; Je 31(48)² AB⁸. 239; Ba 4³⁴ omn exc 49. 51. 62. 88. 90. 231. Compl. Ald. (106 reads αγαλλιαμα); Ju 10⁸ 74; ἀγανριᾶν, -ᾱσθαι Jb 3¹⁴ AB⁸ C. 55. 106. 137. 139. 250. 252. 258; 39²¹ 160. 252. 253; ibid. 23 160. 252. 253. See DIETERICH, Untersuchungen zur Geschichte der griechischen Sprache, p. 33 sqq. ² II K 6³ ηγον AN. A. alii.
³ I Es 1¹⁹ -ον AN. 58. 64. 119. 243. 248. Ald., -οσαν rell.
⁴ Jd 11²⁰ συνήξε BM. 16. 52. 57-59. 63. 77. 85. 107. 120. 131. 144. 209. 236. 237. ⁵ Ge 3¹⁸ φαγεσαι r. ⁶ Ge 4¹² εργαση 1a² Phil-codd.
⁷ Ge 3⁵ διανοιγησονται m.

contemporaneous literature in order to determine the linguistic forms with which the translators may be credited. In this sense the way has been paved by HELBING's "Grammatik der Septuaginta"¹ which, however, ignores the cursives entirely. There will be also questions of internal Greek syntax on which the Semitic original has no bearing.

is really a rule for identifying the Greek with the Semitic. What LAGARDE really means by the original text of the Septuagint is that text which, from among the conflicting forms it has assumed in the history of its transmission, conforms to the Semitic original underlying the translations ("die Vorlage") and to the conception of its meaning on the part of the translators (their exegesis). The First Lagardian Canon is thus a rule for identifying the Greek with the Semitic, the Greek text, buried at present in a mass of variants, with the great unknown quantity, the "Vorlage," with which the prototype of the received Masoretic text was by no means wholly identical. After an elimination of the irrational element of chance corruptions or of the disfiguring element of conscious alteration (diaskeuastic corrections and interpolations), there remains the stupendous task of retroversion for which indeed a knowledge of the style of each individual translator is an all-important prerequisite. The pitfalls are many, not the least

Retroversion being mechanical haste. LAGARDE himself was must not be a sinner in that direction. Following the lead mechanical. of Le 26¹³, he referred *μετὰ παρησίας* = *openly, publicly* (comp. Talmudic בפרהסיא) Pr 10¹⁰ back to קומץיית. He forgot that he was dealing with a translation which aims at elegance rather than at literal accuracy, as well as the fact that the rendering in Le is equally free. קומץיית means properly *with head erect*; one can be made to walk with head erect, but one cannot reprove a friend with head erect. It is a question of Hebrew idiom pure and simple. The Hebrew phrase underlying *μετὰ παρησίας* Pr 10¹⁰ remains an unknown quantity.

Retroversion un- The phrase occurs, for instance, also I Ma
scientific is pass- 4¹³: καὶ μετὰ ταῦτα λάβετε σκύλα καὶ (>SV. Sixt.)
ages wanting in *μετὰ παρησίας*. Who will attempt to render it
the Hebrew. into Hebrew? As a matter of fact, in passages
wanting in the Hebrew, all attempts at retroversion are un-

¹ Göttingen 1907.

scientific. Take, for example, the plus Le 10⁹: ἡ προσπορευομένων ὑμῶν πρὸς τὸ θυσιαστήριον. Ryssel (in Kittel's Bible) renders: או בקרבכם המזבחה (comp. Ex 40³²); but או בנשתכם אל המזבחה (comp. Ex 28⁴³ 30²⁰) is just as possible. Not even the particle is certain; for, though או will suggest itself first, ו is quite as correct (comp. Ex 38²⁷ (40³²)).¹

It may be even laid down as a canon that *certainty of identification is possible only when the translator has misread or misinterpreted the original.* Just as complete identity is often a less reliable criterion of the affinity of languages than differentiations of sound regulated by law, so it is only through variation, provided it is psychologically explainable, that we may with certainty arrive at the true text underlying a translation. Thus ἀγομένους Is 60¹¹ corresponds to נְהוּגִים; but מוֹבְלִים or לְקִיחִים or (if the sense be "led as captives") מְגָלִים would be possible equivalents, and we cannot say with absolute certainty that our text was read by the translator. But ἀγομεναι La 1⁴ to which נְהוּגוֹת corresponds in the Hebrew, points *with necessity* to נְהוּגוֹת as its equivalent, and to nothing else; for both נְהוּגוֹת and נְהוּגוֹת = נְהוּגוֹת² are reducible to one and the same consonantal text.

Not merely a "knowledge of the style of the individual translators" leads to correct identification, but equally a knowledge of the style of the individual Hebrew writers. Otherwise anachronism ensues. When Kittel (in his Bible) puts down συνήχθησαν δὲ Ge 37³⁵ = וַיִּקְהֲלוּ as a variant for וַיִּקְמוּ, he not only misconceives the paraphrastic character of the translation (hence also the free addition καὶ ἔλθον), but, which is less pardonable, burdens the Jahvist with an expression which occurs but once in E (Ex 32¹), and is elsewhere in the Hexateuch confined to P.

¹ The proportion of ו to או for Greek ἡ is 163 : 251 in the Septuagint, 2 : 3 in Aquila, 5 : 4 in Symm., 1 : 4 in Theod., 3 : 8 in AL., 0 : 1 in HEBR.

² In accordance with a well-known orthographic rule; see WELLHAUSEN, *Der Text der Bücher Samuelis*, pp. v-vii. Comp. Ex 15²² וַיִּצְאוּ 6 (וַיִּצְאוּ) / וַיִּצְאוּ; 18⁷ וַיִּבְאוּ 6 (וַיִּבְאוּ) / וַיִּבְאוּ.

The "units" of individual translations still to be determined.

It is furthermore gratuitous to assume that each of the Biblical books was rendered by a new and "individual" translator. Prologues, as in the case of Ecclesiasticus, and colophons, as at the end of Job or Esther, are rare; for the most part we are left to internal evidence to determine the limits of a "unit" of translation. The "higher criticism" of the Greek version is in its very beginnings. We may assume, for example, that the Twelve are the work of one translator; the question is, how much more? A singular rendering like συνάγειν for Hebrew קָנָה (suggested by נִקְנָה συνάγεσθαι Ge 1⁹ Je 3¹⁷ and מִקְנֶה συναγωγή Ge 1¹⁰) which meets us Mi 5⁷⁽⁶⁾¹ occurs again twice in Je 8¹⁵² and 27 (50)^{7.3} It would be reasonable to ascribe both Jeremiah and the Twelve to one and the same translator, provided of course a sufficient number of similar criteria were available.

The method of

In order, however, to discover the total sum of criteria, the student must obviously collect his data from the *whole* of the Greek Old Testament, whereupon he may proceed to distribute them among the various groups of translators thus brought to light. The right method would be first to ascertain the attitude of the general sum of translators towards all of the phenomena which go to make up a translator's style; on the basis of similarity or dissimilarity of "reaction," the idiosyncracies of the individual translators will reveal themselves. For a translator's style is the total sum of "reactions," of the ways in which the original is handled by him in the various provinces of grammar, rhetoric, semantics, and exegesis.

Illustrations:

The Historical Present.

Take, for example, the use of the historical present (with δέ or preceding καὶ) to express the Hebrew 1 *consecutivum cum imperfecto*. Examples are frequent in K⁴; there is just one example in Jd.⁵ How far the usage extends beyond the books just mentioned, remains to be investigated. It is clear that, in order to establish the interrelation of various books, the student must go through the entire Old Testament in Greek.

¹ ל was apparently taken as *nota accusativi*; passivum pro activo?

² Activum pro passivo.

³ וּמִקְנֶה / לְמִקְנֶה?

⁴ E. g., IK 5^{8.11} 7^{1bis} 10²¹ 13⁵ 17^{1bis} 30¹¹ III K 18⁴⁰.

⁵ 17.

Or take the criterion of "subordination in the place of coordination." The following types are met with:

- (a) καὶ λαβοῦσα ἔφαγεν ותקח ותאכל (e. g. Ge 3⁶ 4¹ 41^{14 bis});
 (b) καὶ ταχύναντες καταγάγετε ומהרתם והורדתם (e. g., Ge 45¹³ De 23^{13 (14)} 30³);
 (c) εἰσαγαγὼν καταφύτευσον αὐτοὺς תבאמו ותמעמו (e. g., Ex 15¹⁷ Jb 39²¹);
 (d) ἐπαγαγὼν ἐξαναλώσω σε אעלה וכליתך (e. g., Ex 33⁵ 1);
 (e) καὶ ἐντείλατο φαγεῖν תאכל . . . ויצו (e. g., Ge 2¹⁶ 2³ 17³ 43¹⁶ 4 Ex 6²⁶ 5 Nu 21¹⁶ 6 IK 14¹⁸ 7; *ibid.* 34⁸).

Or, "the generic singular for the Semitic plural"; e. g., Si 4¹² ὁ ἀγαπῶν αὐτὴν ἀγαπᾷ / The Generic Singular.
 אהבו אהב; 47²² τοῦ ἀγαπήσαντος αὐτόν / (אוה) ביו.

Or, conversely, "the plural for the generic singular in Semitic;" e. g., Ge 4²⁰ τῶν κατοικοῦντων / The Plural for the Generic Singular.
 יושב; Ne 12⁴⁴ καὶ τοῖς συνηγμένοις (apparently neuter plural) ἐν αὐτοῖς (sc. ἐν τοῖς γαῖοφυλακίοις) ἄρχουσιν τῶν πόλεων = לְכָנוּם בָּהֶם לְשָׂדֵי הָעָרִים / לְכָנוּם בָּהֶם לְשָׂדֵי הָעָרִים; Pr 11¹⁰ Σ ἀγαλλιάσονται πόλεις / תעליץ קריה; Is 1²³ ἀγαπῶντες δῶρα / בָּלוּ אֹהֶב שָׂחַד; 13¹⁵ οὗτινες¹¹ συνηγμένοι εἰσιν / בל הנספה.

Or, "participial construction in the place of a finite verb in relative clauses;" e. g. Ex 20² ὁ ἐξαγαγὼν σε¹³ אשר הוצאתיך; 29⁴⁶ ὁ ἐξαγαγὼν αὐτούς / אשר הוצאתי אתם; Ru 4¹⁵ ἡ ἀγαπήσασά σε / אשר אהבתך and elsewhere.

Or, conversely, "a relative clause in the place of a Semitic participle;" e. g. I Es 5⁶⁹ (Ezr 4²) ὁς μετήγαγεν (var. μετόκισεν) / המעלה; Is 41⁸ ὃν ἠγάπησά = אֶהְיֶה / אֶהְיֶה; and elsewhere.

¹ 15. 55. 73. 78. Lucif.

² 9.

³ omn exc n.

⁴ A.

⁵ omn exc 75.

⁶ 55.

⁷ 245.

⁸ omn exc A.

⁹ The translator took 'לְכָנוּם וגו' as a general expression summing up the preceding particulars; in such cases, the Hebrew may and may not prefix the conjunction which the translator is free to express if he so chooses; comp. De 15²¹ רַע כָּל מִוֶּם עוֹר פֶּסַח אוֹ עוֹר כָּל מִוֶּם רַע (var. ἢ καὶ, καὶ) πᾶς μῶμος πονηρός AF. alii.

¹⁰ But πας τις αγαπα Qmg.

¹¹ of 106 ἔσοι A.

¹² כִּפָּה as an equivalent of אָפָה also De 32³³ (unless = אָפָה / אָפָה) and Is 29¹; Je 7²² (unless כִּפָּה = an abbreviated אָפָה, comp. Arabic and Aramaic imperatives of פ"פ verbs).

¹³ AF alii.

Complete Induction prevents individualizing what is general From an imperfect collation like the preceding it becomes evident that (1) a phenomenon may indeed be characteristic of certain groups only; (2) when a phenomenon is scattered over a wide area (possibly the entire area), it ceases to be a mark of individual style, but becomes a general characteristic of translation from Semitic into Greek; (3) certain manuscripts or groups of manuscripts (= recensions) show a predilection for a certain stylistic peculiarity. Thus I find that Lucian frequently substitutes the aorist for the historical present.¹ But such results are conclusive only when complete induction is available; otherwise the student runs the risk of individualizing what is general.

and renders identification possible. Many identifications, uncertain at the first blush, become incontrovertible when supported by further evidence which the complete induction alone will bring to light. That παραχρημα, = *on the spot*, is the equivalent of פתחם, פתחם II K 3¹² Jb 40⁷⁽¹²⁾, a matter of doubt for the editors of the Oxford Concordance, is corroborated by Ps 65 (66)¹⁷ Σ (= פתחתי / פתחת). || We are safe in identifying ἔδωκαν φυλάσσειν Je 43 (36)²⁰ with הפקדו, if we compare πεφυλαγμένοι = לפקדון Ge 41³⁶. || Si 44¹ ἄνδρας ἐνδόξους for אנשי חסד ceases to be strange when δόξα = חסד Is 40⁶ is compared. || Ec 2²⁶ τοῦ προσθεῖναι = לסף (להוסיף) / לַסֵּף (לִּלְאֶסֶף), just as Le 19²⁵ ΑΛ. καὶ συνάξετε = לִלְאֶסֶף / להוסיף. || When it is remembered that in 99 instances ἀνάγειν is employed for העלה, it will not be difficult to identify καὶ ἐπαναγόντων Za 4¹² with והמעלים / מעליהם. || Ps 15 (16)⁴ συναγάγω τὰς συναγωγὰς αὐτῶν must certainly be reduced to אָבְנִים בְּנִימֵיהֶם / אָבְנִים (אָבְנֵיהֶם) / אָבְנֵיהֶם, which proves that in the archetype אָבְנֵיהֶם was written אָבְנֵיהֶם, that is, with the נ expressed, though perhaps "assimilated" in pronunciation. The evidence is afforded by the knowledge that συνάγειν = כָּנַס in 11 cases. || The last two examples are illustrations of transposition for which other instances are available. Thus Na 2³⁽⁴⁾ ἐμπαίζοντας = מתעללים / מתעלים; comp. ἐμπαίζειν = התעלל Ex 10² Nu 22²⁹ Jd 19²⁵ I K 6⁶ 31⁴ I Ch 10⁴, ἐμπαίγματα = תעלולים Is 66⁴, ἐμπαίκεται = do. ibid. 3⁴. || Is 35² καὶ ὁ λαὸς μου = וְיִשְׂרָאֵל / וְיִשְׂרָאֵל, just as Ps 28 (29)⁶ καὶ ὁ ἡγαπημένος = וְיִשְׂרָאֵל / וְיִשְׂרָאֵל. While the latter identification

¹ E. g., Jd 1⁷ I K 10²¹ 17² III K 18⁴⁰.

is supported directly by De 32¹⁵ 33^{5.26} Is 44², we may cite in substantiation of the former, examples like Ex 17⁵ Jo 7^{11.1} 16. 24² 10^{29.3} where ὁ λαός = ישראל, or Jd 20²⁵ where ὁ λαός⁴ = בני ישראל, or Mi 2¹² where ὁ λαός οἶτος⁵ or ὁ λαός⁶ = ישראל, or Si 45¹⁶ where ὁ λαός σου⁷ = בני ישראל, also Je 43 (36)⁶ where ὁ λαός⁸ and Si 48¹⁵ where ὁ λαός⁹ = יהודה. Instructive is also Ps 55 (56)¹⁰ where ὁ λαός corresponds to כנסת ישראל ליונה (and parallels): אִימְתִּילָה, "the Community of Israel is likened unto a dove". || Only through the juxtaposition of the total number of passages¹⁰ where ἐλαβεῖσθαι τινα or ἀπό τινος = חסה ב was it possible for Prof. NESTLE¹¹ to identify καὶ ἐλαβονμένους τὸ ὄνομα αὐτοῦ Ma 3¹⁶ with בְּשֵׁמוֹ וְלִחְשֵׁי in the place of our שְׁמוֹ וְלִחְשֵׁי and thus to bring to light a reading which is unquestionably the original. He acknowledges his indebtedness to my article "ΛΑΜΒΑΝΕΙΝ (including Derivatives and Compounds) and its Hebrew-Aramaic Equivalents" which appeared in the AJSL., XXII (1906), 110ff., closing with a confirmation of my own statement that we may obtain through just such work as I am planning, "in the place of the brilliant, but uncertain, guesses, results which may be predicted with almost mathematical accuracy."

Results which are equally certain are afforded by a possession of the complete material when we turn to inner-Greek corruptions. A few examples will not be amiss:

III K 8⁴⁶ καὶ ἐπαξεῖς αὐτοὺς Sixt. (= B. 92. 120. 158. 247) / בם ואנפת has been recognized as faulty. Mr. Burney emends καὶ ἐπάξεῖς αὐτοῖς¹²; he compares Ps 7¹², where ὀργὴν ἐπάγων = וְעַם, and Is 26²¹ ἐπάγει τὴν ὀργήν / לפקר עון; he should have added ibid. 42²⁵ καὶ ἐπήγαγεν ἐπ' αὐτοὺς ὀργήν / וישפך עליו חמה and Si 5⁸ ἐπαγωγή = עברה. But he fails to account for the "alteration" in the parallel passage II Ch 6³⁶ καὶ παταξεῖς αὐτοὺς¹³ for which no variant reading is available. Nevertheless,

¹ Omn exc 54. 75.² BM. 29. 30. 59. 63. 64. 72. 77. 85^{mg}.³ A. 16. 52. 77.⁴ AGA. alii.⁵ A.⁶ 26.⁷ σου>א*. 248; αὐτοῦ 23. 70. 2.⁸ A.⁹ omn.¹⁰ Pr 24²⁹ (30⁵) Na 1⁷ Ze 3¹².¹¹ ZAW., XXVI (1906), 290.¹² Comp. the reading καὶ ἐπαξεῖς ἐπ' αὐτοὺς 44. 52. 55. 64. 71. 74. 106. 119. 121 (with the error -ξει / -ξεῖς). 123. 134. 144. 236. 242-246. Ald. Cat. Nic. A 1. ed 2; καὶ ἐπαρεῖς ἐπ' αὐτοὺς A; καὶ ἐὰν ἐπαγάγῃς (ἐπάξῃς Compl.) ἐπ' αὐτοὺς A.¹³ A: καὶ ἐὰν θυμωθῇς ἐπ' αὐτοὺς.

we must emend here likewise: *καὶ ἐπάξεις αὐτοῖς* or *ἐπ' αὐτούς*. The emendation is rendered plausible by the knowledge that in four other places that have come under my observation *ἐπάξω* has by its side the corrupt variant *πατάξω*.¹

The corrupt reading *απαχθησθησεσθαι* n / *ἀπάχθητε* Ge 42 16 finds its analogy in Is 16 14 where *αχθέσθης*² or *αχθεσθεις*³ is found for *ἀχθῆς*. The latter is of course the correct reading; the translator pointed תַּגְלִי (or תַּגְלִי, תַּגְלִי) ⁴ / תַּגְלִי.

Is 28 20 *τοῦ ἡμᾶς συναχθῆναι* is apparently corrupt. In the first place *ἡμᾶς* BSAQ⁵ is itacistic error for *υμᾶς* Γ⁶; but the whole is corrupt. The translator wrote *τοῦ μὴ συναχθῆναι* = Θ. With the aid of the emended text, we arrive at the reading מהתכנס / כהתכנס; (τοῦ) μὴ c. infin. = מִן c. infin., as may be seen from such an example as *μὴ ἐπαγαγεῖν* = מַעְבֵּר Is 54 9. ⁷ || Hence we are led to the conclusion that the translator with his *τοῦ μὴ διαπορεύεσθαι μηδὲ ἀνακάμπτειν* Za 9 8 pointed his text מַעְבֵּר וּמַשָּׁב / מַעְבֵּר וּמַשָּׁב. || An then to the solution of a more difficult problem: I K 13 6 *μὴ προσάγειν αὐτόν* is reducible to מִגְנֹשׁ for the received כִּי גִנֵּשׁ. For the graphic variant כִּי / מִ I cannot quote another instance from my own observations; but undoubtedly examples will be found. On the other hand, I have met with a sufficient number of the (exegetical) misreading (misinterpretation) of ש into שׁ and vice versa, and in this very verb I am in a position to cite Is 53 7 where both Θ *προσήχθη* and Σ *προσηνέχθη* presuppose גִּנֵּשׁ for the Masoretic גִּנֵּשׁ. The form גִּנֵּשׁ for גִּנֵּשׁ, which suggested itself to the translator, is no more impossible than שָׁאָה for שָׁאָה, or נָתַן for נָתַן. || This observation leads to another find. Je 44 (37) 12 we read ἀγοράσαι / לְחֶלֶק. The consonants are supported by ΑΘΣΣ⁸ 9 10 11 12; just how the word was pointed by them, may still be a matter of doubt; at all events, they took it as a denominative from חֶלֶק. According to Giesebrecht, the ren-

¹ Le 26 25 (16. 73. 77); IV K 6 19 (243); Je 22 7 (106); 25 13 (A). Conversely we find the corrupt *επαξω* B. 42 for the correct *πατάξω* rell Ez 22 13 (Rothstein's retroversion והבאתי is thus rendered problematical).

² 93. ³ 62. 147 (bad orthography). The corrupt reading underlies *עַל־לֵל* S h. ⁴ Comp. Am 7 11. 17 Is 23 1 Je 47 (40) 1.

⁵ Also 24. 49. 51. 62. 106. 147. 306. 309. Compl. Hier.

⁶ = Sixt (and rell ex sil).

⁷ Activum pro passivo.

⁸ *μερισθῆναι*.

⁹ *μερίσασθαι*.

¹⁰ *לפלא אהכנתיה*.

¹¹ *לפלא אהכנתיה*.

¹² *ut divideret possessionem*.

dering of the Septuagint goes back to the same consonants and to the same interpretation. But, to say the least, that is by no means obvious. On the other hand, we find that ἀγοράζειν corresponds in two passages¹ to לָקַח, just as in five passages² it represents the synonymous קָנָה, while Ne 10³¹ ἀγορασμός = מִקָּח. Hence it may be readily conjectured that the translator read in his text לָלַקַח / לָחַלַק, that is, the same consonants transposed, and that his grammar permitted him to see in the word the form לָלַקַח as a possible by-form of לָקַחַת.³

Da 11¹⁰ Θ καὶ οἱ υἱοὶ αὐτοῦ συνάξουσιν ὄχλον ἀνα μέσον πολλῶν contains two corruptions: for ἀνα μέσον read with AA. alii δυνάμεων,⁴ and for συνάξουσιν read συνάψουσι καὶ συνάξουσιν. Note the variant συναψουσιν 88 for συναξουσιν, and the insertion of καὶ συναψουσιν after πολλῶν in A. The whole is then = וּבְנֵי רַבִּים וְאֶסְפוּ הֵמּוֹן חִילִים רַבִּים יִתְּנוּ; συνάπτειν sc. πόλεμον, comp. with the object expressed verse 24 Θ = הַתְּנֶרֶת לְמַלְחָמָה, De 2^{9.24} = הַתְּנֶרֶת מַלְחָמָה and ibid. 5.19 = הַתְּנֶרֶת. Apparently συνάψουσι was miswritten into συναξουσιν, and then καὶ συνάξουσιν was omitted; συναψ— and συναξ— are proved as possible variants

¹ Ne 10³¹ and II Ch 1¹⁶; in the latter passage, במחר is expressed by A (ἐν ἀλλάγματι). Also Σ ψ 67(68)¹⁹ לקחת is rendered **אָבַח**.

² I Ch 21^{24bis} Si 37¹¹ Is 24²; AL. Ge 47¹⁹.

³ Observe that while **CSV** supply an object denoting "portion, possession"—the "land of Benjamin" and chapter 32 are responsible for this curious bit of exegesis—, certain Greek manuscripts (8 c. a. mg Qmg A) rightly add *αρον*, "to buy food", a most natural thing to do during the momentary raising of the siege. It is true, **תְּנֶרֶת** Jb 40²⁵⁽³⁰⁾ is rendered by Θ ἀγοράσουσιν αὐτόν (against **Θ** μεριτεύονται δὲ αὐτόν, 'Α ἡμισεύουσιν αὐτόν, Σ διαμερισθήσονται sive -θήσεται); as **תְּנֶרֶת** and **לָקַח** are synonyms, it may still be possible to reduce ἀγοράσαι in Je to the received **לָחַלַק**. If so, that would be another illustration of the value of complete induction. But it remains difficult to see how **תְּנֶרֶת** and ἀγοράζειν could be equivalent. Perhaps the Theodotonic rendering belongs to the first half of the verse (**יָקַר**; comp. De 2⁶ where **תְּנֶרֶת** is rendered in **Θ** by *λήμψεσθε* || ἀγοράσατε = **תְּנֶרֶת**).—An interesting variant in the Je passage is ἀποδρᾶσαι (239). Of course, it may be a corruption from ἀγοράσαι. On the other hand, it may represent the Masoretic **לָחַלַק** in the sense "to slip through, run away" (see Giesebrecht *ad locum*). (Another variant is παροικισαι 26 = ?)

⁴ *δυναμεις* Q is corrupt, as it does not agree with πολλῶν; the abbreviated *δυναμεῶ* (so A) was incorrectly resolved.

not only from the reading in codex 88 but also from De 32 ²³ 1 and IV K 5 ^{11,2}

II K 3 ²³ ηκουσαν Λ for Hebrew וָשָׁמַע is certainly suspicious; ἤχθησαν B. rell is graphically somewhat distant. But an instance like Le 1 ¹⁰ αὐτον 54. 75 for αὐτό will suggest the possibility that ηκουσαν is a misheard ἤκουσαν. Since ἤκον is used as an aorist, the ending -οσαν for -ον, so frequently met with in the Greek of the Septuagint in aorists, becomes intelligible.³

κ and π are found interchanged in a number of instances. I have noted some in a previous paper.⁴ Observe the additional examples: Za 9 ⁴ καταξει ⁵ / πατάξει ⁶; ibid. 12 ⁴ καταξω ⁷ / πατάξω.⁸

The meaningless καταταξετε w Ge 44 ²⁹ is due to ditto-graphed τα; the correct reading is of course κατάξετε = הוֹרִיתָם (ו). The same error occurs Ge 44 ³¹ 9 III K 3 ¹ 10 Am 3 ¹¹ 11 Jl 3 (4) ^{2,12}. The next step is the simplex ταξετε ¹³ (hence also without an intermediary Is 26 ⁵ 14); and, conversely, Je 19 ⁸ 15 Ez 44 ^{14,16}

How complete induction may be obtained.

Whether the student of the Septuagint aims at restoring the Greek original as it left the translators' hands, or, more ultimately, at a recovery of the Semitic "Vorlage," he is always face to face with problems of identification. Whatever is isolated, depending upon a particular constellation, cannot of course be covered by a general rule. But all those facts which are general, conditioned by causes which may occur again and again, must be formulated as rules, and as such be placed at the service of students. The complete induction of the

¹ συναψω 58 / συνάξω rell.

² επισυναψει 247 / επισυνάξει 71. 119. 243.

³ Comp. Is 53 ⁸ ἥκει Qmg. 62. 90. 144. 147. 233. Clem-Rom. Just-Mar. Chrys as a synonymous variant for ἤχθη rell.

⁴ ZAW., XXVI (1906), 88.

⁵ s* A Q^a. 36. 40. 42. 49. 62. 86. 95. 106. 147. 185. 311.

⁶ Bx c. a c. b. rell = הכה (ו) ה. ⁷ s*. ⁸ rell = אכה ה.

⁹ t*. ¹⁰ 247. ¹¹ 198. ¹² 62. 147.

¹³ Jl 3 (4) ² (311). ¹⁴ ταξεις 36 / κατάξεις rell.

¹⁵ καταξω B. rell / τάξω AGA = שמת (ו).

¹⁶ καταξουσιν BQ. rell / τάξουσιν A. 26. 42. 49. 90. 91. 106. 198. 238. 239. 306. Ald. = נתתי (ו), the intermediate καταταξουσιν is found in 62.

sum total of general, typical facts can be secured only by two methods of procedure which can be easily combined. On the one hand, each article in the Concordance to the Septuagint and the other Greek Lexical equations.

Versions of the Old Testament, such as we possess in the Oxford publication, must be gone through for the purpose of establishing all *lexical* equations. It is obvious, following as it does from the nature of Semitic speech, that derivatives and compounds must be treated in conjunction with the primary words and the simplicia. It has been shown in this paper how the equation of ἐπάγειν τινί or ἐπί τινα = אנה ב is substantiated by the equation ἐπαγωγή = עברה. The Greek compounds often serve merely to mark the "Aktionsart".¹ Whether we say in Greek ἀναγγέλλειν, ἀπαγγέλλειν, or the simplex ἀγγέλλειν, the Semitic equivalents will in most cases be indifferently the same. Where, on the other hand, the preverb retains its local force, as in the case of ἄγειν, the Semitic equivalent will naturally differ, and the differences will become evident as the compounds are studied in their totality and with a view to each other.

On the other hand, the text of the versions must be investigated with a view to *Grammatical* equations. *Grammatical* equations. I use the two terms, *lexical* and *grammatical*, in their widest connotations. When I say, ἄγειν = אנה ב, I abstract from all grammatical differences, such as the correspondence of the active to the Καλ, of the passive to the Semitic passive, of the aorist to the perfect, and the like. Equally, when I treat of the equations: aorist = perfect, ἐάν c. conjunct. aor. = אם c. imperf., or of such stylistic peculiarities as "adjectivum pro nomine in genit.", or "activum pro passivo", I abstract from the lexical meaning of the words or phrases entering into consideration. While a modicum of grammatical observation is necessary for the proper grouping of lexical equations within each article, the material for a grammatical Concordance may be gathered direct from the texts. Complete induction, at all events, can be had only by means of the two lines of investigation, the

¹ See the lucid exposition by MOULTON, *A Grammar of the New Testament Greek*, vol. i: Prolegomena, chapter vi.

lexical and the grammatical. It is a stupendous work, but it must be done: it is of utmost importance not only for purposes of textual criticism, but equally for a study of the oldest exegesis of Scriptures. And the results will have a decided bearing upon an understanding of the New Testament likewise which, in language and range of ideas, is linked to the Old Testament in the Hellenistic garb.

A Hymn to Mullil. Tablet 29615, CT. XV, Plates 7, 8 and 9.—By Rev. FREDERICK A. VANDERBURGH, Ph. D., Columbia University, New York City.

PLATES 7, 8 and 9 in Volume XV of *Cuneiform Texts from Babylonian Tablets in the British Museum* contain texts of sixteen tablets of Sumerian Hymns which are very important. The hymns are of sufficient length and variety to afford a good idea of what Babylonian Psalmody consists. Not one has less than thirty lines, and, in the collection, seven different deities are addressed: Bêl, Sin, Adad, Nergal, Bau, Kirgilu, and Tammuz, gods whose functions relate to almost every phase of Babylonian theology.

This hymn, addressed to Bêl, who is called in the colophon, line 74, *Mu-ul-lil*, is the first in the collection and one of the longest unilingual Babylonian hymns on record. The first sixteen or eighteen lines, however, and the last thirteen are too badly broken to give a connected discourse. From line 20 to line 63, the text is in fairly good condition.

This hymn dwells upon the majesty of Bêl's word. The Non-Semitic Bêl, older than Nannar or Šamaš, who were successively rivals of Bêl as local gods, came to be recognized as "the Lord of the lands." The place of his dwelling was in the temple, E-kur, located at Nippur, probably the "house" referred to in this hymn. As "the Lord of the lands", he was conceived of as controlling the destinies of men. Thus, we find him approaching men and speaking to them, as the following hymn shows. The fuller development of Bêl's position, as belonging to a triad, where Anu was considered god of heaven, Bêl, god of earth, and Ea, god of the deep, was Assyrian. We have no trace of this thought in our hymn.

My translation of this very difficult hymn and its commentary have had the cooperation of Dr. J. Dyneley Prince, Professor of Semitic Languages in Columbia University, and Author of *Materials for a Sumerian Lexicon*, whom I have

consulted while preparing this work, and who is himself just publishing a translation of the interesting *Hymn to Kirgilu* from the same collection, Plate 23.

Transliteration and Translation.

Obverse.

BROKEN TEXT.

1. — — — — — — — — — — *nun(?)*-e-bi *ma-te*
— — — — — — — — — — his prince(?) approacheth.
2. — — — — — — — — — — [-b]i *ma-te*
— — — — — — — — — — his — — approacheth.
3. — — — — — — — — — — — — — — [*gin*(DU)]
4. — — — — — — — — — — — — — — [*gin*(DU)]
5. — — — — — — — — — — — — — — a *gin*(DU)
6. — — — — — — — — — — *mu-un-ši-gar*(ŠA) èš(RI)
— — — — — — — — — — it is done; it is established.
7. — — — — — — — — — — [-e]-ne-àm *dimmer mu-ul-lil-lá* èš(RI)
— — — — — — — — — — the word of Mullil, it is established.
8. — — — — — — — — — — — — — — *dimmer gu-la-a* èš(RI)
— — — — — — — — — — of Gula, it is established.
9. — — — — — — — — — — [-a]m *dimmer mu-ul-lil-lá* èš(RI)
— — — — — — — — — — of Mullil, it is established.
10. — — — — — — — — — — *ma-ab-gu-lá-a* èš(RI)
— — — — — — — — — — which maketh it great; it is established.
11. — — — — — — — — — — *ma-ab-hul-a* èš(RI)
— — — — — — — — — — which maketh it evil; it is established.
12. — — — — — *sìg*(PA) *he*(GAN)-in-gug(KA)-ga èš(RI)
— — — — — [bearing] the sceptre(?), let him speak; it is
established.
13. — — — — — — — — — — *nu-mu-da-ma*(MA)-ma(MA)
— — — — — — — — — — on(?) the one who begetteth not.
14. — — — — — — — — — — *nu-mu-da-zi-zi*
— — — — — — — — — — the one who giveth no life.
15. — — — — — — — — — — *sar-ra mu-ub-bi-ir*
— — — — — — — — — — the one who bindeth the forest.
16. — — — — — — — — — — *bi sila*(TAR)-a *mu-ub-ri*
— — — — — — — — — — the one who setteth up the road.

17. — — — [-a]b(?) -il-e me-ri ám(A. AN) -da-ab-il-e
 — — — the one who lifteth up, who lifteth up the dagger.
18. — [-n]a-ám-da šam(Ú) -sun(SE) -na-ge sag im-da-sig(PA) -gi
 — — — the one who at the fixed period(?) of plant-
 growth smiteth the head.
19. — — — gig-ga-bi-eš ám(A. AN) ši-til(TI) -li
 — — — (to the sick one) (?) thou givest life.

LORD OF ABUNDANCE.

20. [da]m-a nu-mu-un-til(TI) -li-en ma-al-la nu-mu-un-til(TI) -li-en
 To(?) the spouse that liveth not, the husband(?) that liveth not,
21. dam-ma nu-mu-un-til(TI) -li-en dumu(TUR) -a nu-mu-un-
 til-(TI) -li-en
 the wife that liveth not, the child that liveth not (thou
 givest life).
22. zal(NI) nigin ne-en zal(NI) šà(LIB) ne-en
 Abundance of everything there is, abundance in the midst
 (of the land) there is.
23. šam(Ú) ki imina-bi ki-bi-ta šam(Ú) kù me-en
 The food of that land is sevenfold, in that land food to
 eat there is.
24. túr amar(ZUR) -bi a nag an-me-en
 In the resting place of their young water to drink there is.
25. ga-šá-an me-en mu-lu ká-šù(KU) eri-a kur(BAB) -ra me-en
 Lord art thou who for the gate in the city art protector.
26. el ki sug-bi má su-a me-en
 In the shining land on its water-ways shipping thou in-
 creasest.
27. peš a sug-ra ba-an-nigin-na me-en
 Plentifulness of water thou causeth the water-ways to enclose.
28. mu gig gin(DU) eri-gá(MAL) peš me-en kud(TAR) -mu
 ká me-en
 When an epidemic sickness is spread over the established
 city my (its) judge in the gate thou art.
29. ki il ki ne-en ê(BIT) damal muḥ gá(MAL) sag ê(BIT) úr-
 ra-bi me-en
 Over the land, the high land, over the broad house thou
 art established; thou art head over the house and its
 structure (beams).

30. *lid-ša*(LIB)-*ni-māl*(IG) *à*(ID)-*nu-māl*(IG) *me-en*
In the midst of their cattle when they are without power
thou art.
31. *nin gin*(DU) *šāl-māl*(IG) *lid-ša*(LIB)-*nu-māl*(IG) *me-en*
Faithful lord of compassion in the midst of the cattle that
are unsustained thou art.

LORD OF NEAR APPROACH.

32. *ù-mu-un-na e-ne-àm-mă*(MAL)-*ni na-ma-da-te mu(-lu)-da ni-ma-te*
The lord whose word approacheth, to mankind it is near.
33. *e-ne-àm dimmer gu-la-ge na-ma-da-te mu-lu-da ni-ma-te*
The word of Gula approacheth, to mankind it is near.
34. *e-ne-àm dimmer mu-ul-lil-lá-ge na-ma-da-te mu-lu-da ni-ma-te*
The word of Mullil approacheth, to mankind it is near.
35. *ê*(BIT) *zi-mu eri-a ma ni-in-ù mu-lu-da ni-ma-te*
My true house which in the city of the land endureth, to
mankind it is near.
36. *mu-lu zi-mu eri-a ma ni-in-ù mu-lu-da ni-ma-te*
My faithful folk (priesthood) who in the city of the land
endure, to mankind they are near.
37. *ê*(BIT)-*mu zu gal-gal-la ga-ma-te mu-lu-da ni-ma-te*
My house of great wisdom, may it be near; to mankind it
is near.

Reverse.

38. *[mu]-lu ká si il-il ga-ma-te mu-lu-da ni-ma-te*
He of the gate of the high tower (horn), may he be near;
to mankind he is near.

LORD OF SUPPLICATION.

39. *damal*(?) *gan me-en ud-da gab-da-peš mu-lu-na mu-pad-de*
Mighty, productive one thou art, let light extend, to his
people he shall speak.
40. *e-ne-àm dimmer gu-la-ge ga-ba-da-peš mu-lu-na mu-pad-de*
The word of Gula, may it extend, to his people it shall speak.
41. *e-ne-àm dimmer mu-ul-lil-lá-ge ga-ba-da-peš mu-lu-na mu-pad-de*
The word of Mullil may it extend, to his people it shall
speak.

42. *ud-da ê(BIT) azag-ga ga-ba-da-peš mu-lu-na mu-pad-de*
The light of the shining house, may it extend, to his people
it shall speak.
43. *ê(BIT) azag ê(BIT) pisan(ŠIT)-na ga-ba-da-peš mu-lu-na*
mu-pad-de
The shining house, the house of vessels, may it extend, to
his people it shall speak.
44. *mulu hul ki-ne gál(IG)-gál(IG) e-ne zi mu-pad-de e-ne*
Sinners at the altar prostrate themselves, for life they speak.
45. *ê(BIT) ri-a-ni gál(IG)-gál(IG) e-ne zi mu-pad-de e-ne*
In the house of their protection they prostrate themselves,
for life they speak.
46. *dím-mă(MAL)-ni sar mu-un-na-ra i-dib(LU) mu-un-na-*
ab-bi
Before their king they hold a festival, the word they speak.
47. *dím dimmer gu-la dív dimmer bara gín(GÍ)-gín(GÍ)-na*
i-dib(LU) mu-un-na-ab-bi
To the queen, to Gula the queen, to the deity of the
shrine, they turn, the word they speak.

LORD OF MAJESTY.

48. *za-e ud-da ga-šá-an-mu za-e ud-da a-ba da-peš a-na a-a-*
àg(RAM)
Thou who art the light, my lord, thou who art the light,
who can reach (to thee)! What can measure itself (with thee)!
49. *e-ne-àm dimmer gu-la-ge za-e ud-da a-ba da-peš a-na a-a-*
àg(RAM)
The word of Gula, thou who art the light, who can reach
(to thee)! What can measure itself (with thee)!
50. *e-ne-àm dimmer mu-ul-lil-lá-ge za-e ud-da a-ba da-peš (a)-na*
a-a-àg(RAM)
Word of Mullil, thou who art the light, who can reach (to
thee)! What can measure itself (with thee)!
51. *a ga-šá-an-mu túr-zu-da dù(KAK)-e alam-zu ta-a-an nigin*
Father, my lord, in thy court where thou art creative, who
can encompass thy image!
52. *mulu gam-ma-zu ki nu-un-gam alam-zu ta-a-an nigin*
Of the men who bow to thee in the lands which submit
not, who may encompass thy image!

53. *dumu*(TUR) *dur*(?) (KU) *gam-ma šú še-ir nu-un-ma-al alam-zu ta-a-an nigin*
Of the lofty(?) sons who bow down and exercise no power,
who may encompass thy image!
54. *dumu*(TUR) *dur*(?) (KU) *àg*(?) (RAM)-*ga*(?) *li-u gu tuš*(?)
(KU) *ib*(TUM)-*zu zal*(NI) *šim-e ba-nà*.

LORD OF RECOMPENSE.

55. *aga*(MIR) *sag mulu-e-da e-ne šú al kud*(TAR)-*kud*(TAR)-*de*
With crowned head among the people (and) with uplifted
hand he pronounceth judgment.
56. *e-ne-àm dimmer gu-la-ge e-ne šú al kud*(TAR)-*kud*(TAR)-*de*
The word of Gula, it with uplifted hand pronounceth
judgment.
57. *e-ne-àm dimmer mu-ul-lil-lá-ge e-ne šú al kud*(TAR)-*kud*
(TAR)-*de*
The word of Mullil it with uplifted hand pronounceth
judgment.
58. *igi*(ŠI)-*ni-da ud-de ê*(BIT) *bar-ri ud-de ga-ba-bi-èš*(RI)
The light of his face in the house of decision, may it
establish light.
59. *e-ne-àm dimmer gu-la-ge ê*(BIT) *bar-ri ud-de ga-ba-bi-èš*(RI)
The word of Gula in the house of decision, may it estab-
lish light.
60. *e-ne-àm dimmer mu-ul-lil-lá-ge ê*(BIT) *bar-ri ud-de ga-ba-*
bi-èš(RI)
The word of Mullil in the house of decision, may it estab-
lish light.
61. *a-ba ba- -a-de a-ba ba-tug*(TUK)-*gá*(MAL)-*e a-ba ba-an-*
ši-àg(RAM)-*e*
Who can — — who can grasp it! Who can keep it!
62. *e-ne-àm dimmer gu-la-ge a-ba ba-tug*(TUK)-*gá*(MAL)-*e a-ba*
ba-an-ši-àg(RAM)-*e*
The word of Gula, who can grasp it! Who can keep it!
63. *e-ne-àm dimmer mu-ul-lil-lá-ge a-ba ba-tug*(TUK)-*gá*(MAL)-*e*
a-ba ba-an-ši-àg(RAM)-*e*
The word of Mullil, who can grasp it! Who can keep it!

BROKEN TEXT.

64. *dumu*(TUR)-*mu* — — — — — *ba bad àg*(RAM)-*e*
My son — — — — — who can measure it!
65. — — — — — *ba bad a-ba ba-an-àg*(RAM)-*e*
— — — — — who can measure it!
66. — — — — — *a-ba ba-an-àg*(RAM)-*e*
— — — — — who can measure it!
67. — — — — — *a mu* — — — — — *a-ba ba-an-àg*(RAM)-*e*
— — — — — who can measure it!
68. — — — — — *an-ši-àg*(RAM)-*e*
— — — — — can keep it!
69. — — — — — *eš ba al bi eš mal-e a-ba ba-an-* — —
— — — — — who can — — — — —
70. — — — — — *an-da ku mal-e a-ba ba-an-ši-* — —
— — — — — who can keep — — — — —
71. — — — — — *ku mal-e a-ba ba-an-ši-àg*(RAM)-*e*
— — — — — who can keep it!
72. — — — — — *in-dug*(KA)-*ga šes-ra ba-an-da-šub*(RU)
— — — — — speak — — — — — brother — — — — — throw — —
73. — — — — — *in-dug*(KA)-*ga* — — — — — *ba an-da šub*(RU)
— — — — — speak — — — — — throw — —
74. — — — — — *lum-ma dimmer mu-ul-lil*
— — — — — of penitence to Mullil.
75. — — — — — *mu-bi in*
— — — — — its lines in the tablet.

Commentary.

Lines 1 to 19. Broken Text.

The beginning of each line up to line 20, being erased, a connected translation for this section is precluded. The closing words of each line, however, giving some complete clauses, are intact. Some of the characteristics of Bêl or Mullil who seems to be the subject of the hymn therefore crop out here.

1. *bi* is no doubt a pronominal suffix in this line, *te*, occurring here and many times farther on, has in it the idea of 'approaching,' *teḫû* being the Assyrian equivalent.

3. *gin* is a value of DU that might possibly fit here, equal to *kānu* 'set,' or the value *gub* might do, equal to *nazāzu* 'stand.'

6. *mu-un* is a common verbal prefix signifying completed action, *ši* an infix of location or direction, and *gar*(ŠA) or possibly the Eme Sal value *mar* as a verb, if we take its most usual meaning, equals the Assyrian *šakânu. êš*, one of the values of RI, equal to *nadû*, gives the meaning 'establish' which is probably the one intended for the close of this and the following six lines.

7. *e-ne-àm* is probably the subject of *èš*(RI). *e-ne-àm* equals *amâtu* and is a dialectic phoneticism for *inim*(KA), Br. 508. *e-ne-àm* occurs 15 or 16 times in this hymn. *e-ne-àm* is an 'authoritative word.' It sometimes stands for the god himself; see line 50. *mu-ul-lil-lá* is the Eme Sal form in Sumerian for Bêl's name.

8. *gu-la-a* equals *rabû* 'great,' and was also the name of a goddess. She appears in this hymn evidently as the consort of Bêl. The gods sometimes had more than one consort. The chief consort of Bêl was Bêlit. The goddess naturally possessed the same qualities as the god with whom she was consorted, but in a diminutive degree. Gula is more generally known as the consort of Nin-ib.

11. *hul*, the common Sumerian word for 'evil.'

12. We cannot state with much certainty the relation of PA in this sentence. *he*(GAN)-*in-gug*(KA)-*ga* is clearly a verb in the precativ construction. *in* may be a part of the precativ prefix, *he-in* being dialectic for *gan*.

13. *ma*(MA) = *alâdu*, Br. 6769, and the infix *da* may be locative, the pronominal representative being understood.

14. *zi* is one of the common words for 'life,' = Assyrian *napištu*, but here evidently a verb.

15 & 16. *sar-ra* = *kirû*, Br. 4315. *ub* and *bi* are verbal infixes, MSL. p. XXIV. *ir* = *kamû*, Br. 5386.

17. *ù* = *našû*, Br. 6148. *me-ri* is phonetic for the Eme Sal: *mer*(ÁD), *paṭru. ám*(A.AN) seems to occur sometimes as a verbal prefix, Br. p. 548, but it serves more usually as a suffix equal to the verb 'to be.' In *da-ab*, *dab*, 'unto it,' we have the pronominal object represented by *ab*.

18. *šam*(Ú)-*sun*(SE)-*na*, a word not often found outside of the collection of hymns in CT. XV, is explained by Professor Prince in his translation of some of these hymns, as 'plant-growth.' It is to be regretted that the sign SE in this com-

bination in these inscriptions is not very readily identified; the phonetic complement *na*, however, helps to confirm the reading of the sign as *sun*. *sig*(PA) = *maḥâṣu*, 'smite,' Br. 5576.

19. *eš* is sometimes a postposition, Br. 9998. *tîl*(TI) = *balâtu*.

Lines 20 to 31. Lord of Abundance.

The Assyrian Creation Legends assume that Bêl, the old god of Nippur, was the god of the earth *par excellence*, and that it was he who prepared the earth for the habitation of mankind. See Jastrow, *Religion of Babylonia and Assyria*, p. 140.

20 & 21. *dam* = *aššatu* and *ḏumu*(TUR) = *mâru*, and the parallellism between the two lines would suggest that *ma-al-la* must mean 'husband,' being a dialectic form for *mâl*(IG) which equals *bašû*, also *šakânu*, signifying 'substance,' 'existence,' &c.

22 & 23. *zal*(NI) = *barû* 'be abundant,' Br. 5314. *nigin* = *naḫharu*, Br. 10335. *imina-bi* = *sibitti-šunu* or *sibitti-šu*. *šam kû* = *rîtu akâlu*, 'food to eat.'

24. *tûr* = *tarbaṣu* and *amar*(ZUR) = *bûru* 'offspring.' *a nag* = *mê šatû* 'water to drink.' *kur*(BAB)-*ra* in 25 means 'protector,' from *naṣâru*.

26 & 27. These two lines go together and illustrate how Bêl's and Ea's provinces overlap each other, as regards the water-courses. *sug* = *sušû* and *su* = *ruddû*. *peš* = *rapâšu* 'extent,' from which we derive the idea 'plentiffulness,' and *a* may equal *mû* 'water.' *ba-an-nigin-na* is a verb; the prefix, one of usual occurrence, in a pronominal way takes up the remote object just given. *nigin* as a verb = *paḥâru*; above, it is a noun.

28. This and the following three lines offer a considerable difficulty in translation. *mu* = *šattu* from the fuller form *mu-an-na* 'name of heaven,' i. e., 'year.' From *gig* 'sick' and *gin* 'going' we get the translation 'epidemic sickness.' *kud*(TAR) = *dânu* 'judge.'

29. *îl* = *elû* or *našû*, and *mul*, although usually a preposition, seems here to have the place of a postposition. *ûr-ra* = *gušûru* 'beam.'

30 & 31. These two lines have parallel thoughts and consequently should be explained together. Their duplicates in Plate 24, possessing slight phonetic variations, help to a cor-

rect reading. Perhaps IG should be read *gál*, but line 11 of Plate 24 gives *ma-al*. Possibly *lid* is a loan-word from the Semitic *lidu* which is connected with *alâdu*, but there are lexicographic references which connect it with *lû*, making it equal to the feminine *littu* 'wild cow.' It is interesting to note also that the sign LID has a value *âb* = *arhu* 'wild ox.' *gin* (DU) = *kânu* and *šâl* = *rêmu*.

32 to 38. Lord of Near Approach.

The Babylonian theologian, as pointed out by Professor Jastrow, regarded Bêl as representing providential forces which operate among the inhabited portions of the globe. This idea is apparent here in the lines about Bêl's near approach.

32. Possibly it is well to note the difference between *na-ma-da-te* and *ni-ma-te*. The first, it will be noticed, has the infix *da* which the second does not have. This must be because of the locative relation of *da* to the noun preceding the verb. Another difference is that the first verb has the prefix *na* where the second has *ni*. *na* does not often occur as a prefix; when it does, it usually belongs to the verb of the third person. *na* may probably be a harmonic equivalent of *ni*. *ni* and *ne* are both used with an aorist tense. If *te* means 'is approaching,' *ni-te* must mean 'is near.' *ma* as a prefix would be a harmonic equivalent of *mu*, but, as an infix, must have reference to matter going before. *mu-da* seems to be a scribal error for *mu-lu-da*; see the same refrain in line 33.

35. *ni-in-û*: *nin* (*ni-in*) is a reduplication referring to the indirect object, probably to *ma* 'land.' *û* as equivalent to *labâru* can mean 'endure.' Possibly a value should be chosen for *Û* as meaning 'old' that may take the phonetic complement *-ra*; instances with *Û + ra* meaning 'old' are on record. On the other hand, *ra* may not be a phonetic complement at all.

38. *si* = *karnu* 'horn.' Notice the precative form of the verb, *ga-ma-te*; the infix *da* now has dropped out.

39 to 47. Lord of Supplication.

The thought passes here from that of Bêl giving command to his people to that of the people offering prayer to Bêl.

39. *damal* = *gabšu* and *gan* = *alidu*. *gab-da-peš* seems to be

for *ga-ba-da-peš*; see the next line, where *ga* is plainly precative. *peš* = *rapâšu* 'extend' as above. *pad* = *tamû* 'speak.'

43. *pisan*(ŠIT)-*na* = *pisannu* 'vessel;' we are guided by the phonetic complement in determining this value of ŠIT; the value *šid* would have given *alaktu* 'going,' *šiti* = *menûtu* 'counting,' and *sangu* = *šangû* 'priest.' Sacrificial vessels are no doubt referred to.

44. *ki-ne*, 'place of fire,' hence 'altar.' *gâl*(IG) = *labânu*, Br. 2241. *ri* in line 45 = *ḫatânu* which gives us the word 'protection.'

46. *sar*: the right Assyrian equivalent for this word here is *isinnu*, Br. 4311. No other meaning for SAR will suit in this line. From *sar* as 'forest' we easily pass to the conception 'park' and then to the 'festival' that might be held there. *ra* = *ramû*, Br. 6362. *i-dib*(LU) is the same as the Assyrian *kubû*. *i-dib* is said to mean 'seizing speech' and *i-nim*, referred to above, 'high speech.' It may not, however, be safe often to regard the parts of such composite words as having ideographic value. *bi* = *kibû* and *nab* (*na-ab*) calls up the double object, direct and indirect, giving such a use as in 'they speak it to him.'

47. *dîm* = *šarru*, Br. 4254, and of course we can say 'queen,' if *dîm* can mean 'king.' *bara* = *parakku* and *gin*(GÍ) = *târu*.

48 to 54. Lord of Majesty.

The last two lines of this section are exceedingly difficult, lines 51 and 52 also give considerable trouble.

The thought that the loftiness of the deity as incomparable, found here, appears in other hymns, particularly the great bilingual hymn to Nannar, published in IV R. 9. See Vanderburgh's *Sumerian Hymns*.

48. *a-ba* = *mannu* 'who?' *a-na* = *minû* 'what?' *a-a-âg*(RAM); reduplication of *a* for a verbal prefix is unusual; *âg*(RAM) = *madâdu* 'measure.' In line 50, *na*, by scribal error, stands for *a-na*.

51. *tûr*, 'court;' see line 24. *dû*(KAK) = *banû*, *epêšu*, *ritû*, &c. *alam*, according to Sb. 378, but *šalam*, according to Br. 7297, giving the Assyrian *lânu* and *šalmu* 'image.' *ta-a-an* = *minû* 'what?,' Br. 3969. *a-an* above = 'what?' *ta* alone also can = 'what?,' Br. 3958. *nigin* = *saḫâru* similar in meaning to *pa-ḫâru*; see lines 22 & 27. *gam* in 52 = *kanâšu* 'bow down.'

53. *dumu*(TUR) = *mâru* 'son;' see line 21. *dur*(KU); possibly KU = *rubû*; if so, the value would be *dur*, Br. 10498 & 10547. It would not alter the sense very much, if we should read KU as equal to *kakkê* and say 'son with weapons.' *šû* = *emûku* 'power.' *še-ir* is dialectic for *nir* = *bêlu*, *etellu*, *šarru* and other synonyms. *ma-al* is the same as *gál*(IG) = *šakânu* 'establish.'

54. It is almost impossible to tell how KU and RAM should be read in this line. If the fourth sign is *ga* the value of RAM is *âg*. RAM can = *ûru* 'command,' yielding a parallel with *ib*(TUM) 'wrath.' *li-a* (*dîšu*) 'luxuriant growth' + *gu* 'vegetation' form a parallel with *zal*(NI) 'abundant' + *šim-e* 'herbage.' The second KU read as *tuš* (*ašâbu*) makes a parallel to *nâ* (*rabâšu*).

55 to 63. *Lord of Recompense.*

In passing from the previous section to this, there is a change in the pronouns used. In that section Bêl is referred to with the pronominal suffix *-zu* 'thy;' in this section by the suffix *-ni* 'his.'

55. *aga*(MIR); this sign signifies 'crown,' and the value *aga* is apparently from the Semitic *agû*. *al* = *šîru* 'lofty,' Br. 5749. TAR we have had above; with the value *kud*, required by the phonetic complement *de*, we are led to some such meaning as 'judge,' *dânu*, Br. 364, line 28.

mulu-e-da; in line 33 and elsewhere, we have *mu-lu-da*; is there any difference in these two phrases except phonetically? Is *-e*, in a case like this, equal to the definite article 'the?'

58. *igi*(ŠI) = *pânu*, Br. 9259. *bar* = *pirîštu*, Br. 1788.

61. *tug*(TUK) = *aḥâzu* 'seize.'

A Hymn to the Goddess Kir-gi-lu (Cuneiform Texts from the British Museum, XV., Plate 23) with translation and commentary.—By Professor J. DYNELEY PRINCE, Ph.D., Columbia University, New York City.

THE following Eme-Sal hymn to the goddess *Kir-gi-lu* (obv. 4; also *Nin-kir-gi-lu*, rev. 14) is distinctly a prayer for fructifying rain, the granting of which in this petition is made the chief function of the deity. That *Kir-gi-lu*, occurring also Reisner, *Sum. Bab. Hymnen*, NO. III., Pl. 137, col. iii, 4, was none other than Ištar seems apparent from obv. 4, where *Kir-gi-lu* is mentioned as the tutelary deity of the *Ê-Nanâ*, the temple of Ištar. Ištar herself was the personification of fertility, the great mother of all that manifests life (Jastrow, *Religion*, Eng. Ed., p. 459), so that a hymn of this character, praying for plenty, is perfectly natural.

The exact meaning of the name *Kir-gi-lu* is not clear, but it seems undoubtedly to be connected with the idea of plenteousness. Note that the sign KIR-PEŠ = *mamlû* 'fullness,' 6933; also KIR-GAL, 6941; = *marû* 'be fat,' 6934; = *rapâšû* 'extend,' 6936; *šalâšû* 'to triple' = 'multiply,' 6937, all which meanings are in harmony with the general idea of fertility (MSL. 269).¹ For further discussion, see also below on obv. 2.

In obv. 20, 21, I have rendered DA-MU as Bau, in spite of the absence of the god-determinative AN. Here it should be noted that in some forms of the Babylonian theology, Bau was the mother of Ea, the deity of the ocean; viz., of water. Jastrow has suggested (*Religion*, p. 61) that, since Ea represents the waters of the abyss or lower realm, Bau, his mother, probably was the deity of the waters of the upper realm; i. e., the clouds, which makes an allusion to her in the present hymn peculiarly appropriate and implies her identification by the writer with the water-giving Ištar.

¹ MSL. = John Dyneley Prince, *Materials for a Sumerian Lexicon*, Leipzig, 1905. Numbers not preceded by a title are references to Brünnow's *Classified List*.

An interesting feature of this hymn is the occurrence of glosses giving the Eme-Sal pronunciation of certain signs; e. g., obv. 5; UN = *u*; UBUR = *u-bi-ur* for *u-bu-ur*; also rev. 8, *zu-ur zu-ur*, written under a sign which otherwise might be difficult to place.

I am especially indebted to the Rev. Drs. F. A. Vanderburgh and Robert Lau for many valuable suggestions in connection with the rendering of this difficult hymn.

CT. XV. Pl. 23.

Obverse.

1. *du(UL)-e pa-pa-al-ta er(A-ŠI) šeq(A-AN)-da*
For growth in the bud; a lamentation for rain
2. *azag-zu-mu nin ga-ta dimmer Kir-gi-lu*
My glorious wisdom, lady endowed with plenty, goddess
Kirgîlu,
3. *kur-sun(GUL)-sun(GUL) MU-GIG-IB ga-ta dimmer*
an-na
who irrigatest the earth, goddess endowed with fulness,
deity of heaven,
4. *nin-zi-mu ga-ta dimmer ê Nanâ-a-ra*
O my faithful lady, endowed with fulness, goddess of
the house of Ištar!
5. *dimmer u(UN)-mâ i-de ma-al ama ubur zi-da*
O goddess of my people (land), wise one, mother of un-
failing breast!
6. *la-bar lil-e ga-ta dimmer sal-šag*
Messenger of mercy, endowed with fulness, goddess of grace!
7. *du(UL)-e pa-pa-al-ta tuš(KU)-a-ta*
When growth dwelleth in the bud,
8. *du(UL)-e pa-pa-al dimmer azag-ga-ta*
the growth of the bud (is) from the goddess of glorious
fulness.
9. *du(UL)-e pa-pa-al dara(IB)-a-ta*
When the growth of the bud becometh full,
10. *ki-ág(RAM) me-e ma-ar ba-an-ag an-na*
the beloved one establisheth the decree; heaven ordaineth it.
11. *mulu-di ama-mu-ra dug(KA)-ga-na-ab me-na mu-un-gaba-e*
For the man of judgment who prayeth to my mother,
his command she setteth forth.

12. *ga-ta dimmer Gir-gi-lu-ge(KIT) dug(KA)-ga-na-ab me-na mu-un-gaba-e*

For him who prayeth to the fulness of Girgílu, his command she setteth forth.

13. *la-bar lil-e ga-ta dimmer sal-šag-bi me-na mu-un-gaba-e*
(She) the messenger of mercy, endowed with fulness, his lady of grace, his command she setteth forth.

14. *dimmer šeš-ki-ra muš(GIŠ)-gi-ta dug(KA)-ga-na-ab me-na mu-un-gaba-e*

For him who prayeth to Nannar (Sin) with devout inclination (?), his command she setteth forth.

15. *muš(GIŠ)-gi ama dimmer azag-ga-ta a-a-mu-ra dug(KA)-ga-na-ab*

For him who prayeth devoutly inclining (?) before the divine mother endowed with glorious fulness; (viz.,) to my father,

16. *me-na azag mu-un-tu(KU) mu-un-gaba-e me-na mu-un-gaba-e*

his glorious command she setteth forth; his command she setteth forth.

17. *me-na za mu-un-tu(KU) mu-un-gaba-e me-na mu-un-gaba-e*

His command as a jewel she fixeth; she setteth it forth; his command she setteth forth.

18. *azag ni-tuk-a azag-mu ba-ti*

The glorious one she is; my glorious one she liveth.

19. *za-gin(KUR) ni-tuk-a za-mu ba-ti*

A crystal she is; my jewel she liveth.

20. *lil eš(AB) da-mu ide (ŠI)-ni-šú(KU) ba-gúl*

The storm of the house, the goddess Bau before its very face rendereth nought.

21. *(lil eš[AB]) da-mu ide (ŠI)-ni-šú(KU) ba-xul*

The storm of the house, Bau before its very face destroyeth.

22. *a-a-mu ide(ŠI)-ni-šú(KU) ba-pi-el*

(the welfare?) of my father before his very face she seeketh (?).

23. *a-a-mu ide(ŠI)-ni-šú(KU) ba*

. of my father before his very face she

24. *i-dib(LU) nu-a-še er(A-ŠI) šeq(A-AN)-da*

. lament for lack of grain; lamentation for rain

25. (Kir)-*gí-lu-ge*(KIT) *i-dib*(LU) *nu-a-še er*(A-ŠI)
šeq(A-AN)-*da*
 of Kirgilu; a lament for lack of grain; a lamentation for rain

Reversè.

1. *i-dib*(LU)-*má me-a*
 my lament; the voice of
2.
3. *u-sún-na a-še-ir er*(A-ŠI)-*ra-ta*
 The gift of vegetation (in return for) penitential psalms and tears (she will grant?).
4. *damal-šaqgad-mu er*(A-ŠI)-*xul ag-na me-na*
 O my broad headdress (all sufficient protection), I(?) making sad lament, the voice
5. *me-e dimmer En-líl tub*(KU)-*bi šeq*(A-AN) *ide*(ŠI) *gin*(DU) *a-ma lu*
 The decree of Bêl is established; the rain goeth forward; my water
6. *a eri-gúl-a-mu ga sēq*(A-AN) *ide*(ŠI) *gin*(DU) *a-mu lu*
 Water for my city laid waste; plenteous rain goeth forward; my water
7. *ê-gúl-la eri-gúl-la-mu zi*
 For my house laid waste, for my city laid waste, life (hath been decreed?)
8. *šu-ni-el-ta im-ta zur-zur er*(A-ŠI) *gig ni-ib-*
 With her exalted hand in the rain-storm she establishes it; (in response to) troubled weeping
9. *gaba-ni su-ub azag ga al gúl-e er*(A-ŠI)-*gig ni-ib-bad*(BE)
 Her breast is glorious (and) shining; the devastation (in response to) troubled weeping (she will remove?).
10. *úr-ni u-kul-tir-ra-ni šag*(?) *er*(A-ŠI)-*gig ni-ib-*
 Her step (tread) the seed of her vegetation graciously(?) (in return for) troubled weeping (will cause to be?).
11. *utuga-a e-gúl*(?)-*gúl*(?)-*bi muš*(GIŠ) *ba-an-tuk-a-ta*
 When on the day of plenty, with her many streams(?) she giveth ear,
12. *en dumu*(TUR) *dimmer Nin-ki-gal-la-ge*(KIT) *nin-a-ni-šú*(KU) *mu-un-na-ni-me-en*
 the lord, the son of the goddess Allatu (Ninkigal), unto his lady is inclined.

13. *azag-zu-mu ninga-ta dimmer Gir-gi-lu kur-ta nam-ta-ê*
(UD-DU)

My glorious wisdom, lady endowed with fulness, the goddess Kirgilu over the land cometh forth.

14. *er(A-ŠI)-lib(m)-ma dimmer Nin-Kir-gi-lu*
A penitential psalm to the goddess, the lady Kirgilu.

15. *sal-zi-du i-dib(LU) ga-man-ku-tin mulu nam-mu-un-zi*
Faithful lady, may (her) word give life; she is the one who endoweth with life!

16. *du(UL)-e pa-pa-al-la ga-man-ku-tin*
The growth of the bud may she endow with life!

17. *du(UL)-e ki-azag-mu ga-man-ku-tin*
The growth of my pure place may she endow with life!

18. *ki-azag ki-? -na ga-man-ku-tin*
The glorious place; the place of . . . may she endow with life.

19. *ki-ag(RAM?) me-e mar(?) -ra-mu ga-man-ku-tin*
The beloved one (the plaint which I make?) may she endow with life-giving effect!

20. *azag a-a-mu ba-til-la-ta*
The glorious one; when she giveth life to my father;

21. *za a-a-mu ba-til-la-ta*
The jewel; when she endoweth my father with life!

Commentary.

Obverse.

1. *du(UL)* = *šuklulu* 'complete,' 9142. The original meaning of the sign seems to be 'advance,' as seen in *šitbû* 'advance, cause to advance,' 9162. It also means *naqâpu* 'gore,' said of a bull, 9144. For this root-idea 'push,' see MSL. 85, s. v. *du(UL)*.

pa-pa-al-ta, with suffix *-ta*; also 7, 8, 9. See 5631—5632: *giš(IZ) pa-pa-al geštin* = *dillatu* and *papallu*; loanword. *papal* may be for *pal-pal*, a fuller form of PA-PA 'staff, shoot of a plant.' Cf. 5629: U PA-PA-PA = *araru* 'a sort of plant.' I render 'vegetation' here.

er(A-ŠI), also rev. 3: 'weeping' (lit. 'water of the eye'); 'lamentation' (see MSL. 104).

šeq(A-AN) 'water of heaven' = 'rain.' See especially, MSL. 313.

It is highly probable that this line is the heading of the inscription. Note the refrain-like recurrence of the words *du(UL)-e pa-pa-al* in obv. 7, 8, 9. Obv. 25 is possibly another heading for the second part of the hymn given in the reverse.

2. *Azag-zu-mu*. I render 'my (*mu*) glorious wisdom (*azag* = *ellu*, 9890 + *zu* = *nimêqu* 'deep wisdom,' 136). The conventional Semitic translation of this combination is *emuqtu* 'deep wisdom;' cf. Reisner, *Hymnen*, plate 135, NO. III., col. iii., 3; a parallel passage.

nin-ga-ta; lit. 'lady endowed with breast' = 'plenteousness' (MSL., 111: *ga* 'breast, milk, plenty').

dimmer Kir-gi-lu, the name of the goddess. See also Introduction for discussion. *Kir-peš* = 6933: *mamlû* 'fulness' (MSL. 269). *gi* seems also to mean 'plenteousness' (MSL. 136). The name then appears to mean 'the lady who embraces (LU-DIB) copious plenty,' an epithet harmonizing admirably with her character as set forth in this hymn, where she is the giver of plenty-bringing showers. It is not certain whether the signs KIR-GI-LU should not be read *Peš-gi-lu*, or even *Peš-gi-dib*, *peš* being the usual Sumerian value for KIR (MSL. 269).

3. *kur-sun-sun* 'who irrigatest the earth.' *sun* = *gûl* must denote irrigation here from the context, which demands a benevolent function of the goddess. With the value *gûl*, however, it means 'inundation;' cf. rev. 6: *gûl* = *abâtu* 'destroy by water.'

mu-gig-ib = 1319: *ištarîtu* 'goddess;' cf. also Reisner, *Hymnen*, pl. 135, III. col. iii, 5: *mu-gig-an-na* = *il ištarît il A-nim* 'the goddess of heaven.' *mu-gig* seems to mean 'heavy' or 'important name,' being a grandiloquent equivalent for the goddess Ištar, whose name was all powerful. Note that *gig* = *kibtu* 'heaviness, trouble,' 9232. *ib* perhaps = *barû* 'be full,' as in obv. 9, q. v.

4. *nin-zi-mu* 'my faithful lady;' *zi* = *kênu* 'faithful,' 2313, probably not 'lady of life' here, as *nin-zi* suggests *nin-zi-da*, the fuller form (see below on obv. 5). Reisner, *Hymnen*, 135, III, col. iii, 8: *rubâtum kêtum* 'lady of faithfulness.'

ê nanâ 'the house of Nanâ' was probably *e-an-na* in Erech. Note the dative *-ra* for the genitive *-ge*(KIT).

5. *dimmer u(UN)-mâ*. Un, here with the new value *u*(ES) especially glossed in, = *mâtu* 'land,' 5914, or *nišu* 'people,' 5915. The usual EK value is *kalama*. The suffix *mâ* here is, I think,

the ES suffix *mâ* = EK *-mu* of the first person. See also rev. 1. Elsewhere in this hymn, the ordinary EK *-mu* of the first person is used, as obv. 2—4; rev. 6, etc., perhaps, however, applied purely ideographically and to be pronounced *mâ*, since the hymn is unmistakably ES.

i-de ma-al, lit. 'having eye' = 'perception' = *mudû* 'wise one,' 4011. On the val. *ama*, see MSL. 30.

The sign UBUR with value *ubur* (5553) also = *ugan*, 5552. The word *u-bur* seems to be a combination of the abstract *u-* + *bur* 'vessel,' MSL. 63, and probably means 'the vessel *par excellence*,' hence 'breast, teat.' Note that the gloss here indicating the pronunciation is written *u-bi-ur* and not *u-bu-ur* as might be expected. This practically gives the consonantal value *b* to the syllable *bi*, an unusual phenomenon.

zi-da = *kênu* 'fixed, unflinching,' 2313.

6. *la-bar* = *sulkallu* 'messenger,' 993.

lil-e must = *silîtu* 'mercy' here, 5932, although this meaning is not well established. The context certainly requires a benevolent sense. *lil* seems to occur in an opposite sense in obv. 20.

dimmer-sal-šag; I render 'goddess of grace,' regarding *sal* as the abstract prefix (as in *sal-xul* = *limuttu* 'evil,' 10958) before *šag* = *dumqu* 'grace,' 7292.

7. *tuš(KU)-a-ta* 'when it is established;' lit.: 'when it dwells.' KU = *ašâbu* 'dwell,' 10523.

9. *dara(İB)-a-ta* 'when it becometh full.' See MSL. 72. IB means 'be plenteous'; cf. DAR = *tarru*, 3471 and *dara(İB)* = *isxu* 'a swarm of fish,' 10483. Hence the rendering here.

10. *ki-ûg(RAM)* = *narâmu* 'beloved,' 971.

me-e = *qûlu* 'voice, decree,' 10370 and 10374: *parçu* 'decree.'

mâ-ar must be ES for *gar* = *šakânu* 'establish,' 11978.

ba-an-ag 'makes, ordains;' *ag* = *epêšu* 'do, make,' 2778; also rev. 4. Here *ba-an-ag* may be construed participially 'maker of:' 'heaven is the maker of it.'

11. *mulu* 'man,' 6398 + *di* = *dênu* 'judgment,' 9525.

ama-mu-ra 'to (-ra) my (-mu) mother' (*ama*; see on obv. 5).

dug(KA)-ga-na-ab; lit.: 'to him who (*nab*) speaketh (*dug-ga* = *qibû*, 531).

me-e; here with third personal suffix *-na*.

gaba = *paṭâru* 'loosen, solve;' here = 'set forth,' 4488.

14. *šeš-ki-ra* 'to Nannar,' the moon-god. Cf. CT. XV., pl. xvii, obv. 2—5, and see Vanderburgh, *Sumer. Hymns*, p. 45, for the term.

muš(GIŠ)-*gi-ta* 'with (*ta*) inclination' = *muš*(GIŠ)-*gi*. I assign the ES value *muš* to GIS which seems to serve here as an abstract prefix to the root *gi*, which connotes the idea 'bending.' The sense appears to require the idea 'prostration in worship.'

15. *a-a-mu-ra* 'to my father;' *a-a* = *abu*, 11690.

16. If the third sign is *šub*(RU), it seems to mean *nadû*, 1434: 'fix, place' and qualifies *me-na* 'his command,' but I am inclined to read it as *azag*, owing to *za* in line 17 and a similar parallelism between lines 18 and 19.

mu-un-tu(KU) 'she establisheth' (also obv. 7). KU, 10528 = *kanû* 'fix, establish' (see MSL. 210, 211). * In rev. 5, KU-*bi* must be read *tub*(KU)-*bi*, with the same meaning.

17. *za*; also obv. 19 = *abnu* 'stone' or 'jewel,' MSL. 359—360. Cf. Rev. 20.

18. *ba-ti* 'she liveth' (MSL. 330).

19. *za-gin*(KUR) 'jewel, shining object' (MSL. 362), usually with ideogram *tak* = *abnu* 'stone,' 11773. Note that *zagin* is repeated in the second member here by the simple *za* 'jewel' (see on obv. 17).

20. *lil-eš*(AB) *da-mu*; a very difficult combination. The first sign may be *lil*(KIT) = *šâru* 'wind,' 5933; *zaqiqu* 'tempest,' 5934. *eš*(AB) means *bîtu* 'house,' Sb. 189, while *da-mu* may signify the goddess Ba-u, 6662, in spite of the absence of the god-sign AN. See above Introduction.

ide(ŠI)-*ni-šû*(KU) can only mean then 'before its very face;' viz., directly, without resort to subterfuge, she destroys the storm of the hostile house, or perhaps the storm which attacks 'my house.'

ba-gul; *gul* must = *abâtu* 'destroy,' 8954 (cf. rev. 6, 7), here used in rhymed assonance with the clear *xul* of the following line.

21. *ba-xul*; by paronomastic association *xul* = *qullulu* 'slight, treat lightly,' 9500; *lamânu* 'treat evilly,' here associated with the preceding *gul*.

22. *ba-pi*-(*el*). Thus Dr. Lau, who cites 7977: *ba-pi-el-la*(*l*) = *ište*, 'cares for, seeks.'

Line 23, although very mutilated, seems to imply a benevolent sense; viz., that the goddess aids the father after destroying the foes.

24. *i-dib*(LU), also obv. 25, rev. 1, = *qubû* 'lament,' 4040. Note also rev. 15.

nu-a-še must be the privative *nu* 'lack of' + *a-še* 'irrigation of grain.' On the following words, see on obv. 1. This is perhaps a heading of the reverse part of the hymn.

Reverse.

1. *i-diḫ(LU)-mà*, with apparent ES suffix *mà* of the first person. See on obv. 5.

3. *u-sun-na* 'gift of vegetation.' The second sign here is clearly *se*, *sum*, but to be read *sun* with the following *-na* complement, as Dr. Lau has suggested. The preformative *u* must mean 'plant,' 6027. The whole combination then means 'plant-giving.'

a-še-ir = *tanḫu* 'penitential psalm,' 11574. This combination was probably identical with *a-ši*, obv. 1, which has the val. *er*.

4. *damal šaqqad-mu* means literally: 'my broad headdress;' *šaqqad* = *kubšu* 'headdress,' 8864, MSL. 310. The meaning of the line is obscure. Possibly "headdress" means protection of the head, referring to the goddess as a protecting force. Cf. also Pl. XXIV, line 10 of Ct. XV.

5. The decree of *En-lil* = Bêl, who is the god having authority over the storm (see Vanderburgh, *Sum. Hymns*, pl. 15, line 15).

tub(KU)-bi 'it is established. See on obv. 16—17. On *šeq* (A-AN), see on obv. 1.

ide(ŠI)-gin(DU) must mean that after the supplication to the goddess was made, the fructifying rain then went on. The allusion in the word *a-mu* at the beginning of the final mutilated phrase is of the same character.

6. *eri-gul-a-mu* seems to mean 'my city laid waste;' *gul* is the same sign as in obv. 20 = *abātu* 'destroy,' 8954.

ga šeq (A-AN), I render, 'plenteous rain,' regarding *ga* as standing in adjectival relation to *šeq* (A-AN).

7. *ê-gul-la eri-gul-la-mu*; here the possessive *-mu* applies evidently to both the nouns *ê* and *eri*. The sign *zi* must mean 'life' (MSL. 363—364), as the context demands a promise.

8. *šu-ni-el-ta* 'with her glorious hand;' *šu* 'hand' being the symbol of the goddess's power.

im-ta 'in the rain-storm;' *im* = *zunnu* 'rain,' 8374. The goddess establishes the coming of plenty by the coming rain. *zur-zur* = *kunnû* 'establish,' 9087 (9071); note the gloss here *zu-ur zu-ur*.

er(A-ŠI)-*gig* may commence a phrase meaning 'in reply to troubled weeping she will bestow rain or plenty.' Note that *gig* = *marġu* 'troubled,' 9235.

Then follows a verb with the prefix *nib-* as in the following line 9.

9. *su-ub* = *mašâšu* 'glitter, shine,' 203.

I cannot render *ga-al*, as the line is very obscure.

10. A difficult line. I regard the first sign as *úr* = *kibsu* 'step,' 11891. Perhaps her step or tread calls forth vegetation?

u-kul-tir-ra-ni; a difficult combination. I am inclined to render: *u*, probably merely the abstract preformative here + *kul* = *zêru* 'seed,' 1668 + *tir* = *kištu* 'plantation,' 7661. The sign rendered *šag* 'graciously' is very obscure in this text.

11. *utu ga-a* can only mean 'on the day of plenty,' = *ga-a*, as in rev. 6. *e-gul*(?)-*gul*(?)-*bi* is very doubtful, as the sign I read *gul* might just as well be RAM. The sense seems to be that *e* = *iku* 'water-stream,' 5841 (MSL. 92—93). If the second sign is *gul-sun*, this is the *gul-sun* 'inundation' as in obv. 3, read *sun*. The reduplication would then indicate the plenteousness of the fructifying waters.

muš = ES for *giš*; *tuk* must mean 'give ear' = *šemû*, 5727. The suffix *-ta* appended here makes the whole clause dependent, as in rev. 20—21. We have a precisely similar construction in Turkish *dediklerinde* 'when they said' (*-de* = 'when').

12. In connection with *Nin-ki-gal* = *Allatu*, the goddess of the lower world, note that she was regarded as a representative of production as manifested in the earth.

mu-un-na-ni-me-en; lit.: 'he is (*mên*) to her' = *ni*; i. e., 'he is inclined towards her to do her will.'

13. *nam-ta-ê*(UD-DU) 'she cometh forth' (*ê* = *aġû* 'go forth'). The *n*-prefix *nam-* is not necessarily negative.

14. *er*(A-ŠI)-*lib*(*m*)-*ma*; see Prince, *JAOS.* xxviii, 180.

With this colophon the hymn proper ends. Then follow seven lines of what appears to be additional addresses to the goddess, possibly the work of another hand.

15. *sal-zi-du* 'faithful lady,' *zi-du* for *zi-da* = *kênu* 'firm, faithful' occurs also IV, 28, 29a.

ga-man-ku-tin must mean 'may she (prec. *ga-*) endow it

(-man-) with life (*ku-tin*): *ku* = 'establish' + *tin* = *balātu* 'life,' 9853. This is the refrain of the next three lines.

mu-lu as subject here must mean 'she is the one who,' as *mulu* = rel. *ša* = 'who, the one who.'

In *nam-mu-un-zi*, we have again a *nam*-prefix which is clearly not negative, as in line 13, rev.

20. *ba-til-la-ta*, with suffix *-ta* = 'when,' as in rev. 11.

21. These lines close with an unfinished clause, indicating that they were probably jottings from a parallel hymn.

The Parsī-Persian Burj-Nāmah, or Book of Omens from the Moon.—By LOUIS H. GRAY, Ph.D., German Valley, New Jersey.

THE title of *Burj-Nāmah*, "Zodiacal Sign Book," is applied to a short Parsī-Persian poem "in 26 couplets, stating what the first appearance of the new moon portends in each sign of the zodiac" (West, in *Grundriss der iranischen Philologie*, ii. 128). It is contained on folio 64 of a most interesting collection of *rivāyats* and other Parsī-Persian material (for a partial list see West, *op. cit.*, pp. 123-128) preserved in a manuscript belonging to the University of Bombay (BU 29). "All the 26 couplets are written in double columns, and occupy three-quarters of folio 64*b*" (letter of Darab Dastur Peshotan Sanjana, Bombay, June 29, 1909). The whole manuscript is officially entitled "Revayet-i Darab Hormazdyar—Autograph of the compiler, written A. Y. 1048, A. D. 1679," and is bound in two volumes, the first containing folios 1-287, and the second folios 308-556. In view of the exceptionable value of the collection for students of Zoroastrianism, the following description of the codex, most kindly sent me by Fardunji M. Dastur, Registrar of the University of Bombay (Feb. 3, 1910), may well find permanent record here. "This Rivāyat was obtained for the Bombay Government at Bharuch by Professor Martin Haug in January 1864, and was shortly afterwards bound in two volumes. Originally, it must have contained 556 folios, each 10 1/2 inches high, 8 3/4 inches wide, and all written 21 lines to the page; but 47 of these folios were lost before 1864, namely folios 35-43, 160, 161, 288-307, 428-441, 535, and 540. The contents of folios 160, 161 were recovered, in 1893, from another MS. (W), formerly belonging to the Revd Dr. John Wilson of Bombay and now in the library of the Earl of Crawford at Wigan in Lancashire, which is descended from this MS. and was written in 1761-2 by Nōshīrwān Bahrām of Bharuch. W is also an imperfect MS., as 55 of

its folios (corresponding with folios 65-107 of this MS.) have never been written; but all deficiencies of this MS. can be supplied from W, except the contents of fols. 535 and 540, which must have been lost before 1762. This MS., itself, is probably the original compilation of Dārāb Hormazdyār Frāmroz Kiyāmu-d-dīn (or Kawāmu-d-dīn) Kai-Kubād Hamjiyār Padam Sanjānah, and contains eleven colophons written in his name and varying in date from 20 April to 21 November, 1679, at which latter date the compilation was completed. His names and dates occur on 13 *a* 8-10, 30 *a* 11-15, 34 *a* (centre), 50 *b* (bottom), 78 *a* (bottom), 106 *b* (bottom), 108 *a* 5-6, 198 *b* 3-4, 484 *a* 4-7, 518 *b* 5-8, and 550 *a* 16-18; the dates of which are six years earlier than that of Dārāb's supposed original Rivāyat at Balsār mentioned in the *Parsī Prakās*, p. 16, n. 3.¹ Other copies of Dārāb's Rivāyat exist in the Mulla Fīrūz Library, and in that of Dastur Dr. Jāmāsp Minochiharji, both in Bombay; and in some cases the arrangement of the contents varies, as appears from the catalogue of the Mulla Fīrūz Library (Bombay, 1873), pp. 172-178.²

In BU 29 the *Burj-Nāmah* immediately follows the *Mār-Nāmah*, a similar list of omens to be drawn from the appearance of a snake on each of the days of the month. This *Mār-Nāmah* I have already considered at some length in a paper which will appear in the *Hoshang Memorial Volume* now in press at Bombay; and the present contribution may, accordingly, be regarded as a continuation and supplement of my study of the "Snake Book."

The *Burj-Nāmah* goes back, as we have seen, to 1679, and it is probably of somewhat earlier date, for it is scarcely likely that Dārāb Hormazdyār, the compiler of the manuscript which has preserved it, was also its author. In my study of the *Mār-Nāmah* I have suggested that the whole basal system of this sort of augural calendars may have been derived ultimately from Babylonia. Perhaps the same suggestion may be made in the case of the *Burj-Nāmah*, though whether the "astrological forecasts for the various months, taken from ob-

¹ Two more references to the *Parsī Prakās* are given by West (*op. cit.*, p. 126), but the work is unfortunately inaccessible to me.

² This catalogue fails, however, to mention anything corresponding to the *Burj-Nāmah*.

pp. 438-439); and the impossibility of making any people particularly guilty for its introduction is shown, were such proof necessary, by its occurrence among the American Indians (Waitz, *Anthropologie der Naturvölker*, iii. 113, 383; see also Post, *Grundriss der ethnologischen Jurisprudenz*, ii. 391-392 for legislation against it among American Indians, Semites, and Aryans). Despite the statement of Herodotus and the prohibitions of the Avesta, however, I am inclined to doubt whether paederasty was wide-spread among the Persians until a much later period, which perhaps began with the Mohammedan invasion of Irān. That it was lamentably common among the Arabicised Persians is only too plain from the *Thousand Nights and One Night* (cf., for example, Payne's translation, ix. 69 sqq.). To some extent the practise formed part of the Babylonian cult (cf. the determined resistance to the קדשים in Deut. xxiii. 17-18, I Kings xiv. 24, xv. 12, xxii. 46, II Kings xxiii. 7), and this may perhaps have lingered on (possibly furthering, if not even more powerful than, the maleficent influence of Greece), to be still more enhanced by the sensuality of the Arab invaders. But on the other hand, India seems free from this vice, even so minute a scholar as Schmidt recording nothing regarding it in his *Beiträge zur indischen Erotik*.

This absence of paederasty from India, combined with the repeated mention of it in the *Burj-Nāmāh*, makes it probable that the poem was composed in Persia, not in India, and that, as already intimated, Dārāb Hormazdyār was merely its compiler, not its author. How far previous to 1679 it was written is, of course, uncertain, but it may well be several centuries older, especially when it is remembered that the analogous *Mār-Nāmāh*, contained in the same collection, occurs in principle in al-Birūnī's *Chronology of Ancient Nations* (tr. Sachau, p. 218), written in 1000 A.D.

For the text of the *Burj-Nāmāh*, here published and translated for the first time, I am indebted to the courtesy of Darab Dastur Peshotan Sanjana, High Priest of the Parsis at Bombay, who, at my request, made the transcript for me from BU 29 in June, 1909. The text and its translation are as follows:

بنام ایزد مهربان دادگر

- ز لطف خداوند روزی رسان
بگویم زهر ماه نو میتوان
ز برج حمل چو به بینی نو ماه
بکن اندر آن دم بآتش نگاه
گر آن ماه کارت بود خویشتر
ز کنتار دان کنون درنگر
هم از تور بنگر به بینی گورا
گر آن ماه بهتر بود مر ترا
چو در برج جوزا به بینی نو ماه
در آن وقت کن تو بزهر نگاه
بپرهیز از کور و اورا مبین
گر باشدت آن ماه نیکوترین
چو در برج خرجنگ ببینی قمر
ز گفت حکیم این تو بشنو خبر
در آن دم نظر کن بآب روان
دگر سبزه را خوب یا اوروران
ز برج اسد چو به بینی نو ماه
تو بر آسمان کن زمانی نگاه
10 بخواه حاجت از پای پروردگار
چو در برج خوشه به بینی تو دان
مبین تو جنان رودگر کن زدود
بخوان ذکر یزدان بصدق درست
چو در برج میزان به بینی قمر
15 بخواه حاجت از کردگار جهان
تو بنگر ابام بنیکو نظر
مبین چیز مکروه ای نامور
چو در برج² قوس اندر آید قمر
مبین روی بیمار را آنزمان
20 از برج جدی چو به بینی نو ماه
تو منگر ز بیمار وهم کودکان
چو دلو در بینی همی ماه نو
بخواه حاجت از قادر کردگار
چو در برج ماهی به بینی تو ماه
25 به بین و بشو شادمان انزمان
همین است مار اکنون یا ددار
گر باشد نگهبان پروردگار

In the name of God, Compassionate, Omnipotent!

(1) By the grace of the Lord I shall tell, so far as possible, what the days bring according to each new moon.

¹ MS. حنا.

² Dastur Darab's transcript has برس.

(2) When thou seest the new moon from the sign of Aries, at that instant gaze on the fire;

(3) If in that moon thy affairs should be better, consider (that to be) from the making of a grain-jar.¹

(4) Also from Taurus (when the new moon appears), gaze (and) look on a cow if this month is to be better for thee.

(5) When thou seest the new moon in the sign of Gemini, at that moment gaze on her shining;

(6) Beware of mirage and look not on water if that month is to be most good for thee.

(7) When thou seest the moon in the sign of Cancer, hark thou to tidings from the speech of this physician;

(8) Then look to the gate of the soul, though for verdure (this sign) is good, Auvarān(?).

(9) When thou seest the new moon in the sign of Leo, gaze a while upon the sky;

(10) Ask thy need of a pure king; look not, so far as possible, on boy or woman, O famous one!

(11) When in the sign of Virgo thou seest (the new moon), be wise from its meaning, harken to me thus:

(12) Look not on women (and) make thy musician of smoke,² unless thou wouldst make thyself particularly sorrowful;

13) Recite thou praise of God with perfect sincerity if fortunate doings are to be in that new moon.

(14) When in the sign of Libra thou seest the moon, gaze on a mirror and on armour smooth;

(15) Ask thy need of the Creator of the world. Likewise of the sign of Scorpio I shall tell, so far as possible:

(16) Look on Scorpio with a good gaze; young man, in tradition it is not blind and not deaf;³

(17) Look not on an abominable object, O famous one, if with goodness that moon is to come to thee.

(18) When the moon enters the sign of Sagittarius, look straightway on silver and gold;

(19) Look not on the face of the sick then; be on thy guard that thou mayest be joyful.

¹ The meaning of this line, if I have rightly rendered it, is very unclear to me.

² *I. e.* of nothing; in other words, "have no musician."

³ The meaning of the allusion is unknown to me.

(20) When thou seest the new moon in the sign of Capricornus, straightway recite the *Ašm ahū* (*Ašm vohu*) thrice;

(21) Look not on the sick and likewise (not) on boys, else wilt thou be unhappy in that month.

(22) When in Aquarius thou seest the new moon, recite the *Aytā ahū vair* (*Yaθā ahū vairyō*), listen unto them;

(23) Ask thy need of the mighty Creator; look not on boy or woman, O famous one!

(24) When thou seest the moon in the sign of Pisces, look straightway on gem and jewels;

(25) Look and be happy then; be happy, and it will not be harm to thee.

(26) Likewise is the snake now, O Creator, if the king be guardian.

Note on Some Usages of לָכֵן.—By J. M. CASANOWICZ,
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IN a former article in this Journal¹ a number of passages from the Old Testament were quoted in which ל is not a preposition but an emphatic particle, meaning 'verily'. Professor Haupt pointed out to me that this emphatic ל can also be traced in some cases of לָכֵן, which is then not a compound of the preposition ל and the adverb כֵּן, meaning 'thus', = 'therefore', but of the emphatic ל and the adjective כֵּן, meaning 'verily thus', as, for instance, in Micah i, 14, or 'very well', as in Gen. iv, 15; xxx, 15; Jud. viii, 7; I S. xxviii, 2, while in some passages it is to be rendered by 'not so', 'but', 'yet' (= Arabic *lakin*).

In the following passages of the 176 in which לָכֵן occurs the adopting of an emphatic, instead of a causal or argumentative, meaning for it would seem to establish a better logical connection of the context.

לָכֵן 'verily'.

1. Is. xxvi, 14. מְתִים בֹּל יִחְיוּ רַפְאִים בֹּל יָקֻמוּ לָכֵן פָּקַדְתָּ וְתַשְׁמִידִם וְתֹאבֵד כָּל זֵכֶר לָמוֹ, 'the dead will not live, the shades will not rise. Verily thou hast visited to destroy them and cause all memory of them to perish'. The difficulty of ל here in its usual causative or argumentative meaning was perceived by Delitzsch (*in loco*) and in Brown-Driver-Briggs in their Hebrew and English Lexicon, p. 487^a, who explain it (as also in Is. lxi, 7; Jer. ii, 33; v. 2; Job xxxiv, 25; xlii, 3) as 'inferring the cause from the effect, or developing what is logically involved in a statement'. But we would expect כִּי instead of לָכֵן. But taking ל in the emphatic meaning the second hemistich is an epexegetical climax of the first: They will not live, they will not rise: yea, or, to be sure, thou didst visit upon them a radical punishment.

¹ Vol. 16, *Proceedings*, pp. clxvi-clxxi.

2. Is. xxvii, 9. לכן בואת יִכְפֹּר עֹון יַעֲקֹב וְזֶה כֹל פְּרִי הַסֵּר הַמָּאֲתוֹ. וגו', vv. 7 and 8 read: 'Has he smitten it as he smote the smiter? Or was it slain as its slayers were slain? By affrighting it, by sending it away dost thou contend with it; he drove it away with his rough blast in the dry of the east wind'. V. 9 then goes on to say: 'Verily by this—*i. e.*, only in this way—will the sin of Jacob be expiated and this will be the fruit of removing his sin', &c. So also Grätz, *Monatsschr. für Gesch. u. Wissensch. d. Jdth.* 1886, 21, 'wahrlich'. However, the connection of v. 9 with the preceding and succeeding passages is rather loose, and it is possibly out of place here.

3. Is. lxi, 7. לכן בארצם מְשֻׁנָּה יִירְשׁוּ שְׂמֵחַת עוֹלָם תְּהִיָּה לָהֶם. If the reading of v. 6 in the MT. is correct, viz., 'For your shame ye will have double, and for confusion they (or, you) will rejoice over their (your) portion', 'ל' introduces an emphatic parallelism: 'Yea, in their own land will they possess double and their joy will be everlasting'. See, however, the emendations of v. 6 by Oort (quoted in the critical notes to Kautzsch's translation) and Cheyne, SBOT, Isaiah, Hebr. edition, pp. 66 and 161.

4. Jer. v, 2. וְאָם תִּי יִהְיֶה יֹאמְרוּ לֹכֵן לִשְׁקֵר יִשְׁבַּעוּ, 'and though they say, As Jhvh lives, surely they swear falsely'. So the ARV. This makes unnecessary the adoption of an adversative meaning for 'ל' here. Duhm (in Marti's *Kurz. Hdk.*) would change the 'sinnlose' לֹכֵן, after viii, 6, into לֹכֵן or כֵּן לֹא and strike לִשְׁקֵר. But for swearing falsely נִשְׁבַּע is always combined with שְׁקֵר or שָׁוְא. In taking an oath it is not primarily a question of right or wrong, but of true or false.

5. Micah i, 14. לֹכֵן תִּתְּנִי שְׁלוּחִים עַל מוֹרֶשֶׁת גַּת, 'thus thou must indeed give a parting gift to Moresheth Gath'. So Haupt.

6. Zach. xi, 7. וְאָרַעָה אֶת צֹאן לֹכֵן עֲנִי הַצֹּאן, 'so I fed the flock of slaughter, verily the poor of the flock'. So the RV. LXX, εἰς τὴν Χαναανίτιν = 'לִכְנֻעֲנֵי הַצֹּאן'.

7. Job xxxiv, 25. לֹכֵן יִבִּיר מַעֲבָדֵיהֶם וְהִפֵּךְ לֵילָה וַיִּדָּבְאוּ, v. 24 reads: 'He breaks the mighty without an inquiry and sets others in their place'. 'ל' introduces not the cause, but the reason of 'without inquiry': 'Verily he knows their works (sc., without inquiry), and so he overturns them in the night so that they are crushed'. So Vulg.: novit enim opera eorum; LXX: ὁ γνωρίζων αὐτῶν τὰ ἔργα, omitting 'ל'.

8. Job xlii, 3. מִי זֶה מַעֲלִים עֲצָה בְּלִי דַעַת לֹכֵן הִגַּדְתִּי וְלֹא אָבִין

נִפְלְאוֹת מִמֶּנִּי וְלֹא אָדַע, 'who is this that hides counsel without knowledge; thus indeed I have uttered that which I understood not, things too wonderful for me, which I knew not.' Kamphausen (in Bunsen's Bibelwerk), 'nay' ("ja"); Budde (in Nowack's Hdk.) strikes 3^a to avoid the difficulty of the ל', while Duhm considers it a marginal gloss. LXX: τίς δὲ ἀναγγελεῖ μοι = כִּי מִי יַגִּיד לִי.

לָבֵן, 'very well', 'all right'.

9. Gen. xxx, 15. וְתֹאמַר לָהּ הִמָּעֵט קָחְתְּךָ אֶת אִשִּׁי וּלְקַחְתָּ גַם אֶת, דְּוָדָאִי בְנִי וְתֹאמַר רַחֵל לָכֵן יִשְׁכַּב עִמָּךְ הַלִּילָה תַּחַת דְּוָדָאִי בְנָךְ, 'and she (Leah) said unto her, Is it not enough that thou hast taken away my husband, that thou also takest away my son's love apples? And Rachel said, Very well, he shall lie with thee to night for thy son's love apples. LXX: οὐχ οὕτως, while Vulg. omits ל'.

10. Jud. xiii, 7. וַיֹּאמֶר נִדְעוֹן לָכֵן בָּתָּת יְהוָה אֶת זִבְחָהּ וְצִלְמֻנֶּעַ בִּידֵי, וּדְשָׁתִי אֶת בְּשָׂרְכֶם אֶת קִצְוֵי הַמָּדְכָר וְאֶת הַבְּרִקָּנִים, v. 6 reads, 'And the princes of Succoth said, Are the hands (properly, palms) of Zebah and Zalmunna in thy hands, that we should give bread to thy hosts?' And Gideon said, Very well, when Jhvh will have given Zebah and Zalmunna into my hand I shall thresh your flesh with thorns of the wilderness and with briars.' So also Kautzsch and Nowack: 'Nun gut'.

11. I S. xxviii, 2. וַיֹּאמֶר דָּוִד לָכֵן אַתָּה תֵּדַע אֶת אֲשֶׁר יַעֲשֶׂה עִבְדְּךָ, v. 1^b 'and Achish said unto David, know thou assuredly that thou wilt go with me into the campaign, thou and thy men?' 'And David said unto Achish, Very well, thou wilt learn what thy servant will do.' Kautzsch and Nowack: 'Gut nun'. LXX: οὕτω νῦν γνόςῃ; Vulg.: nunc etiam (אתה for עתה). The meaning of 'verily' or 'surely' (so AV.) for ל' would also be proper here.

לָכֵן, 'not so', 'but', 'yet'.

12. Gen. iv, 15. וַיֹּאמֶר לוֹ יְהוָה כָּל הָרֹג קִין שְׂבָעִתִּים יָקָם, v. 14^b, 'and I will be a fugitive and wanderer on the earth, and it will come to pass that whosoever finds me will slay me.' 'And Jhvh said to him, Not so, whosoever slays Cain vengeance will be taken on him sevenfold.' LXX: οὐχ οὕτως; Vulg.: nequamquam. Tuch, 'dennoch', 'aber doch'.

13. Jud. xi, 24. וַיֹּאמְרוּ זְקֵנֵי גִלְעָד אֶל יִפְתָּה לָכֵן עָתָה שָׁבָנוּ אֵלֶיךָ, v. 7, 'and Jephthah said unto the elders of Gilead, Did not you hate me and drive me out of my father's house, and why have you come now when you are in distress?' 'And the

elders of Gilead said unto Jephthah, But now we have turned again to thee.' Kautzsch: 'Ja'. Still, the argumentative meaning of ל' would here also be in place: 'therefore', *i. e.*, either because we want to make good the wrong done to you by us (Nowack), or because we are now in distress (König, *Histor.-Compar. Syntax der Hebr. Spr.* § 373 p.).

14. Is. x, 24. לָכֵן כֹּה אָמַר אֲדֹנֵי אֱלֹהִים צְבָאוֹת אֵל תִּירָא עַמִּי יִשְׂרָאֵל 'צִוּן מֵאֲשׁוּר וְגו', v. 23 'for a strict decree of destruction will the Lord God Sabaoth execute upon all the land'. 'Yet, thus says the Lord God Sabaoth, Fear not my people who dwell in Zion because of Asshur, etc.'

15. Is. xxx, 18. וְלָכֵן יִתְפַּח יְהוָה יְהוָה לְהַנְנִיכָם וּלְכֵן יָרוּם לְרַחֲמֵכֶם כִּי אֱלֹהֵי 'מִשְׁפַּט יְהוָה וְגו', v. 17, 'thousand at the war-cry of one, and the war cry of five shall ye flee, till you are left like a pole on the top of a mountain and like a signal on a hill.' 'And yet, Jhvh waits to be gracious to you, and yet, he rises to show mercy to you, for a God of right is Jhvh,' etc.

16. Jer. xxx, 16. לָכֵן כָּל אֹכְלֶיךָ יֵאָכְלוּ וְכָל צָרֶיךָ כָּלֵם בְּשָׁבִי יִלְכוּ, v. 15^b, 'thy pain is incurable on account of the multitude of thy iniquities; because thy sins were multiplied have I done these things to thee.' 'But all they that devoured thee will be devoured, and all thy adversaries will everyone of them go into captivity.'

17. Hos. ii, 16. לָכֵן הִנֵּה אֲנִי מִפְתִּיחַ וְהִלַּכְתִּיהָ הַמְדַּבֵּר וּדְבָרֵי 'עַל לְבָהּ, v. 15^b, 'and she went after her lovers and forgot me.' 'But behold, I will prevail on her, and will lead her into the wilderness and speak to her heart.'

In Ezekiel, with his tendency to lengthy, discursive arguments, the function of לָכֵן seems sometimes to be to sum up and clinch as it were such an argument¹; so perhaps xviii, 30; xx, 30; xxiv, 6; xxxi, 10; xxxvi, 22; xxxix, 25.

¹ Similar to לָכֵן, cf. vol. 16, p. clxvii f.

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ERRATA.

In vol. 30, p. 359, line 14, read "refuge" for "refuse"; p. 365, foot-note 1, line 4, read "Vasiṣṭha" for "Vasiṣṭha"; p. 371, note 1, line 2, read "dvīpas" for "dvīpas"; p. 372, line 29, read "beside" for "besides"; and p. 372, line 33, read "Symplegades" for "simple edges".

of the Punjāb. 8. 44. 31, on which, as on the Śamī and Iṅguda (nuts), it is said that camels are fattened, 2. 51. 4; though the Śamī, is a holy tree, being the birth-place of Agni, 13. 85. 44, and use itself contributes to holiness. Thus the "great tree at whose foot the king sits" is described as *puṇyadhara*, or "bestowing good" in a religious sense, 3. 24. 24.¹

¹ N. says it is a Kadamba-tree. It is described as *latāvatānāvanataḥ* (bent under its canopy of creepers), a phrase perhaps borrowed from R. 5. 16. 28.

Of tabu-trees there are a number.¹ Thus only sinners make a free use of Pālāśa (*butea frondosa*) and Tinduka wood for seats and tooth-picks, respectively, obviously because they are sacro-sanct, 7. 73. 38. The last mentioned tree it utilized (as are others) to point a moral. It is productive of a short fierce blaze and a sluggish coward is exhorted to imitate this: "Better to blaze for a moment than smoulder long" (*alātām tindukasyeva muhūrtam api hi jvala*) 5. 133. 14f. Similarly, the Śālmali-tree is an image of mortals' (inconstant) thoughts, "tossed by the movement of the wind like the seed of the Śālmali", 5. 75. 19, etc. The Śāla is opposed to the creeper as strength to weakness, 5. 37. 63 (said of the heroes and their foes), and the same image gives the epic equivalent of *noblesse oblige*: "As the Syandana-tree, though slight in size, is able to endure much, so a noble family sustains a weight not to be borne by inferior people," 5. 36. 36; with another image following a few verses later: "Even a great tree cannot withstand a great wind, while many by being united together (in a grove) endure the hurricane," ib. 62 (*śighratamān vātān sahante 'nyonyasamśrayāt*). Compare 12. 154. 4f.

But of ordinary (not supernatural) trees, some are distinctly "revered." The most general case is the "one tree in a village", because it is not specified of what sort it is. Standing alone it affords shade and a resting-place and for this reason it is a *cāitya arcanīyah* and *supūjitah*, that is, "revered and honored" (like a divinity; *grāmadruma*, 1. 151. 33). The *cāitya-vrkṣa* is thus an image of the grandeur of Garutmat, the heavenly bird, 2. 24. 23. Yet only one such tree is noticed in the texts, the famous Akṣaya-vaṭa of Gaya.² Trees suit-

¹ The names of a number of trees whose fruit must not be eaten are given in 13. 104. 92. Their use as food is tabu, *pratisiddhānna*. These are the *pippala* or *figus religiosa*, the *vaṭa* or *figus indica*, the *śaṇa*-tree (*cannabis sativa*), the *śāka* or *tectona grandis*, and the *udumbara* or *figus glomerata*. A list of unguent-making trees is given just before, *priyaṅgu*, sandal, *bilva*, *tagara*, *kesara*, etc., 13. 104. 88. In 13. 98. 39 are mentioned woods to make *dhūpa* (incense). The *Samī*, *pippala*, and *pālāśa* are especially spoken of as *samidhas*, wood for making sacrificial fire, and are mentioned along with the *udumbara*, 12. 40. 11. In 13. 14. 58, ascetics live on the fruit of the *Aśvattha*, though this is a tabu-tree (= *Pippala*). It represents the male element in the production of fire, *versus* the *Samī*.

² This is mentioned several times, yet not as a tree in itself undying, but as conferring deathlessness, *akṣayakarṇa*, or as making endless the

able for an asylum of Saints are enumerated in 13. 14. 46 f.¹ All *cāitya* trees are homes of spirits, 12. 69. 41 f.

It is to be noticed that the tree called Bhāṇḍira, the holy Nyagrodha of Vṛndāvana. is mentioned in the early epic only in the South Indian recension, at 2. 53. 8 f. The famous Khadira is known as a tree used for staking moats, 3. 284. 3.

The *figus religiosa*, Pippala or Aśvattha-tree (the sun is called the *aśvattha*, i. e. life-tree) is the chief of all trees, 6. 34. 26, and typifies, with its roots above and its branches below, the tree of life, rooted in God (above), 6. 39. 1 f. He who daily honors this tree worships God (Viṣṇu is identified with nyagrodha-udumbara-aśvattha, 13. 149. 101), 13. 126. 5 (it is as holy as a cow or *rocanā*, ib.). The four Vedas are "word-branched Pippal trees", 7. 201. 76.

On the other hand, the Vibhītaka-tree stands in disrepute as an unholy tree (see 3. 66. 41, entered by Kali); while, in general, "from one and the same tree are produced evil and good" (only SL. 5. 33. 22, *ekasmād vāi jāyate 'sac ca sac ca*). This refers to implements etc. made of the tree, for harmful or for religious purposes. The sin of Indra, divided among trees, rivers, mountains, earth, and women, 5. 13. 19, etc., seems to have had no effect upon the holiness of trees in general. The "tree of good" and "tree of evil" are metaphors. The hero of the epic is a "great tree of virtue," whose trunk and branches are his brothers, though as with the Aśvattha (above) the roots are here divine (*brahma*; but also the Brāhmaṇas). He is thus opposed to the "tree of evil," the foe, as the Śāla to the vine, 5. 29. 53 and 56.² Cf. *kāmadruma*, 12. 255. 1.

Magical trees are for the most part supernatural, either

offering there given to the Manes. It marks the place where the Asura Gaya fell, or his sacrifice; 3. 84. 83; 87. 11; 95. 14; 7. 66. 20; 13. 88. 14 (proverb); R. 2. 107. 13; my Great Epic, 83, n. 2.

¹ *dhava-kakubha-kadamba-nārikelāiḥ kurabaka-ketaka-jambū-pātālābhīḥ*
vaśa-varuṇaka-vatsanābha-bilvāiḥ sarala-kapittha-priyāla-sāla-tālāiḥ
 (47) *badarī-kunda-punnāgāir aśokā-mrā'-timuktakāiḥ*
madhukāiḥ kovidārāś ca campakāiḥ panasāis tathā

(48) *vanyāir bahuvīdhāir vrkṣāiḥ phalapuspapradāir yutam*

... *kadalīṣaṇḍaśobhitam (kṣetram tapasām . devagandharvasevitam).*

² In this place occurs also the common figure of the wood and the tiger, which mutually protect each other, 5. 29. 54 f.; also ib. 37. 46; and of the lion, ib. 37. 64. The "wood-dwellers", it may be remarked, are, unless qualified as saints, hermits, etc., simply "robbers" 7. 55. 5, etc.

belonging to unearthly places or to prehistoric times, though of course plants that instantly heal wounds are in the hands of the wiseacres. Compare for example, 6. 81. 10: "Thus speaking he gave to him a fine wound-curing strength-endowing plant and he became free of his wounds." The Śleṣmātaka (fruit) stupifies: *śleṣmātakī kṣīṇavarcāḥ śrṇoṣi* (you fail to understand), the commentator says that to eat the leaf or fruit dulls the intellect, 3. 134. 28. But medicinal plants belong especially to the mountain of plants (whence aid was brought to the brother of Rāma) Gandhamādana (below), and the epic gives a special list of trees that grow on this favored mountain in the Himālayas, 3. 158. 43 f. (*saptapatra*, etc.). In this realm of plants and vines, mythology is almost absent and even philosophy scarcely more than affirms that plants are sentient, but "they know not where their leaves are," 12. 251. 8.

There is an implicit denial of any active belief in the action of Karma ever resulting in a man being reborn as a vegetable; the worst he has to fear being re-birth as an insect, a demon, or a low savage. But vines and insects serve the poet better than the metaphysician and here the vines are Love's arrows and ear-rings, and the bees are like Love's arrows (*tilakāṅś tilakān iva*, trees were the *tilaka*, forehead marks, etc.) 3. 158. 66 f.

That trees were sentient beings is philosophically proved in 12. 184. 10 f.; but the tales of the earlier period assume this. Thus in the account of Bhagīratha, the text of the South Indian recension says: "The trees, turning toward him with their faces, stood bowed down, wishing to go after their lord", SI. 7. 16. 14.¹ It is true that in 3. 230. 35, the "mother" of the trees is kind and gives boons and is compassionate, so that those who wish sons revere her in a Karañja-tree, where she has her abode, while under a Kadamba-tree is worshipped Lohitāyanī, 3. 230. 41, the daughter of the Red Sea, and nurse of Skanda; and there can be no doubt that these goddesses are dryads, not so much divine trees as spirits in trees. They are vegetal divinities, but, like many other divinities of like nature, they are savage and eat human flesh and are compassionate only when appeased by offerings. The name given to them (only here!)

¹ B. has "the trees here going after him, the lord, king (*rāja*, sic) wish to arrive there where the two space-devourers Makha-Mukhāu went." In 12. 269. 24 f., trees desire and attain heaven.

is *Vṛkṣikās*, dryads, and they are described as "goddesses born in trees who must be worshipped by those desiring children."¹

Nevertheless, this Buddhistic attitude is off-set by a few passages, such as that already cited, in which not spirits in trees but the trees themselves act, think, speak, etc., undoubtedly a more primitive thought than that of a spirit in the tree. Thus in the age of *Prthu Vāinya*, "when people lived in caves and trees," not only were all the trees good, so that clothes pleasant to touch and wear could be made of their bark, 7. 69. 5 and 7 (*vṛkṣāḥ* in SI.), but the trees personified came to *Prthu Vāinya* and begged a boon of him, wherupon he commanded earth to milk out their wish, and the trees rose first to milk earth, so that the *Śāla* became the calf, the *Plakṣa*-tree the milker, and the *Udumbara* the vessel, 7. 69. 10 f. Or, if this seems too mystic to be primitive, one could appeal to the tree-marriage. In 3. 115. 35 f. (cf. 13. 4. 27 f.), two wives want children and embrace trees, one a *Pippala* and the other a fig (*Aśvattha* and *Udumbara*), at the proper time, and also (it must be said) take medicine. The trees, however, are exchanged, so that the woman who should have had a warrior son from the heroic tree bore a priestly son, and the priest's daughter, who wanted a saintly son, got a fighter; through embracing the *Aśvattha* instead of the *Udumbara*.

The "trees of gold", which one sees with disastrous results in a dream, seem to be connected with the idea expressed at 5. 46. 9 in the words "the tree of ignorance has golden leaves". As it is elsewhere expressed "Him whom the gods wish to destroy they make mad; (so that) he sees things upside down," and "he who is to die sees things inverted; he sees golden trees," that is, to see trees of gold is to share in the more general delusion of seeing things inverted or turned about, the sign of madness precedent to death.²

More particularly, to see golden trees in a cemetery presages death. In 3. 119. 12, "On committing this crime he saw golden

¹ 3. 231. 16 (*vṛkṣeṣu jātāḥ*; hence *vṛkṣikāḥ* with SI. better than the *vṛddhikā nāma nāmataḥ* of B.). "Tree-girded Śiva," 7. 202. 35, is in SI. still more emphatically "the tree" (epithet of Śiva), SI. 7. 203. 32.

² A parallel *marañaciḥna* occurs in R. B. 3. 59. 16: "He that is about to die smells not the expiring lamp, hears not a friend's word, sees not *Arundhatī*" (a star). Cf. AJP. 20. 23, and add R. 2. 106. 13; 3. 30. 15; Mbh. 12. 322. 44. "House-grown" trees are forbidden, 13. 127. 15.

trees in full bloom on the earth of the Pitṛ-world (cemetery)", *cāmīkarābhān kṣitijān..pitṛlokabhūmāu*. But the addition of the significant cemetery is not necessary. In 6. 98. 17, *mu-murṣur hi naraḥ sarvān vrkṣān paśyati kāñcanān*, "he that is about to die sees all trees golden" (the moral: so thou wilt die because thou seest things wrong, *viparītāni*).

The later epic lays a good deal of stress upon tree-worship, doubtless reviving old practices as well as bringing in new ideas. Not only is Śiva identified with the *bakula*, the sandal-wood tree, and the *chada*-tree, 13. 17. 110 (the last is the *saptapatra*, N.), and with the world-tree (ib. N.), and especial efficacy attributed to the grove of Deodars, ib. 25. 27 (from the wood of this tree the sacrificial posts are made, according to epic tradition); but the mere planting of trees is extolled as a meritorious act calculated to insure the planter "fame on earth and rewards in heaven," ib. 58. 24, since such planting "saves one's ancestors" and "gods, saints, and demigods have their resort in trees," ib. 26 and 29. On the other hand, one who cuts down the lords of the forest on the day of the new moon is guilty of Brahman-murder, 13. 127. 3. One should offer a lamp to a *karañjaka* tree, holding in his hand the root of the *suvarcalā*, the latter being both the name of a plant and of the Sun's wife, if he desires offspring, ib. 123. 8.

Besides other wonderful trees there are five trees of Paradise which the epic writers regard as capable of being transplanted to earth. Thus the heavenly tree called Pārijāta was seized by Kṛṣṇa and carried off by him in defiance of Indra, whose defence was useless, 5. 130. 49. In Har. 7168f. this tree is identified with another heavenly tree, the Mandāra; but in 7. 80. 30 the latter appears to be an independent tree on Mount Mandara. The Nāirṛtas in the north country guard the Sāugandhika-vana (cf. *punḍarikavanāni*, 7. 97. 7) in the same way as the gods guard their sacred trees in heaven, and the trees there are called *santānakās* (*nagās*) or immortal trees, distinct from the remarkable Kadali-trees which also grow on the grassy places of the favored region, 5. 111. 12f. Bloody bodies in battle are likened to Pārijāta-vanāni in 7. 187. 34 (red); but the heavenly trees are not described in detail. Even the earthly banyan is figured only by allusion and implication, though it is probably the model of the "hundred-branch tree" to which Drupada is likened because of his

numerous descendants, 5. 151. 14. But magical trees are not confined to heaven. In the land of demons, Dāityas, in the town called Hiranyapura, there are also "trees that bear fruit and flowers at will and go at will," 5. 100. 15. Many even of the sacred asylums on earth have trees which grant wishes. Thus in the Alamba-tirtha the trees grant wishes, 1. 29. 40, and other trees there have branches of gold, silver, and beryl; one of the banyans being the resort of the little Vālakhilya saints, who hang from the branches head down, 1. 30. 2. On the Utsava hill there are also Kalpavṛkṣas (wish-granting trees), 1. 219. 3, though this is an artificial creation. Just as Indra has a *kalpalatikā*, or magic vine granting every wish, so the *kalpa*-tree grants wishes. This is so well known (though rarely referred to) as to introduce a simile in 3. 281. 5: "though adorned with care he seemed less like a (beautiful) *kalpa*-tree than like a *cāitya*-tree in a cemetery," *na kalpavṛkṣa sadrśo.. śmaśānacāityadrūmavat*. Cf. 8. 94. 44, and the *kapparakkho*.

The trees of earthly districts almost merge with those of heaven, as one climbs the mountains to the upper world; but in those divisions of earth known as Dvīpas are to be found similar trees, and where it is etymologically possible the local tree is adored by the inhabitants. Thus in Śāka-dvīpa the Śāka tree is worshipped, 6. 11. 28.

Of the divine trees three or four are specially prominent. The grove of Kadalī-trees seen by Bhīma on Mt. Gandhamādana is leagues in extent and the grove is "golden" and divine. It lies on the way to heaven, a narrow path, on which the hero is stopped by Hanumat, to prevent his being cursed. But he discovers that this golden grove of plantains, pisang trees, *kadalīṣaṇḍa*, conceals the further end of the "road to the world of the gods", *devālokasya mārگاḥ*, 3. 146. 51, 58, 68, 93. Seven trees are "kings," 14. 43. 3.

East of Meru, 6. 7. 14f., in Bhadrāsva-dvīpa, there is a great mango-tree which always bears fruit and flowers and is a league high. It is frequented by Siddhas and Cāraṇas and its juice gives immortal youth, *ib.* 18 (the Kālāmra-tree). The name of the Dvīpa Jambū, is derived from the Jambūvṛkṣa, located "south of Nīla and north of Niṣadha" (mountains), called Sudarśana, an eternal tree which grants all desires and is frequented by Siddhas, etc. It is one thousand and one hundred leagues in height and touches the sky; its fruit being

measured by fifteen and ten hundred cubits (2500 *aratni*). Its juice makes a river which flows around Meru to the Northern Kurus. The red gold used for gods' ornaments, like *indrāgo-pas* in color, comes from it and is hence called *jāmbūnada* (red gold), 6. 7. 20-26.

As the juice of this tree makes a river, so the Ganges itself, which among the gods is called Alakanandā (Alaka is Kubera's city, and Alaka designates an inhabitant thereof, 3. 162. 13) has its source at the great jujube-tree which grows on Mount Kāilāsa, *mahānadī badarīprabhavā*, revered by gods and seers as well as by the aerial Saints called Vāihāyasas, and by Vāḷakhilyas, and Gandharvas, 3. 142. 4f. The tree grows beside the Ganges, according to 3. 145. 51 and is reached only by a long journey through many districts of northern Mlecchas and hills inhabited by Vidyādharas, Vānaras, Kinnaras, Kim-puruṣas, Gandharvas, and Cāraṇas (so SI. 3. 145. 16), till one gets to the asylum of Nara-Nārāyaṇa, which is full of "heavenly trees," i. e. "always bearing fruit and flowers," on Mt. Kāilāsa. The Badarī-tree is huge, with a thick trunk and its boughs afford constant shade. It is of incomparable beauty and its fruits are sweet as honey. The rest of the description is the usual picture of heaven. There are no mosquitoes or gnats; the grass is blue (*nīla*) and soft as snow. The "songs of glad birds" resound. There is an absence of thorns, darkness, sorrow, hunger, thirst, cold, heat; but the place is full of sacrificial glory and holy beauty, *brāhmyā lakṣmī*, though it had no light from the sun. The *badarī* is the most important of the many "divine trees" found there, ib. 27f. As Śāka-dvīpa has its tree of wonders worshipped by the inhabitants, 6. 11. 27; so Śālmalika-dvīpa has a Śālmali-tree, 6. 12. 6. This tree also is worshipped, just as Mt. Krāuñca is worshipped in Krāuñca-dvīpa, ib. 7.

These last passages already reveal the close connection between the trees divine and the mountain heights, and more particularly show that the idea not only of a divine tree but of a divine grove was as familiar to the Hindu as to the Assyrian, German, or Roman. Such a grove, called *vanam divyam*, or *devāranyāni* (plural, 5. 14. 6; 186. 27), *devodyāna*, *upavana*, *vanānta*, *kānana*, *ārāma*, *nandana*, etc., is not only sacred to the gods but is where the gods themselves perform religious rites. In 3. 118. 9f., Yudhiṣṭhira journeys from Śūr-

pāraka past a place by the sea and arrives at the sacred grove where the gods practiced austerity. There he sees the *āyatanāni* (templa) of R̥cika's son and of the Vasus, troops of Maruts, Aśvins, Vāivasvata (Yama), Āditya, the lord of wealth, Indra, Viṣṇu, lord Savitar, Bhava, Candra, the day-maker, the lord of waters, the troop of Sādhyas, Dhātār, the Pitr̥s, Rudra with his troop, Sarasvatī, the troop of Siddhas, "and whatever (other) immortals" (there are).

2. Mountains.

The shrines but not the gods are found in this lowland place. The gods dwell upon the "ownerless", (13. 66. 36) mountains, the high places; and it is significant that it is not upon the Seven Hills of the more southern district but chiefly on the thousands of hills of the northern country that one finds the gods.¹ Bhārata-land comprises the Seven Hills.

It is said in 3. 39. 40 that "the assembly of gods, *tridaśānām samāgamah*, is found on the best of mountains" (Himavat); and in 7. 54. 25, "The gods of old made sacrifice on the top of Himavat." When Nahuṣa, as king of the gods, *devendra*, sported in "all the parks and pleasure-groves" familiar to the divinities, he lived "in Kāilāsa, on the top of Himavat, on Mandara, the White Mountain, Sahya, Mahendra, and Malaya," as well as by seas and streams, 5. 11. 11f. But when the Pāṇḍus go to seek the gods they travel to the northern districts to "divine Hāimavata, holy, beloved of Gods," 3. 37. 39. It is in the northern mountains also that one finds the most famous shrines of the saints. The Agastya-vaṭa (but also Mt. Kuñjara), Vasiṣṭha's mountain, *parvata*, and the still more renowned Bhṛgu-tuṅga, are visited by Arjuna in the Himā-

¹ The Seven Hills of TS. 6. 2. 4. 3 (where, 3. 4. 5. 1, Viṣṇu and not Śiva is "overlord of the hills") remain in epic tradition as the seven Kula-parvatas, 6. 9. 11 (cf. the seven mountains in Śāka-dvīpa, 6. 11. 13). They are perhaps the "seven doors of heaven", TB. 3. 12. 2. 9. They comprise the Orissa chain, Mahendra; the southern part of the western Ghāts, Malabar (Malaya); the northern part of the western Ghāts, Sahya; Śuktimat (location in the east but doubtful); the Gondwana range called Bear-mountain, R̥kṣavat; the (eastern) Vindhya; and the northern and western Vindhya, Pāriyātra. In SI. (only) 4. 3. 36, Arjuna is called "the eighth mountain", implying the same ordinary number of mountain ranges. Among the Seven Hills, Mahendra is best known as a holy place, 1. 215. 13; 3. 85. 16f. (Rāma-tīrtha). Twelve mountains are "kings," 14. 43. 4.

layas, 1. 215. 1 f. (with *tuṅga* cf. *ṭaṅka*, mountains-slope, only in the pseudo-epic).

The mysterious element comes to the fore in the description of one of the holy places in the hills: "Clouds arise without wind to bring them; stones fall; the wind is always blowing and ever rains the god (*nityam devaś ca varṣati*). One hears a sound as of reading but (the reader) is not seen. A fire burns there (of itself) both morn and eve. Flies and mosquitoes interrupt devotion. Melancholy is born there and a man longs for his home", 3. 110. 3 f.¹

A religious explanation of these phenomena is essayed by the traveller's guide. The gods do not like to be seen and so they made this place, which is their resort, inaccessible. It is on Hemakūṭa (Rṣabhakūṭa). When the gods "gather at the river" (Nandā is its name), only a great saint may ascend the mountain. For here the gods sacrifice. The grass is sacred (*kuśa*) grass and the trees grow like sacrificial posts and are used as such by the gods. "Here with the saints live ever the gods and it is their sacred fire which burns morn and eve. On bathing here all sins are destroyed," *ib.* 15 and 18. The weird sounds, however, have an historical explanation. The great saint Rṣabha, who lived in this holy place, was once disturbed in his meditations by a party of tourists, which made him very angry and he gave orders to the mountain: "If any man speaks in this place, throw stones at him and raise a wind to stop his noise," *ib.* 9 f. Hence came the universal rule that one should keep silence in the presence of holiness. "Sit thou down in silence" (*tūṣṇīm āssva*), says Lomaśa, 3. 114. 16, "for this is the grove divine of Brahmā" (the Self-existent). But mountains in general are holy and have a purifying effect, according to 12. 36. 7 and 264. 40.²

The myths of the mountains imply for the most part that they are living beings and of course divine. With other divinities the rivers, seas, and mountains approach and adore Śiva, 13. 14. 399; or Indra, saying "hail to thee", 5. 17. 22.

¹ *ib.* 6: *nirvedo jāyate tatra grhāṇi smarate janakā*. In the beginning of the description another reading is: "With the sound (of speech) clouds arise". For volcanic mountains, see 8. 81. 15.

² Among *punṣyāni* are *dharaṇībhytas* ("earth-holders"; the hills uphold earth) and bathing and visiting the places of the Gods, *devasthānābhigamana*, 12. 36. 7. Mountains assist at a sacrifice, *ib.* 321. 182.

So, conversely, a human being is represented as revering Mt. Rāivata and all (other) divinities and as "walking the deasil" around the mountain, 1. 220. 6. Compare 14. 59. 4f. and the adoration of mountains and trees, in 13. 166. 31f. In another passage it is said that the local mountain is revered by offerings of flowers and perfumes and cars (? *supraṭiṣṭhita*), 2. 21. 20, although here Cāityaka, one of the five hills surrounding a town, is revered rather as a memorable place. There the minotaur, *māmsāda ṛṣabha*, which destroyed the inhabitants, was slain by Br̥hadratha, who (perhaps with the help of the propitious mountain) killed the monster and made three drums of its hide, ib. 16f. Possibly the fact that the hills are represented as running red with metal, *dhātu*, or chalk washed down in the rainy season may have helped in personifying the mountains as bleeding beings (with whom bleeding men and elephants are often compared), but even this was not necessary in a land where everything was alive.¹

One hill in particular, said to be five (or) six thousand leagues in height, is called "garlanded," Mālyavat, but it is garlanded with the *saṁvartaka* fire, and here reside those who have fallen from the world of Brahmā. They precede Aruṇa and then enter the moon after 66000 years, 6. 7. 28. It runs off to east and west into little hills called (uniquely) *gaṇḍikās* (*pūrvapūrvānugaṇḍikās* and *aparagaṇḍikās*, 6. 7. 28f. The title of Himavat as "Guru of mountains," *śāilaguru* (rare and late), 9. 51. 34, of itself imparts personality to the mountain. So a mountain begets children upon a river, 1. 63. 35f. Here the mountain, Kolāhala, is expressly said to be "gifted with intelligence," *cetanāyuktaḥ*. His daughter was called Girikā. Mountains speak, 12. 333. 30; as an echo, 334. 25.

On the assumption that mountains are alive rests one of the oldest legends in regard to them. RV. 2. 12. 2, *yaḥ pr̥thivīm vyathamānām adṛmhat yaḥ parvatān prakupitān aramnāt* ("Indra made firm the shaking earth and brought to rest the excited mountains") is explained by the legend narrated in MS. 1. 10. 13: *teṣām indraḥ pakṣān acchinat tāir imām adṛmhat* ("Indra cut off the wings of the mountains and made earth firm"). In the epic, "like the mountains with wings out off"

¹ Compare 7. 93. 36, *adṛśyantā 'drayaḥ kāle gāirikāmbusravā iva (gāirikādi-*, 6. 78. 28, etc.); *dhātum*, 3. 158. 94f.; 6. 93. 37, and often. N. takes *mahādātu*, 13. 17. 118, as Meru (epithet of Śiva).

is a standing simile, e. g. 6. 93. 36. That the old legend is in mind is shown by the addition of the words "of old," as in 7. 26. 65, where an elephant is likened to "a winged mountain of old"; and ib. 37, a fight of elephants "resembles that of two mountains of old, winged and wooded." But at present it is "something unknown that hills should move," 7. 103. 6.

Historically interesting is the fact that in times of distress (Kali, as reflecting history) the upper castes, when over-taxed, as an alternative to serving a Śūdra king take refuge in mountain-caves, *girigahvana*, not (apparently) artificial but the common resort of tigers and other wild animals, 3. 190. 61; 7. 107. 12 (of animals), as well as of Mlecchas, who in 7. 93. 48 are described as habitually living in caves, *girigahvana-vāsinaḥ*. They are here savages, like those of the north, Pārvatīyas, who fight with stones, an art unknown to the Kurus, 7. 121. 33. In the history of Sunda and Upasunda it is said that "they sent to Yama's home even him who sought refuge in inaccessible places," *saṁlīnam api durgeṣu*, 1. 210. 20. So, when afraid of the Kāleyas, "some retreated to caves," *kecid guhāḥ praviviṣur nirjharāṁś cā 'pare śrītāḥ*, 3. 102. 14. The *kandaras* (caves, a rare word in Mbh. but common in R.) are thus utilized by beasts and saints alike, *guhākandara (saṁlīnās)*, 3. 100. 17; ib. 40. 28. In 2. 31. 17 the caves of Orissa are mentioned (*prayayāu dakṣiṇāpatham, guhām āsādayām āsu Kiṣkindhām lokaviśrutām*) as being already famous. Cf. *darī*, 3. 64. 6; *kandara*, ib. 110; *taṭasānukandaram*, 3. 40. 28.

Later legends representing the mountains as very much alive occur in the accounts of the Vindhya, the Krāuñca, and the Māināka mountains. The fact that Krāuñca is the son of Māināka and Māināka is the son of Himavat, gives even a genealogical tree; but the descent is not always so given and Krāuñca itself or himself is also called the son of Himavat. Although the Vindhya legend is more popular, the story of Māināka is more directly connected with the tale of the winged mountains. The epic use of Māināka is to compare with this mountain a steadfast hero or elephant. For Māināka was the only mountain that escaped or resisted Indra, when the others had their wings cut off. "Like Māināka cast on the ground by great Indra" is the incredible fall of Bhīma (as hard to realize); it is parallel to the "drying of ocean or removal, *visarpaṇa*, of Meru, or the overthrow of Indra at the hands of

Vṛtra, or the fall of the sun, 7. 3. 4f.; 9. 12f. Stereotyped is the phrase "stood firm as Māināka," e. g. 6. 92. 26; 7. 92. 17; 99. 28; 123. 2; 9. 19. 45, etc., referring not to being unshaken by the wind, as is Vindhyagiri, 7. 92. 53, but to its firmness against Indra Nagāri ("foe of the mountains").

In 3. 134. 5f., Māināka is said to be as superior to all other mountains as Indra to other gods, or as Ganges to other rivers. It is situated north of Kāilāsa (q. v.) and is famous for the mass of gems and jewels deposited there by Maya in or near the lake Bindusaras, where Dānavas sacrifice, 2. 3. 3. It is spoken of as having a *vinaśana* (see below, Meru) in the interior of the mountain where Aditi "cooked food of old for the sake of a son," 3. 135. 3. The legend that Ocean gave the mountain refuse when it escaped from Indra is preserved in 1. 21. 15, "Māināka's asylum-giver is ocean." There is a watering-place there of some renown, 13. 25. 59. It is to (hundred-peaked) Mt. Māināka that a Rākṣasa with "one hundred heads" is compared, 7. 175. 63.

Mt. Krāuñca is called the White Mountain, because of the white silver there (Himavat is famous for gold-mines and gems), 3. 188. 112. Compare 13. 166. 30-31, "Himavat rich in herbs divine, Vindhya in metals, Tīrthas, and herbs; and Śveta full of silver" (*rajatāvṛtaḥ*). It is guarded by seven-headed dragons and in it is the golden lake where the mothers of Kumāra (Skanda) bore him (by proxy). Skanda shot at Mt. Krāuñca and it fled but afterwards returned: "Skanda drew his bow and shot his arrows at the White Mountain, and with his arrows he split the mountain Krāuñca (cf. Krāuñca-nisūdaka, epithet of Skanda), the son of Himavat. . . Krāuñca fell uttering fearful howls and the other mountains seeing his fall began to shout. But Skanda split the White Mountain, lopping off one peak and the White Mountain fled in fear from earth," 3. 225. 10f.; 9. 46. 84. In 3. 229. 28, this mountain is called "Rudra's seed;" though it was son of Himavat (whom Menakā bore to Himavat). Compare 8. 90. 68; 9. 17. 51; and the seed of Rudra (Agni) cast on Meru by Ganges, 9. 44. 9; 13. 85. 68.

The legend of Vindhya (renowned for metals and plants, 13. 166. 31) represents that range of hills as angry with the sun for refusing to go round it as it does around Meru, in a respectful manner (*pradakṣiṇam*). Vindhya resolved to hide

the sun's light, and for that purpose began to grow till it shaded earth from the light of sun and moon. The gods begged it to stop growing, but to no purpose. Then the great saint Agastya got permission from it to pass over it both on his way south and on his way back. But as Agastya (the civilizer of the South) never came back, the mountain could grow no more and is still waiting for the saint's return before it grows higher, 3. 103. 16 and 104. 12f. As the mountain rages here, so it may rejoice, "as a mountain rejoicing in heart receives the rain," 4. 64. 5, that is, shows its bravery, since "water is the destruction of mountains," *parvatānām jalam jarā* (as travel is the destruction of bodies; lack of fortune, of women; and word-arrows, of the mind), 5. 39. 78.

Another story illustrates a popular belief. The "Gāthās of the gods" say that there was a saint called Bāladhi, who desired to have an immortal son. The gods were kindly disposed toward him because he had been religious; but they said "No mortal is seen (to be) immortal; but he shall have a life conditioned by a cause," *nimittāyuh*. Then he, thinking "mountains are indestructible," said: "Let his life last as long as the mountains" (let the mountain be the cause). Then Medhāvin, his son, was born but, being arrogant, he insulted the saints. One of the saints, Dhanuṣākṣa, after vainly cursing him, took the form of a buffalo and charging against the mountains reduced them to ashes. So, the cause (of life) being destroyed, Medhāvin, the son of Bāladhi, was also destroyed. A Gāthā is sung about it to this day ("no one can escape what is ordained; Dhanuṣākṣa the great seer split the mountains").¹

In connection with the mountain-myths may be mentioned the story of the nymph turned into stone, like similar tales in Greek mythology. The Apsaras Rambhā, wife of Tumburu, was thus turned into a rock on failing to seduce Viśvāmitra as she came under the curse of that saint, 5, 117. 16, etc.

¹ This is the version in SI. 3. 135, which, at vs. 52, inserts half a dozen verses showing that the seer himself became a buffalo. The words in B. *mahiṣāir bhedayamāsa parvatān* are changed to *maharṣir* and so in the Gāthā: *maharṣir bhedayamāsa Dhanuṣākṣo mahīdharān*. B., 135. 52 and 55, represents the saint splitting the mountains "by means of buffaloes." So, in the story of Kolāhala (p. 357, above), Vasu outraged by its behavior, kicked a hole in it, through which the river escaped.

Other legends abound, connecting some mountain with a god or saint, as in the landing of the ark on Nāubandhana, 3. 187. 50. Often the Puranic story is just alluded to, as when Govardhana is mentioned as the place where Viṣṇu-Kṛṣṇa (called *mahādrīdhṛt* in 13. 149. 32) upheld the hill for the sake of the cows, 5. 130. 46; 13. 159. 17 *gām uddadhāra* (SI. 7. 11. 4, *dāvān muktṛvā . . dhṛtvā Govardhanam*), VP. 5. 11. In the mountain Mahendra (Orissa chain) lived Rāma (after "ejecting the ocean") at the command of Kaśyapa Mārīca to "leave the earth,"¹ what time he extirpated the warriors, 7. 70. 21f. On the Narmadā river is the beryl-mountain (sometimes located in the north) and in this locality "Kauśika drank soma with the Aśvins and Cyavana paralyzed Indra and won Sukanyā as his wife," 3. 121. 19. Both epics have the story of Gandhamādāna (also a name of Rāvaṇa, 3. 283. 5) as the home of medicinal plants, utilized by Hanumat to cure Rāma's brother. It bears the epithet *mahāuśadhisamāyuktaḥ parvataḥ*, 7. 139. 86. In both epics, Mandara is the instrument used by the gods to churn ambrosia from the ocean, 1. 18. 13 = RB. 1. 46. 21 (C. 45. 18, less exactly like Mbh.).

This Mandara, "Indra's golden mountain," *jāmbūnadaparvata*, 3. 139. 16, is identical with Indra-Kīla, 3. 37. 42, and is especially invoked as the home of Sādhus and Munis. It is through the grace of this mountain that priests, warriors, and the farmer-merchant caste attain heaven. Tirthas (3. 26. 12f.), sweet streams, nymphs, and the sound of Vedic recitation are found there, 3. 42. 22f. In 1. 18. 11, it is supported by the sacred tortoise (Viṣṇu). Vṛtra, it is said in 3. 101. 15, "fell like Mandara hurled of old from the hand of Viṣṇu." Elsewhere it associated with Mt. Śveta: "We shall see the White Mountain and Mt. Mandara, where are the *māṇivara* Yakṣa and Kubera the king of Yakṣas, 88000 Gandharvas and four times as many Kimpuruṣas and Yakṣas" (who with Rakṣasas guard the mountain), 3. 139. 5. In 3. 163. 4, it lies east of (Meru and) Gandhamādāna and "illuminates all the earth as far as the sea; and the region is protected by Indra and Kubera." Also here it is said that when Soma and the stars have gone around Meru they "return to Mt. Mandara," i. e.,

¹ So Yudhiṣṭhira on leaving Kubera's mountain "goes to earth" (and addresses it as a person, *draṣṭā tavā 'smi*, auf Wiedersehen!), 3. 176. 20.

to the east (SI. has 'sāgaram). It is located in the north, with Mandākinī, in 5. 111. 12, and in the South in 5. 109. 9, its grottoes (as in the Indraloka ascent, called *kuñjas*) being especially mentioned. In 5. 110. 9, it is found in the west. Here the root of Himavat is said to extend (in the western district) toward Mandara, inapproachable, sunk in the ocean. The fact that these three statements are virtually one description weakens the force of each statement and makes the eastern (Bengal) position of Mandara more probable, as this accords with tradition (at the present day "Mandar-giri" is near Bhagalpar, Bengal). The fact that Mandara is especially Indra's mountain also helps to establish its geographical position, since "Indra's district" is the east.

But the epic has a vague notion of the northern mountains, the approach to which was difficult and the ascent impossible except to very great saints and heroes.¹ The Paṇḍus see, as they ascend from the south, the peaks of Kāilāsa, Māināka, the foot of Gandhamādana (*-pādas*), and Śveta; whence they journey seventeen days to the back of Himavat and "four days later" come to the White Mountain, "like a huge mass of clouds and full of gems and gold" (gold is in all the mountains, 2. 50. 21; 9. 44. 15, etc.) without having yet reached Gandhamādana, 3. 158. 18f. But, when one stands on Gandhamādana, the "mountain of Indra and Kubera" (that is, Mt. Mandara) lies to the east, as opposed to Samyamana, the region of the south (of Yama), to the abode of Varuṇa and the Asta-mountain (where the sun sets; itself opposed to Udaya, sunrise-hill), and to the abode of Brahmā, "great Meru, which illuminates the north," while next (to the east) is the "abode of Visnu."² Compare the confused account of the Mahāpārśva mountains, and those "beyond Kāilāsa and Mandara," 13. 19. 20, 53.

¹ Cf. *āruruḥṣur yathā mandah parvatam Gandhamādanam*, (boasting) "like a fool who (pretends he) is going to climb Mt. Gandhamādana," 5. 160. 94.

² *Asta mahādhra*, 5. 181. 16; *asto nāma parvata*, 5. 110. 6 (*astamana* = *astam-ayana*). The Udaya hill appears at 3. 224. 11. The Asta is conceived as a real "mountain-king," and there "and in the sea dwells Varuṇa protecting all creatures," 3. 163. 10. The gods find Śiva on Mt. Mandara, 7. 94. 57, though his regular abode is Kāilāsa, whose lofty peak serves the hyperbole of the poets as an image, "high as peaked Kāilāsa

Despite the fact that the gods roam about as they will and are constantly found in each others' pleasure-groves, they are ascribed in general not only to certain regions but also to certain mountains. Thus: "The Rakṣasas (*rakṣāṁsi*, sc. live) on Himavat; on Kāilāsa (Hemakūṭa) live the Guhyakas; serpents and Nāgas on (Mt.) Niṣadha; Gokarṇam is a grove of asceticism (cf. 13. 18. 6, Kṛṣṇa practiced asceticism there); the White Mountain is said to belong to all the gods and Asuras; the Gandharvas (live) ever on Niṣadha, likewise the Brahmarṣis on Nīla; but the resort of gods is the Peaked hill" (*śṛṅgavāṁsu . . devānām pratisaṅcaraḥ*; a special range). 6. 6. 51f. Then follows the statement that the fire of destruction (*saṁvartaka*) and the saints who precede Aruṇa (above, p. 357) are on top of Mālyavat, ib. 7. 28. Only *devī Śāṇḍilī* ("Agni's mother;" cf. 13. 123. 2f.) is, however, especially ascribed to Mt. Śṛṅgavat at 6. 8. 9, which, like Meru, has three peaks, one of gold, one of gems, and one of all kinds of jewels, 6. 6. 4 and 6. 8. 8. The flank of Meru called Karṇikāra (wood) is a favorite resort of Paśupati and Umā; and Hiraṇmaya is especially the mountain of Garuḍa, 6. 6. 24 and 6. 8. 6. The Gandharvas too live on Mandara (q. v.), on Meru (in Śāka-dvīpa), 6. 11. 15; and in Kuśa, ib. 12. 14, while "all the districts" (*sub* Krāuṇḍa-dvīpa) have gods and Gandharvas, ib. 12. 21. Harigiri, "Viṣṇu's hill," is in Kuśa-dvīpa 6. 12. 11. Skanda gives his special mountain, near Ellora, the name of *devagiri*, "hill of the god" (not "gods' hill"). The *devakūṭa* (tīrtha) of 3. 84. 141 (ib. 149, the "lake of Pitāmaha" near the Śāilarāja) may refer to the "hill of gods" (in general). The statement in 12. 27. 21, that Drāupadī grieves for her five sons "like earth deprived of five mountains" does not limit the number of mountains in any way.

Further examination of the data leads into the realm of cosmology and ethnology, with which mythology on its religious side is less nearly connected. Yet a word must be said in regard to the conception of the Himālayas in general and the site of the world-mountain Meru. It is evident that the epic

stood he, with club upraised," 6. 94. 23, etc. "High as Mandara," 1. 207. 32 (*gopuras*). Gandhamādana (Kubera's own mountain) is where Pitāmaha receives in audience the gods and seers, 6. 65. 42. The *pādas* (above) of this mountain suggest the simile of 1. 136. 2, *pādacārīva parvataḥ* (Karṇa in arena) "like a footed mountain." The *pāda*, foot (plain), of Himavat is "snowy" (*hāima*), 7. 55. 39.

poets are acquainted with the world as it appears from the Gangetic plains, where the Eastern Ocean is known but not near; where the "western littoral" is also known but distant, as are the "Puñjâb kings," the mountaineers, and, more remotely, the kings of the Śakas, Pahlavas, Daradas, Kambojas, Yavanas, etc., e. g. 5. 4. 15f. But the flight of Indra to "the end of the worlds" sets him in a lake on an island in the sea north of Himavat, 5. 10. 45; 14. 8; and when Arjuna goes north he finds beyond the White Mountain the land of Kimpuruṣas, protected by Drumaputra, and still farther the land (protected by Guhyakas) called Hāṭaka, near lake Mānasa, where there were "streams of saints," *rṣikulyās*, and near Hāṭaka (which gives its name to a kind of gold) he comes on the country protected by the Gandharvas (the Gandharva-nagara is localized here), whence he seeks to cross the "northern Hari-Varṣa" or unconquerable land of the Northern Kurus, 2. 27. 29 to 28. 11 (and expanded in SI.), just as Bhīma gets to the extreme south when he comes to Tāmralipta, 2. 30. 24. Jambūdvīpa, 3. 79. 4 and 6. 1. 8 (*yāvat tapati sūryo hi Jambūdvīpasya maṇḍalam*) and 14. 85. 39, is India.

Himavat itself is often personified, though too huge to be always thought of as individual. For the most part it serves as does any hill (1. 188. 7), for a type of stability, endurance, and size. A standing solemn asseveration is, "Himavat shall fall (or burst) and earth shall burst" (ere such or such happen), where the common distinction between earth and mountain again appears.¹

A general description in 3. 108. 4f., lauds Himavat's peaks, rivers, forests, caves, lions, tigers, birds (the kinds being given

¹ *caled dhi H. śāilah*, etc., 5. 82. 48; cf. *pated Dyāur H. śīryet*, 3. 12. 130, and oft. In 3. 32. 10, it is said that even Himavat, if "divided up and not added to," *bhaksyamāṇo hy anāvāpaḥ*, might be destroyed. Its hugeness leads to the phrase "hide Himavat with a handful of grass," 3. 35. 23 (like "hiding Meru," ib. 29); "it cannot be moved," 13. 35. 20; typical of *dhāirya*, 1. 188. 9. The most striking personification of Himavat occurs at 13. 25. 62, *vikhyāto Himavān puṇyaḥ Śāṅkara-śvaśuro gīriḥ. ākaraḥ sarvaratnāṇaṁ siddhacāraṇasevitaḥ*, "Mt. Himavat, a mine of gems of all sorts, is called Śiva's father-in-law; it is holy and cultivated by saints and singers" (Śiva's wife is Pārvatī, "daughter of the mountain"). Hence perhaps Śiva is called Hāima, but, as he "lives in mountain caves," it may be that *hāima* means "living on Himavat," as he is Merudhāman, "living on Meru," 13. 17. 61, 64 (*hāima*), and 91. Himavat is also "father of Ganges," 6. 119. 97 and of Mt. Abu (below).

in detail), Kinnaras, Apsarasas, elephants, Vidyādhara, jewels, and snakes. In particular it is famous for its gold-mines and gold-bearing waters.¹

Kāilāsa is of all the mountains in Himavat the most famous and serves as a means of comparison when one wishes to describe towers etc., which in Sanskrit as in our parlance are called "sky-scrapers," *divisprś*, as in 1. 185. 19; 2. 34. 20; cf. (not in B) SI. 1. 96. 56, *Kāilāsaśikhārāir gopurāṇi*. Even the house of lac is compared with it, 1. 146. 12, or a man, as Balarāma is "like the Kāilāsa peak," 1. 220. 20. It lies, as described in Vana, beside the upper Ganges but beyond the Northern Kurus and is near Mt. Māināka, 3. 145. 17 f., 41 and 51 (also SI. 1. 243. 31). The Sabhā of Kubera is "like the peak of Kāilāsa" 2. 10. 2. It is said to be six leagues (!) high. All the gods assemble upon it, and the Yakṣas, Rakṣasas, etc. to be seen there are without number, 3. 139. 11 f. The monster jujube described as being there and in Gandhamādana (*ib.* and above) shows perhaps that no great distinction was felt between them, unless one was a part of the other. According to 3. 12. 43, Kṛṣṇa once lived there (SI. quite different, *vāirājabhavane* for *Kāilāsabhavane*).² The two mountains elsewhere, as at a later date, are differentiated.

¹ Compare 5. 111. 24, the "gold-mine of Himavat," *hāimavataḥ kana-kākarah*, and "gold-giving lake," found at Uśira-bīja. In 3. 82. 55, Arbuda is "son of the Himālayas," *himavatsuta*, "where there was of old a cleft in the earth" and asylum of Vasīṣṭha. As it is near Prabhāsa (on the Gujarat coast) it must be the modern Mt. Abu, and not Māināka, as later in VP. The gold comes from "Rudra's seed," 9. 44. 15. Gold in the "essence;" *sāra*, of (all) mountains (as honey is of flowers), 13. 17. 14.

² The commentators here understand *badarī* and *vāiśālā* to refer to the jujube tree and not to the stream or asylum of Nārāyaṇa so called (5. 111. 4). But anyway Kāilāsa seems to include, as a range, the further hill called Māināka and Gandhamādana. Cf. the later *rajatādri* "silver hill," as epithet of Kāilāsa, with the statement above regarding Śveta. In 3. 158. 17, where the heroes see Gandhamādana and Śveta after Kāilāsa and Māināka, SI. has Meru for Śveta. In the more or less stereotyped geographical scheme of 6. 6. 1 f., Gandhamādana lies north of Mālyavat, which is north of Niṣadha, and Niṣadha is the mountain west of Hemakūṭa (Kāilāsa). According to a v. l. in SI. "black men" live on Gandhamādana (in B, they are "happy" *hr̥ṣṭā*), *kṛṣṇā narāḥ*, 6. 6. 31 (36). In 1. 119. 48, Gandhamādana is this side of Indra-Kīla and beyond Himavat (cf. 3. 37. 41); it is protected by Saints, Siddhas, and by *mahābhūtas*. Indradyumna-lake and Haṇsa-kūṭa lie beyond it (*ib.* 50). It is accessible only to ascetic mortals, and the *viśālā badarī* is there, 3. 140. 22; 141. 23.

Mt. Meru, if no cosmological theory stood opposed, would seem to be a hill "beaten by rain," 7. 166. 14; 174. 20, etc., like other hills of the north country, only surpassing all and reaching higher than the sun, so that the sun goes around it, 3. 104. 2. It is Meru-giri, *trikūṭa*, the best of peaked mountains, 5. 65. 5 (it has three golden peaks, 6. 82. 27), and it is covered with cloud but not stirred, *mathita*, by the wind, 7. 156. 81f. ("Wind shall bear away Meru, and the sky fall," ere this thing shall happen, is said as above of Himavat, 5. 160. 98). The "rocks of Meru" ("may be counted," 13. 26. 98) appear to be as well known as the "sands of the Ganges" (with the stars in the sky usually as type of countless hosts of cows), 7. 58. 7, *yāvatyaḥ sikatā gāṅgyo yāvan Meror mahopalāḥ*. Like other mountains it is red with metal, 5. 179. 30 (see above). Like other peaks it stretches to the heavens and "golden Meru" is a part of the Svarloka (light-world), holding parks of the gods, its extent being given in one place as three and thirty thousand leagues, 3. 261. 8. It is the "Indra of mountains" and is ever resplendent with sunlight, 1. 225. 37; 2. 38. 28; 3. 81. 5. Yet its glory excels that of the sun, and it is the home of gods, Gandharvas, and beasts, but not of men who are unrighteous. It is there the gods consulted how to use Mandara as a churning stick to get ambrosia, 1. 17. 5f.; and 1. 18. The *deva-sabhā* is on Meru, SI. 2. 51. 43. It cannot be destroyed (or, SI., turned round, *vivartanam* for *vimardanam*), 3. 36. 3 (cf. *viparyāsa*, 7. 193. 7) or concealed (above). It is typical of dignity (*Merupratimagāūrava*, "O thou as grave as Meru!"), 3. 41. 40.

Yet the poets do not hesitate to say that the sun lights it, SI. 4. 19. 13; that vultures visit it, 3. 225. 33; that the saint Viśvāmitra can "hurl Meru away from earth," 1. 71. 36; and that the "house-goddess" can devour it, 2. 18. 8. Hiraṇyakaśipu is known as "the shaker of Meru" (*-kampana*), 13. 14. 73. On its wooded top sit saints and gods, 12. 324. 11—21. Asylums are found there, as, for example, that of Vasiṣṭha, albeit "on the flank" of the mountain, 1. 99. 6, though Yayāti sports upon its very peak, *Meruśṛṅge . . uttare* (northern), 1. 85. 9, as does Uśanas with the demon Dāityas, 6. 6. 22, and the

It is described in 3. 146. 22, as "dancing with clouds outspread" (as a ballet-dancer with skirts).

"wives of the gods" ascend it, 1. 134. 16. The mountain is spoken of as if the poets saw it before them. "He shone in splendor on his golden car as shines the sun on Meru," 7. 84. 17; "looked like Mahā-Meru with its clouds," 6. 109. 38; "resplendent as the peak of Meru," 7. 120. 4. A long description of it is found in 3. 163. 12f. It lies north of Gandhamādana, is holy, the gate of the saints, and illuminates the northern district. There Prajāpati, the soul of being, abides. There too, in a blessed and healthful abode, live those who are called the *putrā mānasāḥ* of Brahma (his mental sons), of whom Dakṣa is the seventh (14). The "seven seers of the gods" (Devarṣis) set and rise there. The topmost peak is occupied by Pitāmaha, "with the self-pleased gods" (*ātmatrptāḥ*); but beyond the seat of Brahmā is that of the eternal supreme Nārāyaṇa (God). This even the gods cannot see (or "see with difficulty," SL), 18. This place of Viṣṇu (God) is to the east of Meru and is inaccessible even to Brahmarṣis and so, of course, to the "great seers" (Maharṣis, by implication inferior to Brahmarṣis, ib. 21), though Manu holds a conversation there, 13. 98. 6. Around Meru revolve continually the sun and moon, from east to west, *pradakṣiṇam upāvṛtya kurutaḥ* (cf. 3. 168. 36, *girim āmantrya Śāisīram pradakṣiṇam upāvṛtya*), as do all the heavenly lights, which the sun drags with him as he makes the circuit, *kurute* (Meru) *abhipradakṣiṇam*; for the sun, on reaching the Asta mountain and getting "beyond the twilight," takes the northern district as his course, *bhajāte . . kāṣṭhām* (to the north of Meru) and so returns, facing east, 30f.: *Merum anuvṛttaḥ sa punar gacchati prāimukhaḥ* (SL. has *sumerum* for *sa Merum*). Thus also the moon, dividing the months, goes with the stars (*nakṣatras*), and "passing on the other side of Meru . . returns to Mandara" (i. e., the east).¹ Meru itself is east of Ketumāla, 6. 6. 31.

¹ The expression *atikramya* is a technical geographical term, meaning "passing behind" or "on the other side of;" cf. Pāṇ. 3. 4. 20. In 30, above, it is used of the sun getting to the other side of the twilight. In 13. 96. 10, one who kills a refugee is likened to one who should *atīkrāmet* (sic) the brightness of Meru, i. e., disdain. The account following (above) says that to make winter the sun goes to the southern district, but nothing more is said of Meru at this point. In 3. 164. 8, the mountain of the north is luminous with *plants*, and has no distinction of day and night; but the inhabitants see the sun rise and set (*astamana*, 9).

It is even possible that Māināka is at times regarded as part of Meru. There is a *vinaśana* ascribed to Māināka above, and in the Tirtha stories of Vana, 3. 82. 111, the *vinaśana* of the Sarasvatī, is where this river "goes concealed on Meru's flank" (and is seen again at Camasa, Śirodbheda, and Nāgod-bheda).

The Meru of the Mahābhārata nowhere appears to be regarded as the axis of the world, the north pole to which the (later) Sumeru is antithetical. In the "car of the gods," it is the perpendicular flagstaff of the car, that is it is a lofty mountain-range situated in the north, 7. 202. 78. In view of the theory recently propounded in this Journal that Babylonian and Hindu cosmology rest on the same basis, it is necessary to observe that there is in fact no southern pole, Sumeru, recognized at all in the epic. One passage given above shows a doubtful reading (SL.) of *sumeru* for *sa Meru*, but in that case *sumeru* is Meru itself ("fair Meru"), as shown by the context. The only other case where Sumeru occurs is of a similar nature. Instead of the reading *babhūva paramopetaḥ svayambhūr iva bhānunā*, in 6. 2078 (C.), the Bombay and South Indian recensions have (50. 46) *sumerur iva*, which, in the light of the similes just given, is evidently "resplendent as fair Meru."

Meru as described in the late geographical intrusion at the beginning of Bhīṣma¹ is half way between the earlier and

¹ It is only here that the Persians bear the (Puranic) name Pārasikas, 6. 9. 66, *Hūṇāḥ Pārasikāḥ saha* (so too in SL.; in VP. 2. 3. 13, *Pārasikādayas tathā*, to avoid three iambs). One very important difference between the epic and Puranic descriptions is that, whereas the Viṣṇu Purāṇa 2. 4. 1, says that the Plakṣadvīpa (and others) surrounds the sea, which in turn surrounds Jambu-dvīpa, *kṣārodena yathā dvīpo jambusañjño bhiveṣṭitaḥ, samveṣṭya kṣāram udadhīm plakṣadvīpas tathā sthitaḥ*, the epic nowhere says that a continent encircles an ocean, but only that an ocean surrounds each continent, 6. 5. 13f.; cf. ib. (8. 10 and 15) 11. 6; 11. 9; 12. 1f. Furthermore, in 6. 12. 27, after remarking that "jewels come into (are exported into) the Dvīpa called Puṣkara from Jambū-dvīpa" (just as "Indra brings the rain from Śāka-dvīpa," 6. 11. 16), the poet says that all these *dvīpas* excel as they go north, both in virtue and in length of life, but that nevertheless they must all be regarded as one nation, "for that is called (one) nation where there is one law" (or religion), *eko janapado rājan dvīpeṣu eteṣu Bhārata, uktā janapadā yeṣu dharmaś cāi'kaḥ pradrśyate*, and finally he ascribes to the guardian elephants of space a "Plain" country still beyond those already mentioned,

later (Puranic) conception, and one among many indications that the muddled South Indian text (as published) is tainted with later passages is to be seen in this, that just where Meru is sufficiently described in the Bombay texts as being eighty-four thousand leagues high and eighty-four thousand deep, the SI. text adds (in the words of the Viṣṇu Purāṇa, 2. 2. 8) that its apex is twice the size of its base, 6. 6. 10. To get a proper idea of the epic Meru it must be remembered that in this work the *dvīpas* islands or continents, are not spheres but parts of the earth, which to the observer stretch away to the north and north-west on a scale resembling in general that made with Mercator's projection (the farther north the greater the extent), each continent having all its virtues including size, double that of the preceding. Meru is one of seven mountains running across Jambū the Rose-apple continent. It stands exactly in the middle, having south and east of it the three great ranges Niṣadha, Hemakūṭa (or Kāilāsa), and Himavat (the thousand leagues between each range making a valley, *varṣa*), and to the north and west of it the ranges called Nīla, Śveta (White Mountain) and Śrīṅgavat, while north of the last the country "borders on the sea," and so stops the row; but south of the south-eastern end, occupied by Himavat, lies the India of the plains, Bhārata-land. Other continents to the north and east of Jambū-dvīpa (Rose-apple continent) are Ketu-māla, immediately west, and Kaśyapa-continent still further west, which, along with Śāka-continent, or Nāga-(Ceylon? In SI. Śāka for Nāga, 6. 6. 56)¹, forms the ears of the "hare"-shape of part of Sudarśana, equivalent to Jambū continent (also of the discus). This in general is circular, but part of it looks like a hare and part looks like a tree and these shapes are reflected in the moon "as in a mirror." It

tataḥ param samā nāma, having four corners, and thirty (leagues?) in extent, 6. 12. 33 (or "having thirty circuits"). This land called Samā is itself (*ib.*) described as *lokasaṁsthitiḥ*, "the form of the world," as if it were the tower of Babel in Sumerian land! Kuśa is not an uncommon place prefix. Compare Kuśāvarta a teacher on Mt. Nīla, mentioned with Gangādvāra, in 13. 25, 13; Kuśastamba, *ib.* 26 (Kuśasthalī is Dvārakā). Kuśadvīpa was presented to Vidyutprabha by Śiva, according to 13. 14. 84.

¹ Lankā also has its *trikūṭa*, three-peaked mountain (cf. *triśrīṅga*, 8. 15. 8). The Vedic *trikakud* is an epithet of Kṛṣṇa-Viṣṇu. Bhāratavarṣa is middle India, 6. 9. 4f.; 12. 326. 14f.

is possible that the land called Kaśyapa may be Caspian land, at any rate that is where it should be according to the description. Meru rises in the middle of Ilāvṛta, between Nīla and Niṣadha and also between Mālyavat and Gandhamādana. On its flanks are Ketumāla on the west; Bhadrāśva, the land of the Kālāmṛa-tree (above), on the east; the Northern Kurus and the Karṇikāra forest, on the north. Ganges falls from its peak into lake Candramas, appearing first at Bindusaras near Māināka, north of Kāilāsa. On its south is Bhārata-land. The countries and mountains from the last north to Bhārata in the south lie like a bow (curved). The Śāka-continent also has seven mountain-ranges and the first is Meru (6. 11. 15). Meru is the house of divinities and is golden (even the birds being indistinguishably golden); so it resembles the sun (not in being round but in being brilliant), 6. 6. 10. The juice of the 1100 league high rose-apple tree (*divasprś*, "touching the sky") runs around the base of Meru and gives health, agelessness, etc., to the Northern Kurus, as said above, 6. 7. 20.

But it would be a mistake to suppose that there are literally seven continents. Even in this description the poet says expressly: "There are many continents; I will describe seven," 6. 11. 4, using indeed a synonym, since *sapta dvīpāḥ* meant originally the *subahavo dvīpā yāir santatam idam jagat* ("very many continents extend the world").¹ They are thought of as comprising not the sphere of the universe but the earth, *saptadvīpā*, so called in 8. 90. 106; 12. 49. 37; cf. "earth with its seven continents and seas," R. 7. 38. 56. The poet of the Jambūkhaṇḍavinirmāṇa is quite right in saying there are more continents. In Sabhā is mentioned a Śākala-dvīpa and the "seven *dvīpas*" are here clearly equivalent to "the whole earth." Thus in 2. 12. 12, Harisćandra, a king, "conquered the seven continents," *id est*, the whole earth, and in 2. 26. 5f., "He conquered Śākala-dvīpa and king Prativindhya and whatever kings there were in all the seven continents," meaning of course in this conquerable earth. In 2. 32. 14, Śākala is a city of the Madras (Puñjāb). Compare 13. 95. 23, *sapta dvīpān imān varṣeṇā bhipravarṣati*, "rains over this earth." But "earth has thirteen *dvīpas* in 3. 3. 52 and 134. 20; and eighteen

¹ Compare the use of "seven kings" of the Kirātas, the "seven tribes" of Utsava, 2. 27. 16; 30. 12, etc. "Seven" is often several.

in 7. 70. 15.¹ The "gate of Mānasa lake," according to the epic itself, 3. 130. 12, is called "the *varṣam* made by Rāma in the midst of the mountain," apparently Mt. Kāilāsa, where the famous lake (the brooding-place of swans) is situated, although the passage would appear also to include it within the "holy circuit of Kashmir," *Kāśmīramaṇḍalam* (*sarvapuṇyam*) not far from which is Viṣṇupadam. The "seers of the north," *āuttarā ṛṣayaḥ*, held a conversation there with Nāhusa, Agni, and Kāśyapa, ib. 8 and 10.

The number of oceans is indifferently given as four or seven. The "four oceans united by Darbhīn" are repeatedly alluded to: 3. 83. 156; 84. 126; 85. 63. On the other hand, the *saptasamudrāntā mahī* of 7. 198. 55 (R. 4. 15. 8) and *sapta samudrāḥ* of R. 3. 78. 4 imply earthly oceans numbered conventionally as "seven" (still earlier, as in VS. 13. 31, there are three oceans; or only the eastern and western, as in Manu, 2. 22). But even "four oceans" are also recognized, as in Manu 8. 406 and Kath. 69, 181, *catuḥsamudrā pṛthivī*.

Thus the very account in the epic which is supposed to imply the Puranic cosmogony speaks of only four oceans in 6. 3. 38, *catvāraḥ sāgarāḥ*. In the account of the Dvīpas also four oceans are expressly mentioned, *ghṛtatoyaḥ samudro 'tra dadhimāṇḍodako 'paraḥ surodaḥ sāgaraś cāi'va tathā 'nyo jalasāgarāḥ*, 6. 12. 2, though in 11. 8f. the *kṣīroda* is said to surround Śāka-dvīpa. Apparently the original conception was that there was around all the earth four seas, one for each direction, just as there was a four-fold river running from the mountain in the middle of all the earth, and, to judge by the disposition of the four regions around Meru, there were at first but four *dvīpas*. Thus in 6. 6. 12: "On the flanks of Meru are four (is)lands (*tasya pārśveṣv amī dvīpās catvāraḥ samsthītā vibho*), Bhadrāśvaḥ, Ketumāla, Jambūdvīpa, and the Northern Kurus." In VP. 2. 2. 22, the first two are called *varṣe dve*. Even there *dvīpa* is used for *varṣa*. Compare VP. 2. 2. 3, where the *varṣa* called Bhārata has nine *dvīpas* (Indra-dvīpa, Nāga-dvīpa, Gāndharva, Vāruṇa, etc.).

As late as the Śānti, 12. 14. 21f., the four Dvīpas around

¹ Jambūdvīpa is mentioned as "famous" in 3. 79. 4. SI. 2. 96. 29 adds one passage to those giving "seven dvīpas." The *dvīpa* is a safety-place of any sort, 2. 63. 7f.; 3. 177. 19; 8. 93. 5; 12. 302. 71f.

Mahā-Meru are spoken of as we should speak of the quarters of the earth. The king is said to have brought under his sway "Jambūdvīpa, and Krāuñca-dvīpa which resembles it lying below, *adhareṇa*, Mahā-Meru, and Śāka-dvīpa, to the east of Mahā-Meru, and Bhadrāśva of equal extent with Śāka-dvīpa lying north of Mahā-Meru;" and further: "Dvīpas and *antara-Dvīpas* by plunging into the sea thou hast brought under thy dominion," vs. 25. Here the Dvīpas and "antara-Dvīpas" are all part of the conquest of a king of earth, as earth itself in 12. 14. 38 is described as *saparvatavanadvīpā*, "(divine earth) with her mountains, woods, and islands."

In this book alone, 12. 336f., occurs the description of the White Island, Śveta Dvīpa, otherwise known only from the Purāṇas (including the Harivaṃsa), which is a part of the earth lying in the northwestern direction where men profess a monotheistic cult. There is no reason to suppose that Śveta Dvīpa was ever heard of for centuries after our era. It forms no part of the very complete geographical sections in the early epic or even of the late intrusion which precedes the Bhagavad Gītā at the beginning of Bhīṣma.

Despite pretended familiarity with the northern country, it was really reckoned a death-journey to go thither. Thus when Sañjaya "says farewell and sets out for the Himālayas," it means he is going to the bourne whence there is no return, 15. 37. 34. Questionable also is the exact bearing of "Himavat" to the southerner. As Mt. Abu is a son of Himavat (above) so the "plain of Himavat" (*prastha*) extends so far south that it is within two leagues of Kurukṣetra. There, "on the plain of Himavat, besides the red Sarasvatī" is the camp of the Paṇḍus, 9. 5. 50f.; 6. 4.

Particularly in regard to Meru it is to be noticed that even in Śānti its peak joins that of Himavat and is of the same height, so that the two united peaks form simple edges (at least Śuka has to burst his way through them as they join together), which would be indistinguishable were it not that one peak is golden (Meru is *hemagiri*, 8. 56. 114) and the other (snowy or) silvery, 12. 334. 8f. Nor does it accord with the notion of a polar mountain that its top has groves upon it and that not only gods and saints sit there but even "gentle and learned priests" live under the Jambū-tree on its very summit, 13. 102. 20f. In SI. 13. 33. 22, Vatsanābha

proposes to expiate his fault by "going to the top of Meru" and committing suicide. In the epic, in short, Meru is felt to be a mountain like Himavat, only taller and farther north; but its peak rises like that of other mountains perpendicularly and not parallel with the plain of earth as axis of a sphere.

Another distinction between the epic and Puranic idea of the world must be kept in mind. In the Purāṇas, e. g. VP. 2. 7. 1f., there is fully developed the idea of the planetary spheres (not Dvīpas) which go by the names Maharloka, Janaloka, Tapoloka, and Satyaloka, superadded upon the older Bhūrloka and Svarloka or Svargaloka (these are epic) with the intermediate *bhuvās* as Bhuvārloka. Now the epic knows nothing of these seven spheres as such. It is only in its latest parts that it recognizes the seven spheres *bhuvanāḥ* (masculine!), 13. 16. 34 and 52: *Dhruvaḥ saptarṣayaś cāi 'va bhuvanāḥ sapta eva ca*, "Dhruva, the seven seers, and seven spheres," not exactly as in the Purāṇa, even then, since there (loc. cit.) the pole-star, Dhruva, is above the Seven Seers, and only four spheres rise above this. What the earlier epic recognizes is the (old) general conception expressed by "seven worlds;" compare (in the imitation-Upaniṣad) the half-verse *tataḥ param kṣetravido vadanti prākālpayad yo bhuvanāni sapta*, 3. 213. 22. So in 1. 179. 22, the *sapta lokās* are mentioned as in Muṇḍ. Up. 2. 1. 8); cf. AB. 2. 16; 4. 7; 4. 9; 5. 10. That is to say, the epic has the idea of the plurality of worlds, vaguely grouped as Seven Worlds, as this idea came down from antiquity together with that of the Seven Hills, Seven Seas, Seven Rivers, Seven Mountains, Seven Seers, Seven Flames, etc. But there is no recognition of the systematic sevenfold planetary sphere, whose names as subdivisions are not even mentioned till the Purāṇas (cf. 3. 261. 17f. many worlds). In this regard the ideas of space run parallel with those of time. The Puranic system of Manus and *manvantaras* (aeons and ages systematically arranged) is unknown to the early epic. The Anuśāsana, which is little better than a Purāṇa-addition to the poem, knows it well; and so do the later (335—350) Parvans of Śānti and possibly the Sun-Hymn (which alludes to Mithra of Persia) in Vana. The "worlds" of the epic are three or seven or twenty-seven or innumerable. Against the assumption of Indo-Babylonian cosmological unity stands the fact that the earlier the Indic data are the

slighter appears the resemblance to those of Babylon. Even if it be claimed that the epic represents only a disintegrated original system, it must remain an historical contradiction that its data show earlier conceptions than those of the Purāṇas and yet represent the system of the Purāṇas. The only parallel with Babylonian cosmology in India's very early literature is, as it seems to me, the "seven worlds;" but as these are not spheres and as seven is anything but a precise term, it would be periculous to make very much of that fact. Buddhistic world-theories are too late to be of importance in this regard, but they too have affected the later epic.

Expression of the ideas "to be" and "to have" in the Philippine Languages.—By FRANK R. BLAKE, Ph. D., Johns Hopkins University.

ONE of the most important uses of the study of languages which lie outside of the more familiar Indo-European and Semitic groups, is to broaden our knowledge of general grammar, to make us acquainted with unfamiliar turns of speech, and to disabuse our minds of the notion that the way in which the better known tongues are accustomed to express a certain idea, is the logical and only way. In several articles previously published in the *Journal* I have illustrated this general principle by bringing forward some of the most peculiar linguistic phenomena of Tagalog and the other Philippine Languages, I have discussed their peculiar system of counting, in which the numbers intermediate between the tens are made, somewhat as in Latin *duodeviginti*, *undeviginti*, upon the basis of the ten toward which the count is proceeding; I have pointed out that simple adjectives have the same construction as relative clauses; I have shown that the case relation of a noun or pronoun may be expressed by the form of the verb.¹ In the following paper I shall discuss the peculiarities involved in the expression of two ideas of fundamental importance, without a knowledge of which it is impossible to have the mastery of any language, the ideas "to be" and "to have."

In the languages with which we are most familiar, English, German, the Romance Languages, Latin, Greek, these ideas are expressed by verbs, and so to our minds this is the most natural and simple way of expressing them. We receive our first shock when we turn to Sanskrit, where we find there is

¹ Cf. my articles, *Contributions to Comparative Philippine Grammar* II., JAOS, vol. xxviii, 1907; *The Tagalog Ligature and Analogies in other Languages*, JAOS. vol. xxix, 1908; *Expression of Case by the Verb in Tagalog*, JAOS. vol. xxvii, 1906.

no verb for "to have" at all, but that we must express the idea by the verb "to be" followed by the genitive, e. g. *mama asti* "it is of me, I have," a construction, however, for which we have been prepared by the Latin *mihi est* = *habeo*.

If we turn from the Indo-European to the Semitic field, conditions are still more unfavourable to our preconceived notions. Not only is there no verb "to have" in any of the languages except Assyrian,¹ but the idea "to be" is often not expressed by the verb "to be," but by particles, or pronouns; in fact it is sometimes not expressed at all. For example in Hebrew "I have a horse" is rendered by "to me a horse" לִי סוּס, "the man is good" by "the man good" הָאִישׁ טוֹב or "the man he good" הָאִישׁ הוּא טוֹב.

In the Philippine Languages we must break entirely with our traditions, for here we find generally speaking no verb for either "to be" or "to have," these ideas being expressed either by particles, or simply by the construction itself.

These two ideas are, however, not always expressed in the same way, there is not one particle which can always be used to translate 'to be' and another which can always be used to translate 'to have,' the mode of rendition depends on a number of things besides the fundamental ideas of 'being' or 'having.'

In the case of 'to be' we must distinguish three types of construction, viz.:

a) constructions in which some statement is made with regard to the class or characteristics of the subject, e. g., 'the man is good,' 'his father is a farmer;'

b) constructions in which some statement is made with regard to the place of the subject, e. g., 'his father is in the house;'

c) constructions in which some statement is made with regard to the existence of an indefinite subject, corresponding to English 'there is,' 'there are,' German *es gibt*, French *il y a*.

The first we will call 'copulative *to be*,' the second 'locative *to be*,' and the third 'indefinite *to be*.'

In the case of 'to have' we must distinguish two types of construction, viz.:

¹ Here the particle which corresponds to Hebrew *ו*, Syriac *ܐܝܢ* has become a verb and takes verbal inflection, cf. Delitzsch, *Assyrisches Handwörterbuch*, Leipzig, 1896, p. 310a.

a) constructions in which the thing possessed is definite,
e. g., 'your brother has the money I sent you;'

b) constructions in which the thing possessed is indefinite,
e. g., 'have you any money?'

We will call these two types respectively 'definite' and 'indefinite *to have*.'

'Definite *to have*' is expressed in the same way as 'locative *to be*,' the original idea here being similar to that in Latin *mihi est*, 'is to me,' Sanskrit *mama asti*, 'is of me,' Modern Arabic *عندي* 'andî 'is with me,' Ethiopic **በ-ኔ** : *bēña* 'is in me.'

'Indefinite *to have*' and 'indefinite *to be*' are expressed in the same way, the idea of 'having' being the original one and passing into that of 'indefinite being' when the possessor is indefinite; e. g., 'they (indef.) have visitors in the house' becomes 'there are visitors in the house,' just as in Spanish *hay*, and French *il y a*.

The five types therefore resolve themselves into three, viz.: a) copulative *to be*, b) locative *to be* and definite *to have*, c) indefinite *to be* and indefinite *to have*.

The negative of these three types is expressed in two different ways; either the negative is added to the affirmative construction as e. g., in English 'he is' and 'he is not,' or a negative particle meaning 'not to be,' 'not to have' is substituted for the affirmative particle meaning 'to be,' 'to have,' as e. g., in Hebrew **אין לי** 'I have' and **אין לי** 'I have not.' The first way is the regular one in the first type, the second in the other two.

The following table gives the particles which are employed to express 'to be' and 'to have' affirmatively and negatively in the three types of construction just discussed. A dash indicates that no particle is employed. Generally speaking these particles are invariable for person, number, mood and tense, though occasionally they are varied to express person or follow the tense formation of the verb. The particles will be known as quasi-verbal particles or quasi-verbs.¹

The languages treated are Tagalog; the Bisaya² dialects

¹ It would be well to adopt some such designation in Semitic grammar for particles like Heb. **יש**, **אין**, **עוד**; Arab. **ليس**, Syr. **ܐܝܢ**, Eth. **በ**, etc., instead of speaking of them as adverbs, nouns, or prepositions.

² I have adopted in this article the spelling of the language names suggested by Prof. C. E. Conant in *Anthropos*, Vol. IV, 1909, pp. 1069

Cebuan, Hiligayna, Samaro-Leytean; Bikol; Pampanga; Pangasinan; Iloko; Ibanag; Bontok and Nabaloi Igorot; Magindanau; and Sulu.¹

		I copulative 'to be'	II locative 'to be' definite 'to have'	III indefinite 'to be' indefinite 'to have'
Tag.	<i>aff.</i> <i>neg.</i>	— dî, hindî, dilî	na walâ	may walâ
Bis. (Ceb.)	<i>aff.</i> <i>neg.</i>	— dili	{ nia, ania, naa, { anaa, tua, atua wala	{ may, duna, aduna, { duna may wala
Bis. (Hil.)	<i>aff.</i> <i>neg.</i>	— dili	{ ari, yari, ara, { yara, adto { wala, wa { walay, way	{ may { wala, wa { walay, way { wala may, wa may
Bis. (Sam.-Ley.)	<i>aff.</i> <i>neg.</i>	— diri	ini, ada, adto, ito, waray	may waray
Bik.	<i>aff.</i> <i>neg.</i>	— di, bako	{ yaon, iyaon, { idtong, na day	may, igua day
Pamp.	<i>aff.</i> <i>neg.</i>	— ali, ai, e	ni, ani, ti, ati, ta ala	tin, atin ala
Pang.	<i>aff.</i> <i>neg.</i>	— ag, alioa	oa andi	oala andi
Ilok.	<i>aff.</i> <i>neg.</i>	— di, saan	adda aoan	adda aoan
Iban.	<i>aff.</i> <i>neg.</i>	— ari, akkan, ji	egga auan, an	egga auan, an
Igor. (Bon.)	<i>aff.</i> <i>neg.</i>	— adi, faken	woda, woday ma'id	woda, woday ma'id

to 1074. The general principle of spelling which he there proposes, and which should certainly be followed by all those who are working in Philippine Languages, is to use the native name of the language wherever possible. The changes from the spelling formerly used in my Philippine publications are, viz., Bisaya for Bisayan, Pampanga for Pampangan, Iloko for Ilokan, Magindanau for Magindanao.

¹ For the principal grammars and dictionaries of these languages cf. the list given in my *Contributions to Comparative Philippine Grammar* JAOS. vol. xxvii (1906), p. 323, ft. nt. 2; vol. xxviii (1907) p. 1, ft. nt. 2. To these add C. W. Seidenadel, *The language spoken by the Bontok Igorot*, Chicago, 1909.

		I copulative 'to be'	II locative 'to be' definite 'to have'	III indefinite 'to be' indefinite 'to have'
Igor. (Nab.)	<i>aff.</i> <i>neg.</i>	— ag, aligoa	guara anchi	guara anchi
Mag.	<i>aff.</i> <i>neg.</i>	— di	— da	aden da
Sulu	<i>aff.</i> <i>neg.</i>	— di, bukün	aun wai	aun, tuga wai

In the first type there are no affirmative quasi-verbs. The ligatures Tagalog *ay*, *y*, Bontok *ya*, which are very close to being such particles, are better regarded simply as connective particles between predicate and preceding subject.

In type I the negatives are based for the most part on a particle *di* which appears in the different languages in the varying forms *di*, *ri*, *li*, (Ibanag also *ji*),¹ probably with final glottal catch (so at least in Tagalog and Bontok Igorot): *dili* and *diri* are apparently reduplicated forms of *di* (so Conant): in Tagalog *hin-di*, Pampanga *a-li*, Pangasinan *a-li-oa*, Ibanag *a-ri*, we have prefixed elements, *a* being perhaps the same prefix that occurs in Cebuan *ania*, *anaa*, Pampangan *ani*, *ati*. The element *oa* in Pangasinan *alioa* seems to be the quasi-verb *oa*. Pampanga *ai* is derived from *ali* by elision of the intervocalic *l*, and *e* is simply a contraction of *ai* (so Conant). A negative particle *ag* occurs in Pangasinan and Nabaloi, and perhaps in Ibanag *ak-kan*; the negative particle *an*, which is found in Ibanag uncombined, in Pangasinan and Ibanag combined with other particles (viz., *an-di*, *au-an*) as negative verbal particle of the two other types, probably occurs in Iloko *sa-an*, Ibanag *akkan*. Bikol *bako*, Bontok Igorot *faken*, and Sulu *bukün* are evidently identical; these negatives mean not simply 'not,' but indicate 'it is not this but something else' in correcting a mistake. Nabaloi *aligoa* and probably Pangasinan *alioa*, Ibanag *akkan*, have the same meaning.

In type II the affirmative particles are in many cases derived from the demonstratives. Compare Hiligayna *adto* with demonstrative *yadto*; Samaro-Leytean *ini*, *adto*, *ito*, which form the

¹ Cf. *Contributions to Comp. Phil. Gram.*, JAOS, vol. xxvii, 1906, pp. 333, 334.

basis of quasi-verbal particles, with the identical demonstratives; Bikol *idtong* with demonstrative *idto*; Pampanga *ni*, *ti*, *ta* with the demonstratives *ini*, *iti*, *ita*; Sulu *aun* with demonstrative *iaun*; Hiligayna *ari*, *yari*, *ara*, *yara* are to be compared with the demonstratives, Cebuan *k-ari* and Ibanag *yari*, *yara*; Bikol *yaon*, *iyaon* with Tagalog demonstrative *yaon*; Tagalog and Bikol *na*, Cebuan *naa*, *anaa* seem to be connected with the demonstrative particle *na*; Cebuan *nia*, *ania* are perhaps to be connected with the demonstrative particle *ia*. The *n-* of *nia* may have been adopted from *na*, and on the other hand the final *a* of *naa* may have been borrowed from *nia*; what the prefixed *a* is that occurs before the Cebuan and Pampanga particles is not certain. Samar-Leytean *ada* and Iloko *adda* are identical with Malay *ada* 'to be.'¹ In Pangasinan and Igorot, *oa*, *woda*, *guara* are apparently the same as the negatives *wa* and *wala*.² Cebuan *tua* and Ibanag *egga* are difficult; *egga* is perhaps the same as Bikol *igua*, the *u* (= *w*) being assimilated to the *g*.

The negative particles of the second type are in most cases based on a particle *wa* (Nabaloi *gua*)³ or on one written variously *la*, *ra*, *da*, sometimes on both combined. The *y* or *i* at the end of the particle in Bisaya, Bikol, Igorot, and Sulu is simply the ligature *i* which has become an integral part of the particle. Pampanga *ala* perhaps contains the same initial *a* as the affirmatives *ani*, *ati*. Pangasinan *andi*, Nabaloi *anchi*,³ is apparently a compound of two negative particles, viz., the *an* which occurs as quasi-verb in Ibanag, and the *di* that forms the basis of most of the negatives of the first type. Ibanag *an*, though said to be a syncopated form of *auan*,⁴ is probably a simple negative particle; *auan* seems to be made up of this *an* and a particle *au-*, which occurs in Tagalog *ay-aw* 'not to want,' and *ai-au* the Sulu prohibitive negative. In Igorot the meanings of affirmative and negative particles seem to be reversed. If the affirmative *woda* is the same as the negative *wala*, then it is possible to connect the

¹ Cf. *Contributions to Comp. Phil. Gram.*, JAOS, vol. xxvii, 1906, pp. 349—357.

² Cf. *op. cit.*, p. 399, ft. nt. 3.

³ Cf. *op. cit.*, pp. 332, 333.

⁴ Cf. De Cuevas, *Arte nuevo de la lengua ybanag*, Manila, 1854, p. 241.

negative *ma'id* with the affirmative *may* and explain it as *may* or *ma* + preposition *id*.

In type III the particle *may* probably contains the ligature *y* as in *way*, *waray*; the element *ma* is perhaps to be connected with the prefix *ma* that is used to form adjectives in many of the languages, e. g., Tagalog makes from *lakas* 'strength,' the adjective *ma-lakas* 'strong' originally perhaps 'having strength': Bikol *igua* contains perhaps the particle *wa* used affirmatively as in Pangasinan: Pampanga (*a*)*tin* is simply the (*a*)*ti* of type two with ligature *n*: Magindanau *aden* is perhaps a combination of *ada* (= Malay *ada*, Iloko *adda*) and the demonstrative particle *en*: the etymology of Cebuan *duna*, *aduna* and Sulu *tuga* is uncertain; the initial *a* of *aduna* is probably the same as the initial *a* of Cebuan *ania*, *anaa*, *atua*, Pampanga *ani*, *ati*. In Pangasinan and Igorot, *oala*, *woda*, *guara* appear to correspond to the negative *wala*. The negative particles are regularly the same as those of type II: in Hiligayna the ligature *y* and in Pampanga the ligature *n* do not form an inseparable part of the particle; in Cebuan *duna may* two affirmative particles are used together, and in Hiligayna *wala may*, *wa may*, the negative particle is prefixed to the affirmative. Sometimes another word or particle is employed so frequently in connection with the quasi-verb that it has become an integral part of the word: so, for example, in Tagalog *may-roon* = *may*, and Nabaloi *guara-anan* = *guara*. Here *roon* is the adverb *doon* 'there,' *anan* is perhaps a similar element.

In some languages the quasi-verbs of types II and III are varied to express person or tense. In some of the Bisaya dialects and in Pampanga different particles are apparently employed according to the person of the subject. In Cebuan (*a*)*nia* is employed with first person, *anaa* or *naa* with the second or third, and (*a*)*tua* with the third person. In Pampanga (*a*)*ni* and (*a*)*ti* are used with all three persons, (*a*)*ta* only with the third. The reason for this seems to be that the forms used with the first and second persons are based on the nearer demonstratives, and mean 'to be here,' those that are employed only with the third are based on the more remote demonstratives, and mean 'to be there.'

In Samaro-Leytean the particles are varied like verbs to express tense, viz.,

	Pres.	Pret.	Fut.
'to be there'	iito aada aadto	nakada nakadto	makada makadto
'to be here'	iini	nakanhi (makanhi) ¹	

Occasionally in Tagalog the combination of the particle *na* + an adverb of place is treated as if it were the past tense of a verb with prefixed *ma*, e. g., from *naroon* is formed a present tense *naroroon*.

In Magindanau *aden* makes a preterite *naden*.

Sentences containing 'copulative to be' are expressed in most of the languages by simply juxtaposing subject and predicate. The normal order, affirmative and negative, in all the languages seems to be—predicate, subject, in negative sentences the negative standing before the predicate,² e. g.:

Tag. mataas ito-ng lalaki 'this man is tall.'

matatapang sila 'they are brave.'

hindi mabuti ang tawo 'the man is not good.'

hindi sila³ matatapang 'they are not brave.'

hindi ko ina⁴ '(she) is not my mother.'

Bis. (Ceb.) salapian ako 'I am rich.'

dili maayo si Pedro 'Pedro is not good.'

Bis. (Hil.) maayo ini 'this is good.'

si Pedro ako 'I am Pedro.'

maloloyon ang Dios 'God is merciful.'

dili ako³ si padre Ramon 'I am not Father Ramon.'

Bik. marahay ako 'I am good.'

bako ini-ng papel 'it is not this paper.'

bako-ng⁵ sako iyan 'this is not mine.'

¹ Not given but implied in Figueroa, *Arte del idioma visaya de Samar y Leyte*, 2^a ed., Binondo, 1872.

² Negative examples are not always to be found in the material available for study, but the rule probably holds good in all cases.

³ To judge from these examples, when the subject is a personal pronoun in Tagalog and Hiligayna (presumably also in the other Bisaya dialects) it stands between the negative and the rest of the predicate.

⁴ When the predicate of a negative sentence in Tagalog is a noun modified by a possessive pronoun and the subject is not expressed, the postpositive form of the possessive seems to be placed between negative and noun as here.

⁵ A ligature seems to be regularly employed after the negatives *saan*, *alioa*, *aligao*, and also sometimes after *bako*.

Pamp. masanting ya 'he is handsome.'

Pang. kapitan ak 'I am *capitan*.'

balêg so kataoan 'the master is powerful.'

ag maronong	} 'he is wise.'
alioa-n ⁵ maronong	

Ilok. tao ak 'I am a man.'

maymaysa ak 'I am alone.'

naimbag daytoy 'this is good.'

di nasayaat toy a pusa 'this cat is not pretty.'

saan a⁵ daket toy a silid 'this room is not large.'

Iban. babayak 'I am a woman.'

mapia im masipot 'the gentle one is good.'

Igor. (Bon.) kawis siya 'he is good.'

adi kawis sa 'this is not good.'

Igor. (Nab.) kadubong-ko iai 'this is my hat.'

aligoa-n⁵ balei-ko 'it is not my house.'

Mag. mapia si Pedro 'Pedro is good.'

Sulu maraiiau tau ien 'that man is good.'

bukün amu ien 'that is not exact.'

The subject, however, may also stand first, but this seems to be the case in many of the languages at least, only when it is specially emphasized. In the northern group of Philippine Languages, Pangasinan, Iloko, Ibanag, and probably Pampanga¹ this is apparently allowed only when the predicate is definite, *i. e.*, is preceded by the definite article or a demonstrative pronoun. When the subject is a personal pronoun these languages employ a special emphatic form, *e. g.*:

Pang. si Juan so mabayani 'Juan is the brave one.'

say kapitan so linma dia 'the *capitan* was the
one that came here.'

siak so kapitan 'I am the *capitan*.'

Ilok. sika ti napigsa 'you are the brave one.'

toy a tao ti naimbag 'this man is the good one.'

Iban. sakan ig gobernador 'I am the Governor.'

sikau si Pedro 'you are Pedro.'

Cebuan and Hiligayna seem to follow the same rule as the northern languages, though they have no special series of emphatic

¹ No examples are available, but the fact that Pampanga possesses a special series of emphatic personal pronouns, besides its general resemblance to the other languages makes this probable.

pronouns; the definite article may be replaced by the particle *y*, e. g.:

Ceb. si Pedro ang } maloloyon { 'Pedro is the
si Pedro-y } merciful one.'

Hil. siya ang amay ko 'he is my father.'

ako-y amay niya 'I am his father.'

In Tagalog, Samaro-Leytean, Bikol, Bontok Igorot, Magindanao, and Sulu, the subject may apparently stand first without special emphasis; in Tagalog and Bontok Igorot the subject and predicate are joined by the particle *ay* (after a vowel *ay* or *'y*), and *ya* respectively, e. g.:

Tag. ang tawo 'y mabuti 'the man is good.'

ikaw ay hindi matapang 'you are not brave.'

Sam.-Ley. si Juan diri maopay 'Juan is not good.'

Bik. si Antonio maraot 'Antonio is bad.'

ini bulauan 'this is gold.'

Igor. (Bon.) nan mamamagkid ya fanig 'the girls are little.'

sika ya antjo 'you are tall.'

Mag. su kayo makapal 'the tree is large.'

si Rudolfo mapulu a tau 'Rudolf is a tall man.'

su islam talau 'the moro is a coward.'

Sulu in salapa nia balawan 'his betel-box is (made of) gold.'

in batabata ini di masipug 'this boy is without shame (not having-shame).'

In constructions of type II, the affirmative is expressed by particles which, in many cases at least, are derived from the demonstrative pronouns; the negative particle is regularly the same as in the third type. When the sentence contains 'locative *to be*' the particle is regularly followed by the oblique case of the place in which or a demonstrative adverb of place; when it contains 'definite *to have*,' by the oblique case of the possessor. In the second case the subject of the sentence is the thing possessed. The rules with regard to the relative position of subject and predicate seem to be the same as in type I; in Tagalog, and apparently in Bontok Igorot, *ay*, *y* and *ya* are used as in type I, e. g.:

Tag. ang bata 'y na sa bahay } 'the boy is in the house.'

na sa bahay ang batà

ang pari ay walâ sa simbahan } 'the priest is not in
walâ sa simbahan ang pari } the church.'

ang kabayo ni Pedro 'y na sa akin 'I have
Pedro's horse.'

walâ kay Juan ang salapî 'Juan has not the
money.'

Bis. (Ceb.) ania kanako ang sinina 'I have the shirt.'
tua sa ilalom sa lamesa '(it) is under the
table.'

Bis. (Hil.) adto siya sa Ogtong 'he is at Ogtong.'
wala siya sa San Marino 'he is not at San
Marino.'

way diri ang amay ko 'my father is not here.'
Bis. (Sam.-Ley.) iini sa akon kamut 'it is here in my hand.'
aadto sa balay 'it is there in the house.'
nakadto ka sa Katbalogan 'have you been in
Katbalogan?'

Bik. ang kupia iyaon sa lamesa 'the hat is on the
table.'

day duman sa lamesa an sogkod 'the stick is
not on the table.'

na saimo dao an panyo ko 'have you my
handkerchief?'

Pamp. ni-ko keni 'I am here.'
ta-yo karin king silid 'he is there in the room.'
ala-yo keti 'he is not here.'

Pang. oa-d abung to si Pedro 'Pedro is in his house.'
oa-d sika-y kaballo 'have you the horse?'

Ilok. adda iti simbaan si apo Padi 'the priest is in
the church.'

adda ak ditoy 'I am here.'
aoan ditoy ti aso 'the dog is not here.'
adda kenka ti pagtinteroak 'have you my ink-
stand.'

adda-da iti cocinero 'the cook has them.'
aoan ti malo kaniak 'I have not the hammer.'

Iban. egga ip pirak nikau 'have you the money?'
auas¹ si Pedro tab balay 'Pedro is not in the
house.'

Igor. (Bon.) woday-ak is nan afong 'I am in the house.'

¹ Here *n* is assimilated to the following consonant, cf. *Contributions to Comp. Phil. Gram.*, p. 336.

ma'id siya isna adwani 'he is not here to-day.
siya ya woday isna 'he is here.'

Igor. (Nab.) guara-ak chi balei 'I am in the house.'

Sulu in barong mu aun ha-lum bai 'your barong is
in the house.'

wai run pa-lum bai 'it is not in the house.'

In Magindanau this type, in the affirmative, seems to be expressed in the same way as type I, without particle, the prepositional phrase or adverb simply taking the place of the nominal or adjectival predicate, e. g.:

su glat sa linauau na tulugan 'the knife is on the bed.'

su asu sa lamalama 'the dog is on the plaza.'

Some of the other languages also occasionally follow this construction in the affirmative, e. g.:

Bis. (Ceb.) dinhi ako 'I am here.'

Bis. (Hil.) dira si Juan 'Juan is there.'

Ilok. dita ka pay 'are you still there?'

Iban. ajjau ak 'I am here.'

In constructions of type III, in the case of 'indefinite *to have*' the possessor stands sometimes in the nominative, sometimes in the genitive, sometimes, probably after the analogy of type II, in the oblique. The original idea in the case of the genitive in such a sentence as 'I have money' is probably 'there is, there exists money of mine.' The possessor stands in the nominative only, in Tagalog, and apparently in Hiligayna, Samaro-Leytean, Bikol, and Sulu; in the genitive only, in Iloko: in either nominative or genitive in Cebuan, Pampanga, Nabaloi, and Magindanau; in either genitive or oblique in Ibanag, Pangasinan, and Bontok Igorot.

The thing possessed may be preceded by a ligature or indefinite particle or it may stand alone. The ligatures are the following viz., Tag., Bik. -*ng*, Pamp. -*n*, Ceb., Hil., Pang. -*y*, Mag. *a*; the indefinite particles, which in some languages (e. g., Iloko) seem to be used only after a negative, are viz., Ceb. *ug*, *in*, *ing*, Hil. *sing*, Iban. *tu*:—Bik. *nin*, Igor. (Bon.) *nan*, Nab. *ne*, Ilok. *ti*, which are used in the same way as the indefinite particles, although forms of the definite article, are to be classed here. In some cases a ligature has become an integral part of the quasi-verb, so apparently in Tag., Bis., Bik. *ma-y*, Bis. *wa-y*, *wala-y*, *wara-y*, Bik. *da-y*, Pamp. *ti-n*, Igor. (Bon.) *woda-y*: Sulu *tuga* is probably *tug* (used as nominal

prefix, e. g., *tug-bai* 'having a house, owner of a house') + the ligature *a*. The object may stand without preceding ligature or indefinite particle after some of these quasi-verbs, under just what conditions is not in all cases clear; in Tagalog or Bisaya an object that follows *may* directly has this construction.

In the case of 'indefinite to be,' the element that corresponds to the possessor, being indefinite 'one, they,' is not expressed; the thing that is or exists, the logical subject, stands in the same construction as the thing possessed; the place where is expressed by an adverb of place or by an oblique case.

Here, as in type II, the relative position of subject and predicate are governed by the same rules as in type I. In Tagalog the particles *ay*, *y*, in Bontok Igorot the particle *ya* are used as in the two other types.

The following examples will illustrate these principles, e. g.:

Tag. *may ako-ng salapî* } 'I have money.'
ako 'y may salapî }
walâ ako-ng anak }
ako 'y wala-ng anak } 'I have no son.'
may tawo sa bahay 'there is a man in the house.'
wala-ng tawo sa lainsaingan 'there is no one on
the street.'

Bis. (Ceb.) *duna-y âko-ng (gen.) tiempo* } 'I have time.'
duna akó-y (nom.) tiempo }
wala akó (nom.) ug humay 'I have no rice.'
aduna ing katigayonan 'he has riches.'

Bis. (Hil.) *ako may asawa na* } 'I have a wife now.'
may asawa na ako }
wa-y kan'on ini-ng tauo 'this man has no food.'
wala-y buut yana 'he has no sense.'
wa ka-y buut 'you have no sense.'
wala ako-y kan'on 'I have no food.'
wala pa siya sing buut 'he has still no sense.'
way ako sing katungdanan sa pagbuhat sina
'I have no obligation to do that.'
wala may pilak ako 'I have no money.'

Bis. (Sam.-Ley.) *may salapi ka* 'have you any money?'
waray ka salapi 'you have no money.'

Bik. *igua ako-ng saro-ng ayam na magayom* 'I have
a pretty dog.'

- day ako-ng gubing 'I have no clothing.'
 ika dai-ng gubing 'you have no clothes.'
 day ako nin saro-ng sadit 'I have not one cuarto.'
 igua ka nin tubig 'have you any water?'
 dai-ng tawo sa harong 'there is no one in the house.'
- Pamp. atin kopia ning kapatad mo 'has your brother a hat?'
 atin mo¹-n imalan 'he has indeed clothing.'
 atin palæ karin 'there is rice there.'
 ala-n imalan mo }
 ala ka-n imalan } 'have you no clothes?'
 ala-n palæ karin 'there is no rice there.'
- Pang. oala-y kaballo-m }
 oala-y kaballo'd sika } 'have you a horse?'
 oala-y polvos yo }
 oala-y polvos ed sikayo } 'have you (pl.) any powders?'
 oala-y too ed abung 'there are people in the house.'
 andi gapo-y polvos 'there are no powders at all.'
- Ilok. adda tabako-m 'have you any tobacco?'
 adda aso-mi 'we have a dog.'
 aoan ti aso-da 'they have no dog.'
 aoan ti naimbag a arak-na 'he has no good wine.'
 adda tao itoy a balay 'there are people in this house.'
 adda arak ditoy 'there is wine here.'
 aoan ti pusa iti balay itoy 'there are no cats in this house.'
- Iban. egga ginageram mu } 'have you slandered anyone'
 egga tu ginageram mu } '(have you any slandered one).'
 auan yaya tu utok }
 auas² sa tu utok } 'he has judgment.'
 auan ak tu pirak }
 auan niakan tu pirak } 'I have no money.'
 auas² si Pedro tu utok }
 auat² tu utok takkuani Pedro } 'Pedro has no judgment.'
 at² tu tolai tab balay 'there is no one in the house.'
- Igor. (Bon.) woday ken sak'en nan afong }
 woday nan afong-ko } 'I have a house.'
 woda nan kayo 'there is a tree.'

¹ *mo* is here an adverb.

² Here *n* is assimilated to the following consonant, cf. *Contributions to Comp. Phil. Gram.*, p. 336.

woda nan onash id Falidfid 'there was a sugar-cane-plantation at Falidfid.'

ma'id kayo-k 'I have no wood.'

ma'id noang 'there is no buffalo (here).'

Igor. (Nab.) guara balei-to 'has he a house?'

anchi balei-to 'he has no house.'

guara anan tayo ne kabadyo 'we have horses.'

anchi chanum 'there is no water.'

Mag. aden aku bengala 'I have a shirt.'

aden a tau lu 'there are people there.'

da palay ko 'I have no rice.'

da musala nin 'he has no handkerchief.'

da tau lu 'there is no one there.'

kagay naden aku pilak 'yesterday I had money.'

Sulu in sapit tuga jungal 'the sapit has a bowsprit.'

tau tuga ekog 'men that have tails.'

tuga buling-batu ha Sog 'there is coal in Sulu.'

in hula ini tuga saitan 'this country is possessed with devils (has devils).'

tuga tau ha bai ini 'there are people in this house.'

aun kah bili-bili ha Sog 'are there any sheep in Sulu?'

aun ang gatus 'there are a hundred.'

wai run manok kabili ha Sog 'there are no capons in Sulu.'

wai kasudahan in hinang ini 'this work has no end.'

The object of the quasi-verbal particles of this third type is in many cases a verbal form, the construction corresponding usually to the English idiom 'to have to.' This construction certainly occurs in many of the languages and probably in all of them, but a few examples from Tagalog will suffice to illustrate the general principle, e. g.:

Tag. may siya-ng pinatay na tawo 'he has killed a man (he has a killed man).'

walâ ako-ng sasabihin 'I have nothing to say (I have not anything-about-to-be-said).'

may nagnakaw na tawo } 'there was a robber (a man
may tawo-ng nagnakaw } that robbed).'

Cf. also examples in next paragraph.

These particles in connection with their objects often express indefinite pronominal ideas, such as 'some,' 'any,' 'something,'

'anything,' 'no,' 'nothing.' As in the preceding case the examples will be confined to Tagalog, e. g.:

mayroon ako-ng tinapay 'I have some bread.'

mayroon ka-ng salapî 'have you any money?'

mayroon siya-ng sinabi 'did he say anything?'

mayroon kayo-ng hinahanap 'are you looking, for anyone, anything.'

walâ ako-ng asawa 'I have no wife.'

walâ ako-ng sasabihin 'I have nothing to say.'

walâ ako-ng sinabi 'I said nothing.'

All of the three types may also be expressed interrogatively, with negative interrogation, and in connection with special interrogative words such as 'who,' 'what.'

The simple interrogative and negative interrogative of these types do not differ from the affirmative and negative except in the addition of interrogative particles, and the changes in position caused by them. Such particles are, e. g.: Tag. *baga*, *kayâ*, Bis. *ba*, Bik. *baga*, Pamp. *ta*, *kaya*, *kasi*, Pang. *kasi*, Iban. *dasi*, Sulu *kah*. In some languages these particles are more commonly used than in others; they do not appear to be absolutely essential in any. They usually stand after or between two elements of the predicate, but may stand after the subject when it precedes the predicate. When special interrogative words are used they regularly constitute the predicate of the sentence, the remainder of the sentence standing as subject. These special interrogative words may be followed by the interrogative particles. Some examples from Tagalog will illustrate the general principles of construction, e. g.:

malaki *baga* ang iyo-ng aso 'is your dog large?'

mayaman ka *baga* 'are you rich?'

na sa bahay *baga* ang ina mo 'is your mother in the house?'

walâ *baga* sa kaniya ang damit ko 'has-n't he my clothes?'

mayroon *baga* sila-ng salapî 'have they any money?'

sino ka 'who are you?'

sino *kayâ* ito-ng babayi-ng ito 'who is this woman?'

kanino *baga* ito-ng bahay 'whose is this house?'

ano-ng¹ ngalan mo 'what is your name?'

sino ang }
sino-ng¹ } na sa bahay 'who is in the house?'

¹ Ligature used for the article *ang*.

ano-ng bulaklak ang na sa kaniya 'what flower has he?'

sino-ang }
sino-ng } may roong¹ baril 'who has a gun?'

ano-ng mayroon ka 'what have you?'

The foregoing discussion does not claim to be by any means an exhaustive treatment of the two important ideas 'to be' and 'to have' in the Philippine Languages, it simply indicates the lines along which their further study should be carried. It is practically impossible, on the basis of the material available for study to obtain a thoroughgoing knowledge of these three types of construction, and as such a knowledge is essential for the mastery of any Philippine language, those who have the opportunity to investigate these languages at first hand should attempt to supply this want. They should study these types from all points of view. Numerous examples should be collected illustrating the various types expressed affirmatively, negatively, interrogatively, with negative interrogation, and with special interrogative words. These examples should present instances of all the parts of speech, both alone and with all possible modifiers, employed as subject, predicate, or case form depending on the quasi-verb. Especial attention should be devoted to the construction of the pronouns (personal, demonstrative, the article, interrogative, indefinite particles, ligatures) and to the construction of postpositive words (i. e., pronominal or adverbial particles like Tagalog *ka, mo; na, pa, бага*, etc., which must always follow some other word); and the rules governing the position of the various elements should be carefully worked out and tested. Moreover any special idioms founded on these constructions should be pointed out and thoroughly discussed.

It is a difficult matter for those who have no special linguistic training to recognize what things are important and what are trivial in the great mass of material with which they are brought in contact, when they take up the study of a Philippine language, especially one of those about which little is known. For such it is hoped that the sketch here presented may furnish an introduction and guide to the study of one of the most fundamental portions of the grammar of the Philippine Languages.

¹ *Roon* + *ng* > *roong* + *ng* > *roong* by assimilation of *n* to *ng* and simplification of the doubling. Italics are used to indicate that final *ng* results from *n* + ligature *ng*.

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PROCEEDINGS
OF THE
AMERICAN ORIENTAL SOCIETY,
AT ITS
MEETING IN NEW YORK, N. Y.
1909.

The annual meeting of the Society, being the one hundred and twenty-first occasion of its assembling, was held in New York City, at Columbia University, on Thursday, Friday, and Saturday of Easter Week, April 15th, 16th and 17th.

The following members were present at one or more of the sessions:

Adler,	Gilmore,	Joseph,	Olmstead,
Arnold, W. R.	Gottheil,	Kohn, Miss	Peters,
Asakawa,	Gray, L. H.	Kyle,	Quackenbos,
Barret,	Gray, Mrs. L. H.	Lanman,	Rosenau,
Barton,	Grieve, Miss	Levonian,	Rudolph, Miss
Black,	Haas,	Lyon,	Scott, C. P. G.
Brown,	Haessler, Miss	Madsen,	Scott, Mrs. S. B.
Carus,	Harper,	Margolis,	Shepard,
Campbell,	Haupt,	Meyer,	Sherman,
Colton, Miss	Haynes,	Michelson,	Steele,
Davidson,	Hirth,	Moore, J. H.	Thompson,
Demarest,	Hock,	Müller,	Todd,
Ember,	Hopkins,	Muss-Arnolt,	Torrey,
Frachtenberg,	Howland,	Nies, J. B.	Vanderburgh,
Frank,	Hussey, Miss	Nies, W. C.	Ward, W. H.
Friedenwald,	Jackson,	Oertel,	Ussher,
Friedlaender,	Jastrow,	Ogden, C. J.	Yohannan.
Gelbach,	Johnston,	Ogden, Miss E. S.	Total, 71.

The first session began on Thursday afternoon at three o'clock in the Trustees Room of the University, with the Presi-

dent of the Society, Professor E. Washburn Hopkins, in the chair.

The reading of the minutes of the meeting held in Cambridge, Mass., April 23d and 24th, 1908, was dispensed with, because they were presented in printed form as advance sheets ready to appear in the *Journal* (vol. xxix, 304—314).

The Committee of Arrangements presented its report, through Professor A. V. W. Jackson, in the form of a printed program, and made some special supplementary announcements.

The succeeding sessions of the Society were appointed for Friday morning at half-past nine, Friday afternoon at half-past two, and Saturday morning at half-past nine. It was announced that a luncheon would be given to the Society at Columbia University by the local members on Friday at one o'clock, and that arrangements had been made for a subscription dinner at the Park Avenue Hotel on Thursday evening at seven o'clock.

REPORT OF THE CORRESPONDING SECRETARY.

The annual report of the Corresponding Secretary, Professor A. V. Williams Jackson, was then presented as follows:

The Corresponding Secretary desires at the outset to express his thanks and appreciation to his predecessor in office, Professor Hopkins, now President of the Society, for the kindly help lent to him when assuming the new duties and for the aid so generously given to lighten the burden of work inevitable in a secretarial position.

The correspondence for the year has been somewhat extensive. There has been an ever-growing number of communications called forth by the inclusion of the American Oriental Society's name in the lists of organizations that are regularly published in various bulletins and records in different parts of the country. This is a good thing, as it draws wider attention to the scope and aims of the Society, and it might perhaps be well for us later to consider the question of enlarging somewhat the list of cities in which our meetings are held, since several Boards of Trade in other places have made tender of opportunities that might be offered if their particular city should be chosen for one of the annual meetings.

A pleasant part of the interchange of letters which has been carried on since the last meeting has been the correspondence with the newly elected members and with those who had been chosen as honorary members and who have expressed in complimentary terms their appreciation of the distinction conferred by the Society's electing them.

A sad but sympathetic part of the year's work has been writing expressions of thought and remembrance for those who have been bereaved

by the death of some member of the family who was thus lost as a member from our own midst. The list is not small considering our limited membership.

DEATHS.

HONORARY MEMBERS.

Professor Richard Pischel.
Professor Eberhard Schrader.

CORPORATE MEMBERS.

Mrs. Emma J. Arnold.
Mr. Ernest B. Fenollosa.
Mr. Francis Blackmore Forbes.
President Daniel Coit Gilman.
Professor Charles Eliot Norton.
Professor John Henry Wright.

Professor Pischel, one of our more recent honorary members, was a German Sanskrit scholar of wide learning and whose name was recognized with honor throughout the learned world. He died at the age of fifty-nine, in December, 1908, at Madras, India, shortly after reaching the land to which he had devoted his life's studies and which it had ever been his heart's desire to visit.

Professor Schrader, of the University of Berlin, was made an honorary member of the Society in 1890, in recognition of his distinguished services to Oriental science especially in the line of Assyriological research. His long and eminent career, which led him to the position of a Privy Councilor at the Royal Court of Germany, lent a special dignity to the list of the Society's membership.

Mrs. Emma J. Arnold, of Providence, R. I., a corporate member of the Society since 1894, died at the home of her husband, Dr. Oliver H. Arnold, of Providence, on June 7, 1908.

Ernest F. Fenollosa, of Mobile, Alabama, since 1894 a member of the Society, died in England in October, 1908, just as he was about to return to America. His special interest lay in the field of Japan, where he had lived for some time, and he was a very agreeable lecturer and writer on the subject of its art, its history and its civilization.

Francis Blackman Forbes, of Boston, a member since 1864, died at his home in Boston, May 21, 1908, at the age of sixty-eight. Mr. Forbes had been a merchant in China for twenty-five years, until 1882, when he removed to Paris for four years and afterwards returned to his home in Massachusetts. His interest in Chinese flora and the fine collection of specimens which he made in that field won him a fellowship in the Linnean Society of London.

Daniel Coit Gilman, who was an active member of the Society for over half a century, having joined in 1857, and who was our president for thirteen years, from 1893 to 1906, died at his birthplace in Norwich,

on October 13, 1908, in the seventy-eighth year of his age. After his graduation from Yale College in 1852, he continued his studies at Cambridge and at Berlin, and then entered upon a distinguished career as an educator, as is well known to those who are acquainted with the educational development of this country whose interests he served so faithfully. He was President of the Johns Hopkins University from 1875 to 1901, when he retired as emeritus to take the presidency of the newly founded Carnegie Institution. He had previously enjoyed the honor of being appointed by the President of the United States to act as one of the five members of the United States Commission on the subject of the boundary line between Venezuela and Colombia. The valuable services which he rendered to the American Oriental Society during the thirteen years in which he was our presiding officer, and the distinction which he lent by his association with the Society, will always remain a bright memory.

Professor Charles Eliot Norton, of Harvard University, art critic and man of letters, who joined the Society in 1857, the same year as Mr. Gilman, passed away in the week after his contemporary's death. He died at Cambridge, Mass. on October 21, 1908. The public press throughout the land paid tribute to his memory. Although not an active attendant at the Oriental meetings, he never lost his interest during the fifty-one years of his membership. The part which Mr. Norton took as one of the first scholars to draw attention to Fitzgerald's version of Omar Khayyam will always associate his name with the interest taken in the Persian poet.

Professor John Henry Wright, of Harvard University, a member of the Oriental Society since 1898, died at Cambridge, Mass. on November 25, 1908. Professor Wright was born in Urumiah, Persia, the city which is believed by some to have been the birthplace of Zoroaster. Although Dr. Wright's specialty was in Greek, he had early taken an interest in Sanskrit in his student days, and showed his interest in the Oriental Society by joining it ten years ago.

In conclusion the Secretary is pleased to add that the major part of his correspondence has been of a special or technical character as associated with work now incorporated in the Journal or as carried on with fellow-searchers for light in the realm of the Land of the Dawn.

The details of the Secretary's report were accepted as presented and it was directed to place the report on record.

REPORT OF THE TREASURER.

The report of the Treasurer, Professor Frederick Wells Williams, was presented by the Corresponding Secretary and read as follows:

RECEIPTS AND DISBURSEMENTS BY THE TREASURER OF THE AMERICAN ORIENTAL
SOCIETY FOR THE YEAR ENDING DECEMBER 31, 1908.

Receipts.

Balance from old account, Dec. 31, 1907		\$ 59.12
Dues (190) for 1908	\$ 950.00	
„ (64) for other years	320.00	
„ (14) for Hist. S. R. Sect.	28.00	
	\$ 1,298.00	
Sales of Journal	193.79	
Life Memberships (2)	150.00	
Subscriptions collected for Or. Bibl. Subvention . . .	96.00	
State National Bank Dividends	122.21	
Annual Interest from Savings Banks	47.22	
		1,907.22
		\$ 1,966.34

Expenditures.

T., M. and T. Co., printing vol. xxviii (remainder) . .	\$ 1,364.48	
Librarian, postage, etc.	7.09	
Other postage and express	6.77	
Subvention to Orientalische Bibliographie	100.00	
Balance to general account	\$ 488.00	
		\$ 1,966.34

STATEMENT.

	1907	1908
Bradley Type Fund	\$ 2,481.93	\$ 2,653.41
Cotheal Fund	1,000.00	1,000.00
State National Bank Shares	1,950.00	1,950.00
Connecticut Savings Bank	6.03	6.39
National Savings Bank	11.67	12.11
Interest Cotheal Fund	149.27	195.69
Cash on hand	102.93	12.54
Interest	55	
	\$ 5,702.38	\$ 5,830.14

The report of the Treasurer was supplemented verbally by Professor Jackson with a statement, merely for record, that the Directors had voted that the Society should continue next year to contribute as before to the Orientalische Bibliographie, and that the Treasurer was authorized to pay said contribution directly out of the funds in the treasury.

REPORT OF THE AUDITING COMMITTEE.

The report of the Auditing Committee, Professors Torrey and Oertel, was presented by Professor C. C. Torrey, as follows:

We hereby certify that we have examined the account book of the Acting Treasurer of this Society, and have found the same correct, and

that the foregoing account is in conformity therewith. We have also compared the entries in the cash book with the vouchers and bank and pass-books and have found all correct.

CHARLES C. TORREY, } *Auditors.*
HANNS OERTEL,

NEW HAVEN, April 17, 1909.

REPORT OF THE LIBRARIAN.

The Librarian, Professor Hanns Oertel, presented his report as follows:

Miss Margaret D. Whitney has continued her work of cataloguing the Society's Library. The response to a circular letter to our exchanges asking that incomplete sets be, as far as possible, completed, has been very cordial and generous. The next report of the Librarian will contain a bibliographical list of all periodical literature deposited in our Library. As in previous reports, the Librarian again calls attention to the absolute necessity of a small sum of money for the binding of our accessions. It is impossible to allow unbound volumes to go out of the library, and as almost all of our members live at a distance, unbound books cannot be used by them.

The thanks of the Society are again due to Miss Margaret D. Whitney for her continued interest in the Library, to Mr. Schwab, Librarian of Yale University, for many favours, and to Mr. Gruener of the Yale Library for valued assistance in mailing.

REPORT OF THE EDITORS.

The report of the Editors of the Journal of the Society, Professors Oertel and Jewett, was made by Professor Oertel as follows:

The editors regret that owing to the delay in setting up and correcting one of the articles, it has not been possible to complete the current number of the Journal in time to have it in the hands of the members before this meeting. It will be sent out early in May. As is well known to the members, the cost of printing of the Society's Journal has for some years past exceeded the Society's income and made it necessary to draw on our invested funds. It did not seem wise to the editors to continue indefinitely such a policy of living beyond our means. They, therefore, reluctantly decided to publish the Society's Journal for the current year in *one* volume of about 100 pages less than has been customary.

By direction of the Board of Directors, the Editors will make arrangements for printing the next volume of the Journal abroad, and they expect that the saving thus effected will make it possible to print the Journal as before without exceeding the income of the Society.

The Editors, finally, desire to call the attention of members to the rule that all papers read at the Society's meeting are presumed to be available for printing in the Society's Journal and subject to the call of the Editors for that purpose.

ELECTION OF MEMBERS.

The following persons, recommended by the Directors, were elected members of the Society:

HONORARY MEMBERS.

Rev. Canon Samuel R. Driver, M. Charles Clermont-Ganneau,
Professor Hermann Jacobi.

CORPORATE MEMBERS.

Mr. George William Brown,	Mr. James H. Hyde,
Mr. Charles Dana Burrage,	Mr. Thomas W. Kingsmill,
Señor Felipe G. Caldéron,	Rev. M. G. Kyle,
Mr. Irving Comes Demarest,	Mr. Levon J. K. Levonian,
Dr. Carl Frank,	Mr. Albert Howe Lybyer,
Dr. Herbert Friedenwald,	Mr. Charles J. Morse,
Miss Marie Gelbach,	Mr. Albert Ten Eyck Olmstead,
Dr. George W. Gilmore,	Mr. Walter Peterson,
Miss Luise Haessler,	Mr. George V. Schick,
Edward H. Hume, M. D.,	Dr. T. H. Pardo de Tavera,
	Rev. Sydney N. Ussher.

OFFICERS FOR 1909—1910.

The committee appointed at Cambridge to nominate officers for the ensuing year consisted of Professors Francis Brown, Torrey, and Oertel, (see *Journal*, vol. xxix, 311) and their report recommended the following names, which were duly elected:

President—Dr. William Hayes Ward, of New York.

Vice-Presidents—Professor Maurice Bloomfield, of Baltimore; Professor Paul Haupt, of Baltimore; Professor Henry Hyvernatt, of Washington.

Corresponding Secretary—Professor A. V. Williams Jackson, of New York.

Recording Secretary—Professor George F. Moore, of Cambridge, Mass.

Secretary of the Section for Religions—Professor Morris Jastrow, Jr., of Philadelphia.

Treasurer—Professor Frederick Wells Williams, of New Haven.

Librarian—Professor Hanns Oertel, of New Haven.

Directors—The officers above named, and Professors Crawford H. Toy and Charles R. Lanman, of Cambridge; E. Washburn Hopkins, of New Haven; Richard Gottheil, of New York; Charles C. Torrey, of New Haven; Robert F. Harper and James R. Jewett, of Chicago.

ADDRESS BY THE PRESIDENT.

At four o'clock, at the conclusion of the business session, the President of the Society, Professor E. Washburn Hopkins,

of Yale University, delivered his annual address on "Exaggerations of Tabu as a Religious Motive."

The Society adjourned at the close of the address to meet at half past seven o'clock for dinner at the Park Avenue Hotel.

FRIDAY SESSION.

The members re-assembled on Friday morning at half past nine o'clock for the second session. The following communications were presented:

Doctor K. Asakawa, of Yale University, Notes on village administration in Japan under the Tokugawa.—Remarks by Professor Hopkins.

Professor L. C. Barret, of Princeton University, Concerning Kashmir Atharva-Veda, Book 2.—Remarks by Professor Lanman.

Professor G. A. Barton, of Bryn Mawr College, The notation for 216,000 in the Tablets of Telloh.—Remarks by Professors Jastrow and Haupt.

Doctor George F. Black, of Lenox Library, N. Y., Concerning the Gypsy Lore Society, presented by Dr. C. P. G. Scott.

Doctor A. Ember, of Johns Hopkins University, Hebrew stems with prefixed *w*.—Remarks by Professors Haupt and W. Max Müller.

Dr. M. Margolis, of the Jewish Publication Society, Phila., The necessity of complete induction for finding the Semitic equivalents of Septuagint words.—Remarks by Professor Haupt.

Mr. L. J. Frachtenberg, of New York, The superstition of the evil eye in Zoroastrian literature.—Remarks by Professors Hopkins, Müller, Jastrow, Peters.

Professor L. Friedlaender, of the Jewish Theological Seminary of America, The Fountain of Life and the Islands of the Blessed in the Alexander legends.—Remarks by Professors Haupt and Jastrow, and Doctor Yohannan.

Professor R. Gottheil, of Columbia University, The *Kitāb Dīwān Miṣr*.

Professor A. V. W. Jackson, of Columbia University, A legend of aerial navigation in Ancient Persia.—Remarks by Professors Friedlaender and Jastrow.

Professor M. Jastrow, of the University of Pennsylvania, Another fragment of the Etana myth.

At twelve thirty the Society took a recess till half past two o'clock, and were invited to luncheon as guests of the local members.

On convening again after luncheon the session was held in the auditorium of Schermerhorn Hall, Columbia, President Hopkins presiding, and the following papers were presented:

Professor R. Gottheil, of Columbia University, The origin and history of the minaret.—Remarks by Professor Jastrow.

Miss L. C. G. Grieve, Ph. D., of New York, The Dasara Festival at Satara, India.—Remarks by Professor Hopkins.

Professor Paul Haupt, of Johns Hopkins University, The Location of Mount Sinai.

Professor C. R. Lanman, of Harvard University, Pāli book titles and how to cite them.—Remarks by Professors Hopkins and Haupt.

Professor W. Max Müller, of Philadelphia, Scenes of the religious worship of the Canaanites on Egyptian monuments. Illustrated by stereopticon photographs.—Remarks by Professor Haupt.

Professor D. G. Lyon, of Harvard University, The Harvard excavations at Samaria. Illustrated by stereopticon photographs.—Remarks by Professor Lanman.

Dr. T. A. Olmstead, Preparatory School, Princeton, N. J., Some results of the Cornell Expedition to Asia Minor and the Assyro-Babylonian Orient.

Dr. Truman Michelson, of Ridgefield, Conn., The general interrelation of the dialects of Asoka's Fourteen Edicts, with some remarks on the home of Pāli.

Professor F. Hirth, of Columbia University, On Chinese Hieroglyphics.

At five thirty the Society adjourned for the day; and the evening was reserved for an informal gathering of the members for supper and general conversation.

SATURDAY SESSION.

On Saturday morning at half-past nine, the fourth and concluding session was held in Room 407 of Schermerhorn Hall, and was devoted to the reading of papers and the transaction of important business.

In the business portion of the session, which formed the first matter of consideration, the Committee on the Nomination of Officers reported the names as already given above.

The Chair then appointed as committee to nominate officers at the first session of the next annual meeting, the following members:

Professor Robert F. Harper, of Chicago;
 Dr. George C. O. Haas, of Columbia;
 Dr. Albert A. Madsen, of Cleveland, Ohio.

The Directors reported that they had appointed Professor Hanns Oertel and Professor James R. Jewett as Editors of the Journal for the ensuing year.

The place and date of the next meeting as appointed by the Directors was further announced to be Baltimore, during Thursday, Friday, and Saturday of Easter week, March 31st, April 1st and 2d, 1910.

The Committee to audit the Treasurer's accounts consists of Professors Torrey and Oertel.

Professor Hirth brought before the Society for consideration the question of the tariff imposed upon books in foreign languages imported into the United States. Upon motion of Professor Haupt, the following petition was unanimously adopted and the Corresponding Secretary was instructed to forward it in an appropriate manner to the authorities at Washington:

The American Oriental Society, assembled at its annual meeting held in New York, April 17, 1909, respectfully petition the Senate and House of Representatives of the United States of America that all scientific books dealing with foreign languages imported from abroad be admitted free of duty.

The presentation of papers was resumed in the following order:

Professor Christopher Johnston, of Johns Hopkins University:—

- (a) The fable of the horse and the ox in cuneiform literature.
- (b) Assyrian lexicographical notes.
- (c) The Sumerian verb.

Remarks by Professor Haupt.

Dr. Ishya Joseph, of New York, Notes on some matters relating to Arabic philology.—Remarks by Professor Haupt.

Professor Hanns Oertel, of Yale University:

- (a) Some cases of analogy formation.
- (b) The Sanskrit root *drp*, 'stumble'.

Remarks by Professor Hopkins.

Dr. F. A. Vanderburgh, of New York, A hymn to Bel, Tablet 29623, British Museum, as published in CT. xv, plates 12 and 13.

Dr. A. Yohannan, of Columbia University, A Turkish manuscript treatise on physiognomy.

Professor Paul Haupt, of Johns Hopkins University:

- (a) Pi-hahiroth and the route of the Exodus.
- (b) The disgrace and rehabilitation of Galilee.—(Isaiah ix. 1.)

At eleven thirty Vice-President Haupt was invited to the Chair by Professor Hopkins on his withdrawal. The session continued as follows:

Professor F. Hirth, of Columbia University, On early Chinese notices of African territories.—Remarks by Professors Haupt and W. Max Müller.

Professor A. V. W. Jackson, of Columbia University, Notes on Zoroastrian chronology.

Professor I. Friedlaender, of the Jewish Theological Seminary of America, N. Y., 'Abdallah b. Sabā, the Jewish founder of Shiism.

Before the session closed, the following resolution was unanimously adopted:

The American Oriental Society desires to express its thanks to the President and Trustees of Columbia University and to the local members for the courtesies which they have extended to the Society during this meeting; and to the Committee of Arrangements for the provisions they have made for its entertainment.

The Society adjourned at half past twelve on Saturday to meet in Baltimore, Md., March 31st, April 1st, and 2d 1910.

The following communications were read by title:

Dr. Bigelow, of Boston, Nirvana and the Buddhist moral code.

Dr. Blake, of Johns Hopkins University:

- (a) The Tagalog verb.
- (b) Brockelmann's Comparative Semitic Grammar.

Professor Bloomfield, of Johns Hopkins University, Studies on the text and language of the Rig-Veda.

Professor Gottheil, of Columbia University, A door from the Madrassah of Barḳūk.

Reverend A. Kohut, of New York:

- (a) Royal Hebraists.
- (b) A tradition concerning Haman in Albiruni, and the story of Rikayon in the Sefer Ha-Yashar.

Professor Prince, A Hymn to Tammuz.

Dr. W. Rosenau, of Johns Hopkins University:

- (a) The uses of לב in Post-Biblical Hebrew.
- (b) Abstract formations in the philosophical Hebrew.

Professor Torrey, of Yale University:

- (a) The question of the date of the Samaritan schism.
 - (b) The lacuna in Neh. ix. 5 f.
-

LIST OF MEMBERS.

The number placed after the address indicates the year of election.

I. HONORARY MEMBERS.

- M. AUGUSTE BARTH, Membre de l'Institut, Paris, France. (Rue Garancière, 10.) 1898.
- Dr. RAMKRISHNA GOPAL BHANDARKAR, C. I. E., Dekkan Coll., Poona, India. 1887.
- JAMES BURGESS, LL.D., 22 Seton Place, Edinburgh, Scotland. 1899.
- Prof. CHARLES CLERMONT-GANNEAU, 1 Avenue de l'Alma, Paris.
- Prof. T. W. RHYS DAVIDS, Harboro' Grange, Ashton-on-Mersey, England. 1907.
- Prof. BERTHOLD DELBRUECK, University of Jena, Germany. 1878.
- Prof. FRIEDRICH DELITZSCH, University of Berlin, Germany. 1893.
- Canon SAMUEL R. DRIVER, Oxford, England 1909.
- Prof. ADOLPH ERMAN, Steglitz, Friedrich Str. 10/11, Berlin, Germany. 1903.
- Prof. RICHARD GARBE, University of Tübingen, Germany. (Biesinger Str. 14.) 1902.
- Prof. KARL F. GELDNER, University of Marburg, Germany. 1905.
- Prof. IGNAZ GOLDZIEHER, vii Holló-Utca 4, Budapest, Hungary. 1906.
- GEORGE A. GRIERSON, C.I.E., D.Litt., I.C.S. (retired), Rathfarnham, Camberley, Surrey, England. Corporate Member, 1899; Hon., 1905.
- Prof. IGNAZIO GUIDI, University of Rome, Italy. (Via Botteghe Oscure 24.) 1893.
- Prof. HERMANN JACOBI, University of Bonn, 59 Niebuhrstrasse, Bonn, Germany. 1909.
- Prof. HENDRIK KERN, 45 Willem Barentz-Straat, Utrecht, Netherlands. 1893.
- Prof. ALFRED LUDWIG, University of Prague. Bohemia. (Königliche Weinberge, Krameriusgasse 40.) 1898.
- Prof. GASTON MASPERO, Collège de France, Paris, France. (Avenue de l'Observatoire, 24.) 1898.
- Prof. EDUARD MEYER, University of Berlin, Germany. Gross-Lichterfelde-West, Mommsen Str. 7) 1908.
- Prof. THEODOR NOELDEKE, University of Strassburg, Germany. (Kalbsgasse 16.) 1878.
- Prof. HERMANN OLDENBERG, University of Göttingen, Germany. 1910. (27/29 Nikolausberger Weg.)
- Prof. EDUARD SACHAU, University of Berlin, Germany. (Wormser Str. 12, W.) 1887.

- EMILE SENART, Membre de l'Institut de France, 18 Rue François I^{er}, Paris, France. 1908.
 Prof. ARCHIBALD H. SAYCE, University of Oxford, England. 1893.
 Prof. JULIUS WELLHAUSEN, University of Göttingen, Germany. (Weber Str. 18 a.) 1902.
 Prof. ERNST WINDISCH, University of Leipzig, Germany. (Universitäts Str. 15.) 1890. [Total 26]

II. CORPORATE MEMBERS.

Names marked with * are those of life members.

- Rev. Dr. JUSTIN EDWARDS ABBOTT, Tardeo, Bombay, India. 1900.
 Dr. CYRUS ADLER, 2041 North Broad St., Philadelphia, Pa. 1884.
 WILLIAM E. M. AITKEN, 7 Howland St. Cambridge, Mass. 1910.
 F. STURGES ALLEN, 246 Central St., Springfield, Mass. 1904.
 Miss MAY ALICE ALLEN, Williamstown, Mass. 1906.
 Prof. WILLIAM R. ARNOLD, Theological Seminary, Cambridge, Mass. 1893.
 Prof. KANICHI ASAKAWA (Yale Univ.), 870 Elm St., New Haven, Conn. 1904.
 Rev. EDWARD E. ATKINSON, 94 Brattle St., Cambridge, Mass. 1894.
 Prof. J. CULLEN AYER (P. E. Divinity School), 5000 Woodlawn Ave., Philadelphia, Pa. 1907.
 Miss ALICE M. BACON, Smith College, Northampton, Mass. 1907.
 Hon. SIMEON E. BALDWIN, LL.D., 44 Wall St., New Haven, Conn. 1898.
 Prof. LEROY CARR BARRET, Dartmouth College, Hanover, N. H. 1903.
 Prof. GEORGE A. BARTON, Bryn Mawr College, Bryn Mawr, Pa. 1888.
 Prof. L. W. BATTEN, 232 East 11th St., New York. 1894.
 Prof. HARLAN P. BEACH (Yale Univ.), 346 Willow St., New Haven, Conn. 1898.
 Prof. WILLIS J. BEECHER, D.D., Theological Seminary, Auburn, N. Y. 1900.
 HAROLD H. BENDER, Johns Hopkins University, Baltimore, Md. 1906.
 Rev. JOSEPH F. BERG, Port Richmond, S. I., N. Y. 1893.
 Prof. GEORGE R. BERRY, Colgate University, Hamilton, N. Y. 1907.
 Prof. JULIUS A. BEWER (Union Theological Seminary), 700 Park Ave. New York, N. Y. 1907.
 Dr. WILLIAM STURGIS BIGELOW, 60 Beacon St, Boston, Mass. 1894.
 Prof. JOHN BINNEY, Berkeley Divinity School, Middletown, Conn. 1887.
 GEORGE F. BLACK, Ph.D., Lenox Library, Fifth Ave. and 70th St., New York, N. Y. 1907.
 Dr. FRANK RINGGOLD BLAKE (Johns Hopkins Univ.), Dixon Park, Mt. Washington, Md. 1900.
 Rev. PHILIP BLANC, Johns Hopkins University, Baltimore, Md. 1907.
 Rev. DAVID BLAUSTEIN, Chicago Hebrew Institute, 485 West Taylor St. Chicago, Ill. 1891.
 Dr. FREDERICK J. BLISS, Protest. Syrian College, Beirut, Syria. 1898.
 FRANCIS B. BLODGETT, General Theological Seminary, Chelsea Square, New York, N. Y. 1906.
 Prof. CARL AUGUST BLOMGREN, Augustana College and Theol. Seminary, Rock Island, Ill. 1900.

- Prof. MAURICE BLOOMFIELD, Johns Hopkins University, Baltimore, Md. 1881.
- Dr. ALFRED BOISSIER, Le Rivage près Chambésy, Switzerland. 1897.
- Dr. GEORGE M. BOLLING (Catholic Univ. of America), 1784 Corcoran St., Washington, D. C. 1896.
- Prof. C. B. BRADLEY, 2639 Durant Ave., Berkeley, Cal. 1910.
- Prof. RENWARD BRANDSTETTER, Reckenbühl 18, Villa Johannes, Lucerne, Switzerland. 1908.
- Prof. JAMES HENRY BREASTED, University of Chicago, Chicago, Ill. 1891.
- Prof. CHAS. A. BRIGGS (Union Theological Sem.), 700 Park Ave., New York, N. Y. 1879.
- Prof. C. A. BRODIE BROCKWELL, McGill University, Montreal, Canada. 1906.
- Pres. FRANCIS BROWN (Union Theological Sem.), 700 Park Ave., New York, N. Y. 1881.
- Rev. GEORGE WILLIAM BROWN, Jubbulpore, C. P., India. 1909.
- Prof. CARL DARLING BUCK, University of Chicagô, Chicago, Ill. 1892.
- HAMMOND H. BUCK, Division Sup't. of Schools, Alfonso, Cavite Provinces, Philippine Islands. 1908.
- ALEXANDER H. BULLOCK, State Mutual Building, Worcester, Mass. 1910.
- EUGEN WASTON BURLINGAME, 118 McKean House, West Philadelphia, Pa. 1910.
- CHARLES DANA BURRAGE, 85 Ames Building, Boston, Mass. 1909.
- Prof. HOWARD CROSBY BUTLER, Princeton University, Princeton, N. J. 1908.
- Rev. JOHN CAMPBELL, Kingsbridge, New York, N. Y. 1886.
- Rev. SIMEON J. CARR, 1527 Church St., Frankford, Philadelphia, Pa. 1892.
- Pres. FRANKLIN CARTER, care Hon. F. J. Kingsbury, Waterbury, Conn. 1873.
- Dr. PAUL CARUS, La Salle, Illinois. 1897.
- Dr. I. M. CASANOWICZ, U. S. National Museum, Washington, D. C. 1893.
- Miss EVA CHANNING, Hemenway Chambers, Boston, Mass. 1883.
- Dr. F. D. CHESTER, The Bristol, Boston, Mass. 1891.
- WALTER E. CLARK, 37 Walker St., Cambridge, Mass. 1906.
- Prof. ALBERT T. CLAY (Yale Univ.) New Haven, Conn. 1907.
- *ALEXANDER SMITH COCHRAN, Yonkers, N. Y. 1908.
- *GEORGE WETMORE COLLES, 62 Fort Greene Place, Brooklyn, N. Y. 1882.
- Prof. HERMANN COLLITZ, Johns Hopkins University, Baltimore, Md. 1887.
- Miss ELIZABETH S. COLTON, 23 Park St., Easthampton, Mass. 1896.
- Prof. C. EVERETT CONANT, 515 Carlisle Place, Chattanooga, Tenn. 1905.
- WILLIAM MERRIAM CRANE, 16 East 37th St., New York, N. Y. 1902.
- Rev. CHARLES W. CURRIER, 913 Sixth St., Washington, D. C. 1904.
- Dr. WILLIAM R. P. DAVEY (Harvard Univ.), 21 Mellen St., Cambridge, Mass. 1908.
- Dr. HAROLD S. DAVIDSON, 1700 North Payson St., Baltimore, Md. 1908.
- Prof. JOHN D. DAVIS, Princeton Theological Seminary, Princeton, N. J. 1888.
- IRVING C. DEMAREST, 54 Essex st., Hackensack, N. J. 1909.
- Prof. ALFRED L. P. DENNIS, Madison, Wis. 1900.
- JAMES T. DENNIS, University Club, Baltimore, Md. 1900.
- Rev. D. STUART DODGE, 99 John St., New York, N. Y. 1867.
- Dr. HARRY WESTBROOK DUNNING, 5 Kilsyth Road, Brookline, Mass. 1894.

- Prof. M. W. EASTON, 224 South 43d St., Philadelphia, Pa. 1872.
- Dr. FRANKLIN EDGERTON, Johns Hopkins University, Baltimore, Md. 1910.
- Prof. FREDERICK G. C. EISELEN, Garrett Biblical Inst., Evanston, Ill. 1901.
- Mrs. WILLIAM M. ELLICOTT, 106 Ridgewood Road, Roland Park, Md. 1897.
- Prof. LEVI H. ELWELL, Amherst College, 5 Lincoln Ave., Amherst, Mass. 1883.
- Dr. AARON EMBER, Johns Hopkins University. 1902.
- Rev. ARTHUR H. EWING, The Jumna Mission House, Allahâbâd, N. W. P., India. 1900.
- Rev. Prof. C. P. FAGNANI, 772 Park Ave., New York, N. Y. 1901.
- Prof. EDWIN WHITFIELD FAY (Univ. of Texas), 200 West 24th St., Austin, Texas. 1888.
- Prof. HENRY FERGUSON, St. Paul's School, Concord, N. H. 1876.
- Dr. JOHN C. FERGUSON, 16 Love Land, Shanghai, China. 1900.
- Prof. RALPH HALL FERRIS (Theological Seminary), 45 Warren Ave., Chicago, Ill. 1905.
- CLARENCE STANLEY FISHER, 4152 Parkside Ave., Philadelphia, Pa. 1905.
- *Lady CAROLINE DE FILIPPI FITZGERALD, 167 Via Urbana, Rome, Italy. 1886.
- Rev. WALLACE B. FLEMING, Maplewood, N. J. 1906.
- Rev. THEODORE C. FOOTE, Johns Hopkins University, Baltimore, Md. 1900.
- Prof. HUGHELL E. W. FOSBROKE, 9 Acacia St., Cambridge, Mass. 1907.
- MARQUIS ANTOINE FRABASILIS, 1017 East 187th St., New York, N. Y., 1907.
- LEO J. FRACHTENBERG, Hartley Hall, Columbia University, New York, N. Y. 1907.
- Rev. Prof. JAS. EVERETT FRAME (Union Theological Sem.), 700 Park Ave. New York, N. Y. 1892.
- Dr. CARL FRANK, 23 Montague St., London, W. C., England. 1909.
- Dr. HERBERT FRIEDENWALD, 338 West 85th St., New York, N. Y. 1909.
- Prof. ISRAEL FRIEDLAENDER (Jewish Theological Sem.), 61 Hamilton Place, New York, N. Y. 1904.
- Dr. WILLIAM H. FURNESS, 3d, 1906 Sansom St., Philadelphia, Pa. 1897.
- Dr. FLETCHER GARDNER, 202 East Kirkwood Ave., Bloomington, Ind. 1905.
- ROBERT GARRETT, Continental Building, Baltimore, Md. 1903.
- Miss MARIE GELBACH, 534 West 143d St., New York, N. Y. 1909.
- Prof. BASIL LANNEAU GILDERSLEEVE, Johns Hopkins University, Baltimore, Md. 1858.
- Prof. WILLIAM WATSON GOODWIN (Harvard Univ.), 5 Follen St., Cambridge, Mass. 1857.
- Prof. RICHARD J. H. GOTTHEIL, Columbia University, New York, N. Y. 1886.
- Miss FLORENCE A. GRAGG, 26 Maple Ave., Cambridge, Mass. 1906.
- Prof. ELIHU GRANT (Smith College), Northampton, Mass. 1907.
- Mrs. ETHEL WATTS MUMFORD GRANT, 31 West 81st St., New York, N. Y. 1904.
- Dr. LOUIS H. GRAY, German Valley, N. J. 1897.

- Mrs. LOUIS H. GRAY, Germun Valley N. J. 1907.
Miss LUCIA C. GRAEME GRIEVE, 462 West 151st St., New York, N. Y. 1894.
Prof. LOUIS GROSSMANN (Hebrew Union College), 2212 Park Ave., Cincinnati, O. 1890.
Rev. Dr. W. M. GROTON, Dean of the Protestant Episcopal Divinity School, 5000 Woodlawn Ave., Philadelphia, Pa. 1907.
*GEORGE C. O. HAAS, 254 West 136th St., New York, N. Y. 1903.
Miss LUISE HAESSLER, Whittier Hall, Columbia University, New York, N. Y. 1909.
Dr. CARL C. HANSEN, Si Phya Road, Bangkok, Siam. 1902.
PAUL V. HARPER, 59th St. and Lexington Ave., Chicago, Ill. 1906.
Prof. ROBERT FRANCIS HARPER, University of Chicago, Chicago, Ill. 1886.
Prof. SAMUEL HART, D.D., Berkeley Divinity School, Middletown, Conn. 1879.
Prof. PAUL HAUPT (Johns Hopkins Univ.), 2511 Madison Ave., Baltimore, Md. 1883.
Dr. HENRY HARRISON HAYNES, 6 Ellery St., Cambridge, Mass. 1892.
Col. THOS. WENTWORTH HIGGINSON, 25 Buckingham St., Cambridge, Mass. 1869.
Prof. HERMANN V. HILPRECHT (Univ. of Pennsylvania), 807 Spruce St., Philadelphia, Pa. 1887.
Rev. Dr. WILLIAM J. HINKE, 28 Court St., Auburn, N. Y. 1907.
Prof. FRIEDRICH HIRTH (Columbia Univ.), 501 West 113th St., New York, N. Y. 1903.
Prof. CHARLES T. HOCK (Theological Sem.), 220 Liberty St., Bloomfield, N. J. 1903.
*Dr. A. F. RUDOLF HOERNLE, 8 Northmoor Road, Oxford, England. 1893.
Rev. HUGO W. HOFFMAN, 306 Rodney St., Brooklyn, N. Y. 1899.
Prof. FRANKLIN W. HOOPER, 502 Fulton St., Brooklyn, N. Y. 1906.
*Prof. E. WASHBURN HOPKINS (Yale Univ.), 299 Lawrence St., New Haven, Conn. 1881.
Miss SARAH FENTON HOYT, 17 East 95th St., New York, N. Y. 1910.
HENRY R. HOWLAND, Natural Science Building, Buffalo, N. Y. 1907.
Dr. EDWARD H. HUME, Changsha, Huan, China. 1909.
Miss ANNIE K. HUMPHREY, 1114 14th St., Washington, D. C. 1873.
Miss MARY INDA HUSSEY, 4 Bryant St., Cambridge, Mass. 1901.
HENRY MINOR HUXLEY, 1550 Monadnock Block, Chicago, Ill. 1902.
*JAMES HAZEN HYDE, 18 rue Adolphe Yvon, Paris, France. 1909.
Prof. HENRY HYVERNAT (Catholic Univ. of America), 3405 Twelfth St., N. E. (Brookland), Washington, D. C. 1889.
Prof. A. V. WILLIAMS JACKSON, Columbia University, New York, N. Y. (668 Riverside Drive). 1885.
JOHN DAY JACKSON, 86 Crown St., New Haven, Conn. 1905.
Prof. MORRIS JASTROW, (Univ. of Pennsylvania), 248 South 23d St., Philadelphia, Pa. 1886.
Rev. HENRY F. JENKS, Canton Corner, Mass. 1874.
Prof. JAMES RICHARD JEWETT, 5757 Lexington Ave., Chicago, Ill. 1887.
CHARLES JOHNSTON, 511 West 122d St., New York, N. Y. 1910.
Prof. CHRISTOPHER JOHNSTON (Johns Hopkins Univ.), 21 West 20th St., Baltimore, Md. 1889.

- ISHYA JOSEPH, 700 Park Ave., New York, N. Y. 1908.
- ARTHUR BERRIEDALE KEITH, Colonial Office, London, S. W., England. 1908.
- Prof. MAXIMILIAN L. KELLNER, Episcopal Theological School, Cambridge, Mass. 1886.
- MISS ELIZA H. KENDRICK, 45 Hunnewell Ave., Newton, Mass. 1896.
- Prof. CHARLES FOSTER KENT (Yale Univ.), 406 Humphrey St., New Haven, Conn. 1890.
- Prof. ROLAND G. KENT, University of Pennsylvania, Philadelphia, Pa. 1910.
- THOMAS W. KINGSMILL, Shanghai, China. 1909.
- Prof. GEORGE L. KITTREDGE (Harvard Univ.), 9 Hilliard St., Cambridge, Mass. 1899.
- Rev. GEORGE A. KOHUT, 781 West End Ave., New York, N. Y. 1894.
- MISS LUCILE KOHN, 1138 Madison Ave., New York, N. Y. 1907.
- Rev. Dr. M. G. KYLE, 1132 Arrow St., Frankford, Philadelphia, Pa. 1909.
- *Prof. CHARLES ROCKWELL LANMAN (Harvard Univ.), 9 Farrar St., Cambridge, Mass. 1876.
- C. S. LEAVENWORTH, care of Brown, Shipley & Co., 123 Pall Mall, London, England. 1900.
- LEVON J. K. LEVONIAN, Aintal, Turkey. 1909.
- Prof. CHARLES E. LITTLE (Vanderbilt Univ.), 19 Lindsley Ave., Nashville, Tenn. 1901.
- Prof. ENNO LITTMAN, Schweighäuser Str. 24ⁱⁱ, Strassburg i. Els., Germany. 1902.
- PERCIVAL LOWELL, 53 State St., Boston, Mass. 1893.
- Rev. FERDINAND LUGSCHEIDER, 38 Bleeker St., New York, N. Y. 1908.
- ALBERT HOWE LYBYER, Irving St., Cambridge, Mass. 1909.
- *BENJAMIN SMITH LYMAN, 708 Locust St., Philadelphia, Pa. 1871.
- Prof. DAVID GORDON LYON, Harvard Univ. Semitic Museum, Cambridge, Mass. 1882.
- ALBERT MORTON LYTHGOE, Metropolitan Museum of Art, New York, N. Y. 1899.
- Prof. DUNCAN B. MACDONALD, Hartford Theological Seminary, Hartford, Conn. 1893.
- WILLIAM E. W. MACKINLAY, 1st Lieut. 11th U. S. Cavalry, Fort Ethan Allen, Vt. 1904.
- Dr. ALBERT A. MADSEN 22 Courtney Ave. Newburgh, N. Y. 1906.
- Prof. HERBERT W. MAGOUN, 70 Kirkland St., Cambridge, Mass. 1887.
- Prof. MAX L. MARGOLIS, 1519 Diamond St., Philadelphia, Pa. 1890.
- Prof. ALLAN MARQUAND, Princeton University, Princeton, N. J. 1888.
- Prof. WINFRED ROBERT MARTIN, Hispanic Society of America, West 156th St., New York, N. Y. 1889.
- ISAAC G. MATTHEWS (McMaster Univ.), 509 Brunswick Ave., Toronto, Canada. 1906.
- C. O. MAWSON, 64 West 144th St., New York, N. Y. 1910.
- WILLIAM MERRILL, West Newbury, Mass. 1910.
- J. RENWICK METHENY, "Druid Hill," Beaver Falls, Pa. 1907.
- MARTIN A. MEYER, 300 Hamilton St., Albany, N. Y. 1906.
- Dr. TRUMAN MICHELSON, R. F. D. 48, Ridgefield, Conn. 1899.

- Mrs. HELEN L. MILLION (*née* LOVELL), Hardin College, Mexico. Mo. 1892.
Prof. LAWRENCE H. MILLS (Oxford Univ.), 218 Iffley Road, Oxford, England. 1881.
Prof. EDWIN KNOX MITCHELL (Hartford Theol. Sem.), 57 Gillette St., Hartford, Conn. 1898.
ROLAND H. MODE, 5836 Drexel Ave., Chicago, Ill. 1906.
Prof. J. A. MONTGOMERY (P. E. Divinity School), 6806 Green St., Germantown, Pa. 1903.
Prof. GEORGE F. MOORE (Harvard Univ.), 3 Divinity Ave., Cambridge, Mass. 1887.
Dr. JUSTIN HARTLEY MOORE, 8 West 119th St., New York, N. Y. 1904.
*Mrs. MARY H. MOORE, 3 Divinity Ave., Cambridge, Mass. 1902.
CHARLES J. MORSE, 1825 Asbury Ave., Evanston, Ill. 1909.
Prof. EDWARD S. MORSE, Salem, Mass. 1894.
Rev. HANS K. MOUSSA, 316 Third St., Watertown, Wis. 1906.
Prof. W. MAX MUELLER, 4308 Market St., Philadelphia, Pa. 1905.
Mrs. ALBERT H. MUNSELL, 65 Middlesex Road, Chestnut Hill, Mass. 1908.
Dr. WILLIAM MUSS-ARNOLT, Public Library, Boston, Mass. 1887.
Rev. JAS. B. NIES, Care London City and Midland Bank, Threadneedle St., London, England. 1906.
Rev. WILLIAM E. NIES, Port Washington, Long Island, N. Y. 1908.
Rt. Rev. Mgr. DENNIS T. O'CONNELL, D.D. (Catholic Univ.), Washington, D. C. 1903.
Prof. HANNS OERTEL (Yale Univ.), 2 Phelps Hall, New Haven, Conn. 1890.
Dr. CHARLES J. OGDEN, 250 West 88th St., New York, N. Y. 1906.
Miss ELLEN S. OGDEN, St. Agnes School, Albany, N. Y. 1898.
Prof. SAMUEL G. OLIPHANT, Olivet College, Olivet, Mich. 1906.
ALBERT TENEYCK OLMSTEAD, Princeton Preparatory School, Princeton, N. J. 1909.
Prof. PAUL OLTRAMARE (Univ. of Geneva), Ave. de Bosquets, Servette, Genève, Switzerland. 1904.
*ROBERT M. OLYPHANT, 160 Madison Ave., New York, N. Y. 1861.
Dr. JOHN ORNE, 104 Ellery St., Cambridge, Mass. 1890.
Rev. Dr. CHARLES RAY PALMER, 562 Whitney Ave., New Haven, Conn. 1900.
Prof. LEWIS B. PATON, Hartford Theological Seminary, Hartford, Conn. 1894.
Prof. WALTER M. PATTON, Wesleyan Theological College, Montreal, Canada. 1903.
Dr. CHARLES PEABODY, 197 Brattle St., Cambridge, Mass. 1892.
Prof. ISMAR J. PERITZ, Syracuse University, Syracuse, N. Y. 1894.
Prof. EDWARD DELAVAN PERRY (Columbia Univ.), 542 West 114th St., New York, N. Y. 1879.
Rev. Dr. JOHN P. PETERS, 225 West 99th St., New York, N. Y. 1882.
WALTER PETERSEN, Bethany College, Lindsborg, Kansas. 1909.
Prof. DAVID PHILIPSON (Hebrew Union College), 3947 Beechwood Ave., Rose Hill, Cincinnati, O. 1889.
Dr. WILLIAM POPPER, University of California, Berkeley, Cal. 1897.
Prof. IRA M. PRICE, University of Chicago, Chicago, Ill. 1887.

- Prof. JOHN DYNELEY PRINCE (Columbia Univ.), Sterlington, Rockland Co., N. Y. 1888.
- GEORGE PAYN QUACKENBOS, 331 West 28th St., New York, N. Y. 1904.
- Prof. F. P. RAMSAY (S. W. Presbyterian Univ.), Clarksville, Tenn. 1889.
- Dr. GEORGE ANDREW REISNER, The Pyramids, Cairo, Egypt. 1891.
- BERNARD REVEL, 2113 North Camac St., Philadelphia, Pa. 1910.
- Prof. PHILIP M. RHINELANDER (Episcopal Theological Sem.), 26 Garden St., Cambridge, Mass. 1908.
- ERNEST C. RICHARDSON, Library of Princeton University, Princeton, N. J. 1900.
- J. NELSON ROBERTSON, 294 Avenue Road, Toronto, Ont. 1902
- EDWARD ROBINSON, Metropolitan Museum of Art, New York, N. Y. 1894.
- Rev. Dr. GEORGE LIVINGSTON ROBINSON (McCormick Theol. Sem.), 4 Chalmers Place, Chicago, Ill. 1892.
- Hon. WILLIAM WOODVILLE ROCKHILL, American Embassy, St. Petersburg, Russia. 1880.
- Prof. JAMES HARDY ROPES (Harvard Univ.), 13 Follen St., Cambridge, Mass. 1893.
- Dr. WILLIAM ROSENAU, Johns Hopkins University, Baltimore, Md. 1897.
- Miss ADELAIDE RUDOLPH, 2098 East 100th St., Cleveland, O. 1894.
- Mrs. JANET E. RUTZ-REES, Rosemary Cottage, Greenwich, Conn. 1897.
- Miss CATHARINE B. RUNKLE, 15 Everett St., Cambridge, Mass. 1900.
- Prof. ARTHUR W. RYDER (Univ. of California), 2337 Telegraph Ave., Berkeley, Cal. 1902.
- Mrs. EDW. E. SALISBURY, 237 Church St., New Haven, Conn. 1906.
- Pres. FRANK K. SANDERS, Washburn College, Topeka, Kans. 1897.
- JOHANN F. SCHELTEMA, care of Messrs. Kerkhoven & Co., 115 Heerengracht, Amsterdam, Holland. 1906.
- GEORGE V. SCHICK, Johns Hopkins University, Baltimore, Md. 1909.
- Dr. H. ERNEST SCHMID, White Plains, N. Y. 1866.
- Prof. NATHANIEL SCHMIDT, Cornell University, Ithaca, N. Y. 1894.
- MONTGOMERY SCHUYLER, Jr., First Secretary of the American Embassy, St. Petersburg, Russia. 1899.
- GILBERT CAMPBELL SCOGGIN, University of Missouri, Columbia, Mo. 1906.
- Dr. CHARLES P. G. SCOTT, 1 Madison Ave., New York, N. Y. 1895.
- *Mrs. SAMUEL BRYAN SCOTT (*née* Morris), 124 Highland Ave., Chestnut Hill, Philadelphia, Pa. 1903.
- Rev. JOHN L. SCULLY, Church of the Holy Trinity, 312-332 East 88th St., New York, N. Y. 1908.
- Rev. Dr. WILLIAM G. SEIPLE, 78 Higashi Sambancho, Sendai, Japan. 1902.
- J. HERBERT SENTER, 10 Avon St., Portland, Maine. 1870.
- Prof. CHARLES N. SHEPARD (General Theological Sem.), 9 Chelsea Square, New York, N. Y. 1907.
- CHARLES C. SHERMAN, 614 Riverside Drive, New York, N. Y. 1904.
- *The Very Rev. JOHN R. SLATTERY, 261 Central Park West, New York, N. Y. 1903.
- Major (P. S.) C. C. SMITH, P. S. Manila, Philippine Islands. 1907.
- Prof. HENRY PRESERVED SMITH, Theological School, Meadville, Pa. 1877.
- Prof. JOHN M. P. SMITH, University of Chicago, Chicago, Ill. 1906.

- Prof. EDWARD H. SPIEKER, Johns Hopkins University, Baltimore, Md. 1884.
- Rev. JAMES D. STEELE, 15 Grove Terrace, Passaic, N. J. 1892.
- Mrs. SARA YORKE STEVENSON, 237 South 21st St., Philadelphia, Pa. 1907.
- Rev. ANSON PHELPS STOKES, Jr., Yale University, New Haven, Conn. 1900.
- MAYER SULZBERGER, 1303 Girard Ave., Philadelphia, Pa. 1888.
- Prof. GEORGE SVERDRUP, Jr., Augsburg Seminary, Minneapolis, Minn. 1907.
- Prof. WILLIAM C. THAYER, Lehigh University, Bethlehem, Pa. 1907.
- EBEN FRANCIS THOMPSON, 311 Main St., Worcester, Mass. 1906.
- Rev. Dr. J. J. TIERNEY, Mount St. Mary's College, Emmitsburg, Md. 1901.
- Prof. HENRY A. TODD (Columbia Univ.), 824 West End Ave., New York, N. Y. 1885.
- OLAF A. TOFFTEEN, 2726 Washington Blvd., Chicago, Ill. 1906.
- *Prof. CHARLES C. TORREY (Yale Univ.), 67 Mansfield St., New Haven, Conn. 1891.
- Prof. CRAWFORD H. TOY (Harvard Univ.), 7 Lowell St., Cambridge, Mass. 1871.
- Rev. SYDNEY N. USSHER, St. Bartholomew's Church, 44th St. & Madison Ave., N. Y. 1909.
- Dr. FREDERICK AUGUSTUS VANDERBURGH, 53 Washington Sq., New York, N. Y. 1908.
- ADDISON VAN NAME (Yale Univ.), 121 High St., New Haven, Conn. 1863.
- Miss SUSAN HAYES WARD, The Stone House, Abington Ave., Newark, N. J. 1874.
- Rev. Dr. WILLIAM HAYES WARD, 130 Fulton St., New York, N. Y. 1869.
- Miss CORNELIA WARREN, Cedar Hill, Waltham, Mass. 1894.
- Prof. WILLIAM F. WARREN (Boston Univ.), 131 Davis Ave., Brookline, Mass. 1877.
- Rev. W. SCOTT WATSON, West New York, Hudson Co., New Jersey. 1893
- Prof. J. E. WERREN, 17 Leonard Ave., Cambridge, Mass. 1894.
- Prof. JENS IVERSON WESTENGARD (Harvard Univ.), Asst. Gen. Adviser to H.S.M. Govt., Bangkok, Siam. 1903.
- Pres. BENJAMIN IDE WHEELER, University of California, Berkeley, Cal. 1885.
- Prof. JOHN WILLIAMS WHITE (Harvard Univ.), 18 Concord Ave., Cambridge Mass. 1877.
- *Miss MARGARET DWIGHT WHITNEY, 227 Church St., New Haven, Conn. 1908.
- Mrs. WILLIAM DWIGHT WHITNEY, 227 Church St., New Haven, Conn. 1897,
- Rev. E. T. WILLIAMS, Division of Far Eastern Affairs, Department of State. Washington, D. C. 1901.
- Prof. FREDERICK WELLS WILLIAMS (Yale Univ.), 135 Whitney Ave., New Haven, Conn. 1895.
- Dr. TALCOTT WILLIAMS ("The Press"), 916 Pine St., Philadelphia, Pa. Pa. 1884.
- Rev. Dr. WILLIAM COPLEY WINSLOW, 525 Beacon St., Boston, Mass. 1885.
- Rev. Dr. STEPHEN S. WISE, 23 West 90th St., New York, N. Y. 1894.

- HENRY B. WITTON, Inspector of Canals, 16 Murray St., Hamilton, Ontario. 1885.
 DR. LOUIS B. WOLFENSON, 1228 Mound St., Madison, Wis. 1904.
 WILLIAM W. WOOD, 2210 North Fulton Ave., Baltimore, Md. 1900.
 JAMES H. WOODS (Harvard Univ.), 2 Chestnut St., Boston, Mass. 1900.
 DR. WILLIAM H. WORRELL, University of Michigan, Ann Arbor, Mich. 1910.
 REV. JAMES OWENS WRIGHTSON, 812 20th St., N. W., Washington, D. C. 1903.
 REV. DR. ABRAHAM YOHANNAN, Columbia University, New York, N. Y. 1894.

[Total, 286.]

III. MEMBERS OF THE SECTION FOR THE HISTORICAL STUDY OF RELIGIONS.

- REV. DR. SAMUEL H. BISHOP, 500 West 122d St., New York, N. Y. 1898.
 REV. JOHN L. CHANDLER, Madura, Southern India. 1899.
 SAMUEL DICKSON, 901 Clinton St., Philadelphia, Pa. 1899.
 PROF. FRANKLIN GIDDINGS, Columbia Univ., New York, N. Y. 1900.
 PROF. ARTHUR L. GILLETT, Hartford Theological Seminary, Hartford, Conn. 1898.
 PROF. CHARLES B. GULICK (Harvard University), 59 Fayerweather st., Cambridge, Mass. 1899.
 PROF. GEORGE T. LADD (Yale Univ.), 204 Prospect St., New Haven, Conn. 1898.
 M. A. LANE, 451 Jackson Blvd., Chicago, Ill. 1907.
 PROF. FRED NORRIS ROBINSON (Harvard Univ.), Longfellow Park, Cambridge, Mass. 1900.
 REV. W. A. SHEDD, Am. Mission, Urumia, Persia (via Berlin and Tabriz). 1906.
 PRES. LANGDON C. STEWARDSON, Hobart College, Geneva, N. Y. 1901.
 PROF. R. M. WENLEY, University of Michigan, Ann Arbor, Mich. 1898.
 REV. G. E. WHITE, Anatolia College, Marsovan, Turkey [Papers to German Consulate (White), Samsoun, Turkey.] 1906.
 PROF. IRVING F. WOOD, Smith College, Northampton, Mass. 1905.

[Total, 14.]

Number of Members of all Classes, 326.

CHRONOLOGICAL LIST OF LIVING MEMBERS.

(The names of HONORARY MEMBERS are printed in large Capitals and (hon.) is placed after their names; the names of *Members of the Section for the Historical Study of Religions* are printed Italics and (S. S. R.) is placed after their names.)

- 1857 W. W. GOODWIN. 1858 B. L. GILDERSLEEVE.
 1861 R. M. OLYPHANT. 1863 A. VAN NAME. 1866 H. E. SCHMID. 1867 D. S. DODGE. 1869 T. W. HIGGINSON; W. H. WARD.
 1870 J. H. SENTER. 1871 B. S. LYMAN; C. H. TOY. 1872 M. W. EASTON.

- 1873 F. CARTER; A. K. HUMPHREY. 1874 H. F. JENKS; S. H. WARD.
 1876 H. FERGUSON; C. R. LANMAN. 1877 H. P. SMITH; W. F. WARREN;
 J. W. WHITE. 1878 B. DELBRÜCK (hon.); T. NOELDEKE (hon.).
 1879 C. A. BRIGGS; S. HART; E. D. PERRY.
- 1880 W. W. ROCKHILL. 1881 M. BLOOMFIELD; F. BROWN; E. W. HOPKINS;
 L. H. MILLS. 1882 G. W. COLLES; D. G. LYON; J. P. PETERS. 1883
 E. CHANNING; L. H. ELWELL; P. HAUPT. 1884 C. ADLER; E. H. SPIEKER;
 T. WILLIAMS. 1885 A. V. W. JACKSON; H. A. TODD; B. I. WHEELER;
 W. C. WINSLOW; H. B. WITTON. 1886 C. DEF. FITZ-GERALD; R. J.
 H. GOTTHEIL; R. F. HARPER; M. JASTROW; M. L. KELLNER. 1887
 R. G. BHANDARKAR (hon.); J. BINNEY; H. COLLITZ; H. V.
 HILPHRECHT; J. R. JEWETT; H. W. MAGOUN; G. F. MOORE; W. MUSS-
 ARNOLT; I. M. PRICE; E. SACHAU (hon.). 1888 G. A. BARTON;
 J. D. DAVIDS; E. W. FAY; A. MARQUAND; J. D. PRINCE; M. SULZBERGER.
 1889 H. HYVERNAT; CHRISTOPHER JOHNSTON; W. E. MARTIN; D.
 PHILIPSON; E. P. RAMSAY.
- 1890 L. GROSSMANN; C. F. KENT; M. L. MARGOLIS; H. OERTEL; J. ORNE;
 E. WINDISCH (hon.). 1891 D. BLAUSTEIN; J. H. BREASTED; F. D.
 CHESTER; G. A. REISNER; C. C. TORREY. 1892 C. D. BUCK; S. J.
 CARR; J. R. FRAME; H. H. HAYNES; H. L. MILLION; C. PEABODY;
 G. L. ROBINSON; J. D. STEELE. 1893 W. R. ARNOLD; J. F. BERG;
 I. M. CASANOWICZ; F. DELITZSCH (hon.); I. GUIDI (hon.);
 H. KERN (hon.); A. F. R. HOENRNLE; P. LOWELL; D. B. MAC
 DONALD; J. H. ROPES; A. H. SAYCE (hon.); W. S. WATSON.
 1894 E. E. ATKINSON; L. W. BATTEN; W. S. BIGELOW; H. W.
 DUNNING; L. C. G. GRIEVE; G. A. KOHUT; E. S. MORSE; L. B. PATON;
 I. J. PERITZ; E. ROBINSON; A. RUDOLPH; N. SCHMIDT; C. WARREN;
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 E. H. KENDRICK. 1897 A. BOISSIER; P. CARUS; W. M. ELLICOTT;
 W. H. FURNESS; L. H. GRAY; W. POPPER; W. ROSENAU; J. E.
 RUTZ-REES; F. K. SANDERS; W. D. WHITNEY. 1898 S. E. BALDWIN;
 A. BARTH (hon.); H. P. BEACH; S. H. Bishop (S. S. R.); F. J.
 BLISS; A. L. Gillett (S. S. R.); G. T. Ladd (S. S. R.); A. LUDWIG
 (hon.); G. MASPERO (hon.); E. K. MITCHELL; E. S. OGDEN; R. M.
 Wenley (S. S. R.). 1899 J. BURGESS (hon.); J. L. Chandler (S. S. R.);
 S. Dickson (S. S. R.); C. B. Gulick (S. S. R.); H. W. HOFFMAN;
 G. L. KITTREDGE; A. M. LYTHGOE; T. MICHELSON; M. SCHUYLER JR.
- 1900 J. E. ABBOTT; W. J. BEECHER; F. R. BLAKE; C. A. BLOMGREN;
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 F. Giddings (S. S. R.); C. S. LEAVENWORTH; C. R. PALMER; E. C.
 RICHARDSON; F. N. Robinson (S. S. R.); C. B. RUNKLE; A. P. STOKES;
 W. W. WOOD; J. H. WOOD. 1901 F. C. EISELEN; C. P. FAGNANT;
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 TIERNEY; E. T. WILLIAMS. 1902 W. M. CRANE; A. EMBER; R. GARBE
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SOCIETIES AND LIBRARIES, TO WHICH THE PUBLICATIONS OF
THE AMERICAN ORIENTAL SOCIETY ARE SENT BY WAY OF GIFT,
EXCHANGE, OR PURCHASE.

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BOSTON, MASS.: American Academy of Arts and Sciences.

CHICAGO, ILL.: Field Museum of Natural History.

NEW YORK: American Geographical Society.

PHILADELPHIA, PA.: American Philosophical Society.

Free Museum of Science and Art, Univ. of Penna.

WASHINGTON, D. C.: Smithsonian Institution.

Bureau of American Ethnology.

WORCESTER, MASS.: American Antiquarian Society.

II. EUROPE.

- AUSTRIA, VIENNA: Kaiserliche Akademie der Wissenschaften.
K. u. K. Kaiserliche Direction der K. u. K. Hofbibliothek.
(Josephsplatz 1.)
Anthropologische Gesellschaft.
- PRAGUE: Königlich Böhmisches Gesellschaft der Wissenschaften.
- DENMARK, ICELAND, REYKJAVIK: University Library.
- FRANCE, PARIS: Société Asiatique. (Rue de Seine, Palais de l'Institut.)
Bibliothèque Nationale.
Musée Guimet. (Avenue du Trocadéro.)
Académie des Inscriptions et Belles-Lettres.
École des Langues Orientales Vivantes. (Rue de Lille, 2.)
- GERMANY, BERLIN: Königlich Preussische Akademie der Wissenschaften.
Königliche Bibliothek.
Seminar für Orientalische Sprachen. (Am Zeughaus 1.)
- DARMSTADT: Grossherzogliche Hofbibliothek.
- GÖTTINGEN: Königliche Gesellschaft der Wissenschaften.
HALLE: Bibliothek der Deutschen Morgenländischen Gesellschaft.
(Friedrichstrasse 50.)
- LEIPZIG: Königlich Sächsische Gesellschaft der Wissenschaften.
Leipziger Semitistische Studien. (J. C. Hinrichs.)
- MUNICH: Königlich Bayerische Akademie der Wissenschaften.
Königliche Hof- und Staatsbibliothek.
- TÜBINGEN: Library of the University.
- GREAT BRITAIN, LONDON: Royal Asiatic Society of Great Britain and Ireland. (22 Albemarle St., W.)
Library of the India Office. (Whitehall, SW.)
Society of Biblical Archaeology. (37 Great Russell St., Bloomsbury, W.C.)
Philological Society. (Care of Dr. F. J. Furnival, 3 St. George's Square, Primrose Hill, NW.)
- ITALY, BOLOGNA: Reale Accademia delle Scienze dell' Istituto di Bologna.
- FLORENCE: Società Asiatika Italiana.
- ROME: Reale Accademia dei Lincei.
- NETHERLANDS, AMSTERDAM: Koninklijke Akademie van Wetenschappen.
- THE HAGUE: Koninklijk Instituut voor Taal-, Land-, en Volkenkunde van Nederlandsch Indië.
- LEYDEN: Curatorium of the University.
- RUSSIA, HELSINGFORS: Société Finno-Ougrienne.
- ST. PETERSBURG: Imperatorskaja Akademija Nauk.
Archeologiji Institut.
- SWEDEN, UPSALA: Humanistiska Vetenskaps-Samfundet.

III. ASIA.

- BENARES: Benares Sanskrit Coll. "The Pandit."
- CALCUTTA, GOV'T OF INDIA: Home Department.
- CEYLON, COLOMBO: Ceylon Branch of the Royal Asiatic Society.

- CHINA, SHANGHAI: China Branch of the Royal Asiatic Society.
 TONKIN: l'École Française d'extrême Orient (Rue de Coton), Hanoi.
 INDIA, BOMBAY: Bombay Branch of the Royal Asiatic Society.
 The Anthropological Society. (Town Hall.)
 CALCUTTA: The Asiatic Society of Bengal. (57 Park St.)
 The Buddhist Text Society. (86 Jaun Bazar St.)
 LAHORE: Library of the Oriental College.
 SIMLA: Office of the Director General of Archaeology. (Benmore,
 Simla, Punjab.)
 JAPAN, TOKYO: The Asiatic Society of Japan.
 JAVA, BATAVIA: Bataviaasch Genootschap van Kunsten en Wetenschappen.
 KOREA: Korea Branch of the Royal Asiatic Society, Seoul, Korea.
 NEW ZEALAND: The Polynesian Society, New Plymouth.
 PHILIPPINE ISLANDS: The Ethnological Survey, Manila.
 SYRIA: The American School (care U. S. Consul, Jerusalem).
 Revue Biblique, care of M. J. Lagrange, Jerusalem.
 Al-Machriq, Université St. Joseph, Beirut, Syria.

IV. AFRICA.

- EGYPT, CAIRO: The Khedivial Library.

V. EDITORS OF THE FOLLOWING PERIODICALS.

- The Indian Antiquary (Education Society's Press, Bombay, India).
 Wiener Zeitschrift für die Kunde des Morgenlandes (care of Alfred Hölder,
 Rothenthurmstr. 15, Vienna, Austria).
 Zeitschrift für vergleichende Sprachforschung (care of Prof. E. Kuhn,
 3 Hess Str., Munich, Bavaria).
 Revue de l'Histoire des Religions (care of M. Jean Réville, chez M. E.
 Leroux, 28 rue Bonaparte, Paris, France).
 Zeitschrift für die alttestamentliche Wissenschaft (care of Prof. D. Karl
 Marti, Marienstr. 25, Bern, Switzerland).
 Beiträge zur Assyriologie und semitischen Sprachwissenschaft. (J. C.
 Hinrichs'sche Buchhandlung, Leipzig, Germany)
 Orientalische Bibliographie (care of Prof. Lucian Scherman, 18 Ungerer
 Str., Munich, Bavaria).
 The American Antiquarian and Oriental Journal, 438 East 57th St., Chi-
 cago, Ill.
 American Journal of Archaeology, 65 Sparks St., Cambridge, Mass.
 Transactions of the American Philological Association (care of Prof. F. G.
 Moore, Trinity College, Hartford, Conn.).
 Le Monde Oriental (care of Prof. K. F. Johansson, Upsala, Sweden).

VI. LIBRARIES.

The Editors request the Librarians of any Institution or Libraries, not mentioned below, to which this Journal may regularly come, to notify them of the fact. It is the intention of the Editors to print a list, as

complete as may be, of regular subscribers for the Journal or of recipients thereof. The following is the beginning of such a list.

Andover Theological Seminary.

Boston Public Library.

Brown University Library.

Buffalo Society of Natural Science, Library Building, Buffalo, N. Y.

Chicago University Library.

Columbia University Library.

Cornell University Library.

Harvard Sanskrit Class-Room Library.

Harvard Semitic Class-Room Library.

Harvard University Library.

Nebraska University Library.

New York Public Library.

Yale University Library.

Recipients: 326 (Members) + 75 (Gifts and Exchanges) + 13 (Libraries) = 414.

CONSTITUTION AND BY-LAWS
OF THE
AMERICAN ORIENTAL SOCIETY.

With Amendments of April, 1897.

CONSTITUTION.

ARTICLE I. This Society shall be called the AMERICAN ORIENTAL SOCIETY.

ARTICLE II. The objects contemplated by this Society shall be: —

1. The cultivation of learning in the Asiatic, African, and Polynesian languages, as well as the encouragement of researches of any sort by which the knowledge of the East may be promoted.

2. The cultivation of a taste for oriental studies in this country.

3. The publication of memoirs, translations, vocabularies, and other communications, presented to the Society, which may be valuable with reference to the before-mentioned objects.

4. The collection of a library and cabinet.

ARTICLE III. The members of this Society shall be distinguished as corporate and honorary.

ARTICLE IV. All candidates for membership must be proposed by the Directors, at some stated meeting of the Society, and no person shall be elected a member of either class without receiving the votes of as many as three-fourths of all the members present at the meeting.

ARTICLE V. The government of the Society shall consist of a President, three Vice Presidents, a Corresponding Secretary, a Recording Secretary, a Secretary of the Section for the Historical Study of Religions, a Treasurer, a Librarian, and seven Directors, who shall be annually elected by ballot, at the annual meeting.

ARTICLE VI. The President and Vice Presidents shall perform the customary duties of such officers, and shall be *ex-officio* members of the Board of Directors.

ARTICLE VII. The Secretaries, Treasurer, and Librarian shall be *ex-officio* members of the Board of Directors, and shall perform their respective duties under the superintendence of said Board.

ARTICLE VIII. It shall be the duty of the Board of Directors to regulate the financial concerns of the Society, to superintend its publications, to carry into effect the resolutions and orders of the Society, and to exercise a general supervision over its affairs. Five Directors at any regular meeting shall be a quorum for doing business.

ARTICLE IX. An Annual meeting of the Society shall be held during Easter week, the days and place of the meeting to be determined by the Directors, said meeting to be held in Massachusetts at least once in three years. One or more other meetings, at the discretion of the Directors,

may also be held each year at such place and time as the Directors shall determine.

ARTICLE X. There shall be a special Section of the Society, devoted to the historical study of religions, to which section others than members of the American Oriental Society may be elected in the same manner as is prescribed in Article IV.

ARTICLE XI. This Constitution may be amended, on a recommendation of the Directors, by a vote of three-fourths of the members present at an annual meeting.

BY-LAWS.

I. The Corresponding Secretary shall conduct the correspondence of the Society, and it shall be his duty to keep, in a book provided for the purpose, a copy of his letters; and he shall notify the meetings in such manner as the President or the Board of Directors shall direct.

II. The Recording Secretary shall keep a record of the proceedings of the Society in a book provided for the purpose.

III. *a.* The Treasurer shall have charge of the funds of the Society; and his investments, deposits, and payments shall be made under the superintendence of the Board of Directors. At each annual meeting he shall report the state of the finances, with a brief summary of the receipts and payments of the previous year.

III. *b.* After December 31, 1896, the fiscal year of the Society shall correspond with the calendar year.

III. *c.* At each annual business meeting in Easter week, the President shall appoint an auditing committee of two men—preferably men residing in or near the town where the Treasurer lives—to examine the Treasurer's accounts and vouchers, and to inspect the evidences of the Society's property, and to see that the funds called for by his balances are in his hands. The Committee shall perform this duty as soon as possible after the New Year's day succeeding their appointment, and shall report their findings to the Society at the next annual business meeting thereafter. If these findings are satisfactory, the Treasurer shall receive his acquittance by a certificate to that effect, which shall be recorded in the Treasurer's book, and published in the Proceedings.

IV. The Librarian shall keep a catalogue of all books belonging to the Society, with the names of the donors, if they are presented, and shall at each annual meeting make a report of the accessions to the library during the previous year, and shall be farther guided in the discharge of his duties by such rules as the Directors shall prescribe.

V. All papers read before the Society, and all manuscripts deposited by authors for publication, or for other purposes, shall be at the disposal of the Board of Directors, unless notice to the contrary is given to the Editors at the time of presentation.

VI. Each corporate member shall pay into the treasury of the Society an annual assessment of five dollars; but a donation at any one time of seventy-five dollars shall exempt from obligation to make this payment.

VII. Corporate and Honorary members shall be entitled to a copy of all the publications of the Society issued during their membership, and

shall also have the privilege of taking a copy of those previously published, so far as the Society can supply them, at half the ordinary selling price.

VIII. Candidates for membership who have been elected by the Society shall qualify as members by payment of the first annual assessment within one month from the time when notice of such election is mailed to them. A failure so to qualify shall be construed as a refusal to become a member. If any corporate member shall for two years fail to pay his assessments, his name may, at the discretion of the Directors, be dropped from the list of members of the Society.

IX. Members of the Section for the Historical Study of Religions shall pay into the treasury of the Society an annual assessment of two dollars; and they shall be entitled to a copy of all printed papers which fall within the scope of the Section.

X. Six members shall form a quorum for doing business, and three to adjourn.

SUPPLEMENTARY BY-LAWS.

I. FOR THE LIBRARY.

1. The Library shall be accessible for consultation to all members of the Society, at such times as the Library of Yale College, with which it is deposited, shall be open for a similar purpose; further, to such persons as shall receive the permission of the Librarian, or of the Librarian or Assistant Librarian of Yale College.

2. Any member shall be allowed to draw books from the Library upon the following conditions: he shall give his receipt for them to the Librarian, pledging himself to make good any detriment the Library may suffer from their loss or injury, the amount of said detriment to be determined by the Librarian, with the assistance of the President, or of a Vice President; and he shall return them within a time not exceeding three months from that of their reception, unless by special agreement with the Librarian this term shall be extended.

3. Persons not members may also, on special grounds, and at the discretion of the Librarian, be allowed to take and use the Society's books, upon depositing with the Librarian a sufficient security that they shall be duly returned in good condition, or their loss or damage fully compensated.

Until further notice the

Publications of the American Oriental Society

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1. Members of the Society receive the current number of the Society's Journal free of charge.

2. To those who are not members of the Society the price of the current volume is six dollars, carriage to be paid by the purchaser.

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7. Beginning with volume XXX the Journal appears in four quarterly parts of which the first is issued on December first, the second on March first, the third on June first, and the fourth on September first. Single parts of the Journal cannot be sold.

All communications concerning the Library should be addressed to HANNS OERTEL, 2 Phelps Hall, Yale University, New Haven, Conn., U. S. A.

TO CONTRIBUTORS.

Fifty copies of each article published in this Journal will be forwarded to the author. A larger number will be furnished at cost.

GENERAL NOTICES.

1. Members are requested to give immediate notice of changes of address to the Treasurer, Prof. Frederick Wells Williams, 135 Whitney avenue, New Haven, Conn.

2. It is urgently requested that gifts and exchanges intended for the Library of the Society be addressed as follows: The Library of the American Oriental Society, Yale University New Haven, Connecticut, U. S. America.

3. For information regarding the sale of the Society's publications see the next foregoing page.

4. Communications for the Journal should be sent to Prof. James Richard Jewett, University of Chicago, Chicago, Ill., or Prof. Hanns Oertel, Yale University, New Haven, Conn.

CONCERNING MEMBERSHIP.

It is not necessary for any one to be a professed Orientalist in order to become a member of the Society. All persons—men or women—who are in sympathy with the objects of the Society and willing to further its work are invited to give it their help. This help may be rendered by the payment of the annual assessments, by gifts to its library, or by scientific contributions to its Journal, or in all of these ways. Persons desiring to become members are requested to apply to the Treasurer, whose address is given above. Members receive the Journal free. The annual assessment is \$5. The fee for Life-Membership is \$75.

Persons interested in the Historical Study of Religions may become members of the Section of the Society organized for this purpose. The annual assessment is \$2; members receive copies of all publications of the Society which fall within the scope of the Section.

JOURNAL

OF THE

AMERICAN ORIENTAL SOCIETY.

EDITED BY

JAMES RICHARD JEWETT, AND HANNS OERTEL

Professor in Harvard University,
Cambridge, Mass.

Professor in Yale University,
New Haven, Conn.

THIRTY-FIRST VOLUME

THE AMERICAN ORIENTAL SOCIETY.

NEW HAVEN, CONNECTICUT, U. S. A.

MCMXI.

A copy of this volume, postage paid, may be obtained anywhere within the limits of the Universal Postal Union, by sending a Postal Money Order for six dollars, or its equivalent, to The American Oriental Society, New Haven, Connecticut, United States of America.

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PROCEEDINGS

OF THE

AMERICAN ORIENTAL SOCIETY,

AT ITS

MEETING IN BALTIMORE, MD.

1910.

The annual meeting of the Society, being the one hundred twenty-second occasion of its assembling, was held in Baltimore, Md., at the Johns Hopkins University, on Thursday, Friday, and Saturday of Easter week, March 31st and April 1st and 2d.

The following members were present at one or more of the sessions :

Barret,	Davidson,	Hyvernât,	Quackenbos,
Blake,	Edgerton,	Jastrow,	Rosenau,
Bloomfield,	Ember,	Kent, R. G.	Rudolph, Miss
Bolling,	Foote,	Kyle,	Schick,
Brown, F.	Gildersleeve,	Lyon,	Steele,
Brown, G. W.	Grieve, Miss	Margolis,	Torrey,
Burlingame,	Haas,	Meyer, E.	Vanderburgh,
Casanowicz,	Harper, R. F.	Michelson,	Ward, W. H.
Clay,	Haupt,	Montgomery,	Yohannan.
Collitz,	Haynes,	Müller,	
Conant,	Hopkins,	Muss-Arnolt,	Total: 45.
Currier,	Hussey, Miss	Oertel,	

The first session began on Thursday afternoon at three o'clock in the Donovan Room, McCoy Hall, with the President, Dr. Wm. Hayes Ward, in the chair. In the absence of both the secretaries Dr. George C. O. Haas was appointed to act as recording secretary for the meeting.

The reading of the minutes of the meeting in New York,

April 15th, 16th, and 17th, 1909, was dispensed with, because they had already been printed in the Journal (vol. 30, p. i-xii).

The Committee of Arrangements presented its report, through Professor Haupt, in the form of a printed program. The succeeding sessions were appointed for Friday morning at half past nine, Friday afternoon at half past two, and Saturday morning at half past nine. It was announced that a luncheon would be given to the Society by the University at the Johns Hopkins Club on Friday at one o'clock, and that arrangements had been made for a subscription dinner at the same place on Friday evening at seven o'clock. The Johns Hopkins Club and the University Club extended their courtesies to the members of the Society during the meeting.

REPORT OF THE CORRESPONDING SECRETARY.

The annual report of the Corresponding Secretary, Professor A. V. Williams Jackson, was then presented as follows:

The Secretary has the honor to report that he has endeavoured to carry on the duties of his office during the current year as before, and has had pleasant correspondence, not only with the newly elected members, honorary and corporate, but also with various persons who take an interest in Oriental matters and have been attracted by the aims of the Society. A special phase of the correspondence is represented by letters to and from one engaged in writing a report for a Japanese publication on the history of learned organizations in America. Several communications have been received requesting the Society to consider different cities from those where it has met in the past, as places for the annual meeting. Most noteworthy among these is an invitation from the Conventions Bureau of the Business Men's League of St. Louis, accompanied by letters from the Governor of Missouri, the Mayor of St. Louis, and a number of local civic bodies.

The Secretary has to record the loss of several members whose names have added honor to our list.

DEATHS.

HONORARY MEMBER.

Professor M. J. De Goeje.

CORPORATE MEMBERS.

Mr. Henry Charles Lea.

Miss Maria Whitney.

Professor M. J. De Goeje, of the University of Leyden, who died in May, 1909, was elected to honorary membership in 1898 as a representative of Dutch scholarship and in recognition of his distinguished con-

tributions in the field of Semitic philology, especially Arabic, which are too well known to need record here.

Mr. Henry C. Lea, of Philadelphia, who had been a member of the Society since 1898, died in October 1909. He was a zealous furtherer of scholarship, historical and antiquarian, and the author of numerous works on mediaeval history.

Miss Maria Whitney, sister of the late Professor W. D. Whitney, died in January last. She joined the Society in 1897.

The Secretary cannot close this report without a word of appreciation of the help he has received from his Baltimore colleagues on the Committee of Arrangements (Professors Bloomfield and Haupt) in arranging the details of the meeting at which this report is presented.

REPORT OF THE TREASURER.

The annual report of the Treasurer, Professor F. W. Williams, was then presented, as follows:

RECEIPTS AND DISBURSEMENTS BY THE TREASURER OF THE AMERICAN ORIENTAL SOCIETY FOR THE YEAR ENDING DEC. 31, 1909.

Receipts.

Balance from old account, Dec. 31, 1908		\$ 488.00
Dues (190) for 1909	\$ 950.00	
" (43) for other years	214.88	
" (15) for His. Stud. of Relig. Section	30.00	1,194.88
Life Membership payment		75.00
State National Bank Dividends		124.97
Annual interest from Savings Banks		42.92
Sales of Journal		408.52
		<u>\$ 2,334.29</u>

Expenditures.

T. M. and T. Co., Printing Vol. xxiv and sundry	\$ 1,357.80
Editor's Honorarium	100.00
Librarian, Scribe and Postage	64.50
Treasurer, Postage	1.00
Subvention to Orientalische Bibliographie	95.95
Balance to general account	715.04
	<u>\$ 2,334.29</u>

STATEMENT.

	1908	1909
Bradley Type Fond	\$ 2,653.41	\$ 2,781.29
Cotheal Fund	1,000.00	1,000.00
State National Bank Shares	1,950.00	1,950.00
Connecticut Savings Bank	6.39	6.64
National Savings Bank	12.11	12.89
Interest, Cotheal Fund	195.69	237.88
Cash in hand	12.54	24.69
	<u>\$ 5,830.14</u>	<u>\$ 6,013.09</u>

REPORT OF THE AUDITING COMMITTEE.

The report of the Auditing Committee, Professors Torrey and Oertel, was presented by Professor Oertel, as follows:

We hereby certify that we have examined the account book of the Treasurer of this Society and have found the same correct, and that the foregoing account is in conformity therewith. We have also compared the entries in the cash book with the vouchers and bank and pass books and have found all correct.

CHARLES C. TORREY, } *Auditors.*
HANNS OERTEL, }

NEW HAVEN, March 23. 1910.

REPORT OF THE LIBRARIAN.

The Librarian, Professor Hanns Oertel, presented his report as follows:

The library was unfortunate in losing the help this year which Miss Margaret D. Whitney has very generously given the last three years. As a consequence the accessioning had to be done by paid labor, and it was through the kindness of my fellow editor, who allowed his honorarium to be used to defray this expense, that this work could be carried on. However, it will be necessary to provide hereafter a regular appropriation for the librarian to pay for the labor of accessioning and acknowledging; the work of binding has been entirely discontinued owing to lack of funds. It will be impossible to continue for any length of time a policy which is sure to result in confusion and loss, and the Librarian again wishes to impress upon the members of the Society the absolute necessity of a regular allowance for the payment of clerical help.

This report was completed when the Librarian received the sum of one hundred dollars from Professor Jewett as a second most welcome gift toward the expenses of the library.

Upon motion it was voted to convey the thanks of the Society to Professor Jewett for his two gifts.

REPORT OF THE EDITORS.

The report of the Editors of this Journal, Professors Oertel and Jewett, was presented by Professor Oertel, as follows:

Pursuant to a vote of the directors at the last annual meeting, the editors arranged to have the Journal published hereafter in four quarterly numbers. The first of these was sent to the members on December 1st, the second on March 1st. The third will be sent out on June 1st, and the fourth on September 1st. The second number contained the proceedings of the New York meeting. It is possible now to form an estimate of the cost of the printing of the current volume of the Journal. The first number of volume 30, including addressing and postage, cost 1271 marks and 30 pfennigs. The cost of the second number amounts

to 1006 marks and 50 pfennigs. Figuring on this basis, the Editors estimate that the whole volume will cost 4556 marks, thus coming well within the estimated sum of \$ 1200.

ELECTION OF MEMBERS.

The following persons, recommended by the Directors, were elected members of the Society:

HONORARY MEMBER.

Professor Hermann Oldenberg.

CORPORATE MEMBERS.

Mr. William E. M. Aitken,	Miss Sarah Fenton Hoyt,
Prof. Cornelius B. Bradley,	Mr. Charles Johnston,
Mr. Alexander H. Bullock,	Prof. Roland G. Kent,
Mr. Eugene Watson Burlingame,	Mr. C. O. Sylvester Mawson,
Mr. Francis A. Cunningham,	Mr. William Merrill,
Dr. Franklin Edgerton,	Mr. Bernard Revel,
Dr. William H. Worrell.	

OFFICERS FOR 1910-1911.

The committee appointed at New York to nominate officers for the ensuing year, consisting of Professor Harper, Dr. Haas, and Dr. Madsen, reported through Professor Harper and recommended the following, who were duly elected:

President—Professor Maurice Bloomfield, of Baltimore.

Vice-Presidents—Professor Paul Haupt, of Baltimore; Professor Henry Hyvernat, of Washington; Professor Charles C. Torrey, of New Haven.

Corresponding Secretary—Professor A. V. Williams Jackson, of New York.

Recording Secretary—Professor George F. Moore, of Cambridge, Mass.

Secretary of the Section for Religions—Professor Morris Jastrow, Jr., of Philadelphia.

Treasurer—Professor Frederick Wells Williams, of New Haven.

Librarian—Professor Hanns Oertel, of New Haven.

Directors—The officers above named, and Professors Crawford H. Toy and Charles R. Lanman, of Cambridge; E. Washburn Hopkins, of New Haven; Richard Gottheil, of New York; Robert F. Harper and James R. Jewett, of Chicago; Dr. William Hayes Ward, of New York.

At four o'clock, at the conclusion of the business session, the Society adjourned to the large lecture-room in the same building, where the President, Dr. William Hayes Ward, delivered the annual address on "Oriental Sources of Greek Mythology."

At five o'clock Professor Eduard Meyer of the University of Berlin, Exchange Professor at Harvard University and an

Honorary Member of the Society, delivered in the same hall an illustrated lecture on "The Egyptians in the Time of the Pyramid-builders."

The evening was reserved for an informal gathering of the members for supper and general conversation.

SECOND SESSION.

The members re-assembled on Friday morning at half past nine o'clock for the second session. The following communications were presented:

Dr. F. R. Blake, of Johns Hopkins University: 'To be' and 'to have' in the Philippine languages.

Professor M. Bloomfield, of Johns Hopkins University: Announcement of a work on Repetitions in the Rig-Veda.

Mr. G. W. Brown, of Baltimore: *Prāna* and *apāna* in the Upanishads.—Remarks by Professor Bloomfield.

Professor C. E. Conant, of the University of Chattanooga: RGH and RLD in Philippine languages.—Remarks by Dr. Blake.

Rev. Dr. C. W. Currier, of Washington: Gonzales de Mendoza and his work on China.—Remarks by Professor Jastrow

Dr. A. Ember, of Johns Hopkins University: Semito-Egyptian sound-changes.—Remarks by Professor W. Max Müller.

Dr. M. Margolis, of Dropsie College, Philadelphia: Grammatical notes on transliterations in the Greek Old Testament.—Remarks by Professors W. Max Müller and Haupt.

Professor P. Haupt, of Johns Hopkins University: Babylonian words in the Talmud.

At twelve thirty the Society took a recess until half past two, and the members were invited to luncheon as guests of the University at the Johns Hopkins Club.

THIRD SESSION.

The third session was held in the large lecture-room in McCoy Hall, President Ward presiding. The following papers were read:

Professor L. C. Barret, of Dartmouth College: Myths about dragon-fights.—Remarks by Professor Bloomfield.

Dr. Lucia Grieve, of New York: The Mohurum in Western India.

Professor P. Haupt, of Johns Hopkins University: A Macabean oratorio.

Professor M. Jastrow, Jr., of the University of Pennsylvania: The Etana myth on the Babylonian-Assyrian seal-cylinders.—Remarks by Dr. Ward and Professor Bloomfield.

Professor G. A. Barton, of Bryn Mawr College: On the latest addition to the Babylonian Deluge literature; presented by Professor Torrey.—Remarks by Professors Haupt and Clay.

Dr. G. A. Reisner, of Harvard University: The Harvard excavations at Samaria in 1909; presented by Professor Lyon.

The reading of papers was concluded at four forty, and at five o'clock Professor Eduard Meyer delivered in the same hall a lecture on 'Augustus Caesar.' At half past seven the members met for dinner at the Johns Hopkins Club.

FOURTH SESSION.

On Saturday morning at half past nine the fourth and concluding session was held in the Donovan Room in McCoy Hall. President-elect Bloomfield presided in the absence of President Ward.

The directors reported that they had re-appointed Professors Oertel and Jewett as Editors of the Journal for the ensuing year.

They further announced that the next meeting would take place at Cambridge, Mass., on March 16, 17, and 18, 1911. (This date was afterwards changed by the Directors to April 20, 21, and 22 in Easter week.)

It was announced that the President had appointed as committee to nominate officers, Professors Hopkins, Christopher Johnston, and Barret; as committee to arrange the details of the next meeting, Professors Lyon, Lanman, and Jackson; as Auditors, Professors Torrey and Oertel.

On motion of President Francis Brown the following resolution was unanimously adopted:

The American Oriental Society desires to express its thanks to the Johns Hopkins University and to the Johns Hopkins and University Clubs for the courtesies they have extended to the Society during this meeting; and to the Committee of Arrangements for the provision they have made for its entertainment.

The presentation of papers was then resumed in the following order:

Professor D. G. Lyon, of Harvard University: Another word on the structure of the Hammurabi code.—Remarks by Professor Jastrow.

Rev. Mr. M. G. Kyle, of Philadelphia: The 'Field of Abraham' in the geographical list of Shishak I.

Dr. T. Michelson, of Ridgefield, Conn.: The dialect of the

Girnār redaction of Asoka's Fourteen Edicts.—Remarks by Professor Bloomfield.

Dr. Mary I. Hussey, of Cambridge, Mass.: Notes on some cuneiform tablets in the Semitic Museum of Harvard University.

Professor J. A. Montgomery, of Philadelphia: Some Judæo-Aramaic mortuary inscriptions from the Hauran.—Remarks by Professor Jastrow, Dr. Yohannan, and Professor Bloomfield.

Professor H. Hyvernât, of the Catholic University of America: On some so-called prehistoric tablets lately discovered in Michigan.—Remarks by Professors Jastrow and Haupt.

Mr. G. V. Schick, of Baltimore: On the stems דָּיִם and דָּמָם.—Remarks of Professor Haupt.

Rev. Dr. F. A. Vanderburgh, of New York: A hymn to Mullil (*Cuneiform Texts*, vol. 15, plates 7, 8, and 9).—Remarks by Professor Jastrow.

Rev. Dr. A. Yohannan, of Columbia University: Inscriptions on some Persian tiles from Rhages.

Dr. F. R. Blake, of Johns Hopkins University: Vocalic *n*, *m*, *r*, *l* in Semitic.—Remarks by Dr. Michelson.

Dr. A. Ember, of Johns Hopkins University: Some Hebrew etymologies.

Professor P. Haupt, of Johns Hopkins University: The priestly blessing.

Professor M. Jastrow, Jr., of the University of Pennsylvania: The Babylonian astrological series *Anu-Enlil*; presented in abstract.

Professor J. A. Montgomery, of Philadelphia: A novel form of early Syriac script.

The Society adjourned at half past twelve to meet in Cambridge, Mass., on March 16, 17, and 18, 1911. (This date was afterwards changed by the Directors to April 20, 21, and 22 in Easter week.)

The following communications were read by title:

Mr. W. E. M. Aitken, of Courtright, Canada: 'Collation of two unpublished copies of the Standard inscription of Ashurnasirpal.

Professor G. A. Barton, of Bryn Mawr College:

- (a) The significance of Babylonian label tablets;
- (b) The Babylonian calendar in the oldest temple archives;
- (c) The location of the Land of Uz.

Dr. I. M. Casanowicz, of the National Museum at Washington: Note on some usages of לָבָן.

Professor M. W. Easton, of the University of Pennsylvania: The physics and psychology of the Vaiśeṣika system.

Dr. A. Ember, of Johns Hopkins University: On the transliteration of Egyptian.

Professor E. W. Fay, of the University of Texas: Two Indo-Iranian notes.

Dr. L. H. Gray, of Newark, N. J.: The Parsi-Persian *Burj Nāmah*, or Book of Omens from the Moon.

Professor F. Hirth, of Columbia University: On methods of studying Chinese.

Professor E. W. Hopkins, of Yale University: Mythological aspects of woods and mountains in the Sanskrit Epic.

Professor A. V. W. Jackson, of Columbia University: On the precise location of the Pass of the Caspian Gates.

Professor Hermann Jacobi, of the University of Bonn: When were the philosophical Sūtras of the Brahmans composed?

Mr. Charles Johnston, of New York: On a Buddhist catechism.

Professor C. R. Lanman, of Harvard University: Buddhaghosa and the Way of Purity.

Professor D. G. Lyon, of Harvard University: Some recent accessions to the Harvard Semitic Museum.

Professor W. Max Müller, of Philadelphia:

(a) The swords of the ancient Orient.

(b) An American scarab.

Professor J. D. Prince, of Columbia University: A hymn to the goddess Kir-gi-lu (*Cuneiform Texts*, vol. 15, plate 23).

Rev. Dr. W. Rosenau, of Johns Hopkins University:

(a) A word about Abraham Geiger;

(b) Some educational theories held by the Rabbis prior to the last century.

Professor C. C. Torrey, of Yale University:

(a) A bilingual inscription from Baal-Peor;

(b) The American School in Jerusalem.

PROCEEDINGS
OF THE
AMERICAN ORIENTAL SOCIETY,
AT ITS
MEETING IN CAMBRIDGE, MASSACHUSETTS.

1911.

The annual meeting of the Society, being the one hundred twenty-third meeting, was held in Cambridge, Massachusetts, on Wednesday and Thursday of Easter week, April 19th and 20th.

The following members were present at one or more of the sessions :

Aitken,	Gellot,	Lanman,	Reisner,
Arnold,	Haas,	Lyon,	Rudolph, Miss
Atkinson,	Haupt,	Moore, G. F.,	Steele,
Barret,	Hoyt, Miss,	Moore, Mrs. G. F.	Toy,
Bloomfield,	Hussey, Miss	Muss-Arnolt,	Vanderburgh,
Carus,	Jastrow,	Oertel,	Ward, W. H.
Channing, Miss,	Kellner,	Ogden, C. J.,	Warren, W. F.,
Clay,	Miss Kendrick,	Ogden, Miss	Winslow,
Edgerton,	Kent, R. G.	Oliphant,	Wood,
Ember,	Kyle,	Orne,	Total: 39.

The first session was held in the Phillips Brooks House, on Wednesday morning, beginning at eleven o'clock; the President, Professor Maurice Bloomfield, being in the chair.

The reading of the minutes of the meeting in Baltimore, March 31st-April 2nd, 1910, which had been already printed in the Journal (vol. 31, pp. i-ix), was dispensed with.

The Committee on Arrangements presented its report, through Professor Lyon, in the form of a printed programme. The succeeding sessions were appointed for Wednesday afternoon

at half past two, Thursday morning at half past nine, and Thursday afternoon at half past two. It was announced that a luncheon would be given to the Society by its resident members at the Colonial Club on Wednesday at one o'clock, and that arrangements had been made for a subscription dinner at the same place on Thursday evening at seven o'clock. The Colonial Club extended its courtesies to the members of the Society during their meeting.

REPORT OF THE CORRESPONDING SECRETARY.

The report of the Corresponding Secretary, Professor A. V. Williams Jackson, was presented by Dr. Haas as follows:

During the course of the year the Secretary has had pleasant correspondence not only with persons interested in Oriental matters who have inquired as to the aims and activities of the Society, but also with some fellow-members in more distant parts, such as Major C. C. Smith, in the Philippines, Dr. Edward P. Hume, of China, Dr. Justin E. Abbott, of Bombay, (who is now in this country), and with a number of colleagues in Europe. Letters of acceptance have been received from all those elected to membership at the last meeting.

Among the formal communications received may be mentioned invitations to participate in the International Congress of Orientalists, to be held at Athens in 1912, and in the Universal Races Congress, which will take place in London this July; a request for co-operation from the George Washington Memorial Association of America; and a letter from Professor Snouck Hurgronje, of Leiden, calling upon the members of the Society to aid in the publication of the *Encyclopaedia of Islam*. All of these communications have been duly acknowledged and laid before the Directors for consideration.

The Secretary has to record the loss of three members by death during the past year.

The Rev. Dr. Henry N. COBB, of New York, who was a member of the Society since 1875, died in April 1910, at an advanced age.

Mr. Thomas W. KINGSMILL, who died at Shanghai in the autumn of 1910, was a recent accession to our number, having joined the Society in 1909. Although an architect by profession, he was an indefatigable student and had considerable knowledge of the classical Chinese literature. He was the author of many articles on Chinese subjects and made several happy poetical translations from the Odes of the Shih Ching.

Professor William G. SUMNER, of Yale University, who died in April 1910, became a member of the Section for the Historical Study of Religions in the year 1898.

In closing this report, which will be presented during the absence of the Secretary on another journey to India and the East, he desires to express his appreciation of the willing co-operation of all concerned in the work and to add a hearty wish for the continued welfare of the Society.

REPORT OF THE TREASURER.

The annual report of the Treasurer, Professor F. W. Williams, was presented by the Recording Secretary, as follows:

RECEIPTS AND DISBURSEMENTS BY THE TREASURER OF THE AMERICAN ORIENTAL
SOCIETY FOR THE YEAR ENDING DEC. 31, 1910.

Receipts.

Balance from old account, Dec., 1909		\$ 715.04
Dues (183) for 1910	\$ 914.41	
„ (33) for other years	165.00	
„ (12) H. S. R. Section	24.00	1,103.41
Sales of Journal		295.69
State National Bank Dividends		127.93
		<u>\$ 2,242.07</u>

Expenditures.

Printing Journal, Volume XXX	\$ 1,102.38	
Sundry printing and addressing	65.87	
Typewriter	4.00	
Editor's Honorarium	100.00	
Treasurer, Postage	13.55	
Subvention to Orientalische Bibliographie	95.33	
Balance to new account	860.94	
		<u>\$ 2,242.07</u>

STATEMENT.

	1909	1910
Bradley Type Fond	\$ 2,781.29	\$ 2,914.35
Cotheal Fund	1,000.00	1,000.00
State National Bank Shares	1,950.00	1,950.00
Connecticut Savings Bank	6.64	6.90
National Savings Bank	12.59	13.07
Interest, Cotheal Fund	237.88	284.71
Cash in hand	24.69	
	<u>\$ 6,013.09</u>	<u>\$ 6,169.03</u>

The Treasurer in presenting his report for the year 1910 calls the attention of the members of the Society to a falling off in receipts from dues owing chiefly to an unusual number of delinquencies in paying the annual assessment. He takes occasion to remind them again that on failing to pay two years in succession they are dropped from the list of members unless good reason is given for a longer delay. The total receipts during the past year show a falling off (\$ 1527.03 against \$ 1813.37), leaving out the small sum of interest from the Savings Bank interest, which being left in the banks is removed from the Treasurer's debit and credit account and reported in the annual Statement. The cost of printing and mailing the Journal has been reduced from about \$1800 to \$1102.

REPORT OF THE AUDITING COMMITTEE.

The report of the Auditing Committee, Professors Torrey and Oertel, was presented by the Recording Secretary, as follows:

We hereby certify that we have examined the account book of the Treasurer of this Society and have found the same correct, and that the foregoing account is in conformity therewith. We have also compared the entries in the cash book with the vouchers and bank and pass books and have found all correct.

CHARLES C. TORREY, } *Auditors.*
HANNS OERTEL, }

NEW HAVEN, Conn., April 10, 1911.

REPORT OF THE LIBRARIAN.

The Librarian, Professor Hanns Oertel, presented his report as follows:

By arrangement with the Librarian of Yale University the work of accessioning of new books was carried on during the past year by the regular staff of the University Library. In the same way the University Library took charge of the sales of the Journal, covering all necessary correspondence and the collecting of bills. For this service the Society paid a nominal charge.

The Library has received from Professor Jewett one hundred dollars. this being the amount of his honorarium as editor of the Journal and a further sum of one hundred dollars for defraying the expenses of the Library.

REPORT OF THE EDITORS.

The report of the Editors, Professors Oertel and Jewett, was presented by Professor Oertel, as follows:

From the financial point of view the printing of the Journal abroad has resulted in a decided saving (see the Treasurer's Report). It has also been possible to use a greater variety of Oriental type without any appreciable increase of cost, and, in spite of the distance, the four parts of the Journal have appeared fairly punctually at the beginning of each quarter. But as it is manifestly impossible to allow authors more than two proofs, the editors would urge contributors to prepare their MS. carefully for the press, to make corrections as plainly as possible, and to avoid extensive alterations and additions. If additions are unavoidable; they should be added at the end of the article.

ELECTION OF MEMBERS.

The following persons, recommended by the Directors, were elected corporate members of the Society:

CORPORATE MEMBERS.

Rev. Mr. D. F. Bradley, Cleveland, O.
 Professor R. E. Brünnow, Princeton, N. J.
 Mrs. Francis W. Dickins, Washington, D. C.
 Mr. E. A. Gellot, Ozone Park, L. I., N. Y.
 Mr. W. S. Howell, New York, N. Y.
 Mr. R. L. Kortkamp, Hillsboro, Ill.
 Rev. Dr. E. S. Rousmaniere, Boston, Mass.
 Mr. R. H. Rucker, New York, N. Y.
 Mr. E. B. Soane, Muhammerah, Persian Gulf.
 Rev. Mr. H. B. Vanderbogart, Middletown, Conn.
 Professor J. E. Wishart, Xenia, O.
 Mr. R. Zimmermann, Berlin, Germany.

OFFICERS FOR 1910-1911.

The committee appointed in Baltimore to nominate officers for the ensuing year, consisting of Professors E. Washburn Hopkins, Christopher Johnston, and Barrett, reported through Professor Barrett.

The election of a Secretary for the Section for Religions was postponed to Friday morning.

The officers nominated by the committee were duly elected, as follows:

President—Professor George F. Moore, of Cambridge.

Vice-Presidents—Professor Paul Haupt, of Baltimore; Professor Robert F. Harper, of Chicago; Professor Charles C. Torrey, of New Haven.

Corresponding Secretary—Professor A. V. W. Jackson, of New York.

Recording Secretary—Dr. George C. O. Haas, of New York.

Treasurer—Professor Frederick Wells Williams, of New Haven.

Librarian—Professor Albert T. Clay, of New Haven.

Directors—The officers above named, and Professors Crawford H. Toy and Charles R. Lanman, of Cambridge; E. Washburn Hopkins and Hanns Oertel, of New Haven; Maurice Bloomfield, of Baltimore; George A. Barton, of Bryn Mawr; Dr. William Hayes Ward, of New York.

The President, Professor Maurice Bloomfield, of Johns Hopkins University, delivered the annual address on "The Religion of the Sikhs".

After the Presidential address the Society proceeded to the hearing of communications.

Professor Paul Haupt, of Johns Hopkins University, presented a communication on Some Difficult Passages in the Cuneiform Account of the Deluge.

At one o'clock the Society took a recess until half past two.

SECOND SESSION.

At half past two o'clock the Society reassembled in the Phillips

Brooks House, and the presentation of communications was resumed, as follows:

Miss S. F. Hoyt, of Baltimore: The Name of the Red Sea.

Professor R. G. Kent, of the University of Pennsylvania: The Etymology of Syriac *dastabīrā*.

Professor C. R. Lanman, of Harvard University: Buddha-ghosa's Way of Purity.

Dr. C. J. Ogden, of Columbia University: References to the Caspian Gates in Ammianus Marcellinus.

Miss E. S. Ogden, of Albany: A Conjectural Interpretation of *Cuneiform Texts* (v 81. 7—27). — Remarks were made by Professors Jastrow and Bloomfield.

The Rev. Dr. F. A. Vanderburgh, of Columbia University: The Babylonian Legends published in *Cuneiform Texts* (xv. 1-6.)

Professor M. Jastrow, Jr.: The Chronology of Babylonia and Assyria. — Remarks were made by Mr. Kyle and by Professor Wiener.

At five o'clock the Society adjourned to Thursday morning, at half past nine.

THIRD SESSION.

The Society met at quarter before ten o'clock in the Phillips Brooks House, President Bloomfield presiding. The reading of communications was resumed as follows:

Dr. Edgerton, of Johns Hopkins University: Later history of the Sanskrit suffix *ka*. — Remarks by Professors Lanman and Bloomfield, and Dr. C. J. Ogden.

Dr. A. Ember, of Johns Hopkins University: Semito-Egyptian words. — Remarks by Professor Haupt, Mr. Kyle, and Professor Bloomfield.

Professor S. G. Oliphant, of Olivet College: The elliptic dual and the dual dvandva. — Remarks by Dr. Edgerton, Dr. C. J. Ogden, and Professor Bloomfield.

The President announced that a telephone message had just been received from Colonel Thomas Wentworth Higginson, one of the oldest members of the Society, sending his greetings to the Society and regretting that he was prevented by the inclemency of the weather from attending the sessions today. It was voted that the Society send its greetings to Colonel Higginson and express its regret that he was unable to be present. Professor Lanman was asked to communicate this vote to Colonel Higginson, and also to send a salutation from the Society to Professor W. W. Goodwin. Professor Lyon was requested to do the same to Professor C. H. Toy, who has been for forty years a member of the Society.

Mr. E. A. Gellot: Monosyllabism of the Semitic Languages.
 — Remarks by Professors Lyon, Haupt, Kent, and Bloomfield.
 Professor Paul Haupt, a Vice-President of the Society, took the chair.

Professor M. Bloomfield, of Johns Hopkins University: Final account of the work on Rig-Veda Repetitions.

Miss S. F. Hoyt, of Baltimore: The Holy One in Psalm 16: 10.
 — Remarks by Dr. Ember.

Dr. B. B. Charles, of Philadelphia: The autobiography of Ibn Sinā; presented by title by Professor Jastrow.

Dr. A. Ember, of Johns Hopkins University: The etymologies of Aramaic *lehēnā* and Hebrew *gāhar*, *šélem*, etc.

At one o'clock the Society took a recess until half past two o'clock.

FOURTH SESSION.

The Society met at a quarter before three o'clock in the lecture-room of the Semitic Museum, with Vice-President Haupt in the chair. A communication was presented by Miss S. F. Hoyt, of Baltimore: The etymology of *religion*.

At three o'clock President Bloomfield took the chair. Professor Oertel reported for the Directors that they had appointed the next annual meeting of the Society to be held in New York, on Tuesday, Wednesday, and Thursday of Easter week, April 9th, 10th, and 11th, 1912.

They had reappointed as Editors of the Journal, Professors Oertel and Jewett.

The Directors further recommended the adoption of the following resolutions concerning the Section for the Historical Study of Religions:

1. That the American Oriental Society emphasize more forcibly in the future the inclusion of the historical study of religions in its scope.
2. To discontinue the separate Section for the Historical Study of Religions.
3. To invite the members of the present Section for the Historical Study of Religions to become corporate members of the Society.
4. That one special session of the meeting be devoted to papers dealing with the historical study of religion in its widest scope (including primitive religions, European religions, etc.)
5. That the Constitution be amended by the omission of the words "Secretary of the Section for the Historical Study of Religions" in Article V, by the omission of Article X entire, and by the renumbering of Article XI as Article X; that the By-Laws be amended by the omission of Article IX and the renumbering of Article X as Article IX.

It was moved that the report be adopted, and that the proposed changes in the Constitution and By-Laws be made. This motion was carried, *nemine contradicente*.

Professor Oertel moved a vote of thanks to the authorities of Harvard University, to the Governors of the Colonial Club, and to the Committee of Arrangements, Professors Lyon and Lanman.

On motion of Dr. Haas, the thanks of the Society were tendered to Professor Oertel for his services as Librarian.

The President, Professor Bloomfield, announced that he had appointed as a Committee on Arrangements for the next annual meeting Professors Gottheil and Jackson, and Dr. Haas, of Columbia University; as a Committee to nominate officers to be elected at the next annual meeting, Professors Lanman and Lyon, of Harvard University, and Dr. C. J. Ogden, of Columbia; as Auditors to audit the accounts of the Treasurer, Professors Torrey and Oertel, of Yale University.

Communications were presented as follows:

Dr. W. H. Ward, of New York: The Zadokite document.

Professor George Moore, of Harvard University: A hitherto unknown Jewish sect; Schechter, *Documents of Jewish Sectaries I*.

Professor D. G. Lyon, of Harvard University: Notes on a Canaanite cemetery.

Miss A. Rudolph, of Cleveland: The outlook for Oriental studies in Cleveland.

Professor W. F. Warren, of Boston University: Why does Plutarch describe the moon as bi-perforate?

At quarter after five o'clock the Society adjourned to meet in New York, on Tuesday, of Easter week, April 9th, 1912.

The following communications were read by title:

Rev. Dr. J. E. Abbott: The Fire Temple at Baku and its inscriptions.

Professor K. Asakawa, of Yale University: The parallels of the Frankish *precaria* and *beneficium* in the mediaeval history of Japan.

Professor G. A. Barton, of Bryn Mawr College:

- (a) On the etymology of Ishtar;
- (b) Notes on Babylonian and Assyrian systems of measures;
- (c) Improvements in the renderings of the Blau monuments, the Scheil tablet, and the Hoffman tablet (J. A. O. S. 22, 118—128; 23, 21—28).

Dr. F. R. Blake, of Johns Hopkins University:

- (a) The original meaning of the Semitic intransitive verbal forms;

(b) The Hebrew metheg.

(c) Relative clauses in Tagalog.

Rev. Mr. J. L. Chandler, of Madura, Southern India
Hinduism as taught in Hindu Schools.

Dr. B. B. Charles, of Philadelphia: The autobiography of
Ibn Sīnā.

Mr. C. E. Conant, of the University of Chicago: Monosyllabic
roots in Pampanga.

Dr. A. Ember, of Johns Hopkins University:

(b) Scriptio plena of the Hebrew imperfect *iqtol*.

Professor E. W. Fay, of the University of Texas: Indo-
Iranian word-studies.

Professor Paul Haupt, of Johns Hopkins University:

(b) The four Assyrian stems *la'u*;

(d) Biblical and Oriental articles in the new edition of the
Encyclopaedia Britannica, and the Islamic Encyclo-
paedia.

Professor Margolis, of the Dropsie College: The Washington
manuscript of Joshua.

Professor W. Max Müller, of the University of Pennsylvania
General account of a papyrus collection recently acquired by
the University of Pennsylvania Museum.

Professor J. D. Prince, of Columbia University: A divine
lament (*Cuneiform Texts*, xv. 24, 25).

Mr. G. P. Quackenbos, of New York: An unedited Sanskrit
poem of Mayūra.

Rev. Dr. W. Rosenau, of Johns Hopkins University:

(a) The term תורה in the Talmud.

(b) The Talmudic proclitic קט.

(c) Some Talmudic compounds.

Professor G. Sverdrup, Jr., of Augsburg Seminary, Minnea-
polis: A letter from the Mahdi to General Gordon.

Dr. A. Yohannan, of Columbia University: Some references
in Arab writers to the ancient city of Merv.

LIST OF MEMBERS.

The number placed after the address indicates the year of election.

I. HONORARY MEMBERS.

- M. AUGUSTE BARTH, Membre de l'Institut, Paris, France. (Rue Garancière, 10.) 1898.
- Dr. RAMKRISHNA GOPAL BHANDARKAR, C. I. E., Dekkan Coll., Poona, India. 1887.
- JAMES BURGESS, LL.D., 22 Seton Place, Edinburgh, Scotland. 1899.
- Prof. CHARLES CLERMONT-GANNEAU, 1 Avenue de l'Alma, Paris. 1909.
- Prof. T. W. RHYS DAVIDS, Harboro' Grange, Ashton-on-Mersey, England. 1907.
- Prof. BERTHOLD DELBRÜCK, University of Jena, Germany. 1878.
- Prof. FRIEDRICH DELITZSCH, University of Berlin, Germany. 1893.
- Canon SAMUEL R. DRIVER, Oxford, England. 1909.
- Prof. ADOLPH ERMAN, Berlin-Steglitz-Dahlem, Germany, Peter Lennéstr. 72. 1903.
- Prof. RICHARD GARBE, University of Tübingen, Germany. (Biesinger Str. 14.) 1902.
- Prof. KARL F. GELDNER, University of Marburg, Germany. 1905.
- Prof. IGNAZ GOLDZIEHER, vii Holló-Utcza 4, Budapest, Hungary. 1906.
- GEORGE A. GRIERSON, C.I.E., D.Litt., I.C.S. (retired), Rathfarnham, Camberley, Surrey, England. Corporate Member, 1899; Hon., 1905.
- Prof. IGNAZIO GUIDI, University of Rome, Italy. (Via Botteghe Oscure 24.) 1893.
- Prof. HERMANN JACOBI, University of Bonn, 59 Niebuhrstrasse, Bonn, Germany. 1909.
- Prof. HENDRIK KERN, 45 Willem Barentz-Straat, Utrecht, Netherlands. 1893.
- Prof. ALFRED LUDWIG, University of Prague. Bohemia. (Königliche Weinberge, Krameriusgasse 40.) 1898.
- Prof. GASTON MASPERO, Collège de France, Paris, France. (Avenue de l'Observatoire, 24.) 1898.
- Prof. EDUARD MEYER, University of Berlin, Germany. (Gross-Lichterfelde-West, Mommsenstr. 7) 1908.
- Prof. THEODOR NÖLDEKE, University of Strassburg, Germany. (Kalbsgasse 16.) 1878.
- Prof. HERMANN OLDENBERG, University of Göttingen, Germany. 1910. (27/29 Nikolausberger Weg.)
- Prof. EDUARD SACHAU, University of Berlin, Germany. (Wormserstr. 12, W.) 1887.

- EMILE SENART, Membre de l'Institut de France, 18 Rue François I^{er}, Paris, France. 1908.
 Prof. ARCHIBALD H. SAYCE, University of Oxford, England. 1893.
 Prof. JULIUS WELHAUSEN, University of Göttingen, Germany. (Weberstr. 18 a.) 1902.
 Prof. ERNST WINDISCH, University of Leipzig, Germany. (Universitätsstr. 15.) 1890. [Total, 26]

II. CORPORATE MEMBERS.

Names marked with * are those of life members.

- Rev. Dr. JUSTIN EDWARDS ABBOTT, Irvington, N. Y. 1900.
 Dr. CYRUS ADLER, 2041 North Broad St., Philadelphia, Pa. 1884.
 WILLIAM E. M. AITKEN, 7 Howland St., Cambridge, Mass. 1910.
 F. STURGES ALLEN, 246 Central St., Springfield, Mass. 1904.
 Miss MAY ALICE ALLEN, Williamstown, Mass. 1906.
 Prof. WILLIAM R. ARNOLD, Theological Seminary, Cambridge, Mass. 1893.
 Prof. KANICHI ASAKAWA (Yale Univ.), 870 Elm St., New Haven, Conn. 1904.
 Rev. EDWARD E. ATKINSON, 94 Brattle St., Cambridge, Mass. 1894.
 Hon. SIMEON E. BALDWIN, LL.D., 44 Wall St., New Haven, Conn. 1898.
 Prof. LEROY CARR BARRET, Trinity College, Hartford, Conn. 1903.
 Prof. GEORGE A. BARTON, Bryn Mawr College, Bryn Mawr, Pa. 1888.
 Prof. L. W. BATTEN, 232 East 11th St., New York. 1894.
 Prof. HARLAN P. BEACH (Yale Univ.), 346 Willow St., New Haven, Conn. 1898.
 Prof. WILLIS J. BEECHER, D.D., Theological Seminary, Auburn, N. Y. 1900.
 Dr. HAROLD H. BENDER, Princeton University, Princeton New Jersey. 1906.
 Rev. JOSEPH F. BERG, Port Richmond, S. I., N. Y. 1893.
 Prof. GEORGE R. BERRY, Colgate University, Hamilton, N. Y. 1907.
 Prof. JULIUS A. BEWER (Union Theological Seminary), Broadway and 120th St., New York, N. Y. 1907.
 Dr. WILLIAM STURGIS BIGELOW, 60 Beacon St., Boston, Mass. 1894.
 Prof. JOHN BINNEY, Berkeley Divinity School, Middletown, Conn. 1887.
 Rev. Dr. SAMUEL H. BISHOP, 500 West 122d St., New York, N. Y. 1898.
 Dr. GEORGE F. BLACK, N. Y. Public Library, Fifth Ave. and 42d St., New York, N. Y. 1907.
 Dr. FRANK RINGGOLD BLAKE, Windsor Hills, Baltimore, Md.
 Rev. PHILIP BLANC, St. Johns Seminary, Brighton, Md. 1907.
 Rev. Dr. DAVID BLAUSTEIN, The New York School of Philanthropy, 105 East 22d St., New York, N. Y. 1891.
 Dr. FREDERICK J. BLISS, Protest. Syrian College, Beirut, Syria. 1898.
 FRANCIS B. BLODGETT, General Theological Seminary, Chelsea Square, New York, N. Y. 1906.
 Prof. CARL AUGUST BLOMGREN, Augustana College and Theol. Seminary, Rock Island, Ill. 1900.
 Prof. MAURICE BLOOMFIELD, Johns Hopkins University, Baltimore, Md. 1881.
 Dr. ALFRED BOISSIER, Le Rivage près Chambésy, Switzerland. 1897.

- Dr. GEORGE M. BOLLING (Catholic Univ. of America), 1784 Corcoran St., Washington, D. C. 1896.
- Prof. CORNELIUS B. BRADLEY, 2639 Durant Ave., Berkeley, Cal. 1910.
- Rev. Dr. DAN FREEMAN BRADLEY, 2905 West 14th St., Cleveland, Ohio. 1911.
- Prof. RENWARD BRANDSTETTER, Reckenbühl 18, Villa Johannes, Lucerne, Switzerland. 1908.
- Prof. JAMES HENRY BREASTED, University of Chicago, Chicago, Ill. 1891.
- Prof. CHAS. A. BRIGGS (Union Theological Sem.), Broadway and 120th St., New York, N. Y. 1879.
- Prof. C. A. BRODIE BROCKWELL, McGill University, Montreal, Canada. 1906.
- Pres. FRANCIS BROWN (Union Theological Sem.), Broadway and 120th St., New York, N. Y. 1881.
- Rev. GEORGE WILLIAM BROWN, Jubbulpore, C. P., India. 1909.
- Prof. RUDOLPH E. BRÜNNOW (Princeton Univ.) 49 Library Place, Princeton, N. J. 1911.
- Prof. CARL DARLING BUCK, University of Chicago, Chicago, Ill. 1892.
- HAMMOND H. BUCK, Division Sup't. of Schools, Alfonso, Cavite Provinces, Philippine Islands. 1908.
- ALEXANDER H. BULLOCK, State Mutual Building, Worcester, Mass. 1910.
- Dr. EUGENE WATSON BURLINGAME, 118 McKean House, West Philadelphia, Pa. 1910.
- CHARLES DANA BURRAGE, 85 Ames Building, Boston, Mass. 1909.
- Prof. HOWARD CROSBY BUTLER, Princeton University, Princeton, N. J. 1908.
- Rev. JOHN CAMPBELL, Kingsbridge, New York, N. Y. 1896.
- Pres. FRANKLIN CARTER, LL.D. Williamstown Mass.
- Dr. PAUL CARUS, La Salle, Illinois. 1897.
- Dr. I. M. CASANOWICZ, U. S. National Museum, Washington, D. C. 1893.
- Rev. JOHN L. CHANDLER, Madura, Southern India. 1899.
- Miss EVA CHANNING, Hemenway Chambers, Boston, Mass. 1883.
- Dr. F. D. CHESTER, The Bristol, Boston, Mass. 1891.
- WALTER E. CLARK, 37 Walker St., Cambridge, Mass. 1906.
- Prof. ALBERT T. CLAY (Yale Univ.) New Haven, Conn. 1907.
- *ALEXANDER SMITH COCHRAN, Yonkers, N. Y. 1908.
- *GEORGE WETMORE COLLES, 62 Fort Greene Place, Brooklyn, N. Y. 1882.
- Prof. HERMANN COLLITZ, Johns Hopkins University, Baltimore, Md. 1887.
- Miss ELIZABETH S. COLTON, 23 Park St., Easthampton, Mass. 1896.
- Prof. C. EVERETT CONANT, Indiana University, Bloomington, Indiana. 1905.
- WILLIAM MERRIAM CRANE, 16 East 37th St., New York, N. Y. 1902.
- Rev. CHARLES W. CURRIER, 913 Sixth St., Washington, D. C. 1904.
- Dr. HAROLD S. DAVIDSON, 1700 North Payson St., Baltimore, Md. 1908.
- Prof. JOHN D. DAVIS, Princeton Theological Seminary, Princeton, N. J. 1888.
- IRVING C. DEMAREST, 54 Essex St., Hackensack, N. J. 1909.
- Prof. ALFRED L. P. DENNIS, Madison, Wis. 1900.
- JAMES T. DENNIS, University Club, Baltimore, Md. 1900.
- Mrs. FRANCIS W. DICKINS, 2015 Columbia Road, Washington, D. C. 1911.
- Rev. D. STUART DODGE, 99 John St., New York, N. Y. 1867.
- Dr. HARRY WESTBROOK DUNNING, 5 Kilsyth Road, Brookline, Mass. 1894.
- Prof. M. W. EASTON, 224 South 43d St., Philadelphia, Pa. 1872.

- Dr. FRANKLIN EDGERTON, Johns Hopkins University, Baltimore, Md. 1910.
 Prof. FREDERICK G. C. EISELEN, Garrett Biblical Inst., Evanston, Ill. 1901.
 Mrs. WILLIAM M. ELLICOTT, 106 Ridgewood Road, Roland Park, Md. 1897.
 Prof. LEVI H. ELWELL, Amherst College, 5 Lincoln Ave., Amherst, Mass. 1883.
 Rev. Prof. C. P. FAGNANI, 772 Park Ave., New York, N. Y. 1901.
 Prof. EDWIN WHITFIELD FAY (Univ. of Texas), 200 West 24th St., Austin, Texas. 1888.
 Prof. HENRY FERGUSON, St. Paul's School, Concord, N. H. 1876.
 Dr. JOHN C. FERGUSON, 16 Love Lane, Shanghai, China. 1900.
 *Lady CAROLINE DE FILIPPI FITZGERALD, 167 Via Urbana, Rome, Italy. 1886.
 Rev. WALLACE B. FLEMING, Maplewood, N. J. 1906.
 Rev. THEODORE C. FOOTE, Rowland Park, Maryland. 1900.
 Prof. HUGHELL E. W. FOSBROKE, 9 Acacia St., Cambridge, Mass. 1907.
 Dr. LEO J. FRACHTENBERG, Hartley Hall, Columbia University, New York, N. Y. 1907.
 Prof. JAS. EVERETT FRAME (Union Theological Sem.), Broadway and 120th St., New York, N. Y. 1892.
 Dr. CARL FRANK, 23 Montague St., London, W. C., England. 1909.
 Dr. HERBERT FRIEDENWALD, 356, 2nd Ave., New York, N. Y. 1909.
 Prof. ISRAEL FRIEDLAENDER (Jewish Theological Sem.), 61 Hamilton Place, New York, N. Y. 1904.
 ROBERT GARRETT, Continental Building, Baltimore, Md. 1903.
 Miss MARIE GELBACH, Prospect Terrace, Park Hill, Yonkers, N. Y. 1909.
 EUGENE A. GELLOT, 1420 Chester Ave., Ozone Park, L. I., N. Y., 1911.
 Prof. BASIL LANNEAU GILDERSLEEVE, Johns Hopkins University, Baltimore, Md. 1858.
 GEV. WM. GILMORE, 11 Waverly Place, New York, N. Y. 1909.
 Prof. WILLIAM WATSON GOODWIN (Harvard Univ.), 5 Follen St., Cambridge, Mass. 1857.
 Prof. RICHARD J. H. GOTTHEIL, Columbia University, New York, N. Y. 1886.
 Miss FLORENCE A. GRAGG, 26 Maple Ave., Cambridge, Mass. 1906.
 Prof. ELIHU GRANT (Smith College), Northampton, Mass. 1907.
 Mrs. ETHEL WATTS MUMFORD GRANT, 31 West 81st St., New York, N. Y. 1904.
 Dr. LOUIS H. GRAY, 291 Woodside Ave., Newark, N. J. 1897.
 Mrs. LOUIS H. GRAY, 291 Woodside Ave., Newark, N. J. 1907.
 Miss LUCIA C. GRAEME GRIEVE, 462 West 151st St., New York, N. Y. 1894.
 Prof. LOUIS GROSSMANN (Hebrew Union College), 2212 Park Ave., Cincinnati, O. 1890.
 Rev. Dr. W. M. GROTON, Dean of the Protestant Episcopal Divinity School, 5000 Woodlawn Ave., Philadelphia, Pa. 1907.
 Prof. CHARLES B. GULICK (Harvard Univ.), 59 Fayerweather St. Cambridge, Mass. 1899.
 *Dr. GEORGE C. O. HAAS, 254 West 136th St., New York, N. Y. 1903.
 Miss LUISE HAESSLER, 1230 Amsterdam Ave., New York, N. Y. 1909.
 Dr. CARL C. HANSEN, Si Phya Road, Bangkok, Siam. 1902.
 PAUL V. HARPER, 59th St. and Lexington Ave., Chicago, Ill. 1906.

- Prof. ROBERT FRANCIS HARPER, University of Chicago, Chicago, Ill. 1886.
Prof. SAMUEL HART, D.D., Berkeley Divinity School, Middletown, Conn. 1879.
Prof. PAUL HAUPT (Johns Hopkins Univ.), 2511 Madison Ave., Baltimore, Md. 1883.
Dr. HENRY HARRISON HAYNES, 6 Ellery St., Cambridge, Mass. 1892.
Prof. HERMANN V. HILPRECHT, 807 Spruce St., Philadelphia, Pa. 1887.
Rev. Dr. WILLIAM J. HINKE, 28 Court St., Auburn, N. Y. 1907.
Prof. FRIEDRICH HIRTH (Columbia Univ.), 501 West 113th St., New York, N. Y. 1903.
Prof. CHARLES T. HOCK (Theological Sem.), 220 Liberty St., Bloomfield, N. J. 1903.
*Dr. A. F. RUDOLF HOERNLE, 8 Northmoor Road, Oxford, England. 1893.
Rev. Dr. HUGO W. HOFFMANN, 306 Rodney St., Brooklyn, N. Y. 1899.
*Prof. E. WASHBURN HOPKINS (Yale Univ.), 299 Lawrence St., New Haven, Conn. 1881.
WILSON S. HOWELL, 416 West 118th St., New York, N. Y. 1911.
HENRY R. HOWLAND, Natural Science Building, Buffalo, N. Y. 1907.
Miss SARAH FENTON HOYT, 17 East 95th St., New York, N. Y. 1910.
Dr. EDWARD H. HUME, Changsha, Hunan, China. 1909.
Miss ANNIE K. HUMPHREY, 1114 14th St., Washington, D. C. 1873.
Miss MARY INDA HUSSEY, 4 Bryant St., Cambridge, Mass. 1901.
*JAMES HAZEN HYDE, 18 rue Adolphe Yvon, Paris, France. 1909.
Prof. HENRY HYVERNAT (Catholic Univ. of America), 3405 Twelfth St., N. E. (Brookland), Washington, D. C. 1889.
Prof. A. V. WILLIAMS JACKSON, Columbia University, New York, N. Y. 1885.
Prof. MORRIS JASTROW (Univ. of Pennsylvania), 248 South 23d St. Philadelphia, Pa. 1886.
Rev. HENRY F. JENKS, Canton Corner, Mass. 1874.
Prof. JAMES RICHARD JEWETT, (Harvard Univ.) Cambridge, Mass. 1887.
Prof. CHRISTOPHER JOHNSTON (Johns Hopkins Univ.), 21 West 20th St., Baltimore, Md. 1889.
ARTHUR BERRIEDALE KEITH, Colonial Office, London, S. W., England. 1908.
Prof. MAXIMILIAN L. KELLNER, Episcopal Theological School, Cambridge, Mass. 1886.
Miss ELIZA H. KENDRICK, 45 Hunnewell Ave., Newton, Mass. 1896.
Prof. CHARLES FOSTER KENT (Yale Univ.), 406 Humphrey St., New Haven, Conn. 1890.
Prof. ROLAND G. KENT, University of Pennsylvania, Philadelphia, Pa. 1910.
Prof. GEORGE L. KITTREDGE (Harvard Univ.), 9 Hilliard St., Cambridge, Mass. 1899.
Miss LUCILE KOHN, 1138 Madison Ave., New York, N. Y. 1907.
RICHARD LEE KORTKAMP, Hillsboro, Ill.
Rev. Dr. M. G. KYLE, 1132 Arrow St., Frankford, Philadelphia, Pa. 1909.
Prof. GEORGE T. LADD (Yale Univ.), 204 Prospect St., New Haven, Conn. 1898.
M. A. LANE, 451 Jackson Boulevard, Chicago, Ill. 1907.
*Prof. CHARLES ROCKWELL LANMAN (Harvard Univ.), 9 Farrar St., Cambridge, Mass. 1876.

- Dr. BERTHOLD LAUFER, Field Museum of Natural History, Chicago, Ill. 1900.
- LEVON J. K. LEVONIAN, Syrian Protest. College, Beirut, Syria. 1909.
- Prof. CHARLES E. LITTLE (Vanderbilt Univ.), 19 Lindsley Ave., Nashville, Tenn. 1901.
- PERCIVAL LOWELL, 53 State St., Boston, Mass. 1893.
- Rev. FERDINAND LUGSCHEIDER, 38 Blecker St., New York, N. Y. 1908.
- Dr. ALBERT HOWE LYBYER, 153 South Cedar Ave., Oberlin, Ohio. 1909.
- *BENJAMIN SMITH LYMAN, 708 Locust St., Philadelphia, Pa. 1871.
- Prof. DAVID GORDON LYON, Harvard Univ. Semitic Museum, Cambridge, Mass. 1882.
- ALBERT MORTON LYTHERG, Metropolitan Museum of Art, New York, N. Y. 1899.
- Prof. DUNCAN B. MACDONALD, Hartford Theological Seminary, Hartford, Conn. 1893.
- WILLIAM E. W. MACKINLAY, 1st Lieut. 11th U. S. Cavalry, Fort Ethan Allen, Vt. 1904.
- Rev. Dr. ALBERT A. MADSEN, 22 Courtney Ave., Newburgh, N. Y. 1906.
- Prof. HERBERT W. MAGOUN, 70 Kirkland St., Cambridge, Mass. 1887.
- Prof. MAX L. MARGOLIS, 1519 Diamond St., Philadelphia, Pa. 1890.
- Prof. ALLAN MARQUAND, Princeton University, Princeton, N. J. 1888.
- Prof. WINFRED ROBERT MARTIN, Hispanic Society of America, West 156 th St., New York, N. Y. 1889.
- ISAAC G. MATTHEWS (McMaster Univ.), 509 Brunswick Ave., Toronto, Canada. 1906.
- C. O. SYLVESTER MAWSON, 64 West 144th St., New York, N. Y. 1910.
- J. RENWICK METHENY, "Druid Hill," Beaver Falls, Pa. 1907.
- MARTIN A. MEYER, 2109 Baker St., San Francisco, Cal. 1906.
- Dr. TRUMAN MICHELSON, Bureau of American Ethnology, Washington, D. C. 1899.
- Mrs. HELEN L. MILLION (*née* LOVELL), Hardin College, Mexico, Mo. 1892.
- Prof. LAWRENCE H. MILLS (Oxford Univ.), 218 Iffley Road, Oxford, England. 1881.
- Prof. J. A. MONTGOMERY (P. E. Divinity School), 6806 Green St., Germantown, Pa. 1903.
- Prof. GEORGE F. MOORE (Harvard Univ.), 3 Divinity Ave., Cambridge, Mass. 1887.
- Dr. JUSTIN HARTLEY MOORE, 549 Springdale Ave, East Orange, N. J. 1904.
- *Mrs. MARY H. MOORE, 3 Divinity Ave., Cambridge, Mass. 1902.
- CHARLES J. MORSE, 1825 Asbury Ave., Evanston, Ill. 1909.
- Prof. EDWARD S. MORSE, Salem, Mass. 1894.
- Rev. HANS K. MOUSSA, 316 Third St., Watertown, Wis. 1906.
- Prof. W. MAX MÜLLER, 4308 Market St., Philadelphia, Pa. 1905.
- Mrs. ALBERT H. MUNSELL, 65 Middlesex Road, Chestnut Hill, Mass. 1908.
- Dr. WILLIAM MUSS-ARNOLT, Public Library, Boston, Mass. 1887.
- Rev. JAS. B. NIES, Care London City and Midland Bank, Threadneedle St., London, England. 1906.
- Rev. WILLIAM E. NIES, Port Washington, Long Island, N. Y. 1908.
- Rt. Rev. Mgr. DENNIS J. O'CONNELL, DD. St. Mary's Cathedral, San Francisco, Cal. 1903.

- Prof. HANNS OERTEL (Yale Univ.), 2 Phelps Hall, New Haven, Conn. 1890.
Dr. CHARLES J. OGDEN, 250 West 88th St., New York, N. Y. 1906.
Miss ELLEN S. OGDEN, St. Agnes School, Albany, N. Y. 1898.
Prof. SAMUEL G. OLIPHANT, Olivet College, Olivet, Mich. 1906.
ALBERT TENEYCK OLMSTEAD, Princeton Preparatory School, Princeton, N. J. 1909.
Prof. PAUL OLTRAMARE (Univ. of Geneva), Ave. de Bosquets, Servette, Genève, Switzerland. 1904.
*ROBERT M. OLYPHANT, 160 Madison Ave., New York, N. Y. 1861.
Dr. JOHN ORNE, 104 Ellery St., Cambridge, Mass. 1890.
Rev. Dr. CHARLES RAY PALMER, 562 Whitney Ave., New Haven, Conn. 1900.
Prof. LEWIS B. PATON, Hartford Theological Seminary, Hartford, Conn. 1894.
Prof. WALTER M. PATTON, Wesleyan Theological College, Montreal, Canada. 1903.
Dr. CHARLES PEABODY, 197 Brattle St., Cambridge, Mass. 1892.
Prof. ISMAR J. PERITZ, Syracuse University, Syracuse, N. Y. 1894.
Prof. EDWARD DELAVAN PERRY (Columbia Univ.), 542 West 114th St., New York, N. Y. 1879.
Rev. Dr. JOHN P. PETERS, 225 West 99th St., New York, N. Y. 1882.
WALTER PETERSEN, Bethany College, Lindsborg, Kansas. 1909.
Prof. DAVID PHILIPSON (Hebrew Union College), 3947 Beechwood Ave., Rose Hill, Cincinnati, O. 1889.
Dr. WILLIAM POPPER, University of California, Berkeley, Cal. 1897.
Prof. IRA M. PRICE, University of Chicago, Chicago, Ill. 1887.
Prof. JOHN DYNELEY PRINCE (Columbia Univ.), Sterlington, Rockland Co., N. Y. 1888.
GEORGE PAYN QUACKENBOS, 331 West 28th St., New York, N. Y. 1904.
Prof. GEORGE ANDREW REISNER, Harvard University, Cambridge, Mass. 1891.
BERNARD REVEL, 2113 North Camac St., Philadelphia, Pa. 1910.
Prof. PHILIP M. RHINELANDER (Episcopal Theological Sem.), 26 Garden St., Cambridge, Mass. 1908.
ERNEST C. RICHARDSON, Library of Princeton University, Princeton, N. J. 1900.
J. NELSON ROBERTSON, 294 Avenue Road, Toronto, Ont. 1902
EDWARD ROBINSON, Metropolitan Museum of Art, New York, N. Y. 1894.
Prof. FRED NORRIS ROBINSON (Harvard Univ.) Longfellow Park, Cambridge, Mass. 1900.
Rev. Dr. GEORGE LIVINGSTON ROBINSON (McCormick Theol. Sem.), 4 Chalmers Place, Chicago, Ill. 1892.
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- Miss CATHARINE B. RUNKLE, 15 Everett St., Cambridge, Mass. 1900.
 Mrs. EDW. E. SALISBURY, 237 Church St., New Haven, Conn. 1906.
 Pres. FRANK K. SANDERS, Washburn College, Topeka, Kans. 1897.
 JOHANN F. SCHELTEMA, care of Messrs. Kerkhoven & Co., 115 Heerengracht, Amsterdam, Holland. 1906.
 GEORGE V. SCHICK, Johns Hopkins University, Baltimore, Md. 1909.
 Prof. NATHANIEL SCHMIDT, Cornell University, Ithaca, N. Y. 1894.
 MONTGOMERY SCHUYLER, Jr., American Embassy, Tokyo, Japan. 1899.
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 Dr. CHARLES P. G. SCOTT, 1 Madison Ave., New York, N. Y. 1895.
 *Mrs. SAMUEL BRYAN SCOTT (*née* Morris), 124 Highland Ave., Chestnut Hill, Philadelphia, Pa. 1903.
 Rev. JOHN L. SCULLY, Church of the Holy Trinity, 312-332 East 88th St., New York, N. Y. 1908.
 Rev. Dr. WILLIAM G. SEIPLE, 125 Tschihidai, Sendai, Japan. 1902.
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 Rev. W. A. SHEDD, American Mission, Urumia, Persia, (via Berlin and Tabriz). 1906.
 Prof. CHARLES N. SHEPARD (General Theological Sem.), 9 Chelsea Square, New York, N. Y. 1907.
 CHARLES C. SHERMAN, 614 Riverside Drive, New York, N. Y. 1904.
 *JOHN R. SLATTERY, 14, rue Montaigne, Paris, France. 1903.
 Major C. C. SMITH, P. S., Manila, Philippine Islands. 1907.
 Prof. HENRY PRESERVED SMITH, Theological School, Meadville, Pa. 1877.
 Prof. JOHN M. P. SMITH, University of Chicago, Chicago, Ill. 1906.
 ELY BANNISTER SOANE, care of Messrs. H. S. King & Co., 9 Pall Mall, London, SW., England. 1911.
 Prof. EDWARD H. SPIEKER, Johns Hopkins University, Baltimore, Md. 1884.
 Rev. Dr. JAMES D. STEELE, 15 Grove Terrace, Passaic, N. J. 1892.
 Mrs. SARA YORKE STEVENSON, 237 South 21st St., Philadelphia, Pa. 1907.
 President LANGDON C. STEWARDSON, Hobart College, Geneva, N. Y. 1901.
 Rev. ANSON PHELPS STOKES, Jr., Yale University, New Haven, Conn. 1900.
 MAYER SULZBERGER, 1303 Girard Ave., Philadelphia, Pa. 1888.
 Prof. GEORGE SVERDRUP, Jr., Augsburg Seminary, Minneapolis, Minn. 1907.
 EBEN FRANCIS THOMPSON, 311 Main St., Worcester, Mass. 1906.
 Prof. HENRY A. TODD (Columbia Univ.), 824 West End Ave., New York, N. Y. 1885.
 OLAF A. TOFFTEEN, 2726 Washington Boulevard, Chicago, Ill. 1906.
 *Prof. CHARLES C. TORREY (Yale Univ.), 67 Mansfield St., New Haven, Conn. 1891.
 Prof. CRAWFORD H. TOY (Harvard Univ.), 7 Lowell St., Cambridge, Mass. 1871.
 Rev. SYDNEY N. USSHER, St. Bartholomew's Church, 44th St. & Madison Ave., N. Y. 1909.
 Rev. HERVEY BOARDMAN VANDERBOGART, Berkeley Divinity School, Middletown, Conn. 1911.
 Rev. Dr. FREDERICK AUGUSTUS VANDERBURGH, 53 Washington Sq., New York, N. Y. 1908.

- ADDISON VAN NAME (Yale Univ.), 121 High St., New Haven, Conn. 1863.
Miss SUSAN HAYES WARD, The Stone House, Abington Ave., Newark,
N. J. 1874.
Rev. Dr. WILLIAM HAYES WARD, 130 Fulton St., New York, N. Y. 1869.
Miss CORNELIA WARREN, Cedar Hill, Waltham, Mass. 1894.
Prof. WILLIAM F. WARREN (Boston Univ.), 131 Davis Ave., Brookline,
Mass. 1877.
Prof. R. M. WENLEY, University of Michigan, Ann Arbor, Mich. 1898.
Prof. J. E. WERREN, 17 Leonard Ave., Cambridge, Mass. 1894.
Prof. JENS IVERSON WESTENGARD (Harvard Univ.), Asst. Gen. Adviser to
H.S.M. Govt., Bangkok, Siam. 1903.
Pres. BENJAMIN IDE WHEELER, University of California, Berkeley, Cal.
1885.
Prof. JOHN WILLIAMS WHITE (Harvard Univ.), 18 Concord Ave., Cambridge
Mass. 1877.
* Miss MARGARET DWIGHT WHITNEY, 227 Church St., New Haven, Conn.
1908.
Mrs. WILLIAM DWIGHT WHITNEY, 227 Church St., New Haven, Conn. 1897,
Hon. E. T. WILLIAMS, U. S. Legation, Peking, China. 1901.
Prof. FREDERICK WELLS WILLIAMS (Yale Univ.), 135 Whitney Ave., New
Haven, Conn. 1895.
Dr. TALCOTT WILLIAMS ("The Press"), 916 Pine St., Philadelphia, Pa.
1884.
Rev. Dr. WILLIAM COPLEY WINSLOW, 525 Beacon St., Boston, Mass. 1885.
Rev. Dr. STEPHEN S. WISE, 23 West 90th St., New York, N. Y. 1894.
Prof. JOHN E. WISHART, Xenia, Ohio. 1911.
HENRY B. WITTON, Inspector of Canals, 16 Murray St., Hamilton, Ontario.
1885.
Dr. LOUIS B. WOLFENSON, 1620 Madison St., Madison, Wis. 1904.
Prof. IRVING F. WOOD, Smith College, Northampton, Mass. 1905.
WILLIAM W. WOOD, Shirley Lane, Baltimore, Md. 1900.
Prof. JAMES H. WOODS (Harvard Univ.), 2 Chestnut St., Boston, Mass.
1900.
Dr. WILLIAM H. WORRELL, 53 Premont Street, Hartford, Conn. 1910.
Rev. JAMES OWENS WRIGHTSON, 812 20th St., N. W., Washington, D. C.
1903.
Rev. Dr. ABRAHAM YOHANNAN, Columbia University, New York, N. Y.
1894.
Rev. ROBERT ZIMMERMANN, S. J., Niederwallstrasse 8—9, Berlin, SW. 19,
Germany. 1911.
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(Total, 292.)

SOCIETIES, EDITORS, AND LIBRARIES, TO WHICH THE PUBLICATIONS OF
THE AMERICAN ORIENTAL SOCIETY ARE SENT BY WAY OF GIFT,
EXCHANGE, OR PURCHASE.

I. AMERICA.

- BOSTON, MASS.: American Academy of Arts and Sciences.
CHICAGO, ILL.: Field Museum of Natural History.
NEW YORK: American Geographical Society.
PHILADELPHIA, PA.: American Philosophical Society.
Free Museum of Science and Art, Univ. of Penna.
WASHINGTON, D. C.: Smithsonian Institution.
Bureau of American Ethnology.
WORCESTER, MASS.: American Antiquarian Society.

II. EUROPE.

- AUSTRIA, VIENNA: Kaiserliche Akademie der Wissenschaften.
K. u. K. Kaiserliche Direction der K. u. K. Hofbibliothek.
(Josephsplatz 1.)
Anthropologische Gesellschaft.
PRAGUE: Königlich Böhmisches Gesellschaft der Wissenschaften.
DENMARK, ICELAND, REYKJAVIK: University Library.
FRANCE, PARIS: Société Asiatique. (Rue de Seine, Palais de l'Institut.)
Bibliothèque Nationale.
Musée Guimet. (Avenue du Trocadéro.)
Académie des Inscriptions et Belles-Lettres.
École des Langues Orientales Vivantes. (Rue de Lille, 2.)
GERMANY, BERLIN: Königlich Preussische Akademie der Wissenschaften.
Königliche Bibliothek.
Seminar für Orientalische Sprachen. (Am Zeughaus 1.)
DARMSTADT: Grossherzogliche Hofbibliothek.
GÖTTINGEN: Königliche Gesellschaft der Wissenschaften.
HALLE: Bibliothek der Deutschen Morgenländischen Gesellschaft.
(Friedrichstrasse 50.)
LEIPZIG: Königlich Sächsische Gesellschaft der Wissenschaften.
Leipziger Semitistische Studien. (J. C. Hinrichs.)
MUNICH: Königlich Bayerische Akademie der Wissenschaften.
Königliche Hof- und Staatsbibliothek.
TÜBINGEN: Library of the University.
GREAT BRITAIN, LONDON: Royal Asiatic Society of Great Britain and Ire-
land. (22 Albemarle St., W.)
Library of the India Office. (Whitehall, S.W.)
Society of Biblical Archaeology. (37 Great Russell
St., Bloomsbury, W.C.)
Philological Society. (Care of Dr. F. J. Furnivall,
3 St. George's Square, Primrose Hill, N.W.)
ITALY, BOLOGNA: Reale Accademia delle Scienze dell' Istituto di Bologna.
FLORENCE: Società Asiatica Italiana.
ROME: Reale Accademia dei Lincei.

- NETHERLANDS, AMSTERDAM: Koninklijke Akademie van Wetenschappen.
THE HAGUE: Koninklijk Instituut voor Taal-, Land-, en
Volkenkunde van Nederlandsch Indië.
LEYDEN: Curatorium of the University.
RUSSIA, HELSINGFORS: Société Finno-Ougrienne.
ST. PETERSBURG: Imperatorskaja Akademiya Nauk.
Archeologiji Institut.
SWEDEN, UPSALA: Humanistiska Vetenskaps-Samfundet.

III. ASIA.

- CHINA, SHANGHAI: China Branch of the Royal Asiatic Society.
TONKIN: l'École Française d'extrême Orient (Rue de Coton), Hanoi.
INDIA, BOMBAY: Bombay Branch of the Royal Asiatic Society.
The Anthropological Society. (Town Hall.)
BENARES: Benares Sanskrit Coll. "The Pandit."
CALCUTTA: The Asiatic Society of Bengal. (57 Park St.)
The Buddhist Text Society. (86 Jaun Bazar St.)
Home Dept., Government of India.
LAHORE: Library of the Oriental College.
SIMLA: Office of the Director General of Archaeology. (Benmore,
Simla, Punjab.)
CEYLON, COLOMBO: Ceylon Branch of the Royal Asiatic Society.
JAPAN, TOKYO: The Asiatic Society of Japan.
JAVA, BATAVIA: Bataviaasch Genootschap van Kunsten en Wetenschappen.
KOREA: Korea Branch of the Royal Asiatic Society, Seoul, Korea.
NEW ZEALAND: The Polynesian Society, New Plymouth.
PHILIPPINE ISLANDS: The Ethnological Survey, Manila.
SYRIA: The American School (care U. S. Consul, Jerusalem).
Revue Biblique, care of M. J. Lagrange, Jerusalem.
Al-Machriq, Université St. Joseph, Beirut, Syria.

IV. AFRICA.

- EGYPT, CAIRO: The Khedivial Library.

V. EDITORS OF THE FOLLOWING PERIODICALS.

- The Indian Antiquary (Education Society's Press, Bombay, India).
Wiener Zeitschrift für die Kunde des Morgenlandes (care of Alfred Hölder,
Rothenthurmstr. 15, Vienna, Austria).
Zeitschrift für vergleichende Sprachforschung (care of Prof. E. Kuhn,
3 Hess Str., Munich, Bavaria).
Revue de l'Histoire des Religions (care of M. Jean Réville, chez M. E.
Leroux, 28 rue Bonaparte, Paris, France).
Zeitschrift für die alttestamentliche Wissenschaft (care of Prof. D. Karl
Marti, Marienstr. 25, Bern, Switzerland).
Beiträge zur Assyriologie und semitischen Sprachwissenschaft. (J. C.
Hinrichs'sche Buchhandlung, Leipzig, Germany.)

- Orientalische Bibliographie (care of Prof. Lucian Scherman, 18 Ungerer-str., Munich, Bavaria).
 The American Antiquarian and Oriental Journal, 438 East 57th St., Chicago, Ill.
 American Journal of Archaeology, 65 Sparks St., Cambridge, Mass.
 Transactions of the American Philological Association (care of Prof. F. G. Moore, Columbia University, New York, N. Y.).
 Le Monde Oriental (care of Prof. K. F. Johansson, Upsala, Sweden).
 Panini Office, Bhuvaneswani, Asram Allahabad Bahadurgany, India.

VI. LIBRARIES.

The Editors request the Librarians of any Institution or Libraries, not mentioned below, to which this Journal may regularly come, to notify them of the fact. It is the intention of the Editors to print a list, as complete as may be, of regular subscribers for the Journal or of recipients thereof. The following is the beginning of such a list.

- Andover Theological Seminary.
 Boston Athenaeum, Boston, Mass.
 Boston Public Library.
 Brown University Library.
 Buffalo Society of Natural Science, Library Building, Buffalo, N. Y.
 University of California Library, Berkeley, Cal.
 Chicago University Library.
 Columbia University Library.
 Connemora Public Library, Madras, India.
 Cornell University Library.
 Harvard Sanskrit Class-Room Library.
 Harvard Semitic Class-Room Library.
 Harvard University Library.
 Hebrew Union College, Cincinnati, O.
 Johns Hopkins University Library, Baltimore, Md.
 University of Michigan, Ann Arbor, Mich.
 Minneapolis Athenaeum, Minneapolis, Minn.
 Nebraska University Library.
 New York Public Library.
 Rochester Theological Seminary, Rochester, N. Y.
 Yale University Library.

Recipients: 318 (Members) + 76 (Gifts and Exchanges) + 21 (Libraries) = 415.

CONSTITUTION AND BY-LAWS
OF THE
AMERICAN ORIENTAL SOCIETY.

With Amendments of April, 1897 and 1911.

CONSTITUTION.

ARTICLE I. This Society shall be called the AMERICAN ORIENTAL SOCIETY.

ARTICLE II. The objects contemplated by this Society shall be: —

1. The cultivation of learning in the Asiatic, African, and Polynesian languages, as well as the encouragement of researches of any sort by which the knowledge of the East may be promoted.

2. The cultivation of a taste for oriental studies in this country.

3. The publication of memoirs, translations, vocabularies, and other communications, presented to the Society, which may be valuable with reference to the before-mentioned objects.

4. The collection of a library and cabinet.

ARTICLE III. The members of this Society shall be distinguished as corporate and honorary.

ARTICLE IV. All candidates for membership must be proposed by the Directors, at some stated meeting of the Society, and no person shall be elected a member of either class without receiving the votes of as many as three-fourths of all the members present at the meeting.

ARTICLE V. The government of the Society shall consist of a President, three Vice Presidents, a Corresponding Secretary, a Recording Secretary, a Treasurer, a Librarian, and seven Directors, who shall be annually elected by ballot, at the annual meeting.

ARTICLE VI. The President and Vice Presidents shall perform the customary duties of such officers, and shall be *ex-officio* members of the Board of Directors.

ARTICLE VII. The Secretaries, Treasurer, and Librarian shall be *ex-officio* members of the Board of Directors, and shall perform their respective duties under the superintendence of said Board.

ARTICLE VIII. It shall be the duty of the Board of Directors to regulate the financial concerns of the Society, to superintend its publications, to carry into effect the resolutions and orders of the Society, and to exercise a general supervision over its affairs. Five Directors at any regular meeting shall be a quorum for doing business.

ARTICLE IX. An Annual meeting of the Society shall be held during Easter week, the days and place of the meeting to be determined by the Directors, said meeting to be held in Massachusetts at least once in three years. One or more other meetings, at the discretion of the Directors,

may also be held each year at such place and time as the Directors shall determine.

ARTICLE X. This Constitution may be amended, on a recommendation of the Directors, by a vote of three-fourths of the members present at an annual meeting.

BY-LAWS.

I. The Corresponding Secretary shall conduct the correspondence of the Society, and it shall be his duty to keep, in a book provided for the purpose, a copy of his letters; and he shall notify the meetings in such manner as the President or the Board of Directors shall direct.

II. The Recording Secretary shall keep a record of the proceedings of the Society in a book provided for the purpose.

III. *a.* The Treasurer shall have charge of the funds of the Society; and his investments, deposits, and payments shall be made under the superintendence of the Board of Directors. At each annual meeting he shall report the state of the finances, with a brief summary of the receipts and payments of the previous year.

III. *b.* After December 31, 1896, the fiscal year of the Society shall correspond with the calendar year.

III. *c.* At each annual business meeting in Easter week, the President shall appoint an auditing committee of two men—preferably men residing in or near the town where the Treasurer lives—to examine the Treasurer's accounts and vouchers, and to inspect the evidences of the Society's property, and to see that the funds called for by his balances are in his hands. The Committee shall perform this duty as soon as possible after the New Year's day succeeding their appointment, and shall report their findings to the Society at the next annual business meeting thereafter. If these findings are satisfactory, the Treasurer shall receive his acquittance by a certificate to that effect, which shall be recorded in the Treasurer's book, and published in the Proceedings.

IV. The Librarian shall keep a catalogue of all books belonging to the Society, with the names of the donors, if they are presented, and shall at each annual meeting make a report of the accessions to the library during the previous year, and shall be farther guided in the discharge of his duties by such rules as the Directors shall prescribe.

V. All papers read before the Society, and all manuscripts deposited by authors for publication, or for other purposes, shall be at the disposal of the Board of Directors, unless notice to the contrary is given to the Editors at the time of presentation.

VI. Each corporate member shall pay into the treasury of the Society an annual assessment of five dollars; but a donation at any one time of seventy-five dollars shall exempt from obligation to make this payment.

VII. Corporate and Honorary members shall be entitled to a copy of all the publications of the Society issued during their membership, and shall also have the privilege of taking a copy of those previously published, so far as the Society can supply them, at half the ordinary selling price.

VIII. Candidates for membership who have been elected by the Society shall qualify as members by payment of the first annual assess-

ment within one month from the time when notice of such election is mailed to them. A failure so to qualify shall be construed as a refusal to become a member. If any corporate member shall for two years fail to pay his assessments, his name may, at the discretion of the Directors, be dropped from the list of members of the Society.

IX. Six members shall form a quorum for doing business, and three to adjourn.

SUPPLEMENTARY BY-LAWS.

I. FOR THE LIBRARY.

1. The Library shall be accessible for consultation to all members of the Society, at such times as the Library of Yale College, with which it is deposited, shall be open for a similar purpose; further, to such persons as shall receive the permission of the Librarian, or of the Librarian or Assistant Librarian of Yale College.

2. Any member shall be allowed to draw books from the Library upon the following conditions: he shall give his receipt for them to the Librarian, pledging himself to make good any detriment the Library may suffer from their loss or injury, the amount of said detriment to be determined by the Librarian, with the assistance of the President, or of a Vice President; and he shall return them within a time not exceeding three months from that of their reception, unless by special agreement with the Librarian this term shall be extended.

3. Persons not members may also, on special grounds, and at the discretion of the Librarian, be allowed to take and use the Society's books, upon depositing with the Librarian a sufficient security that they shall be duly returned in good condition, or their loss or damage fully compensated.

Until further notice the

Publications of the American Oriental Society

will be sold as follows:

1. Members of the Society receive the current number of the Society's Journal free of charge.

2. To those who are not members of the Society the price of the current volume is six dollars, carriage to be paid by the purchaser.

3. The back volumes of the Journal will be sold separately as follows:

*Vol. I (1843-1849)	\$25	Vol. XVII (1896)	\$4
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Vol. III (1852-1853)	5	Vol. XIX (1898)	6
Vol. IV (1853-1854)	5	Vol. XX (1899)	6
Vol. V (1855-1856)	5	Vol. XXI (1900)	6
*Vol. VI (1860)	20	Vol. XXII (1901)	6
Vol. VII (1862)	6	Vol. XXIII (1902)	6
Vol. VIII (1866)	8	Vol. XXIV (1903)	6
Vol. IX (1871)	8	Vol. XXV (1904)	6
Vol. X (1872-1880)	8	Vol. XXVI (1905)	6
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Vol. XIII (1889)	8	Vol. XXIX (1908-1909)	5
Vol. XIV (1890)	6	Vol. XXX (1909-1910)	6
Vol. XV (1890)	6	Vol. XXXI (1910-1911)	6
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* Only a very limited number of volumes I and VI can be sold separately.

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5. A limited number of complete sets (vol. I—vol. XXX) will be sold at the price of \$180, carriage to be paid by the purchaser.

6. The following separate prints are for sale:

H. G. O. Dwight, Catalogue of works in the Armenian language prior to the seventeenth century	\$5.00
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Whitney's Index Verborum to the Atharva-Veda	6.00
The same on large paper	8.00
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7. Beginning with volume XXX the Journal appears in four quarterly parts of which the first is issued on December first, the second on March first, the third on June first, and the fourth on September first. Single parts of the Journal cannot be sold.

All communications concerning the Library should be addressed to Professor ALBERT T. CLAY, Yale University, New Haven, Conn., U. S. A.

TO CONTRIBUTORS.

Fifty copies of each article published in this Journal will be forwarded to the author. A larger number will be furnished at cost.

GENERAL NOTICES.

1. Members are requested to give immediate notice of changes of address to the Treasurer, Prof. Frederick Wells Williams, 135 Whitney avenue, New Haven, Conn.

2. It is urgently requested that gifts and exchanges intended for the Library of the Society be addressed as follows: The Library of the American Oriental Society, Yale University New Haven, Connecticut, U. S. America.

3. For information regarding the sale of the Society's publications see the next foregoing page.

4. Communications for the Journal should be sent to Prof. James Richard Jewett, Harvard University, Cambridge, Mass., or Prof. Hanns Oertel, Yale University, New Haven, Conn.

CONCERNING MEMBERSHIP.

It is not necessary for any one to be a professed Orientalist in order to become a member of the Society. All persons—men or women—who are in sympathy with the objects of the Society and willing to further its work are invited to give it their help. This help may be rendered by the payment of the annual assessments, by gifts to its library, or by scientific contributions to its Journal, or in all of these ways. Persons desiring to become members are requested to apply to the Treasurer, whose address is given above. Members receive the Journal free. The annual assessment is \$5. The fee for Life-Membership is \$75.

Printed by W. Drugulin, Leipzig (Germany).

The Dates of the Philosophical Sūtras of the Brahmans.—

By HERMANN JACOBI, Professor in the University of Bonn, Germany.

Subject of the investigation.—Some of the Sūtras of the six orthodox philosophical Systems of the Brahmans¹ refer to Buddhist doctrines and refute them. As we are now sufficiently acquainted with Buddhist philosophy and its history, we can attempt to make out the peculiar school of Buddhist philosophy which is referred to in a passage of a Sūtra, and thus to determine the date, or rather *terminus a quo*, of the Sūtra in question. Our inquiry will be chiefly concerned with the Śūnyavāda or philosophical nihilism, and with the Vijñānavāda or pure idealism. The former is the philosophy of the Madhyamikas; the latter is that of the Yogācāras. It may be premised that both these systems admit the Kṣaṇikavāda or the theory of the momentariness of everything, so far at least as is consistent with their peculiar principles; to these I will now briefly advert. The Śūnyavāda maintains that all our ideas, if analysed, contain logical impossibilities or self-contradictions, and that therefore nothing real can underlie them; and that that upon which they are based is a nonentity or the void (*śūnya*, *nirupākhyā*). This system² was established by Nāgārjuna, who flourished

¹ Abbreviations: M.S. = Mīmāṃsā Sūtra; B.S. = Brahma Sūtra (Vedānta); V.D. = Vaiśeṣika Darśana; N.D. = Nyāya Darśana; Y.S. = Yoga Sūtra; S.S. = Sāṅkhya Sūtra.

² The Śūnyavāda may be compared with the philosophy of Zeno, who by a similar method tried to refute the common opinion that there exist many things of a changing nature. Aristotle called Zeno εὑρετὴν τῆς διαλεκτικῆς; the same may be said of Nāgārjuna whose Mādhyamikasūtras set the example for the dialectical literature of the Hindus which reached its height in Śrīharṣa's Khaṇḍana-Khaṇḍa-Khāḍya. It deserves to be remarked that in this regard also the Vedāntin of Śaṅkara's school follows in the track of the Śūnyavādin,

about the end of the second century A.D.¹ The Vijñānavāda contends that only consciousness or *viññāna* is real. There are two kinds of *viññāna*: 1. *ālaya-viññāna* or consciousness proper, which lasts till the individual reaches Nirvāṇa (*ā-laya*); and 2. *pravṛtti-viññāna* or the thoughts of the same individual concerning objects. The latter is produced from *ālaya-viññāna*. The Vijñānavāda was established by Asaṅga and his younger brother Vasubandhu, who seem to have flourished during the latter part of the fifth century A.D.² To this school belong Dignāga and Dharmakīrti, the greatest Buddhist philosophers and writers on Logic (*pramāṇa*). Dignāga attacked Vātsyāyana's Nyāyabhāṣya, and was answered by the Uddyotakara (6th century A.D.) in the Nyāyavārttika. Dharmakīrti, who further developed Dignāga's philosophy, appears to have flourished about the middle of the seventh century A.D.

It will be our task to examine closely the Buddhist doctrines controverted in the philosophical Sūtras in order to decide whether they belong to the Śūnyavāda or to the Vijñānavāda. On the result of our inquiry will depend the presumable date of the Sūtras in question. If they refer to the Vijñānavāda, they must be later than the fifth century A.D.; if however this is not the case, and we can assign to them an acquaintance with the Śūnyavāda only, they must date somewhere between 200 and 500 A.D.

Doubts about the conclusiveness of this argumentation.—Even if we should succeed in recognising the true origin of the controverted doctrines, still it might be doubted whether the few passages on which we must rely for proof, form a genuine part of the work in which they occur, or are a later addition. For the aphoristical style of the Sūtras, the somewhat desultory way of treating subjects, and the loose connexion of the several parts (*adhiḥkaraṇas*) in most of these works make the insertion of a few Sūtras as easy as the detection of them is difficult. The text of the Sūtras as we have them is at best that which the oldest Scholiast chose to comment upon, and it cannot be

¹ A contemporary of Nāgārjuna was Āryadeva. A poem ascribed to him has been edited in JASB. 1898. As in that poem the zodiacal signs (*vāṣī*) and the weekdays (*vāraka*) are mentioned, it can not be earlier than the third century A.D.

² See Takakusu in *Bulletin de l'École Française d'Extrême-Orient*, 1904, vol. iv, p. 53f.

safely traced further back. The uncertainty occasioned by the nature of our texts is, however, in the present case partly remedied by the repeated allusions in one text to the same doctrines, or by the occurrence in two Sūtraworks of the same discussion with the same arguments. These facts make it probable that the topic in question was one which at that time a Sūtrakāra considered himself bound to discuss.

Another objection may be raised against our chronological argument. It may be said, and not without a considerable amount of plausibility, that even before Nāgārjuna had brought the Śūnyavāda into a system, similar opinions may already have been held by earlier Buddhist thinkers; and the same remark applies to the Vijñānavāda. Therefore, it may be argued, a reference to doctrines of the Śūnyavāda or Vijñānavāda, need not be posterior to the definite establishment of these systems. On the other hand, however, it is almost certain that a Sūtrakāra would not have thought it necessary to refute all opinions opposed to his own, but only such as had successfully passed the ordeal of public disputation. For only in that case would the doctrines themselves and the arguments *pro* and *contra* have been defined with that degree of precision which rendered their discussion in aphorisms possible to the author and intelligible to the student. Now when a philosopher succeeds in upholding his individual opinions against all opponents in public disputations, he is henceforth considered the founder of a new school or sect, and the author of its tenets.¹ Therefore we may be sure that a discussion of Śūnyavāda or Vijñānavāda opinions in a Sūtra must be referred to the period after the definite establishment of those schools.

Origin and development of the views here presented.—I conceived the general ideas set forth above and began to work them out in the summer of 1909. My first impression, supported by the comments of Śaṅkara and Vācaspatimiśra and others, was that the Sūtras, especially B.S. and N.D., refer to the Vijñānavāda. On a closer examination, however, of the evidence, I became convinced that they really refer to the Śūnyavāda, and that the later commentators had brought in the Vijñānavāda because that system had in their time risen to paramount importance. I had nearly finished my article

¹ Compare my remarks on the Dhvanikāra in ZDMG. 56. 409f.

when Professor von Stcherbatskoi told me that he had treated the question about the age of the philosophical Sūtras in his work *Теорія познанія и логика по ученію позднѣйшихъ Буддистовъ*, часть II, St. Petersburg, 1909, and had arrived at the conclusion that the Sūtras refer to the Vijñānavāda. He kindly sent me an abstract in English of his arguments, which I subjoin for the benefit of those readers who, like the author of this paper, cannot read the Russian original.

In his work "*Epistemology and Logic as taught by the later Buddhists*" Mr. Stcherbatskoi maintains (p. 29) that the Sūtras of the chief philosophical systems in their present form do not belong to that high antiquity to which they commonly are assigned, nor to those half-mythical authors to whom tradition ascribes them. The philosophical systems themselves have been evolved at a much earlier period than that in which the Sūtras were written. The Sūtras in their present form must have been elaborated during the period subsequent to the formation of the Yogācāra school (Vijñānavāda), and their authorship has been attributed to writers of a high antiquity in order to invest them with greater authority. In a previous paper (*Notes de littérature buddhique*, Muséon nouv. série, vol. vi, p. 144), Mr. Stcherbatskoi had already established, on the authority of the Tibetan historian Bouston, that the Vijñānavāda system (Buddhist idealism), professed by a part of the Yogācāra school, was clearly formulated for the first time by Vasubandhu in his celebrated Five Prakaraṇas. As Vasubandhu could not have lived much earlier than the fifth century A.D., it follows that those philosophical Sūtras which refer to his doctrine, in order to refute it, cannot have been written at an earlier time.

It is well known that Buddhist idealism is mentioned, and that its tenets are refuted, in the Sūtras of Bādarāyaṇa and of Gotama. Thus B.S. ii. 2. 28 refutes the doctrine of the non-existence of external things. Again, ii. 2. 30 refutes the erroneous opinion of those who admit solely the existence of a series of mental impressions unsupported by external objects, and, arguing from the Buddhist's point of view, demonstrates that a series of mental impressions (internal cognitions) could not exist, unless there were external objects to produce the impression. Once more, B.S. ii. 2. 31 maintains, according to Śāṅkara's interpretation, that, inasmuch as, according to Buddhist doctrine, the stream of internal cognition consists of a series of separate moments, it cannot have actual existence on account of its momentariness.

It appears upon consideration of these Sūtras that their author is bent upon refuting the doctrine which proclaims 1. the unreality of the external world, and 2. the actuality of an internal consciousness which consists of a series of cognitional acts. Both these tenets are characteristic of Buddhist idealism which developed subsequently to the nihilistic doctrine of the Madhyamikas. The latter denied the reality of the internal consciousness as well as that of the external world.

In his commentary, Śāṅkara corroborates our opinion, inasmuch as

he avers that the above mentioned Sūtras refute the doctrine of those who maintain that the stream of our consciousness is an altogether internal process, existing only so far as it is connected with the mind. Now it is well known that the Vijñānavādins alone professed the doctrine that *prameya* and *pramāṇa* and *pramāṇaphala* have existence only in so far as they are connected with the mind (cf. p. 418 of vol. i of Thibaut's translation of B.S.; Ślokav. iv. 74 ff.; Nyāyabindu, i. 18, ii, 4). Śaṅkara mentions likewise the scholastic argument against realism of which Dignāga made use at the opening of his work Ālambanaparīkṣā (cf. Tanager, mdc v. 95). This work, in which the main tenet of idealism (Vijñānavāda, otherwise termed Nirālambanavāda) is proved, is one of the fundamental works of the school. The argument starts from the antinomic character of the ideas of the whole and of the parts, and states that the external object can be neither the whole, nor can it consist of atoms (indivisible partless things: cf. p. 419 in Thibaut's transl. of B.S.).

Further we find in the Nyāyasūtras a refutation of Buddhist idealism, namely in iv. 2. 26—35. It is worthy of note that the Buddhist doctrine is referred to in the course of an argument upon the nature of atoms—thus as it were answering the considerations which we likewise find in the work of Dignāga in favor of the Nirālambanavāda. The Nyāyasūtras maintain the indivisibility of atoms, and, while refuting the opposed opinions touching this point, they refer to the Buddhists, to the Mādhyamikas (who denied the existence of atoms), and to the idealists (who admitted atoms to be a percept of the mind or an idea). In the Tātparyatīkā, p. 458, Vācaspatimiśra avers that the Sūtra, N.D. iv. 2. 24 implies a refutation of the Mādhyamika doctrine, while the Sūtras iv. 2. 26—35 are directed against those who proclaim that all ideas of external things are false (*ibid.* p. 461). It is thus established by the testimony of Vācaspatimiśra and of Vātsyāyana (Nyāya-bhāṣya, p. 233. 6) that Sūtra iv. 2. 26 is directed chiefly against the school of the Vijñānavādins.

Though the philosophical Sūtras of the remaining systems do not contain any clear reference to the Vijñānavādins, yet it has been noted that some of the Sūtras display a remarkable knowledge of each other. To judge by the whole tone and drift of the philosophical Sūtras, they must be the production of one and the same literary epoch.

On the basis of what has been here said, it can be averred with a considerable degree of probability that the philosophical Sūtras of the chief systems belong approximatively to one and to same period, a comparatively late one, and can in no wise be attributed to those venerable authors to whom tradition ascribes them.

Improbability of this view.—As stated before, I too entertained at first the opinion expressed by Professor von Stcherbatskoi, but I was induced to give it up by reason of the following chronological considerations. As the Nyāyabhāṣya was criticised by Dignāga, its [author Vātsyāyana (Pakṣila-svāmin)] must be earlier than the latter, by at least ten or

twenty years, since it is not Vātsyāyana, but the Uddyotakara (Bhāradvāja) who answered Dignāga. He may therefore have flourished in the early part of the sixth century or still earlier. Now Vātsyāyana is not the immediate successor of Akṣapāda Gautama, the author of the Sūtra; for, as Professor Windisch pointed out long ago, Vātsyāyana incorporated in his work, and commented upon them, sentences of the character of Vārttikas which apparently give in a condensed form the result of discussions carried on in the school of Gautama. Hence Gautama must have been separated by at least one generation from the Bhāṣyakāra, and can therefore not be placed after the last quarter of the fifth century.¹ Thus if we accept the latest possible date for the composition of the N.D., it would fall in a period when the Vijñānavāda could scarcely have been firmly established. The V.D. is probably as old as the N.D.; for V.D. iv. 1. 6 is twice quoted by Vātsyāyana, namely in his comment on N.D. iii. 1. 33 and 67, and V.D. iii. 1. 16 is quoted by him² in his comment on N.D. ii. 2. 34, and the Uddyotakara quotes the V.D. several times simply as the Sūtra or Śāstra, and once calls its author Paramarṣi, a title accorded only to ancient writers of the highest authority.³ We are therefore almost certain that two Sūtras at least, N.D. and V.D., preceded the origin of the Vijñānavāda, or rather its definite establishment; and the same assumption becomes probable with regard to some of the remaining Sūtras, because the composition of the Sūtras seems to be the work of one period

¹ This result is supported by collateral proofs. 1. When commenting on N.D. i. 1. 5, Vātsyāyana gives two different explanations of the terms *pūrvavat*, *śeṣavat*, *sāmānyato dṛṣṭam*, the names of the three subdivisions of inference, showing thereby that the meaning of these important terms had become doubtful at his time. 2. In his concluding verse, which however, is wanting in some MSS., Vātsyāyana calls Akṣapāda a Ṛṣi, which he would not have done, if he had not considered the Sūtrakāra as an author of the remote past.

² See Bodas's *Introduction* (p. 23) in Tarkasaṃgraha BSS., 1897.

³ At this point I may mention that Professor von Stcherbatskoi, when passing through Bonn on his way to India in December 1909, told me that he had meanwhile studied the first *pariccheda* of Dignāga's *Pramāṇasamuccaya* in the Tanjour. Dignāga giving there his definition of *pratyakṣa* (perception) and refuting the opinions of the Mīmāṃsā, Nyāya, Vaiśeṣika, and Sāṅkhya, quotes N.D. i. 1. 4 and several Sūtras of V.D. which treat of *pratyakṣa*.

rather than of many. In order to prove this assumption to be true, we must show, as stated above, that the Buddhist doctrines refuted in several Sūtras need not be interpreted as belonging to the Vijñānavāda, but that the discussion in the Sūtra becomes fully intelligible if understood as directed against the Śūnyavāda.

Difficulty of distinguishing both systems in our case.—The point at issue is whether perception (*pratyakṣa*) is a means of true knowledge (*pramāṇa*) or not. The realistic view, strictly maintained by the Nyāya and Vaiśeṣika philosophies, is that by perception we become truly cognizant of real objects. The Śūnyavāda, Nihilism or Illusionism, contends that no real objects underlie our perceptions, but that those imagined objects as well as our ideas themselves are intrinsically illusory, in other words, they are nonentities or a mere void. On the other hand, the Vijñānavāda declares that our ideas or mental acts (perception included) are the only reality, and that external objects (since they have no existence) are not really perceived and do not cause our ideas about them, but are produced, so far as our consciousness is concerned, by ideas existing independently of objects. It will thus be seen that both Vijñānavāda and Śūnyavāda are at one as far as regards the unreality of external objects; and therefore a refutation of this theory may be directed against the one of these doctrines as well as the other. Commentators chose between them as suited their purpose. Thus Kumārila, commenting on a passage which will be dealt with later, makes the following remarks:¹ “(Among the Bauddhas) the Yogācāras hold that ‘Ideas’ are without corresponding realities (in the external world), and those that hold the Madhyamika doctrine deny the reality of the Idea also. To both of these theories, however, the denial of the external object is common.² Because it is only after setting aside the reality of the object that they lay down the Samvṛti (falsity) of the ‘Idea.’ Therefore on account of this (denial of the reality of external objects) being common (to both), and on account of (the denial of the reality of the ‘Idea’) being based upon the aforesaid denial of the external

¹ Ślokaṛtīka, translated by Gangānātha Jhā, p. 120, 14—16 (Bibliotheca Indica).

² Similarly Śrīdhara ad Praśastapādabhāṣya p. 229 speaks of *nirālam-baṇaṃ vijñānam icchatām Mahāyānikānām*.

object,—the author of the Bhāṣya has undertaken to examine the reality and unreality of the external object.” And accordingly Kumāṛila interprets his text in such a way as to make it serve as a basis for the refutation first of the Vijñānavāda and then of the Śūnyavāda. He, as well as Śaṅkara and Vācaspatimiśra and later authors who wrote when the Vijñānavāda had become the most famous Buddhist philosophy, felt of course bound to refute it; and if the text they commented upon still ignored the Vijñānavāda and combated the Śūnyavāda only, they could introduce their refutation of the Vijñānavāda by doing just a little violence to their text. That such was actually the case, is the thesis I want to prove.¹

Mentioning of the Vijñānavāda in the Sāṅkhya Sūtra.—Before examining those texts which give rise to doubts regarding the particular school combated, I briefly advert to one which beyond doubt discusses the Vijñānavāda doctrine. I refer to the Sāṅkhya Sūtra. In that work the principal doctrines of the four philosophical schools of the Buddhists are discussed: those of the Vaibhāṣikas i, 27—33, of the Sautrāntikas i, 34—41, of the Vijñānavādins i, 42, and of the Śūnyavādins

¹ *Remarks on the development of the Śūnyavāda.*—Like Kumāṛila, other brahmanical philosophers treat the Śūnyavāda as the logical sequence of the Vijñānavāda or as a generalization thereof; but the true or historical relation is just the reverse: the belief in the unreality of external things is a *restriction* of the previously obtaining and more general belief in the unreality or illusory nature of everything whatever, consciousness included. Buddhist Nihilism or Illusionism, introduced and supported by a splendid display of the novel dialectic art, seems to have deeply impressed and invaded the Hindu mind of that period. But realistic convictions or habits of thought could not be wholly eradicated; they entered into various kinds of compromise with Illusionism. The belief in the transcendent reality and oneness of Brahma as taught in the Upaniṣads admitted a combination with Illusionism in the Māyāvāda of the Vedāntins of Śaṅkara's school, nicknamed Pracchannabauddhas, who maintained that Brahma alone is real and that the phenomenal world is an illusion (see Sukhtankar, *The teachings of Vedānta according to Rāmānuja* in WZKM. vol. xii). On the other hand the ‘*cogito ergo sum*’ proved irresistibly self-evident to many Mahāyānists also, and led them to acknowledge the reality of consciousness. These were the Vijñānavādins or pure Idealists. But the great Logicians of this school seem to have further encroached on its principles; for Dharmakīrti, in this particular point also probably following Dignāga, declared the object of perception to be *svalakṣaṇa*, i. e. the catena or series (*santāna*) of *kṣaṇas* to be *paramārthasat*, i. e. really existing.

i, 43—47. The Sūtra referring to the Vijñānavādins reads thus: *na vijñānamātram bāhyapratīteḥ*; 'Not Thought alone because of the conception of the external.'¹ The next Sūtra (43): *tadabhāve tadabhāvāc chūnyam tarhi*, 'Since as the one does not exist, the other too does not, there is the void then' is according to Vijñānabhikṣu a refutation of the Vijñānavāda, but according to Aniruddha the statement of the Śūnyavāda which is discussed in the following Sūtras. However this may be, there can be no doubt that here both the Vijñānavāda and the Śūnyavāda are discussed, in that sequence which (as stated in the last note) has become customary for later theoretical writers. Now it is admitted on all sides that the Sāṅkhya Sūtra is a very late, or rather a modern, production, and that it does not rank with the genuine philosophical Sūtras. Therefore the fact that the Sāṅkhya Sūtra mentions the Vijñānavāda does in no way prejudice any one in deciding the question whether the Sūtras of the other systems also were acquainted with it. Perhaps it might be said that the directness of reference to the Vijñānavāda in the Sāṅkhya Sūtra shows what we should expect to find in the other Sūtras if they did really know and refute that doctrine.

1. Nyāya.

I begin our inquiry with the examination of the passage N.D. iv. 2, 25ff., which, according to Vācaspatimiśra, is directed against the Vijñānavādins; for, as explained above, chronological considerations make it almost certain that our Sūtra was composed before the establishment of the Vijñānavāda, and therefore entitle us to doubt, in this matter, the authority of the author of the Tātparya Tīkā. The subject treated in those Sūtras, namely, whether perception is a means of true knowledge, is connected with and comes at the end of a discussion of, other subjects which for the information of the reader must briefly be sketched. First comes the problem of the 'whole and its parts,' iv, 2, 4ff. The adherents of Nyāya (and Vaiśeṣika) maintain that the whole is something different (*arthāntara*) from the parts in which it 'inheres,' an opinion which is strongly combated by other philosophers. Connected

¹ Aniruddha's Commentary, Garbe's translation, in BL., page 23.

with this problem is the atomic theory, which is discussed in 14ff. After Sūtra 17, Vātsyāyana introduces an opponent, 'a denier of perception, who thinks that everything is non-existent' (*ānupalambhikaḥ sarvaṃ nāstīti manyamānaḥ*). There can be no doubt that an adherent of the Śūnyavāda is meant. He attacks the atomic theory, 18—24, and is refuted in 25 thus: "as your arguments would lead us to admit a *regressus in infinitum* (by acknowledging unlimited divisibility) and as a *regressus in infinitum* is inconsistent with sound reason, your objection is not valid (*anavasthākāritvād anavasthānupapattes cā 'pratiṣedhaḥ*). Vātsyāyana, after explaining this Sūtra, continues: '(An opponent objects:) what you say with regard to notions (*buddhi*), that their objects are really existing things, (that cannot be proved). These notions are intrinsically erroneous (*mithyābuddhayas*); for if they were true notions, (*tattvabuddhayas*) they would, on being analysed by the understanding, teach us the true nature of their objects." The argument of this opponent is stated in Sūtra 26 which the above passage serves to introduce, and runs thus: "If we analyse things, we do not (arrive at) perceiving their true nature (or *essentia*); this not-perceiving is just as, when we take away the single threads (of a cloth), we do not perceive an existing thing (that is called) the cloth." Vātsyāyana explains: "(This is) just as on distinguishing the single threads (of a cloth): this is a thread, this is a thread, &c. &c., no different thing is perceived that should be the object of the notion cloth. Since we do not perceive the *essentia*, in the absence of its object, the notion of a cloth, that it exists, is an erroneous notion. And so everywhere." Sūtras 27 and 28 contain the counter-arguments, and Sūtra 29 adds to them the following: "And because by right perception (*pramāṇatas*, viz. *upalabdhyā*) we come to know things (whether and how they are)." Sūtra 30 gives a proof for this view: *pramāṇānupapattiyupapattibhyām*. Vātsyāyana explains: 'Now then the proposition that nothing exists is against reason; why? (answer): *pramāṇānupapattiyupapattibhyām*. If there is proof *pramāṇa* (in favour of the proposition) that nothing exists, (this proposition that) nothing exists, sublates the (existence of) proof as well. And if there is no proof for it, how can it be established that nothing exists? If it is regarded to be established without proof, why should (the contrary) that all things do exist, not be regarded as

established?" Here it is quite clear that the opponent whom Vātsyāyana refutes, is a Śūnyavādin just as in Sūtra 17. For there is no indication that Vātsyāyana in the mean time has changed front, and that the opponent in Sūtra 26 is not a Śūnyavādin, but a Vijñānavādin. The latter contends that external things do not exist (*bāhyārthā na santi*), while Vātsyāyana (on 27) makes his opponent uphold *sarvabhāvānām yāthātmyānupalabdhiḥ*. Moreover, this opponent maintains that "notions about things are erroneous notions (*mithyābuddhayaḥ*)," and this is primarily the view of the Śūnyavāda. The fundamental principle of the Vijñānavāda is that ideas only (*vijñāna*) are really existent, and not that they are erroneous ideas. That Vātsyāyana really has in view the opinions of the Śūnyavādins, may be seen from his concluding words in 36, "therefore erroneous notions too are really existing," and in 37, where he speaks of his opponent as one for whom "everything is without essence and unreal" (*nirātmaṇḥ nirupākhyam sarvam*). Nevertheless Vācaspatimiśra,¹ commenting on Vātsyāyana's words in Sūtra 25 translated above ("An opponent objects: what you say," &c.), remarks that the opponent is a Vijñānavādin. That he is mistaken, we have seen, and a general cause of such a mistake on the part of later commentators has been given above, p. 7. In the present case we can watch the gradual development of this misrepresentation. For in his comment on 26 the Uddyotakara again introduces the opponent's argument that every part of a thing may be regarded as a (minor) whole consisting of minor parts, and that this analysis may be continued not only down to atoms but *in infinitum* till everything is dissolved into nothing. Now as Professor von Stcherbatskoi informs us (see above p. 5), Dignāga in his work *Ālambanaparīkṣā* makes the discussion of the problem of 'the whole and its parts' the basis of his exposition of the Vijñānavāda. Therefore the Uddyotakara, who answers Dignāga's attacks on Vātsyāyana, avails himself of an opportunity to undermine the antagonist's basis of argumentation. And Vācaspatimiśra, knowing what was the starting-point of Dignāga's speculations, and seeing that it was exhaustively treated by the authors of the Sūtra and the Bhāṣya, was easily misled to believe that they were defend-

¹ Nyāyavārttikatātparyāṭikā (viz. S. S.), p. 460, 3d line from below.

ing it against the Vijñānavāda. Being separated from them by 400 years or more, he was ignorant of their historical interrelation, and consequently interpreted the philosophical discussion in the text before him from a merely theoretical point of view. For, as indicated above, a rational refutation of the Śūnyavāda was naturally divided into two parts, the first proving the reality of objects and the second the reality of ideas; and a theoretical construction could well treat the Śūnyavāda as the logical outcome of the Vijñānavāda, and take the first part of the refutation of the Śūnyavāda as directed against the Vijñānavāda.

We proceed in our analysis of the Sūtra. After the last passage translated above, we have another objection of the Illusionist in Sūtras 31 and 32. "Like the erroneous belief in the objects seen in a dream is this belief in the means of true knowledge and the things known through them erroneous." Vātsyāyana explains: "Just as in a dream the objects seen in it are not real, while there is belief in them, so the means of knowledge and the things known through them are also not real (*na santi*), though there is belief in either." Sūtra 32 completes this argument: "Or like magic, *fata morgana*, and mirage." As this argument serves to demonstrate that *pramāṇa* and *prameya* are an illusion, it is evident that the opponent is a Śūnyavādin. The next Sūtra 33 answers his objection, in pointing out that 'he has established nothing, as he has given no reason' for declaring (1) that the belief in *pramāṇa* and *prameya* is like that in objects seen in a dream and not like the perception of objects in the waking state, (2) that in a dream non-existing things are perceived. This argument of the Sūtra is supplemented in the Bhāṣya by another formulated in what looks like a Vārttika; it comes to this. If you say that things seen in a dream do not exist because they are no more seen in the waking state, you must admit that those seen in the waking state do exist; for the force of an argument is seen in the contrary case, viz. that things exist because they are seen. The Uddyotakara enlarging upon this argument unmistakably introduces Vijñānavāda views; for he speaks of things independent of the mind (*citta-vyatiरेkin*) and uses the term *vijñāna*; but there is no trace of all this in the Bhāṣya. The Sūtra then goes on to explain the belief in things seen in a dream and other topics con-

nected with the subject in hand which, however, do not concern us here.

To sum up: our investigation has proved that neither the Sūtra nor the Bhāṣya refer to the Vijñānavāda, and that the whole discussion is perfectly intelligible if we consider it as meant to refute the Śūnyavāda.¹

2. Vedānta and Mīmāṃsā.

Brahma Sūtra, 2nd Adhyāya; 2nd Pāda, contains a discussion and refutation of other philosophical systems. The Sūtras 18—32 deal with Buddhist philosophy. Sūtras 18—27 deal with the doctrines of the Sarvāstivādins; and 28—32, according to Śāṅkara, with those of the Vijñānavāda. Rāmānuja agrees with Śāṅkara in so far as he also refers Sūtras 28—30 to the Vijñānavāda, but he differs from him in that he interprets the last Sūtra² as containing a refutation of the Śūnyavāda. For convenience of reference I subjoin the text of the Sūtras 28—32 and the translation of them by Thibaut according to Śāṅkara's and Rāmānuja's interpretation:

nābhāva upalabdheḥ 28

vaidharṃyāc ca na svapnādivat 29

na bhāvo 'nupalabdheḥ 30

kṣaṇikatvāc ca 31

sarvathānupapattēś ca 32.

I. Śāṅkara's interpretation, SBE. vol. xxxiv, p. 418ff.:

The non-existence (of external things) cannot be maintained, on account of (our) consciousness (of them), 28.

And on account of their difference of nature (the ideas of the waking state) are not like those of a dream, 29.

The existence (of mental impressions) is not possible (on the Buddhist view) on account of the absence of perception (of external things), 30.

And on account of the momentariness (of the *ālayavijñāna*) it cannot be the abode of mental impressions), 31.

And on account of its general deficiency in probability, 32.

¹ If the Sūtrakāra knew the Vijñānavāda, we should expect him to combat it in ii, 1, 8 ff., where *pratyakṣādīnām aprāmāṇyam* is discussed. But in that place even Vācaspatimiśra (p. 249) assigns this opinion to the Madhyamikas.

² He omits Sūtra 31 of Śāṅkara's text.

II. Rāmānuja's interpretation, SBE. xlvi, p. 511 ff.:

Not non-existence on account of consciousness, 27.¹

And on account of difference of nature (they are) not like dreams, 28.

The existence [of mere cognitions] is not on account of the absence of perception, 29.

[Here ends the *adhikaraṇa* of perception.]

And on account of its being unproved in every way (viz. that the Nothing is the only Reality), 30.

Now it would be rather surprising if the Śūnyavāda had been ignored by the Brahma Sūtra as Śaṅkara in his treatment of the above Sūtras would make us believe; he says that Śūnyavāda is thoroughly irrational and may therefore be left out of account. But the Śūnyavādins were once formidable opponents, and it would have delighted an orthodox dialectician to expound their unreasonableness. Rāmānuja apparently was conscious of this deficiency and therefore introduced the refutation of the Śūnyavāda in the very last Sūtra. But this Sūtra contains only an argument, and if Rāmānuja be right, we search in vain in the preceding Sūtras for the statement, or even a hint, of the doctrine he wishes to refute. However this Sūtra reads like a finishing blow dealt to a vanquished opponent whose arguments the author had just been refuting. That this opponent was a Śūnyavādin becomes probable if we compare the Sūtras in question with those in N.D. which we have examined above and, which, as we have seen, refer to the Śūnyavāda only. For Sūtra 29: *vaidharmyāc ca na svapnādivat*, deals with the same argument which is stated in N.D. 31f.: *svapnābhimānavad ayam pramāṇaprameyābhimānaḥ; māyāgandharvanagaramṛgatṛṣṇikāvad vā*. The *ādi* in *svapnādivat* means according to Śaṅkara *māyādi*, in other words the things fully enumerated in the second of the quoted Sūtras of N.D. As the argument in N.D. and B.S. is the same, it is almost certain that the same doctrine is discussed in both works, and as the doctrine refuted in N.D. is the Śūnyavāda, it is highly probable that it is meant in B.S. also. Though we have thus very weighty reasons for not trusting Śaṅkara, Rāmānuja, and all the later commentators in their inter-

¹ Rāmānuja's numbering here differs from that of Śaṅkara. In order to avoid confusion I shall refer to the latter only.

pretation of the passage under consideration, still the almost deliberately enigmatical character of the Sūtras would make it a hazardous task to explain them without the aid of tradition. Fortunately, however, the same philosophical problem aphoristically discussed in those Sūtras has been dealt with at considerable length by an other ancient author.

For Śābarasvāmin, the Bhāṣyakāra of the Mīmāṃsā Sūtra, after having commented on M.S. i, 1, 5 transcribes a long passage from the unknown Vṛtti, which begins in the edition of the Bibliotheca Indica on p. 7, line 7 from below, and ends on p. 18, line 6, as the editor remarks in a footnote p. 18.¹ The whole passage is without doubt by the Vṛttikāra; it gives an explanation of Sūtras 3—5, and is introduced by Śābarasvāmin at the end of his own comment on Sūtra 5. It is therefore a matter of no little surprise to find that Kumārila-bhaṭṭa in the Śloka-vārttika (on Sūtra 5) assigns only the first part of this passage, viz. from p. 7, l. 7 from below, down to p. 8, l. 8 from below, to the Vṛttikāra; and accordingly his comment on this part only bears the title Vṛttikāragrantha in the edition of the Śloka-vārttika in the Chowkhamba Sanskrit Series, p. 212, 216. Kumārila himself refers to the author of this part of the passage as the Vṛttikāra, ib., p. 136; but he refers to the author of the following part (which is actually the work of the same author) as Bhāṣyakṛt, p. 221 (v. 16) and Bhāṣyakāra, p. 224 (v. 29), i. e., Śābarasvāmin. That part which Kumārila ascribes to the Vṛttikāra, contains the explanation of Sūtra 3 and part of Sūtra 4 only. If Kumārila were right, this passage should have been quoted by Śābarasvāmin at the end of his comment on Sūtra 4, and not, where he actually introduces it, at the end of his comment on Sūtra 5. Kumārila does not notice nor attempt to account for the fact that Śābarasvāmin, on his assumption, twice interprets part of Sūtra 4 and the Sūtra 5, once at the proper place, and then

¹ Śābarasvāmin introduces this passage by the following words: *Vṛttikāras tv anyathe 'mam granthaṁ varṇayāṃcakāra: tasya nimittaparīṣṭir ity evamādiṃ*. We first have a comment on Sūtra 3; the comment on Sūtra 4 commences p. 8, l. 2, that on the second part of Sūtra 4 (*animittam*, &c.) on p. 12, l. 2 from below; on p. 11, l. 2 from below, begins the comment on Sūtra 5, and that on the last part of the same Sūtra on p. 17, l. 10 (*avyatirekaś ca*); *arthe 'nupalabdhe*, p. 17, last line; *tat pramāṇam (Bādarāyaṇasya) anapekṣatvāt*, p. 18, l. 3.

again after what he contends to be the end of the quotation from the *Vṛttikāra*. And any lingering doubt that also the second part of the passage ending on p. 18, l. 6, is not by Śābarasvāmin, is removed by the passage that comes after it. For there (p. 18, l. 7, 14, 16; p. 24, l. 9) he controverts and sets right some assertions in the preceding part which according to Kumārila is not by the *Vṛttikāra*. Whether Kumārila himself or some predecessor of his was the author of this error, we do not know; but we can well understand how it crept in. For Śābarasvāmin, whose habit is not to make long quotations, apparently inserted this passage from the *Vṛttikāra* because it contains a discussion of peculiar Mīmāṃsaka doctrines, e. g., on the six *pramāṇas*, for which his succinct commentary on the Sūtras of Jaimini would not otherwise have offered an opportunity. In quoting, and not criticising, those doctrines, he intimated his acceptance of them; and Kumārila therefore, misled by Śābarasvāmin's words *Vṛttikāras tv anyathe 'mam granthaṃ varṇayāṃcakāra*, ascribed to the *Vṛttikāra* only that part of his exposition where it obviously differs from Śābarasvāmin's comment, not the remaining part which chiefly contains the additional matter. This second part was so important for the Mīmāṃsaka philosophy, that Kumārila devoted to the discussion of its contents little less than half the volume of his *Ślokavārttika*. He had therefore a strong motive to ascribe this part of the quotation to Śābarasvāmin on whose *Bhāṣya* he wrote his *Vārttika*. But from the fact that he did so, we may perhaps conclude that at his time, or earlier, the original work of the *Vṛttikāra* had been lost or at least had ceased to be studied at all; for otherwise he could not have committed or repeated this gross error.

Now the question arises as to who is the author of the *Vṛtti* from which the passage under consideration has been taken. Gangānātha Jhā in his admirable translation of the *Ślokavārttika*, p. 116, note (17) says with regard to this passage: "Kārikās 17—26 expound the view of the author of the *Vṛtti* (Bhavadāsa)." However, the name of Bhavadāsa is not given by Pārthasārathi commenting on the passage in question (printed text, p. 212—216); but on p. 11, commenting on v. 33, in which Kumārila adverts to a controverted opinion brought forward 'in other commentaries' *vṛttyantareṣu*, he mentions as the authors 'Bhavadāsa and others,' in accordance with

Kumārila's statement in v. 63, p. 21. On these passages, it would seem, Gangānātha based his conjecture, which in my opinion is unacceptable. For if an author is referred to simply by the title *Vṛttikāra*, an authority of high rank must be intended, as is seen in many other cases; and it is not at all likely that Kumārila would have ranked such an authority together with other commentators, as he did with regard to Bhavadāsa in the phrase *vṛtṭyantareṣu*. If there had been more than one *Vṛtti*, then it would have been inaccurate to speak of the *Vṛttikāra*. And besides, the *Bhāṣya* contains no reference to Bhavadāsa; Kumārila must therefore have learned Bhavadāsa's opinion from his work. But as shown above, he most probably did not know the original work of the *Vṛttikāra*. Hence it would follow that the *Vṛttikāra* is not to be identified with Bhavadāsa.

The same scholar ascribes, on p. III of the introduction of his work named above, the *Vṛtti* to the revered Upavarṣa. But as the *bhagavān* Upavarṣa is mentioned in the very passage from the *Vṛttikāra*, he must be not only different from, but also considerably older than, the latter; for the title *bhagavān* is given only to authors of high authority and some antiquity.¹

As thus both conjectures of Gangānātha Jhā about the author of the *Vṛtti* can be shown to be wrong, I venture to advance one of my own. Rāmānuja quotes a *Vṛtti* on the *Brahma Sūtra* by Bodhāyana and refers to him as the *Vṛttikāra*.² Now I think it probable that Bodhāyana wrote the *Vṛtti* not only on the *Uttara Mīmāṃsā* (i. e. B.S.), but also on the *Pūrva Mīmāṃsā*, just as Upavarṣa, the predecessor of the *Vṛttikāra*, commented on both *Mīmāṃsās*. For, according to Śāṅkara ad B.S. iii, 3, 53, Upavarṣa in his commentary on M.S. referred to his remarks in the *Śārīraka*, i. e. his commentary on B.S. And Śabarāsvāmin also was equally versed in the *Uttara* and the *Pūrva Mīmāṃsās*; for a lengthy dissertation on the existence of the soul, called *Ātmavāda*, (p. 19, l. 3—p. 24, l. 9 of the printed text) in his *Bhāṣya* reads like part

¹ Hall, Index, p. 167, says with reference to the Śābara *Bhāṣya* "Kṛṣṇa Deva states, in the *Tantra Cūḍāmaṇi*, that a *Vṛtti* was composed on this work, by Upavarṣa." If Kṛṣṇa Deva is right, his Upavarṣa must be a different person from our Upavarṣa.

² Thibaut in SBE. vol. xxxiv, p. xxi. Sukhtankar, *The teachings of Vedānta according to Rāmānuja*, p. 7, 9 (WZKM. vol. xii, p. 127, 129).

of a Vedānta treatise. Śāṅkara ad B.S. iii, 3, 53 says¹ with regard to that passage that the Ācārya Śabarasvāmin took (his subject) from B.S. iii, 3, 53, and treated it in the *pramāṇalakṣaṇa* (i.e. ad M.S. 1, 5). The meaning of this statement is that Śabarasvāmin by anticipation discussed the existence of the soul in the Bhāṣya on M.S. i, 1, 5, while the proper place for this subject is in a commentary on B.S. iii, 3, 53; we can not safely conclude from Śāṅkara's words, that Śabarasvāmin actually wrote a commentary on B.S., and even less, that he transcribed the passage in question from it (for it is clearly worded with reference to the context in which it now stands). But at any rate it is evident that at Śabarasvāmin's time the Pūrva and Uttara Mīmāṃsās still formed *one* philosophical system, while after Kumārila and Śāṅkara they were practically two mutually exclusive philosophies.

After this necessarily long digression we return to the examination of that part of the passage from the Vṛttikāra which relates to the Bauddha doctrines. It consists of two sections called Nirālambanavāda and Śūnyavāda in the Śloka-vārttika where the discussion of it is introduced by the remarks translated above, p. 7. The author, i.e., the Vṛttikāra, has explained in the preceding part that perception is a means of right knowledge provided that no defect (*doṣa*) vitiates any of the parts or elements which combined constitute perception; he then goes on as follows:

“(An opponent objects:) ‘All cognitions (*pratyaya*) are without foundation (in reality) just like a dream; for we recognise in a dream that it is the nature of cognition to be without foundation. A waking person also has cognitions, e.g. of a post or a wall; and therefore this cognition also is without foundation.’ We answer: a waking man's notion (e.g.) »this is a post« is a positively ascertained one; how is it possible that it should turn out wrong? ‘The notion in a dream also was, just in the same way, a well ascertained one; previous to the awakening there was no difference between the two.’ You are wrong; for we find that (what we saw) in a dream, turns out wrong; but we find that (what we see) in the other case (i.e. in the waking state), does not turn out wrong. If you say that on account of the class-characteristic (cognition as a

¹ *ita evā "kṛṣyā "cāryeṇa Śabarasvāminā pramāṇalakṣaṇe varṇitam.*

genus) (the same predication) will hold good in the other case, (we reply as follows). If you mean that the cognition in a dream is wrong because it is a cognition, then of course the cognition of a waking man must be wrong too. But if cognition is (taken to be) the reason that something is so as it is cognised (and not different), then it is impossible to say that this cognition (viz. one in a dream) is different (i. e. wrong) because it is a cognition. (Not from the nature of cognition by itself), but from something else we come to know that cognition in a dream is wrong on account of its being opposed to truth. 'How do you ascertain this?' In the following way because a sleepy mind is weak, sleep is the reason for the wrongness (of cognition) in a dream; in dreamless sleep it (the mind) is absent altogether; for one without any consciousness whatever, is said to be in dreamless sleep. Therefore the cognition of a waking man is not wrong. 'But the sensorium of a waking man also may be vitiated by some defect.' If so, the defect may be found out! 'While one dreams, a defect is not found out.' It is; for on awaking we find out that the mind had been vitiated by sleep."

The problem discussed in the preceding passage is the same as that in N.D. iv, 2, 31—33, see above, p. 12. The point at issue is this. Perception in a dream cannot be said to be wrong, unless some other perception is admitted to be true, in contradistinction to which that in a dream could be recognised to be wrong. As the opponent maintains that all cognitions are wrong, his argumentation from dreams is without meaning. I now continue the translation of the passage from the Vṛtti-kāra:

"(The opponent says: 'The cognition itself) is a *void*. For we do not perceive a difference of form in the object and the idea of it; our idea is *directly* perceived, and therefore the so-called object which should be different from the idea, is a non-entity.' (Answer:) Well, this would be the case, if the idea had the form (or shape) of its object. But our idea is without form, and it is the external object which has the form; for the object is directly perceived as being in connexion with a locality outside of ourselves. An idea caused by perception is concerned with an object, and not with another idea; for every idea lasts but one moment, and does not continue to exist while another idea comes up. (The opponent says:)

'While this second idea is originating, it becomes known (to the first idea) and, at the same time, it makes known to it the object, just as a lamp (illuminates and makes thus known things).' We reply: This is not so. For before the object has become known, nobody is conscious of having the idea, but after the object has become known (to us), we become aware by *inference* that we have an idea concerning it; it is impossible that both these processes should be simultaneous. (The opponent says:) 'We do not contend that we know the object before the idea has originated, but after it has originated; therefore the idea originates first, and afterwards the object becomes known.' (We reply:) Quite right! The idea originates first, but it is not the idea that first becomes known. For as will occur occasionally, we say of an object which we do know, that we do not know it.¹—Moreover it is the very nature of every idea to be always and necessarily bound up with the name of (or a word denoting) its object. Therefore an idea is 'intimately connected with a name,' but that which is 'not intimately connected with a name' is termed 'directly perceived.'²—And furthermore, if (the object and the idea) had the same form, this would sublate the idea and not the object which is directly perceived. But there is no such uniformity (between the object and its idea, as you assume); for by *inference* we become cognizant of the intrinsically formless idea, but we *directly perceive* the object together with its form. Therefore cognition is based on the object.—And furthermore, the notion of (e.g.) a piece of cloth has an individual cause (in this sense, that we have the idea of the cloth) only when threads form the material cause (of the object, viz. the cloth). For if this were not the case, a man of sound senses might

¹ We are not conscious of having an idea concerning it.

² The printed text is wrong. Instead of '*tasmān na vyapadeśyā buddhiḥ, avyapadeśyam ca nāpratyakṣam*' we must read '*tasmān nāvya-padeśyā buddhiḥ, avyapadeśyam ca nāma pratyakṣam*.'

What is meant is this. An abstract idea is always coupled with a word expressing its object; but this is not the case when we directly perceive a thing. Therefore perception is thus defined in N.D. i, 1, 4: *indriyārthasannikarṣotpannam jñānam avyapadeśyam avyabhicāri vyavasāyātmakam pratyakṣam*. Instead of *avyapadeśyam* the Buddhists say more accurately *kalpanāpōḍham*. The definition of *pratyakṣa*, Nyāyabindu I, is *pratyakṣam kalpanāpōḍham abhrāntam*; and *kalpanāpōḍha* is defined (ibidem) *abhilāpasamsargayogyapratibhāsapratītiḥ kalpanā, tayā rahitam*.

have the notion of a jar though threads had been used (in the production of the object in question); but that is not the case.¹ Therefore cognition is not without foundation (in external objects), and consequently direct perception does not convey erroneous knowledge."

In this part of the passage from the Vṛttikāra, the opponent whose arguments are refuted is without doubt a Śūnyavādin. This is not only the opinion of Kumārila (see original, p. 268 to 354, translation, p. 148—182), but it is unmistakably indicated by the word, with which this part opens, viz. *śūnyas tu*. But if we consider the arguments brought forward, by themselves, we might be led to believe that their object is to prove that only the idea has real existence. And on the other hand in the first part the illusory character of all ideas or cognitions is discussed; and this is properly the view of the Śūnyavādins. Nevertheless Kumārila would make us think that the Vijñānavādins are combated in this first part to which he gives the title Nirālambanavāda (see original, p. 217 to 268; translation, p. 119—148). At first sight the text itself seems to speak in favour of his view; for it opens with the opponent's statement that the *pratyayas* are *nirālambana*. But very weighty reasons prove, in my opinion, that Kumārila's view is wrong. (1) As said above, the problem discussed in the first part of our text is the same as in N.D. iv, 2, 31—33, and we have demonstrated above that not only these Sūtras, but also Vātsyāyana's comment on them have in view the Śūnyavāda only. (2) The technical terms peculiar to the Vijñānavāda, e. g. *viññāna*, *ālayaviññāna*, *pravṛttiviññāna*, *vāsanā*, are absent from our passage, and instead of them only such words as *pratyaya*, and *buddhi*, and *jñāna* (which are common to all Indian philosophers) are used. (3) The only argument discussed is that waking-cognitions being like dream-cognitions are likewise illusory, and as has already been said, this is not an opinion which is peculiar to the Vijñānavādins. (4) The division of the whole passage into two parts, of which the first combats the Nirālambanavāda, and the second the Śūnyavāda, is quite arbitrary. There is in truth but one subject of dis-

¹ The meaning of this argument is that the object is not caused by the idea, but it has a cause which is independent of the idea, viz. the material from which the object or the thing is produced.

cussion in the whole passage, viz. that which is stated at the beginning of the first part, and which is repeated at the end of the second: *nirālambanaḥ pratyayaḥ*. And therefore the whole text must be directed against the Śūnyavāda because this is avowedly the case in the second.¹

In the introductory remarks it has already been explained how later commentators came to interpret a refutation of the Śūnyavāda as one of the Vijñānavāda. If radical Scepticism, represented by the former, attacked the validity of perception as a means of true knowledge, it is natural that it brought forward arguments which might be used also by pure Idealism, represented afterwards by the Vijñānavāda. But it is worthy of note that all those arguments on which the Vijñānavādins based their idealistic system, had already been advanced by the Śūnyavādins. Thus it is evident that the Vijñānavāda was potentially contained in the Śūnyavāda, and that Asaṅga and Vasubandhu, who founded the idealistic school of Buddhist philosophy, were largely indebted to their predecessors.

The result of the preceding inquiry, viz. that the controversy in the passage from the old Vṛttikāra is about Śūnyavāda opinions only, *a fortiori* holds good with the Vedānta Sūtras also. But that passage may also serve us as a commentary on B.S. ii, 2, 28—32. I have above identified conjecturally our Vṛttikāra with Bodhāyana who wrote a Vṛtti on B.S.; if this be true, it is most likely that in our passage he should have given the essence of his comment on the quoted Sūtras in B.S., which are concerned with the same problem. But if my conjecture is not accepted, then the case is similar to that of Śabarasvāmin, who, when expounding the Ātmavāda in his Bhāṣya on M.S., anticipates the Sūtras of B.S. in which this topic is discussed. In the same way our author who wrote

¹ I draw attention to another passage, p. 14f., though it is not conclusive for the question in hand. There the Vṛttikāra discusses the problem about the meaning of words, and touches the problem of the whole and its parts. The opponent denies that there is such a thing as a wood, a herd, &c., and goes on to object to perception as a means of true knowledge 'the trees also are non-existent.' The answer is: "If you say this (we need not enter into a renewed discussion), for this view of the Mahāyānikas has already been refuted" (*pratyuktaḥ sa mākāyānikāḥ pakṣaḥ*). This is apparently a reference to the passage translated in the text, and the followers of the Mahāyāna are spoken of without the distinction of Madhyamikas and Yogācāras.

the Vṛtti on M.S. must have regarded Pūrva and Uttara Mimāṃsā as the two interconnected parts of one uniform system; and when he treated a subject which properly belongs to the Uttara Mimāṃsā, he must have treated it in conformity with the latter. We actually find in the passage from the Vṛttikāra the substance of a commentary on B.S. ii, 2, 28—32, disposed in nearly the same order as that of those Sūtras, as will now be proved. The substance of the first part of the passage is epitomised in Sūtras 28 and 29: *nā 'bhāva upalabdheḥ; vaidharmyāc ca na svapnādivat*. We may paraphrase these two Sūtras in accordance with the explanation of the Vṛttikāra as follows: "The objects of cognition are not non-entities (i. e. cognition is not without foundation in the external world: *na nirālambanaḥ pratyayaḥ*), because we actually perceive external objects. 28. Nor is our cognition similar to dreams, &c., because there is a real difference of cognition in the state of waking and that of dreaming 29" The next two Sūtras contain in a condensed form the substance of the second part of our passage, *na bhāvo 'nupalabdheḥ* 30. "(An idea) cannot be the real object (underlying cognition, as proved in Sūtras 28 and 29), because (the idea) is not the object of direct perception." In the passage from the Vṛttikāra the opponent maintains: 'our idea is directly perceived (*pratyakṣā ca no buddhiḥ*), and the author refutes him by showing that an idea is not perceived, but that we become aware of having an idea by inference. This is the substance of Sūtra 30. The next Sūtra: *kṣaṇikatvāc ca* (31): "And because cognition has but momentary existence" is explained by the Vṛttikāra in the passage beginning: 'for every idea lasts but one moment' (*kṣaṇikā hi sā*). The meaning is of course that one idea cannot perceive another; for while the first exists, the second has not yet come into existence; and when the second has come into existence, the first has ceased to exist. The last Sūtra: *sarvathā 'nupapattēś ca* (32) "And because it is unreasonable in every way" gives occasion to the Vṛttikāra's remarks beginning with 'But there is no such uniformity' (*api ca kāmam, &c.*).

Thus it will be seen that with the help of the passage from the Vṛttikāra we can fully and consistently explain the original Sūtras. And I venture to presume that this interpretation comes nearer the meaning of the original, than that given either by Śāṅkara or Rāmānuja; for these commentators living

several centuries after the Vṛttikāra did violence to the text because they felt obliged to introduce into their comments the substance of controversies which happened long after the time of the Sūtrakāra.

The preceding inquiry has proved that the Śūnyavāda only has been confuted in the Brahma Sūtras and in the Vṛtti quoted by Śābarasvāmin. These two works must therefore have been composed in the period between 200 and 500 A.D. according to what has been said in the beginning of this paper. I am inclined to think that Śābarasvāmin also must be assigned to the same period, since he also appears to ignore the Vijñānavāda and to refer to the Śūnyavāda when controverting the Buddhist denial of the soul (p. 20f.). There a Buddhist combats the argument that knowledge (*vijñāna*) presupposes a knower (*vijñātṛ*), and explains that knowledge and memory can be accounted for by the assumption of *skandhas* or rather a *santāna* of momentary *skandhas*. He concludes: *tasmāc chūnyāḥ skandhaghanāḥ*, "therefore nothing real is behind the *skandhas*." This doctrine is of course common to all Buddhists, but the expression used here, *śūnya*, seems to betray the Śūnyavādin. And besides, in this controversy, especially where the real meaning of *aham*, is discussed, a Vijñānavādin would have introduced his term *ālayavijñāna*; but no special terms of the Vijñānavāda are used by Śābarasvāmin. It is therefore probable that he wrote before the establishment of the Vijñānavāda. His archaic style also speaks in favour of an early date.¹

3. Yoga.

In Yōga Sūtra, iv, 15f., the Buddhist denial of the external world is briefly discussed. Sūtra 15: *vastusāmye cittabhedāt tayor viviktaḥ panthāḥ*. "Since the same object (is perceived by many persons and) causes various impressions on their mind, they (i. e., the objects and the ideas caused by them) must be two different things." This is apparently a refutation of the Nirālambanavāda, but it does not appear whether it is intended against the Śūnyavāda or the Vijñāna-

¹ Cf. Bühler in SBE., vol. xxv, p. CXII. After the preceding discussion it is perhaps superfluous to state that I cannot subscribe to the exaggerated chronological estimate of that scholar.

vāda.¹ Sūtra 16: *na cai 'kacittatantram vastu; tad apramāṇaṁ, tadā kiṁ syāt?* "Nor can the existence of an object be dependent on the mind of one observer; for when (his mind being absent) it is not observed at all, (pray) what would become of the object?" (cf. S.S. i, 43) Here, I think, the meaning of the Sūtra will be best understood, if we assume the opponent to be an adherent of the Vijñānavāda. For in that philosophy the *ālayavijñāna* which represents the self-consciousness of the individual person, contains the *vāsanās* (= *saṁskāras*) which becoming mature (*paripāka*) produce the *pravṛttivijñāna* or the thoughts concerned with objects.² According to this theory the object is dependent on *pravṛttivijñāna* or, in common language, on the mind of the observer.³ If this interpretation is right, Patañjali must be later than the middle of the 5th century A.D. At any rate he cannot be earlier than the 3rd century A.D.

Even the earlier of these two dates is at variance with the prevailing opinion that Patañjali the author of the Yogasūtra is the same Patañjali who composed the Mahābhāṣya. For Patañjali is said to have written the Yogasūtra, the Mahābhāṣya, and a work on medicine. This tradition, however, cannot be traced to an ancient source.⁴ Nevertheless European

¹ In the Bhāṣya on the preceding Sūtra we find the same argument about things seen in a dream with which we are already familiar. Vācaspatimiśra in the Ṭīkā ascribes this argument to the Vijñānavādin (cf. above, p. 11), but he says expressly that it has been introduced by the Bhāṣyakāra without its being warranted by the Sūtra (*utsūtra*).

² Sarvadarśanasamgraha, Anandasram edition, p. 15f.

³ Y.S. iv, 21 might be taken for a reference to the Vijñānavāda; but the commentators are apparently right in referring to the *mānasa-pratyakṣa* or *manovijñāna*, which seems to have been acknowledged by the older schools also. The definition in the Ṭīkā, however, agrees nearly verbatim with that in the Nyāyabinduṭīkā (*Bibl. Ind.*, p. 13, l. 11).

⁴ It occurs in a traditional verse which is quoted, as Professor J. H. Woods informs me, in the commentary on the Vāsavadattā by Śivarāma (p. 239 of the edition in the Bibl. Indica; Śivarāma wrote in the beginning of the 18th century, Aufrecht Cat. Cat., p. 652). According to Bodās (Tarkasamgraha, B.S.S., p. 24) this (?) verse is said to be from Yogabīja. It must be stated that the passage in the Vāsavadattā which refers to Patañjali alludes to his *oratorical* gifts only. Similarly, a verse in the Patañjalīcarita, V, 25 (Kāvya-mālā, Nro. 51), by Rāmabhaṭṭa Dīkṣita of the 18th century (cf. Aufrecht, l. c., p. 517), ascribes to him *sūtrāṇi Yogaśāstre Vaidyakaśāstre ca vārttikāni*. Here he is identified apparently

scholars are inclined to give it credit, e. g. Lassen, *Ind. Alt.*, I², p. 999, Garbe, *Sāṅkhyaphilosophie*, p. 26, note, and *Sāṅkhya und Yoga*, p. 36, and others; and accordingly they place Patañjali in the 2nd century B.C. But it can be shown on internal evidence that the author of the Mahābhāṣya cannot be identical with the author of the Yogasūtra. It is worth while definitely to establish this point.

Professor Garbe admits that there are no special coincidences between the language of the Yogasūtra and the Mahābhāṣya, and accounts for this want of agreement by the difference of the subject of both works. But on the other hand we certainly might expect that the greatest grammarian of his age should have observed the rules of his grammatical work when he wrote another on Yoga. Yet in Y.S. i, 34 he writes *pracchar-danavidhāraṇābhyām* instead of *vidhāraṇapracchardanābhyām* as it ought to be according to the rule *laghvakṣaram* (i. e., *pūrvam*) in *vārttika* 5 of ii, 2, 34; and here the meaning of the two parts of the compound furnishes no reason for altering their grammatical order, as might perhaps be pleaded for the order in *sarvārthataikāgratayoḥ* iii. 11 instead of *ekāgratāsarvāthatayoḥ* as postulated by Pāṇini's rule *ajādyadantam* ii, 2, 33. A similar case is *grahīṭṛgrahaṇagrāhyeṣu* in i, 41. Vacaspatimiśra says when commenting on that Sūtra:¹ "the order of the members of the compound as given in the Sūtra is irrelevant, because it is opposed to the order required by the subject (viz. *grāhyagrahaṇagrāhīṭṛ*)." Now grammar is in favour of that very order which is also required by the subject; for this order is in accordance with Pāṇini's rule: *alpāctaram* ii, 2, 34: "In a Dvandva the member of fewer syllables should come first." And though a deviation from this rule might be defended, still the grammarians seems to have regarded it as an irregularity better to be avoided.² At any rate our

with Caraka. This is expressly done according to Bodās (l. c.) by the grammarian Nāgeśa, who lived in the 18th century, in his *Vaiyākaraṇa-siddhāntamañjūṣā* (cf. Aufrecht, *Cat. Cat.*, s. v.).

¹ *tatra grahīṭṛgrahaṇagrāhyeṣu iti sautraḥ pāṭhakramo 'rthakramavirodhān nā 'daraṇīyaḥ.*

² Patañjali discusses the question whether the rule *alpāctaram* applies to compounds of more than two members, to which alone the comparative *alpāctaram* would seem to apply. He adduces two verses which contain three-membered dvandvas: *mṛdaṅgaśaṅkhatūnavāḥ* and *dhana-patirāmakeśavānām*. Kātyāyana in *vārttika* 1 accounts for these ex-

case would have given cause to a grammarian to consider the order in which he should place the members of the compound, and he certainly would not have chosen that order which could be impugned for reasons derived from grammar *and* from the nature of the subject. The reason why the author of the Sūtra placed *grahīṭṛ* first in the dvandva, was perhaps a linguistic instinct that words not ending in *a* or *ā* should come first, a rule which grammarians restrict to words ending in *i* and *u* (*dvandve ghi* ii. 2. 33).

On the other hand it can be shown that the author of the Mahābhāṣya held philosophical ideas which differed considerably from those of Yoga and Sāṅkhya. Commenting upon *Vārttika* 53 ad i, 2, 64 he discusses a *kārikā* on the meaning of gender: the feminine denotes the congelation (*saṁstyā·a*), the masculine the productivity (*prasava*) of the qualities (*guṇas*): sound, touch, colour, taste, and smell. "All individual things (*mūrtayas*) are thus constituted, they are qualified by congelation and productivity, possessing sound, touch, colour, taste, and smell. Where there are but few qualities, there are at least (*avaratas*) three: sound, touch, and colour; taste and smell are not everywhere." This is a very crude theory about the qualities and one that is very far removed from the refined speculations of the Śāṅkhyas and Yogas about the *tanmātras* and *mahābhūtas*.—Therefore, since the author of the Yogasūtra does not conform to the grammatical rules taught by the author of the Mahābhāṣya, and because the latter is ignorant of the philosophical views of the former, they cannot be identical, but must be two different persons.

Having shown that the only argument for the great antiquity of the Yogasūtra is fallacious, I shall now bring forward internal evidence for a rather late date of that work. The Yogaśāstra of Patañjali is described as being part of the Sāṅkhyasystem (*yogaśāstre sāṅkhyapravacane*); and it is well known that it generally conforms to the Sāṅkhya. But there are some Yoga doctrines which differ from the Sāṅkhya. Yoga admits the Īśvara, while Sāṅkhya is essentially atheistic; and

ceptions by assuming that the two last members are a dvandva (*śāṅkhatūnava*) and form the second member of the whole dvandva (*atantre tatanirdēṣe śāṅkhatūnavayor mṛdaṅgena samāsaḥ*).

this peculiarity of the Yoga seems to be very old, since it is mentioned in so ancient a work as the *Mahābhārata* (xii. 300. 3 ff.). But there are other Yoga doctrines not countenanced by *Sāṅkhya*¹ which are clearly adoptions from other systems. They are the following:

(1) The doctrine of *Sphoṭa* has been adopted from the *Vaiyākaraṇas*; it is expounded in the *Bhāṣya* ad iii. 17. This theory is however not directly mentioned in the *Sūtra*, and its introduction rests entirely on the authority of the *Bhāṣya*. (2) The doctrine of the infinite size of the *antaḥ-karāṇa* seems to have been adopted from the *Vaiśeṣika* philosophy (*ātman*). It is given in the *Bhāṣya* on iv. 10 and there ascribed to the 'Ācārya.' (3) The atomic theory which originally belonged to the *Vaiśeṣika*,² is clearly referred to by Patañjali in i. 40 (cf. *Bhāṣya* on iii. 44). (4) The doctrine that time consists of *kṣaṇas*, which was first put forth by the *Sautrāntikas*, is clearly assumed in iii. 52, though the details are explained in the *Bhāṣya* only.—The *Sphoṭavāda* and the *Manovaiśvavāda* (1. and 2.) may be later additions to the system, but the *Paramāṇuvāda* and the *Kṣaṇikavāda* must be ascribed to Patañjali and cannot be later than him. That he did adopt them, directly or indirectly, from the *Vaiśeṣikas* and *Buddhists*, though of course not in their original form, presupposes that these doctrines had somehow ceased to be shibboleths of hostile schools, and that the general idea underlying them had been acknowledged by other philosophers too. We know that this has been the case with regard to the atomic theory which has also been admitted by *Buddhists*, *Jainas*, *Ajīvakas*, and some *Mīmāṃsakas*.³ The *Kṣaṇikavāda*, in an altered and restricted form, has been adopted by the *Vaiśeṣikas*. For according to them some qualities (*guṇas*) exist for three *kṣaṇas* only, e. g., sound originates in one *kṣaṇa*, persists in the second, and vanishes in the third. This is a kind of *Kṣaṇikavāda* so changed as to avoid the objections to which the original doctrine was exposed. Still it must be remarked that even this altered form of the *Kṣaṇikavāda* is not yet found in the

¹ See Garbe, *Sāṅkhya und Yoga*, p. 49 ff.

² Cf. *Encyclopedia of Religion and Ethics*, vol. i, p. 199 ff.

³ See my article quoted in the last footnote.

Sūtra,¹ but is first taught in the *Praśastapādabhāṣya*, p. 287.—This adoption of originally heterodox doctrines by Patañjali therefore unmistakably points to a relatively modern time, and thus it serves to confirm the result at which we arrived by examining the allusions to Buddhist doctrines contained in Y.S.; namely, that the *Yogasūtra* must be later than the 5th century A.D. It is probably not far removed in time from Īśvara Kṛṣṇa, the remodeler of Sāṅkhya.

Nor can an objection be raised against this date from the remaining literature of the Yoga. For the *Bhāṣya* by Vyāsa, which is next in time to the Sūtra, contains nothing that would make the assumption of an earlier date necessary. Garbe places Vyāsa in the seventh century (l. c., p. 41); and though his estimate is supported only by a legendary account of Vyāsa's pupils, still it is not improbable in itself.

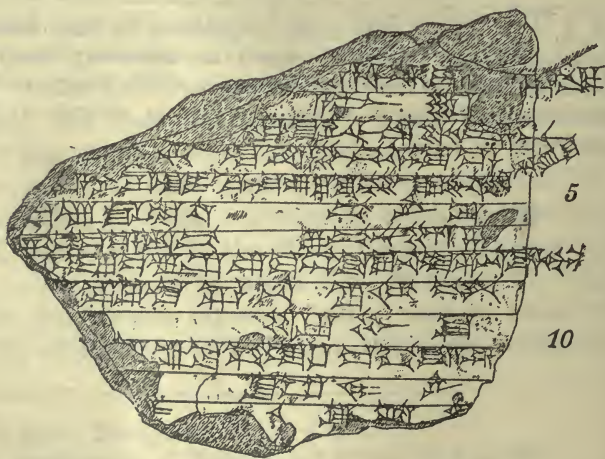
The results of our researches into the age of the philosophical Sūtras may be summarized as follows. N.D. and B.S. were composed between 200 and 450 A.D. During that period lived the old commentators: Vātsyāyana, Upavarṣa, the Vṛttikāra (Bodhāyana?), and probably Śabarasvāmin. V.D. and M.S. are about as old as, or rather somewhat older than, N.D. and B.S. Y.S. is later than 450 A.D., and S.S. is a modern composition.

¹ V.D. ii. 2. 31 teaches that sound is produced by conjunction and disjunction and sound. This is the germ of an undulatory theory of the transmission of sound in India; but the details of this theory, containing the above mentioned doctrine of the three *kṣaṇas*, are not yet worked out in the Sūtra.

Hilprecht's Fragment of the Babylonian Deluge Story
(*Babylonian Expedition of the University of Pennsylvania, Series D, volume V, fasc. I*).—By GEORGE A. BARTON, Bryn Mawr College, Bryn Mawr, Pa.

ON Saturday morning, March 19th, the daily press of Philadelphia and other cities contained announcements of the discovery, by Professor Hilprecht, of a new version of the story of the deluge, which antedated all the accounts previously found and which vindicated the correctness of the statements of the Priestly Document of the Pentateuch. Interest was increased when in the *Old Penn Weekly Review of the University of Pennsylvania* of March 19th Dr. Hugo Radau, commenting on the discovery, wrote: "It is safe to say that this publication, based upon one of the most remarkable finds in the Temple Library of Nippur, is destined to usher in a new period in the history of religion."

The speedy publication of the tablet itself together with Prof. Hilprecht's interpretation enabled us to examine both in detail.



The Nippur version of the Deluge Story
(From *The Babylonian Expedition of the University of Pennsylvania, Series D, vol. V, fasciculus 1*, Philadelphia, 1910).

The text of the tablet is given below followed by Professor Hilprecht's transliteration and translation as they appear on pp. 48 and 49 of *The Babylonian Expedition of the University of Pennsylvania*, Series D, Volume V, fasciculus 1 (Philadelphia 1910).

(p. 48) Transliteration.

1. (2)-ša(2)-ši-il(2) i-(2)-... (2)-ka
2. a-pa-aš- šar
3. ka-la ni-ši iš-te-niš i-za-bat
4. -ti la-am a-bu-bi wa-ši- e
5. ..(2)-a-ni ma-la i-ba-aš-šú-úlu-kinub-bu-kulu-pu-ut-tuḫu-ru-šú
6. ..^{is}elippu ra-be-tu bi- ni- ma
7. ..ga-be- e gab-bi lu bi-nu-uz- za
8. ..ši-i lu ^{is}magurgurum ba-bil- lu na-aṭ- rat na-piš-tim
9. -ri(2)zu- lu-la dan-na zu- ul- līl
10. te-ip- pu- šú
11. -lam(2)ú-ma-am ši-rim iš-šur šá-me-e
12. ku-um mi- ni
13. -(2) u ki[n]- ta ru(2)-.....
14. u]

(p. 49) Translation.

1. "thee,
2. ... "[the confines of heaven and earth] I will loosen,
3. ... "[a deluge I will make, and] it shall sweep away all men together;
4. ... "[but thou seek l]ife before the deluge cometh forth;
5. ... "[For over all living beings], as many as there are, I will bring overthrow, destruction, annihilation.
6. "Build a great ship and
7. "total height shall be its structure.
8. "it shall be a house-boat carrying what has been saved of life.
9. "with a strong deck cover (it).
10. ... "[The ship] which thou shalt make,
11. ... "[into it br]ing the beasts of the field, the birds of heaven,
12. ... "[and the creeping things, two of everything] instead of a number,
13. "and the family
14. ... "and"

In the present paper it is proposed: 1. To examine the interpretation of the text. 2. To discuss the evidence for the age of the document, and 3. To discuss its bearings on the Bible.

1. As to the interpretation:

In line 1 Hilprecht interprets only the last sign *ka*, rendering it "thee." In the absence of what preceded we do not know whether this is right or not. Even if a pronominal suffix, it was, perhaps, dependent on a noun, and to be rendered "thy."

In line 2 the only legible syllables are *ap-pa-aš-šar*, "I will loosen" or "let loose." Hilprecht supplies before it, *uṣurā-* (or *kippāt*) *šamē u iršitim*, and renders: "the confines of heaven and earth I will loosen." He refers for authority to Jensen in KB., VI, 520, where Jensen quotes a conjectural emendation made by Haupt in Schrader's KAT² to line 2 of DT, 42, published in Haupt's NE, p. 131. What really stands in that text is *kima kip-pa-ti*. No mention of heaven and earth appears on that tablet, nor the verb *ap-pa-aš-šar*. To base a conjectural emendation on another conjectural emendation to another passage which stood in another context, is insecure ground.¹

In line 3 the words that stand are very clear: *ka-la ni-ši iṣ-te-niṣ i-za-bat*, "all the people together it shall seize." *i-za-bat* being clearly for *i-ša-bāt*, the future of *šabātu*, "to seize," "take."² While Hilprecht recognizes the "possibility" of this reading, he "prefers" to regard it as from the stem *šabātu*, "to beat," "to strike." Why this common form, written as it often is in the time of the Cassites and of Hammurabi, should be discarded for one that presupposes the difficult phonetic change of *š* to *z* and the unnecessary change of *t* to *t*, is because Jensen had noted (KB., VI, 531), that *šabātu* was the technical term used of the deluge!

¹ Hommel, who has defended Hilprecht's main positions in articles published in the *Frankfurter Zeitung* of April, 19, 1910 and the *Expository Times* for May, 1910, improves upon Hilprecht's rendering by boldly inserting from Gen. 7¹¹ the words "the springs of the deep", making the line read, "the springs of the deep will I loose". Bezold, *Frankfurter Zeitung*, May, 21, 1910, renders "I will loose a bann". Prince and Vanderburgh AJSL, XXVI (July, 1910), p. 305, note that it is ordinarily used of loosening a curse. It is clearly uncertain how the line began.

² So also Prince and Vanderburgh.

In line 4 we can make out the signs: *ti la-am a-bu-bi wa-se-e*. Disregarding the first sign the three remaining words clearly mean, as Hilprecht has translated them, "before the deluge comes forth." The *ti* belongs to a lost word. Hilprecht fills it out *u at-ta-ma še'-i* (or *bul-lit*) *nap-ša-ti* on the ground that in the "first Nineveh version" 11, 25 ff. these phrases appear. A part of them do appear there, it is true, but in a different order. In reality no one knows what stood at the beginning of this line. *Ti* might belong to any feminine or abstract noun.

Of line 5 Hilprecht has correctly transliterated the visible signs, and disregarding the *a-ni* at the beginning, which belong to a lost word, his rendering of the remainder ("as many as there are, I will bring overthrow, destruction, annihilation") may pass. What is to be supplied at the beginning is uncertain. Hilprecht's guess may in this case be right.

In lines 6 and 7 Hilprecht wisely refrains from filling out the broken lines,¹ and as his rendering of the Semitic is possible no comment is necessary.

In line 8, however, we come upon more difficulties. The sign which he renders *bil* certainly does not have that value. It is in reality two signs *šum-ša*.² The preceding sign, which Hilprecht reads *ba* may be *ma*. The sign which he reads *at* is probably a carelessly written *ši*. We should, therefore, probably read . . . *ši-i-lu* ^{is} *MA-GUR-GUR-ma šum-ša lu-na-ši-rat na-piš-tim*, . . . "a GUR-GUR³ boat indeed is its name, verily it is a savior of life". Perhaps we should render . . . "a GUR-GUR boat, and its name is '*Lu-naširat napištīm*'". Evidence that the Babylonians gave such names to their boats is, however, wanting. The three signs after GUR-GUR

¹ Not so, however, Hommel. Taking a hint from Gen. 6¹⁴ he supplies in line 6 "Take wood and pitch", so as to make the whole "Take wood and pitch and build a great ship"! In line 7 he also supplies from Gen. 6¹⁵ the word "cubits" and reads "and . . . cubits be its complete height".

² In all the writer's researches for his forthcoming volumes on the *Origin and Development of Babylonian Writing* he has met with no instance of *bil* made in this way in any period of the writing. Professor Clay, who has edited as many documents from the Cassite period as any other living scholar agrees with the writer that the reading is *šum-ša*. Bezold questions Hilprecht's reading, but suggests no other.

³ Prince and Vanderburgh, *op. cit.* show that we should not read "house-boat", but a "navigable vessel", i.e. one that can be steered without difficulty.

might also be read *ba-taq-ša* = "its crack". Were we sure that the line referred to stopping the cracks with pitch, this would be attractive. The line is too broken for certain interpretation, but Hilprecht's interpretation is clearly wrong.

Hilprecht renders line 9 (. *zu-lu-la dan-na zu-ul-lil*), "with a strong deck cover it", and claims that this conclusively proves the ordinary rendering line 31 of the well known version, "upon the deep launch it," wrong. In this he is, perhaps, right, but his statement (p. 56) that צֶהָר (Gen. 6¹⁶) means "roof" and not "window" is not new. It is found in Brown, Driver and Briggs, *Hebrew and English Lexicon*, 844a.

In line 10 Hilprecht's conjecture of "The ship" before *te-ip-pu-šu* is as probable as any other.

In line 11, we clearly have "the beasts of the field and the birds of heaven" referred to (*u-ma-am ši-rim iṣ-šur ša-a-mi*), and no fault need be found with Hilprecht's guess that we should supply at the beginning "Into it bring."

Upon line 12 Hilprecht stakes a great deal, and his treatment of it is really astounding. The only signs visible in the line are *ku-um-mi-ni*. Hilprecht divides this *ku-um mi-ni*, and translates, "instead of a number". He then supplies from the P Document of the Old Testament, without even telling us what the Babylonian form of the words would be, "and the creeping things, two of everything," making the whole read: "[and the creeping things two of everything¹] instead of a number."

If now we compare the passage with what Hilprecht calls the Nineveh version 11, 84ff., it becomes certain that this rendering rests on a most uncertain basis. Ll. 84—86 of the copy in the British Museum tell of three classes of living things that went into the ship: *bu-ul ši-ri*, *u-ma-am ši-ri* ("cattle of the field, beasts of the field") formed one class. That class is represented in Hilprecht's tablet by "beasts of the field and birds of heaven," which forms a more beautiful line and avoids tautology. Another class was the "family" (*kim-ti*) of Par-napishtin which appears in the last fragmentary

¹ Hilprecht's friend Kittel has pointed out, *Theologisches Literaturblatt*, XXXI, col. 243 (May, 27, 1910), that one could as well supply "seven of everything" and obtain agreement with the J document. It would certainly be quite as justifiable as that which Hilprecht has done.

line of Hilprecht's tablet as *kin-ta*.¹ The third class, the artisans or people, was expressed by *um-ma-a-ni*. This class probably occurs in Hilprecht's text in the line under discussion (line 12), but he has not recognized it. We should read ...*ku um-mi-ni*, taking *ku* as the final syllable of some lost word. Probably that word is supplied for us in the fragment published by Père Scheil (cf. *Rec. de Travaux*, XX, p. 58, l. 20), in which we have the word *li-il-li-ku*. If now we supply the remainder of the missing word thus [*li-il-li*]-*ku um-mi-ni*,² we obtain: "let the artisans (or people) come." This rendering supposes that *ummîni*³ is the plural of a variant form of *ummâni*, just as we have *šurmîni* for *šurmâni* and *kurummîti* for *kurummâti*. *Mârî ummani*, of the Nineveh version shows that the Deluge writers did not regard the collective *ummani* alone as a sufficient plural.

More extraordinary and inexplicable still, however, is Hilprecht's note on line 12. He equates *mi-nu*, which we have shown to be a part of *um-mi-nu*, with the Heb. מין, "species," which occurs so often in the P document in the phrase למינה or למינהו, meaning "according to its kind," and claims that the occurrence of *minu* in his tablet in this connection proves that מין means "number." He further states that if we insert this meaning wherever מין occurs in the P document, the sense is improved; and on p. 65 of his pamphlet he actually translates Gen. 6²⁰, rendering למינה "instead of a number." ל in Hebrew never means "instead of;" even Hilprecht can find no Biblical parallel, all the corroborative passages which he cites

¹ Prince and Vanderburgh, (*op. cit.*) declare that Hilprecht has no right to read *Kin-ta* here. It is true that the tablet is crumbling at this point, but I see no reason for seriously questioning Hilprecht's reading.

² Bezold questions whether instead of *ku-um* we should not render ŠU-NIGIN *mi-ni*, "the total number". Prince and Vanderburgh read *kûm mi-ni*, "the dwelling of a number", understanding it to mean that the GUR-GUR boat shall be the dwelling of a number. Some may prefer one of these explanations to that offered above. The text is so fragmentary that we are all groping in the dark. These explanations, however, show how insecure Hilprecht's interpretation is.

³ The kindred word *ummâni*, "people", makes one of its plurals by the form *ummâni*, (HWB, 87a). A plural *ummîni* from a singular *um-mînu* would be analogous to this; it also finds analogy in the change of the plural ending *-an* to *-en*; cf. Delitzsch, *Assyrische Grammatik*, § 93, a), 3).

use ל, as he himself confesses, in the sense of "to" or "for."¹ The word מִן, moreover, cannot possibly mean "number." One has but to substitute "number" for מִן and "instead of" for ל in any random passage in Gen. 1 to see how absurd Hilprecht's contention is. Take, e. g., Gen. 1¹²: "Let the earth bring forth grass, herb seeding seed *instead of a number* and trees bearing fruit, the seed of which is in it *instead of a number*". What nonsense! Hilprecht endeavors (p. 57 ff.) to gain help for this impossible meaning by making it seem that Wellhausen and Delitzsch favor it. He says that Wellhausen had pronounced the word a riddle, but he gives no reference to a work of Wellhausen. The fact is he quotes the remark from Delitzsch, *Hebrew Language in the Light of Assyrian Research*, 1883, p. 70 f. and *Prolegomena eines neuen Hebräisch-Aramäischen Wörterbuchs* p. 143. Delitzsch gives no reference for the remark, and Hilprecht evidently does not know where to find it in the voluminous works of Wellhausen. The statement looks very much like a free quotation on the part of Delitzsch of a remark of Wellhausen *Prolegomena zur Geschichte Israels*, 5th ed., p. 396 (cf. his *English History of Israel* p. 389). Wellhausen says: "מִן (kind), a very peculiar word, especially in the form *leminehu*, is found outside this chapter [Gen. 1] and Lev. 14, Gen. 6²⁰ 7¹⁴, only in Deut. 14 and Ezek. 47¹⁰." That is all he says about it, and he clearly translates it "kind," never hinting that there is any doubt as to the signification, but only remarking that the word itself is peculiar.

As to Delitzsch, in his *Hebrew Language* (1883) he expressed the conjecture that it might be "ultimately derived from the Assyrian word "number." He would render e. g. Gen. 1¹²: "Let the earth bring forth grass, herb seeding seed according to its number," understanding the last phrase to be equivalent to the Assyrian "as many as there are." This conjecture, however, he withdrew in 1886 (*Prolegomena* p. 143), where he says: "I have expressed in *Hebrew Language* p. 70 f. the guess that originally it [מִן] was borrowed from the Bab.-Assyr. *minu* 'number' ... I am quite prepared to give this conjecture up." It was a rash theory of Delitzsch's youth, which he abandoned twenty-four years ago.

As is well known, מִן is the regular word in Jewish

¹ Compare the remarks of Kittel on this point, *op. cit.* note to col. 243.

Aramaic and Syriac for "species," "kind," and Professor Haupt has shown that it occurs in Assyrian also (see JAOS XXV 71).

We have now examined Professor Hilprecht's interpretation of the text, with the result, that, while in many of the less important parts of the little tablet his interpretation is sound, he has drawn too freely throughout upon his imagination in filling out the broken lines, and in the one passage upon which he lays most stress, as having a bearing upon Biblical criticism, he has not only hazardingly rendered the cuneiform text, but filled out a broken line from the Bible itself in a most improbable way, and grossly mistranslated his Hebrew.

2. We now turn to the evidence for the age of the tablet. Professor Hilprecht claims that the tablet was composed between 2137 B. C. and 2005 B. C. He bases this claim on three kinds of evidence, A. The stratum in which the tablet was found, B. Palaeographical evidence, C. Linguistic peculiarities. Let us examine each of these in turn.

A. Hilprecht says on p. 1 of this Deluge publication, (i. e. *Bab. Exp. of the University of Pennsylvania*, Series D, Vol. V, Faciculus I), that the tablet was found "while unpacking and examining two boxes of cuneiform tablets from our fourth expedition to Nippur." On p. 36 of the same publication he says: "it was found intermingled with the dated and undated tablets of the lowest of the three strata of "Tablet Hill".

Now the tablet was clearly found before Hilprecht himself reached Nippur, for he had not seen it until October 1909. Indeed, in a foot note on p. 1 he excuses himself for having overlooked it in Constantinople in 1901.¹ An important point

¹ The writer is reluctantly compelled to believe that Hilprecht's foot note is deliberately misleading and that the following statements of Hilprecht in the *So-called Peters-Hilprecht Controversy* are untrue. Hilprecht says on p. 191: "My examination at Constantinople of at least 40,000 tablets from the Third and Fourth Expeditions merely strengthened my conviction. And indeed in setting this number at 40,000 I do not mention enough, for I practically examined to some extent *every* tablet taken to Constantinople from both these expeditions". Again he says on p. 339: "I had personally examined *all* the tablets excavated by the fourth expedition in 1902". [*Italics, mine.*]

My reasons for doubting the truth of these statements are as follows:—

Dr. G. B. Gordon, who was appointed Director of the Museum of the University of Pennsylvania in February 1910, sent me an invitation on June 14th, 1910 to come and see what Babylonian material the Museum

is, that in BE., Series D, Vol. I, p. 509 Professor Hilprecht has himself said some interesting things about the methods of work followed by the fourth expedition before his arrival. He says: "Our knowledge as to how and precisely where the tablets were found is extremely limited. As I must depend exclusively on Haynes' official entries and records for this important question, I deem it necessary to submit a specimen of my only written source of information for the time prior to my arrival when most of the tablets were taken out of the ground. I quote literally from his diary. 'Jan. 16, 1900: 30 sound tablets from a low level in Tablet Hill' (To

contained. His letter stated that "these tablets are now accessible to all Babylonian scholars". I accepted his invitation and visited the Museum on June 17th. Dr. Gordon informed me then that a similar invitation had been sent to all American Assyriologists. In the basement room of the museum, where many boxes of tablets have reposed unpacked, some of them for twenty years, I saw a box of tablets from the fourth Expedition, which was just opened and the contents of which a workman was beginning to clean. Some of these tablets were wrapped in paper which had clearly been put about them while they were still damp, for it had dried on, and came off with the greatest difficulty.

I then recalled that Mr. Clarence S. Fisher, who was the architect of the fourth Expedition and who helped pack these tablets was once, while Fellow in Architecture at the University, asked to assist in unpacking some of these very boxes and had declared in an article in the Philadelphia *Public Ledger* of Feb. 4, 1907 that this paper was the same which they had wrapped about the tablets at Nuffar while they were yet wet. An examination of the boxes and the tablets convinced me that Mr. Fisher's statements are true, and that Hilprecht's explanation given in BE, XX, p. viii ff. and the *So-Called Peters-Hilprecht Controversy*, p. 307ff., viz:—that the boxes were wet by rain in Constantinople will not hold.

Further, of tablets in the box which were not so wrapped, a large number were covered with mud and gypsum, sometimes to the thickness of $\frac{1}{4}$ inch. It is clear that no scientific examination of such tablets could have been made in Constantinople. In view of these facts no comment is necessary on the quotations from Hilprecht made above.

It is to be hoped that many Assyriologists will accept Dr. Gordon's invitation and obtain first hand evidence on this point as well as upon some of those mentioned below.

Since Professor Clay convinced the Museum authorities some years ago that Professor Hilprecht's carelessness had let a large number of tablets crumble to dust, H. has rigidly shut every one from this tablet room. The action of the new Director accordingly means much to science.

this statement Hilprecht adds a foot note which reads: "I cannot even find out in which section of the large mound he unearthed these particular tablets. Nor is the slightest indication given by him as to whether he worked in a room, or found the tablets loose in the earth, or in both.") To continue his quotation of Haynes' diary. "Many large fine fragments of tablets, 1 pentagonal prism, $7\frac{3}{4}$ inches long; its five sides from 1 to $2\frac{1}{6}$ inches wide." Three or four other quotations from Dr. Haynes' diary follow, all of the same import. The only definite statement is that the tablets were found at a 'low level' in "Tablet Hill."

Again, in the *So-Called Peters Hilprecht Controversy*, p. 196, after saying in substance that Dr. Haynes simply numbered his boxes of tablets 1, 2, 3, 4, etc., and that he (Hilprecht) could only determine their locality by the dates at which Dr. Haynes was digging in certain localities, as e. g. on the west side of the Shatt-en-Nil, Hilprecht continues: "It would have been useful for me if the marking had been such as would indicate also the height of the stratum¹ and the exact position; but Dr. Haynes could not attempt to do it, since he was alone in the field, and Mrs. Haynes never attempted to do it; consequently I must now infer . . . by other means, to which stratum the tablets belong".

If we turn now to p. 132 of the same work, we find that Hilprecht has there published the testimony of Mrs. Haynes,

¹ In connection with this declaration that no record was kept of the "stratum" the reader should compare a statement by Professor Hilprecht published in all the daily papers of Philadelphia on April 23rd, 1910. Hilprecht there declares that he only meant that Dr. Haynes did not keep a record of the exact position in which every single tablet had been found, and says that "the stratum of the temple library, the place of its discovery, and the precise number of boxes coming from a certain locality are absolutely known". The reader should note how this statement in part flatly contradicts that quoted in the text above, and should also note the adroit wording of the last part of the sentence. The word "stratum" is introduced here, so that a casual reader gains the impression that Hilprecht asserts that Haynes kept a record of the strata from which tablets came. While the sentence does give that impression, he could, if pressed later, say that he only declared that the *stratum* of the library was known. This is an excellent example of Hilprecht's habit of endeavoring by adroit wording to convey one impression, while he retains the power of declaring later that he did not say what he has seemed to say. It is this kind of writing that has destroyed the confidence of American scholars in him.

who was present when the so-called library was discovered. Her testimony shows that the general level at which tablets were found was known, but that the tablets were not found in strata at all. They were found, Mrs. Haynes says, in different rooms, dumped in such great heaps in the middle that the men could separate them only with the greatest difficulty, and that these heaps appeared as though the tablets had been thrown from shelves at the sides of the room. Imagine a library of account books thrown into the middle of the room from the shelves, would there be *strata* in it? If the books had been arranged chronologically on the walls, would they be chronological in the heap on the floor?¹

From these statements of Hilprecht himself it is clear that he has not in his possession any definite data about strata.

B. Hilprecht remarks (p. 3) that the "writing employed" (in the documents from the supposed stratum in question) "is the script of the early Babylonian period in its various varieties." This is a very vague statement. I venture to think that if the stratum referred to really existed, there are several varieties of early Babylonian writing that were not found in it — such, for example as those of Ur-Nina, Lugalanda etc. Every Assyriologist knows, however, that in the period of Hammurabi a variety of scripts were used. The laws of Hammurabi, for example, and many of his inscriptions, are written in a fairly archaic script — a script readily distinguishable from that of the time of Gudea, as Gudea's is from the earlier periods, but still fairly archaic. There are also scripts which approximate in archaic coloring to that of the laws, but side by side with these there came into use at this time a cursive script, which is indistinguishable from the script of the Cassite period, and many of the features of which persisted into the Neo-Babylonian period.

The writer has taken pains to compile a table, which is here reproduced, by means of which an intelligent idea of the bearing of palaeography upon the date of the tablet may be

¹ Since the above paragraph was written my visit to the Museum of the University of Pennsylvania mentioned in the previous note has afforded proof that the supposition as to the mingling of tablets from different periods in the boxes is true. Dr. Gordon allowed me to see four or five boxes the contents of which had just been cleaned, and this was true of each box.

scientifically estimated. In five successive columns 37 signs are arranged. The signs of col. i represent the time of the Second dynasty of Ur, with the exception of two which are taken from Gudea (Stat. B, vi, 34 and Cyl. B, xiv, 12). In col. ii are signs from a tablet in the Harvard Semitic Museum dated in the reign of Ellil-bani¹, one of the later kings of the dynasty of Isin, who ruled about 2100 B. C.—the very time from which Hilprecht claims that his tablet came. It is a business document. It is well known that business tablets were written in a less archaic script than that employed by the scribes of the same period for literary work, and yet the script of col. ii is much more archaic than that of col. iv in which are placed signs from Hilprecht's deluge fragment. In col. iii are collected signs from the Temple Archives of Nippur of the time of the First Dynasty of Babylon, published by Poebel in BE, VI, 2. In col. iv, signs from Hilprecht's deluge fragment, and in col. v, signs from the Cassite sign list compiled by Clay in BE, XIV.

The tablets published by Poebel in BE, VI, 2 were selected for comparison because they were written at Nippur. A comparison of Poebel's volume with Ranke's (BE, VI, 1) and Scheil's publications of texts from Abu Habba² reveals the fact that at the time of the First Dynasty of Babylon the scribes of Nippur were using a considerably more archaic script than the scribes of Sippar.

A comparison of the signs in this list produces the following results. Of the 37 signs compared, 9 (ŠAR, A, PA, NI, ŠI, PU, PI, LU, ŠU) undergo no marked development. They are the same in all the five columns. Twenty-one signs on Hilprecht's tablet agree closely with Cassite forms but show decided development over all the other columns, even over that containing signs from Nippur tablets of the first dynasty of Babylon. These signs are IŠ, AM, ŠI, E, UB, RU, RA, MA, ŠUM, ŠA, KAL (DAN), IL, TE, IB, UM, TA, KA, PIŠ, KIN, ZU, UL. Four signs (LA, TIM, NA, NU), have the same form as those of the first dynasty tablets and as the Cassite tablets also, but differ from the earlier periods. There

¹ A photograph of the tablet was kindly furnished me by Professor D. G. Lyon.

² *Une saison de fouilles à Sippar*, Paris, 1902.

Dr. Reiser's Urkunden		Harvard Tablet from Nippur time of Sili-bani cir. 2100 B.C.		Temple Archive of Nippur First Dynasty B.E. VII.2.		Hilfrecht's Deluge Fragment.		Gassite, Clay's list. B.E. XIV.	
	135				23 ²¹		l. 1		84
	205		7b		7 ²⁶		l. 2.		223
	324		2a		1'		l. 2		240
	68		3b		4 ¹⁰		l. 2		124
	293		8a		8 ⁵		l. 3		52
	165		4b		5 ²⁵		l. 3		184
	92				9 ¹⁶		l. 3		90
	256		4b		45 ²³		l. 4		15
	65				22 ⁵		l. 4		132
	194				42 ¹¹		l. 4		206
	229				1 ⁸		l. 4		67
	108		10b		7 ²²		l. 4		106
	190				4 ¹²		l. 4		218
	315				4 ¹⁴		l. 4.		246
	^{End} St. B. VI.24				37 ¹¹		l. 4		99
	265		16a		61 ⁹		l. 4		128
	104		9b		35 ¹⁰		ll. 5, 8		247
	105						l. 8		171
	98		2a		12 ^{5, 19}		ll. 5, 9		161
	23				8 ¹²		l. 8		24
	156				4 ³		l. 5		196
	272		4a		8 ⁴		l. 6		1048
	89		5a		3 ¹⁰		l. 6		95
	299		11a		26 ^{11, 13}		ll. 6, 7		152
	^{End} C. B. XIV. 12				31 ²²		l. 6		260
	21		1b		14 ¹⁴		l. 6		21
	^{Hilf} 59				10 ¹²		l. 7		59
	94		7b		1 ³		l. 7		167
	16		11a		4 ¹		l. 7		34
	237				52 ²⁰		l. 8		105
	261				91 ¹¹		l. 8		91
	184				57 ⁶		l. 9		214
	298		10b		10 ²⁵		l. 9		723
	131		6b		10 ³⁹		l. 9		153
	159				8 ¹⁸		l. 9		179
	67		1b		12 ²⁵		l. 11		63
	234		7a				l. 13		115

are but two signs (NE and BI) which differ from Cassite forms in favor of an earlier period, while one (KAB) is intermediate in form between forms of the First Dynasty and those of Clay's Cassite list.

Of the twenty eight signs which can be counted as evidence, therefore 26 favor the Cassite date as against two which are opposed to it. The evidence is 21 to 7 against a date earlier than the time of the First Dynasty. This is the verdict of palaeography concerning the date of the tablet. Had Hilprecht bought the tablet in the market so that one could plausibly connect it with Sippar, an earlier date would be more thinkable.

C. On p. 39 Hilprecht urges that the use of PI = *wa* and of binuzza = binûssa point to the period of the first dynasty of Babylon. It is true that these phenomena appear in first dynasty documents, but they also occur of the Cassite period, and in part of later periods.

With reference to PI = *wa* three remarks should be made.

1. PI is used in inscriptions of the First Dynasty both for *wa* and *we*. Thus in the laws of Hammurabi we have *a-PI-tum* for *a-wa-tum* and *a-PI-lu-tum* for *a-we-lu-tum*. The two usages go together; we find both in the Cassite period. Thus Kadashman-Elil in the El-Amarna letters writes the name of Amenophis III of Egypt *Ni-mu-PI-ri-ya* for *Ni-mu-'wa-ri-ya*¹

¹ In this connection it may not be out of place to remark, since Hilprecht has asserted in a newspaper article that in the El-Amarna letters PI = *a* never *wa*, that in the name *Ni-mu-wa-ri-ya* the consonant *w* occurs after the vowel *u* and before *a*, and would certainly be pronounced *wa*. The fact that the name is Egyptian and not Babylonian is no proof that in the form of it written in Babylonia the ordinary phonetic laws did not apply. The hieroglyphic Egyptian did not write the vowels. *Ni-im-mu-'wa-ri-ya* and *Ni-im-mu-wa-ri-ya* are attempts to represent the Egyptian *Nb-m' t-re*, the Egyptian vowels being unknown. In the Babylonian form *b* is assimilated to the following *m*, *t* is elided, and the vowel *a* follows *u*. It would be inevitable among a Semitic people that between the *u* and *a* a *w* should slip in to help the pronunciation. There is no more ground for doubting that PI was pronounced *wa* in this word because there was no *w* in the Egyptian form of the word than there is for supposing that *ya* at the end of the word was not pronounced *ya* because the Egyptian does not contain either letter of that syllable. The fact that in the *Tell el-Amarna Tablets in the British Museum*, No. 1, l. 2, the name is spelled *Ni-ib-lu-a-ri-a* in no way affects the above argument, as that letter was written in Egypt and does not represent the Babylonian pronunciation.

and *Ni-mu-PI-ri-ya* for *Ni-mu-wa-ri-ya* (see Abel and Winckler, *Thontafelfund von Tell-El-Amarna*, No. 1 : 1; 2 : 1). In BE, XIV, No. 58, 1 we also find *a-PI-lu-tum* for *a-we-lu-tum*. The same usages are also found in copies of the Greek period. In Reisner's *Sumerisch-Babylonische Hymnen*, No. 55, 69 we have *a-PI-tim* for *a-wa-tim*, and in No. 2 rev. 27 *a-PI-lu-tu* for *a-we-lu-tu*. It is clear, then, that where we find one usage we find the other.

2. The evidence just adduced shows that *PI* = *wa* is not a mark even of a First Dynasty date, to say nothing of a date in the time of the Isin dynasty, for it is found in the Cassite period and even in the Greek period.

3. *PI* is defined in II R, 39, No. 2, 14 as *a* where it is used in writing the word *a-su-u*—the very word under discussion in Hilprecht's tablet.¹ In I R, 52, No. 4, 3 *PI-aš-ru* stands for *a-aš-ru* (Cf. Ball, PSBA, X, 290). Here *PI* must equal *a*, for the root is a פ"י (ישר). In the word *ti-PI-mat* (K, 5298, cf. AL³, p. 26, n.) *PI* might stand either for *wa* or *a*. In the Neo-Babylonian period it was used at Nippur, from which Hilprecht says his deluge tablet came, at the beginning of several words. Thus Nebuchadrezzar, BE, I, No. 85, i, 10 uses *PI-aš-rat* for *a-aš-rat*. Nabu-na'id, BE, No. 84, i, 6 has *PI-ši-ib* for *a-ši-ib*; in i, 15, *PI-aš-ru-um* for *a-aš-ru-um*; in ii, 33, *PI-ar-ka-at* for *wa-ar-ka-at* or *a-ar-ka-at*; in ii, 45, *PI-aš-ri-im* for *a-aš-ri-im*; and in ii, 52, *lu-u-PI-aš-ši-im* for *lu-u-wa-aš-ši-im* or *lu-u-a-aš-ši-im*. It is not certain that any of these were pronounced *wa*, but when the sign was part of a פ"י word it may still have had the value *wa*; that, however, we cannot confidently affirm, for already in the time of the

¹ In connection with this passage it may be well to note an illustration of Professor Hilprecht's methods of answering his critics. Professor Clay, in an article published in the *Piladelphia Evening Bulletin* of April 16, 1910, had cited *PI (a)-su-u*, II, R, 39, No. 2, 14, but in printing it the typesetter had accidentally made the reference read No. 2, 4. Professor Hilprecht in the newspaper article of April 23, 1910, referred to above, showed that he recognized the real reference by remarking that *PI* here has the rare Neo-Babylonian value *a*, but in order to make Professor Clay appear ridiculous, he chose to translate II R, 39, No. 1, 4, which happens to be *pi-tu-u*, remarking this passage will doubtless be read by every beginner in Assyrian *pi-tu-u*, "to open" (namely, "the mouth"). It must be said that such an act is disingenuous, especially as he intimates that Clay may have intentionally misrepresented the case!

first dynasty of Babylon we find *wa-ar-hu-um*, "month" (King's *Letters and Inscriptions of Hammurabi*, No. 14, 5) by the side of *arhu* (No. 27, 10; cf. also *Laws of Hammurabi*, xxxix, 11, 15 and xliii 52 and Brockelmann's *Vergleichende Grammatik der semitischen Sprachen*, § 49, h, a). Apparently the initial *w* had begun to disappear very early.¹ As a result of observing these facts we may affirm that the one occurrence of PI = *wa* in Hilprecht's tablet (occurring in *wa-ši-e*) does not prove that the tablet is earlier than the Cassite period, and that it may be that we should read *a-ši-e* in which case we have a purely Neo-Babylonian form, which is not a mark even for a Cassite date.

In the Cassite period we have the following parallels to *binuzzu*: *Belit-šu-nu* (which would regularly become *Belit-su-nu*) is in BE, XV, 149, 38 written *Belit-zu-nu*; the same name with the loss of the *t*, according to another well known phonetic law, is spelled in BE, XV, No. 188, 1v, 20 [*Be*]li-zu-nu (cf. No. 195, rev. 26, where it is spelled *Beli-su-nu*), and *Enlil-uballit-su* is in BE, XIV, 33, 9 *Enlil-uballit-zu*. Outside of proper names the following examples may also be cited, viz: *qa-az-zu* for *qa-at-šu*, "his hand" occurs in BE, XV, No. 158, 5 and in the Kudurru of Melishikhu, i, 26, *Délégation en Perse*, II, opposite p. 98; also *pu-uz-zu* for *pu-ut-šu*, "in front of him" or "instead of him", BB, XIV, No. 11, 6.

Hilprecht also claims as a mark of the early date of his tablet the occurrence of the mimmation in two words, *širim* and *napištim*. It happens, however, that no more can be inferred from the mimmation of these words than from the use of PI for *wa*, since in both cases the mimmation continued to be used down to the time of Assurbanipal. *Širim* has the mimmation as late as the time of Nabu-na'id (see V. R. 63, 41^a), and *napištim* occurs in the annals of Assurbanipal, e. g. 1 R, 9, 33.

The philology of the tablet, then, no more than its paleography carries us back of the Cassite period. The fragment

¹ There is some uncertainty about the matter, as the word which scholars transliterate *arhu* is written ideographically; but that it should be transliterated without the initial *w* is the opinion of Scheil (*Délégation en Perse*, Vol. IV, pp. 114, 127), of R. F. Harper (*Code of Hammurabi*, pp. 92, 106 and 155), L. W. King (*op. cit.* III, 267), and Brockelmann (*Vergleichende Gramm. der sem. Sprachen*, § 49, h, e).

of the deluge story dated in the reign of Ammi-šadugga, discovered some years ago by Père Scheil and now preserved in The Morgan Library in New York City, still antedates by some centuries all other accounts of the deluge which are known.

3. We now come to the claim that this fragment contains a text so strikingly like that of the Priestly Document of the Pentateuch that the antiquity of the tradition of that Document is vindicated from the aspersions of critics. What little need be said upon this point has already been anticipated. Any resemblance, which the text of this document has been supposed to present to the P text over and above other Babylonian accounts of the deluge is based, as has been shown above, on an unscientific handling of the Babylonian text, a mistranslation of the Hebrew text, and upon pure imagination.

Post Script.

Since the above article was sent to press a German edition of the deluge fragment has reached me. It bears the title *Der neue Fund zur Sintflutgeschichte aus der Tempelbibliothek von Nippur* von H. V. Hilprecht, Leipzig, 1910. In this edition there are a number of new features which call for a few comments.

1. Bezold in the article quoted above had said that he had every reason to doubt that Hilprecht first saw this tablet in October 1909. Having no authoritative information as to the grounds of Bezold's doubt, and wishing to be fair to Hilprecht, this sentence was not referred to above. Authoritative information is now at hand, that Hilprecht wrote Bezold two years ago informing him that he was absolutely sure that he had found a fragment of the deluge story. Hilprecht would now have us believe (see p. 19 ff.) that this letter referred to "a new fragment of the Deluge tablet" mentioned as absolutely certain in the *So-called Peters-Hilprecht Controversy*, p. 289, which he had referred to in his English edition of *The Earliest Version of the Babylonian Deluge Story* (i. e. BE, Series D, Vol. V), p. 33 n. in these words: "Possibly we have another exceedingly small fragment of the Deluge Story from the second expedition, too small to be determined accurately."

One cannot but be grateful to Hilprecht for telling us that these two passages refer to the same thing. He has thereby revealed a standard by which to judge other confident state-

ments of his in the *So-called Peters-Hilprecht Controversy*. Scholars cannot be expected to attach a higher value to those statements than Hilprecht himself does.

A comparison of these passages tends strongly to confirm the conviction that Bezold's doubts were well founded.

2. Hilprecht endeavors on p. 19 of the new German edition to break the force of his former declarations concerning the fact that Dr. Haynes kept no adequate records of where the tablets were found. His remarks on this point are the same in substance as those printed in the newspaper articles of April 23rd, 1910, which have been disposed of above on p. 38.

3. We learn on p. 25 that Professor Lyon of Harvard sent Professor Hilprecht a copy of the tablet of Ellil-bani, which is quoted above, at the same time that he sent one to me. Hilprecht admits that the writing on this tablet is more archaic than on his fragment, but claims to know some unpublished material from Zambīia and Damiq-ilišu of the same dynasty which is not in such archaic writing.

In view of the evidence presented above, one must decline to give this much weight to this statement until the material is published.

Indeed there is no reason to believe that religious or mythological texts were written in Semitic as early as the dynasty of Isin.

4. On p. 50 Hilprecht says that my suggestion that the ku of ku um-mi-ni may belong to a form of the verb alāku is impossible in the context because it is not the technical term for entering a ship. The reader should note that it is shown above, p. 35 to occur in a deluge fragment in an analogous context. That it was the technical term for entering the ship I never implied.

5. In a foot note on p. 50 Hilprecht declares that when I wrote the first draft of the above article part of which was published in the *Philadelphia Ledger* of Apr. 3, 1910, I did not consult the cuneiform text of the Nineveh version of the Deluge but used Jensen's translation in KB, VI. His evidence is (forsooth!) that I rendered ummāni, "artisans or children" and Jensen renders it Handwerker(söhne).

The evidence presented has no connection whatever with the conclusion drawn. Every tyro in Semitic would know that Jensen's sōhne is the translation of mārî in the phrase mārî

ummâni and that he bracketed it because it has no more significance than בני in the phrase בני ישראל, literally "children of Israel," but really "Israelites." To suppose that Jensen meant it as an alternative for "children" and to be misled by it, is a piece of reasoning worthy of Hilprecht himself! I cannot truthfully plead guilty to it. Hilprecht seems to be ignorant of the fact that in Muss-Arnolt's *Assyrian-Dictionary*, p. 58 a, *ummâni* = "young man" and that a number of new passages have come to light which bear out this meaning (See Jastrow's *Die Religion Babyloniens und Assyriens*, II, p. 657, n.4). It was in reality from pondering these passages that I was led to waver as to whether *ummâni* in the deluge fragment might not mean "children", but afterward abandoned the idea, because the "children" must be included in the "family" (*kintu*).

Naturally in working up the article I consulted Jensen's work along with that of other Assyriologists. Not to have done so would have been unscholarly, but this is no evidence for Hilprecht's false statement that I did not consult the original. If this reasoning were sound one could prove by it that Hilprecht cannot read cuneiform at all, for on p. 27 of his German edition, where his argument demands citations from the cuneiform texts, he cites only the transliterations of Knudtson and Jensen!

6. Hilprecht declares on p. 51 that my suggestion that *um-mi-ni* may be a variant of *um-ma-a-ni* is impossible. His words are: "eine solche Schreibweise ist für das Altbabylonische direkt ausgeschlossen".

With reference to this statement two remarks should be made:

1. The tablet is not Old Babylonian as has been convincingly proven above.

2. Whatever the tablet is Hilprecht himself (see p. 47) presupposes an analogous scribal change of *i* or *e* to *a* in *nâtrat*, on which he still insists instead of the more probable *naširat*. Vowel changes seem to be perfectly legitimate when it suits his purpose, but otherwise they are impossible!

Some Rig-Veda Repetitions.—By MAURICE BLOOMFIELD,
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THE Rig-Veda contains repeated stanzas, hemistichs, and single verse lines (*pāda*) which amount to a total of between 1500 and 1600 *pādas*—more precisely about 1560. They are repeated an average of nearly $2\frac{1}{2}$ times, making a total of about 3560 *pādas*. This count does not include such as are repeated, for one reason or another, in the same hymn. Of such there are about 60, making a total of about 120, exclusive of rhetorical concatenations between successive stanzas; the latter also result in pairs that are so much alike as to be almost identical. Again, *a fortiore*, this count does not include refrain *pādas* which abound in the Rig-Veda. Of these there are just about 150, repeated a total of about 1000 times. Thus [the total of repeated *pādas* in the RV., aside from sameness due to catenation is about 1770, repeated about 4680 times; it involves quite a little more than one tenth of the entire Rig-Veda collection.

I have been engaged for some time with a statistical and critical study of this material,¹ and I wish now to show by a number of selected examples how these repetitions can be made helpful for the interpretation of the text, the proper estimate of its metrical habits, and, above all, the relative chronology of the hymns or stanzas which contain the repeated materials.

1. The meaning and etymology of *iṣmín*.

5. 87. 5 (Evayāmarut Ātreya; to the Maruts).

svanó ná vó 'mavān rejayad vṛṣā tveṣó yayís taviṣá evayāmarut,
yéna sáhanta pñjāta svárociṣa stháraçmāno hiranyáyīḥ svāyudhāsa iṣmínāḥ.

7. 56. 11 (Vasiṣṭha; to the Maruts)

svāyudhāsa iṣmínāḥ suniṣkā utá svayám tanvāḥ çumbhamānāḥ.

¹ Cf. JAOS. xxix, pp. 287 ff.

The hieratic word *iṣmín* occurs, as far as I know, only four times, all in the RV. Yāska deals with the word in Nirukta 4. 16, to no purpose. All Western authorities derive the word from the root *iṣ* 'impel,' or the noun *iṣ* 'strength;' they translate by something like 'hasting,' 'driving,' or 'strengthy.' Under such construction *iṣmínah* in 7. 56. 11 is badly coordinated with its surroundings, because it is preceded and followed by words designating the warlike, or personal equipment of the Maruts. It can be made plain that *iṣmín* also is such a word, being = **iṣu-min* 'armed with arrows.' In sense the word is a perfect equivalent of *iṣu-mant*. For the omission of *u* before *m* I may simply refer to Wackernagel, *Altindische Grammatik*, 1. 59, with the additional remark that the loss of *u* before *m* seems, by the terms of *iṣmín*, no less organic than the loss of *u* before *v*.

In RV. 5. 22. 16 the crested Maruts are said to call upon their father Rudra, *ádhā pitāram iṣmínām vocanta śikvasaḥ*. The translation 'stormy' for *iṣmínām* suits Rudra, of course. Still more to the point is 'armed with arrows;' see *rudráya kṣipréśave*, 'for Rudra whose arrows are swift,' RV. 7. 46. 1; *rudráh sviṣúḥ*, 'Rudra whose arrows are strong,' RV. 5. 42. 11. In the Çatarudriya sections of the Yajur-Vedas we have *namas tigmeśave*, and *namas tikṣneśave*, both, of course, referring to Rudra; see my Vedic Concordance under these items. In AV. 1. 19. 3 we have *rudráh śaravyāyāitān māmāmitrān ví vidhyatu*, 'may Rudra hit these my enemies with a volley of arrows;' cf. also RV. 10. 125. 6; AV. 15. 5. 5. Rudra's missile (*rudrásya hetih*) is dreaded in every book of Vedic literature. A typical expression is (see Conc.):

pari no (no) rudrasya hetir vṛṇaktu
pari no hetī rudrasya vṛjyāḥ (vṛjyāt)
pari tvā (vo) rudrasya hetir vṛṇaktu
pari vo hetī rudrasya vṛjyāḥ (vṛñjyāt).

Rudra is really the typical archer (*ástar*) of the Veda: RV. 10. 64. 8; AV. 6. 93. 1. The archer is described as *iṣumant*, of course: RV. 2. 42. 2; cf. AV. 20. 127. 6. The equation *iṣmín* = *iṣumant* follows automatically.

Otherwise *iṣmín* is an attribute of the Maruts. They are described as *svāyudhāsa iṣmínah*, 'having strong weapons and arrows,' RV. 5. 87. 5; 7. 56. 11; as *vācīmanta iṣmínah*, 'armed with axes and arrows,' RV. 1. 87. 6. But in RV. 5. 57. 2

they are *vāṣīmanta ṛṣṭimānto sudhānvāna iṣumantaḥ*, 'armed with axes, spears, bows, and arrows,' and so, again, *iṣmīn* = *iṣumant*. Cf. also RV. 5. 53. 4; 8. 20. 4, 12, and the Çata-rudriya formula, *nama iṣumadbhyo dhanvāyibhyaḥ* (or, *dhanvā-vibhyaḥ*) *ca*: see Concordance. It is scarcely necessary to state that *iṣmīnaḥ* and *iṣumantaḥ* are metrical doublets, and that, of the two, *iṣmīnaḥ* is the secondary formation, as, e. g. *ojasvin*: *ojasvant*; *bhrājasvin*: *bhrājasvant*; see Conc., under *indrāujasvinn*, and *sūrya bhrājiṣṭha*. Stems in *-vin* and *-min* are primarily, and in the main, *-vant* and *-mant* stems modulated over into *-in*-stems.

2. On the meaning of *kīrī*.

6. 23. 3 (Bharadvāja; to Indra)

pātā sutām indro astu sōmam prapenīr ugrō jaritāram ūtī,
kārtā vīrāya sūṣvaya u lokān dātā vāsu stuvatē kīrāye cit.

6. 44. 15 (Çaṁyu Bārhaspatya; to Indra)

pātā sutām indro astu sōmam hantā vṛtrān vājreṇa mandasānāḥ,
gāntā yajñām parāvātaḥ cid āchā vāsur dhīnām avitā kārūdhāyāḥ.

By italicizing the two words *kīrāye* in 6. 23. 3, and *kārūdhāyāḥ* 'nourishing poets,' in 6. 44. 15, I have indicated my belief that *kīrī* means 'poet.' Pischel, *Ved. Stud.*, I, 216 ff., following Ludwig, *Der Rig-Veda*, vol. vi, p. 105, takes *kīrī* in the sense of 'miserable, poor,' contending that the word nowhere means 'poet.' Why not here in 6. 23. 3, where the antithesis between *vīrāya sūṣvaye* and *stuvatē kīrāye cit* is positively fundamental? The rich gentleman who presses the soma for the gods, and 'aye the poet who has only his song of praise to offer the gods'—that is what *stuvatē kīrāye cit* means—are contrasted most effectively (cf. 7. 97. 10). So also in 1. 31. 13 *rātāhavyaḥ*, 'he who gives the offering,' and *kīriḥ cin mántram*, 'the poet with his mantra only.' In 2. 12. 6 we have *coditā yo brahmāṇo nādhamānasya kīrēḥ*, '(Indra) who promotes the needy Brahman poet.' The word *kīrī* has the side meaning 'poor' only, in so far as the poets of the Veda are constitutionally and congenitally poor. The normal state of the Brahman poet and priest is expressed explicitly in AV. 7. 103: 'What gentleman (*kṣatriya*), desiring to improve his condition, will get us (the priests) out of this wretched plight? Who desireth to sacrifice, who to give baksheesh? Who shall gain

long life with the gods?'¹ I am sure that in this way the word *kīrī* in the sense of 'poet,' with the implication that poets, in contrast with their employers, are, as a rule, poor men, will be finally placed upon solid ground. And so *kīrī* and *kārū* and *kīṣṭá*, all from the *seṭ-* root *kari* (cf. *kīrti*, 'act of praising:' I. E. type *kṛtī*), need not be separated etymologically. In RV. 5. 4. 10, *yás tvā hṛdā kīrīṇā mānyamāno . . . jōhavīmi*, means 'I, who remember thee with a heart full of praise, fervently call upon thee.' Geldner, in his *RV. Glossary*, under *kīrī*, remarks that Sāyaṇa takes *kīrī* in the sense of 'poet.' Geldner believes in Sāyaṇa more than I do: it would have been well to have listened to him in this instance, not because Sāyaṇa knows anything special about the word, but because it is antecedently unlikely that a Hindu could err in the case of word which must suggest to him the root *kari*, 'praise.'

3. On the ethnical or geographical term *ámbara*.

1. 47. 7 (Praskaṇva Kāṇva; to the Aṇvins)
yán nāsatyā parāvāti yád vā sthó ádhi turváḇe,
 áto ráthena suvṛtā na á gataṁ sākāṁ sūryasya raḇmībhiḥ.

8. 8. 14 (Sadhvāṇsa Kāṇva; to the Aṇvins)
yán nāsatyā parāvāti yád vā sthó ádhy ámbare,
 átaḥ sabāsrānirṇijā ráthenā yātam aṇvinā.

The confrontation of the two stanzas throws some light on the word *ámbare* in 8. 8. 14. The Pet. Lex. started by giving it the meaning 'umkreis,' 'umgebung,' (with an fanciful derivation from *anu-var*). Ludwig, 66, renders the two words *ádhy ámbare* by 'oben im luftkreise.' I think that if this scholar had remembered his own rendering (25) of *ádhi turváḇe*, in 1. 47. 7, by, 'über den Turvaḇa,' he would have rendered *ádhy ámbare* by, 'über den Ambara' (whatever that is). Grassmann, ii, 51, renders 1. 47. 7^b, 'ob ihr bei Turvaḇa verweilt;' but, in i, 406, he renders 8. 8. 14^b, 'wenn in der nähe ihr verweilt.' Again the parallelism between *ádhi turváḇe*, and *ádhy ámbare* is obliterated.

The Nighaṇṭavas have played mischief with *ámbara*. There are two treatments of the word. In 1. 3 it figures among

¹ See Bloomfield, *The Atharva-Veda (Grundriss der Indo-Arischen Philologie)*, p. 77. For Brahmans in need see further RV. 6. 44. 10; 8. 80. 3; and 10. 24. 3.

the sixteen words for 'midair' (*antarikṣa*). That, I presume, is at the root of the Pet. Lex.'s rendering. In 2. 16 it appears in a list of eleven words for 'near' (*antika*). Thence, perhaps, Grassmann's 'in der nähe.' Unfortunately 2. 16 contains also *turvāṣe*, in the very same locative case of 8. 8. 14. The absurdity of such glossography is really appalling. The only excuse for the appearance of the two words in this list is that they are both contrasted in the RV. stanzas above with *parāvāti*, 'at a distance.' The enticement lies in the frequent contrast between *parāvāti* and *arvāvāti*, e. g., RV. 8. 97. 4, *yác chakrási parāvāti yád arvāvāti vṛtrahan*. I should not wish to go so far as to say that the school of interpretation which bred these glosses actually meant that both *ambaram* (*sic*) and *turvāṣe* were adverbs = *antike*, 'near.' They probably conceived them to be things or places near at hand (in contrast with *parāvāti*). Yet their statement was misleading enough to lead astray so very distinguished a scholar as Grassmann. It would pay well to work through the Nighaṇṭavas and Yāska to discover in what way they arrived at their many equally stunning results.

One gain accrues from this discussion. If *turvāṣe* is beyond doubt an ethnical or geographical designation, then *āmbare* also is the name of a people, or a land. As such it occurs in the Brhatsamhitā, and elsewhere; see Böhtlingk's Lexicon, s. v. In his *Prolegomena*, p. 263, note, Oldenberg thinks that possibly 8. 8. 14 is less original than 1. 47. 7, but this opinion may be due to the current lop-sided interpretation of *āmbare*. With *āmbare* in an ethnical sense, I see no reason for discriminating against 8. 8. 14.

4. An exceedingly wonderful horse.

1. 152. 5 (Dīrghatamas Ācuthya; to Mitra and Varuṇa)
anaṣvó jātó anabhīṣúr árvā kánikradat patayad ūrdhvāsānuḥ,
acittam bráhma jujuṣur yúvānaḥ prá mitré dháma várune
grṇántaḥ.

4. 36. 1 (Vāmadeva; to the Rbhus)
anaṣvó jātó anabhīṣúr ukthyò ráthas tricakráḥ pári vartate
rájāḥ,
mahád tát vo devyāsya pravácanaṁ dyám ṛbhavaḥ prthivīm
yác ca púṣyatha.

In 4. 36. 1 the R̥bhus are said to have fashioned a chariot, fit to be praised in hymns, because without horse or bridle it courses with three wheels through the air. Since it is three-wheeled it seems to be the chariot of the Aṇvins (cf. 1. 120. 10). That sort of a vehicle is, the lord knows, marvelous enough, but it will pass in the light of mythic fancies and ethnological parallels elsewhere. Similarly, in 6. 66. 7 the Maruts are described, along the same line of fancy even more energetically, as crossing the air without span of deer or horses, without charioteer, and without bridle. Now in 1. 152. 5 (above) the mystery is heightened to the second power, as it were. Ludwig, 97: 'ohne ross geboren, ohne zügel der renner, wiehernd fliegt er mit aufgerichtetem rücken.' Grassmann, ii, 153: 'Geboren ohne Ross und Zügel, wiehernd fliegt auf der Renner mit erhobenem Rücken.' Geldner and Kaegi, *Siebenzig Lieder*, p. 13, more diplomatically, but less close to the text, and its parallel in 4. 36. 1: 'Sich bäumend schiesst nach oben mit Gewieher der Renner ohne Zügel, der kein Ross ist.'

Any attempt to extract a picture with clear outline out of 1. 152. 5^a will prove quite futile; the pāda is built by a secondary poetaster upon the previously existing pāda 4. 36. 1^a; he 'goes' his model 'one better,' and loses himself in mock-mythic fatuity—one of the standard failings of his class. What he had in mind may perhaps, after all, be expressed by 'the steed which is yet no horse and goes without bridle.' Or, 'the steed which is born from no horse,' &c. In any case the present parallel offers a clear case of relative chronology: 1. 152. 5 is later than 4. 36. 1.

5. The Bull-Cow.

4. 3. 10 (Vāmadeva; to Agni)

rtēna hī śmā vṛṣabhāç cid aktāḥ pumān agniḥ pāyasā pr̥ṣṭhyēna,
āspandamāno acarad vayodhā vṛṣā çukrām duduhe pr̥çñir ūdhaḥ.

'In accord with the divine law, indeed, Agni, the bull, the man, has been annointed with the heavenly fluid. Unwavering he moved, strength-bestowing; he the bull, the Pr̥çni-cow, has milked his bright udder.' The paradox in pāda *d* between *vṛṣā*, 'bull,' and *pr̥çñi*, 'heavenly cow' (especially, 'mother of the Maruts') has led the interpreters in various directions. Ludwig, 330, changes *pr̥çñir* to *pr̥çner*, 'es melkte der stier der Pr̥çni helles euter;' in his commentary he retains *pr̥çñir* but takes

vṛṣā with the preceding *pāda*, so as to avoid the paradox: 'nicht zuckend ohne anstrengung gieng der lebenskraft schaffende stier, ihr helles euter liess *Prṇi* fliessen.' Grassmann's rendering, i, 112, 'der Same strömt dem Stier, der Kuh das Euter,' is negligible, in the light of the parallel *pāda*, 6, 66, 1^d. Oldenberg, *SBE.* xlv, 326, does not quite do justice to *prṇir* in his rendering, 'the speckled bull has poured out his bright udder.' I think that Bergaigne, ii, 397, 398, is unquestionably right in assuming a paradoxical 'taureau-vache,' here, and in other passages mentioned by him. The daring metaphor is, that Agni shoots out his flames from his bright udder; he, a bull, is thereby also 'a *prṇi*, the heavenly, yielding cow, *par excellence*. Although the conception is very effective, it is, nevertheless, modelled after a simpler one of which we have the exact record:

6. 66. 1 (Bharadvāja; to the Maruts)

vāpur nú tāt cikitūṣe cid astu samānām nāma dhenú pātya-
mānam,
mārteṣv anyād dohāse pīpāya sakṛc chukrām duduhe prṇir
ūdhah.

Ludwig, 696, translates the stanza very cleverly, as follows: 'Ein wunder muss sein selbst dem [weisen, was den gemeinsamen namen Kuh hat; das eine schwoll dass die menschen es melkten, einmal nur hat *Prṇi* ihr helles euter gemolken.' In 6. 48. 22 we have a similar statement, *prṇyā dugdhām sakṛt pāyah*. Max Müller, in a note to his similar translation, *SBE.* xxxii. 370, explains that *dhenú*, a cloud, yields rain but once, or that *Prṇi* gave birth but once to the Maruts. The first alternative seems likely to me, as it does to Bergaigne, i. 321; ii. 399. The pertinence and originality of the repeated *pāda* in 6. 66. 1 is established beyond peradventure by the parallel in 6. 48. 22; equally certain is, that the metaphor which turns Agni in 4. 3. 10 into a 'bull *Prṇi* who milked his bright udder' is the work of a later poet who is unquestionably bending to his purpose the very wording of a familiar mythological conceit, current in his time as kind of mystery (*brahmodya*) about *Prṇi*. Cf. v. Bradke, *Festgruss an Roth*, p. 123; Oldenberg, *Rig-Veda Noten*, p. 268.

6. 'In the maw of the biter' (úpa srákveṣu bāpsataḥ).

7. 55. 2 (Vasiṣṭha; Prasvāpinyaḥ [sc. rcaḥ])

yád arjuna sārameya datāḥ piçaṅga yāchase,
viva bhrājanta rṣṭāya úpa srákveṣu bāpsato ní ṣú svapa.

'When, o white-brown Sārameya (dog), thou doest show thy teeth, then, as it were, spears shines in the maw of thee biting—sleep thou deeply.' Cf. Pischel, *Ved. Stud.* ii. 55ff.; Foy, *KZ.* xxxiv. 257; Oldenberg, *ZDMG.* lxi. 823. Pischel, p. 58, renders *bāpsataḥ* here, erroneously and unnecessarily, by 'knurrend,' though admitting 'verzehrend,' 'fressend,' as the meaning of the word on p. 63. In this way he places out of accord the repeated pāda, *úpa srákveṣu bāpsataḥ*, in another stanza:

8. 72. 15 (Haryata Prāgātha; to Agni, or Haviṣām Stutiḥ)
úpa srákveṣu bāpsataḥ kṛṇvaté dharūṇān divi,
indre agnā námaḥ svāḥ.

Pischel, l. c., p. 58, thinks this repetition an instructive example, calculated to show that the same words do not have the same sense everywhere. The same words, taken singly, of course not, tho even in this matter we may remember Bergaigne's warning against splitting up too much. But the same pāda, that is a more ticklish matter. My own, more extensive investigations of repeated pādas show that they have as a rule the same value, wherever they occur. He translates, p. 59: 'Wenn ihn (die Presssteine) im Maule zermalmt haben, machen sie ihn (that is, Soma) zum Tragepfeiler am Himmel. Verehrung sei Indra, Agni, Svar.' In the line of Pischel's own thought we could but translate: 'They that eat him in their maws make (or build) support in heaven.' But I see no reason to take it for granted that *bāpsataḥ* are the *ádrayaḥ*, or press-stones, because the verb in question is used of things other than the press-stones as well; see Pischel, *ibid.*, p. 63; Aufrecht, *KZ.* xxxiv. 459. The subject of *kṛṇvaté* seems to be the same as that of the preceding stanza, 8. 72. 14, namely the substances added to soma (milk, &c.), of which it is there said that they know their own belongings as a calf its mother; that is, they know that they belong to soma: *té jānata svām okyām sām vatsāso ná mātṛbhiḥ*. The hymn 8. 72, as a whole, is obscure and mystically ritualistic, but it will be safe to translate 8. 72. 15 verbally: 'in the maw of consuming (soma) they (the ingredients of the soma mixture) create support in

heaven. To Indra, Agni obeisance, light.' Now in 9. 73. 1, it seems to me, we have the true parallel to the pāda, *ūpa srākveṣu bāpsataḥ* in 8. 72. 15. The first hemistich of the former stanzas reads: *srākve drapsāsya dhāmataḥ sām asvarann rtāsya yōnā sām aranta nābhayaḥ*. Grassmann, ii, 242, renders aptly, though not literally: 'Im Schlund des Tropfens, welcher gährt, in Opfers Schoos vereinten strömend jetzt verwandte Tränke sich.' One thing is certain, it is a question in this stanza, as well as in 8. 72. 14, 15, of soma and his admixtures (cf. Grassmann's introductions to the two hymns); *bāpsataḥ* as well as *dhāmataḥ* is genitive singular, applied to soma as consuming, or amalgamating with himself his admixtures. In this way *ūpa srākveṣu bāpsataḥ* means 'in the maw of him that bites,' in both of its occurrences (cf. e. g., *bhāsmanā datā*, 10. 115. 2). I can discover no criterion which points out the relative chronology of the two stanzas, but the metaphoric character of the repeated pāda in 8. 72. 15 rather points to its secondary origin.

7. An assumed parenthesis verified by a repeated pāda.

1. 10. 7 (Madhuchandas Vāṅvāmitra; to Indra)
 suvivṛtam sunirājam *indra tvādātam id yāçaḥ*,
 gāvām āpa vrajām vṛdhi kṛṇusvā rādho adriyaḥ.

3. 40. 6 (Viṅvāmitra; to Indra)
 girvaṇaḥ pāhī naḥ sutām mādhor dhārābhir ajoyase,
indra tvādātam id yāçaḥ.

Ludwig, 449, renders 1. 10. 7: 'ganz offen da liegend, leicht zu gewinnen, Indra, ist der ruhm, der von dir verliehen wird. Öffne den stall der rinder, schaffe gewährung, steinbewerter.' Grassmann, ii, 9: 'Leicht zu eröffnen, zu empfahn ist der Schatz, den, Indra, du verleihst; so öffne uns die der Rinder Stall, und schenk uns Gut, o Schleuderer.' Neither rendering of the first hemistich is good; Grassmann's *yāçaḥ* as 'Schatz' is especially indefensible. As a matter of fact the second pāda is a parenthesis; it feels like a foreign body. The stanza makes perfect sense without it: 'Open the stable of the cows that is easy (for thee) to open, easy to drive out from; show thy kindness, O god of the press-stone.¹ The parenthetic

¹ For *adriyaḥ* see the author, *ZDMG.* xlviii. 572.

pāda *b*, *indra tvādātāṃ ūl yāçāḥ*, appears in proper connection at 3. 40. 6^c.

It is well to compare the translations of 3. 40. 6 with those of 1. 10. 7^b; they reveal extreme inconsistency in the renderings of the repeated pāda. Ludwig, 505: 'lieder liebender, trink unsern saft, in madhuströmen badest du; Indra, von dir wird diese herrlichkeit geerntet.' Grassmann, i. 86: 'Den Liedern hold geniesst den Trank, du wirst mit süßem Strom gesalbt. Von dir ist, Indra, Glück geschenkt.' The repeated pāda fits here perfectly: Indra bestows prosperity or glory in return for abundant soma. It requires no too great boldness to assume that the traditional Madhuchandas Vāiçvāmītra of 1. 10. 7 borrowed the pāda in question from the hymn of the traditional Viçvāmītra of 3. 40. 6. Note that 1. 10. 7 shares another of its pādas, namely, *kr̥ṇuṣvā rādho adriṣvaḥ* with 8. 64. 1. In this way, that is by regarding 1. 10. 7^b as an awkward interpolation, we are saved the necessity of regarding 1. 10. 7^a as a separate sentence, and supplying a verb from the preceding stanza, as suggests Oldenberg, *Rig-Veda Noten*, p. 13. It is interesting to add that the extraneous character of 1. 10. 7^b was clear to Aufrecht's mind in the year 1888 (see *Festgruss an Otto von Böhtlingk*, p. 2), tho he did not know that the pāda was borrowed, or, at least, repeated elsewhere.

8. A new case of parenthesis.

1. 124. 3 (Kakṣīvat Dāirghatamasa; to Uṣas)
eṣā divó duhitā prāty adarçi jyótir vásānā samānā purástāt,
rtāsya pānthām ānv eti sādhu prajānatīva ná diço mināti.

5. 80. 4 (Satyaçravasa Ātreya; to Uṣas)
eṣā vyēnī bhavati dvibārḥā āviṣkr̥ṇvānā tanvām purástāt,
rtāsya pānthām ānv eti sādhu prajānatīva ná diço mināti.

We have not the means of deciding which of these two stanzas is entitled to priority. But one point is certain: the two pādas of the repeated hemistich are so well knit together as to preclude their having been composed in the first place separately: 'straight does she (the daughter of Heaven, Uṣas) go along the path of *rtā* (divine law); as one who knows (the way) she does not miss the directions.' Now we find the pāda, *rtāsya pānthām ānv emi sādhuṣā* (*sādhuṣā*, neat

jagatī variant for the triṣṭubh cadence in *sādhú*), in another place:

10. 66. 13 (Vasukarṇa Vāsukra; to the Viṣve Devāḥ)
dāivyā hótārā prathamā puróhita ṛtasya pānthām ánu emi
sādhuyā,
kṣétrasya pátiṁ prátiveṣam imabe viṣvān devān amṛtān ápra-
yuchataḥ.

Ludwig, 228, tries the *tour de force* of translating the first two pādas in one construction: 'den beiden göttlichen hotar als den ersten purohita geh ich glücklich nach den weg der ordnung.' Grassmann, ii. 353, not unsimilarly, 'Den götterpriestern, als dem ersten Priesterpaar folg graden Wegs ich auf dem Pfad des rechten Werkes.' And again Bergaigne, iii. 241: 'Je suis exactement les deux sacrificateurs divins, les premiers *purohita* sur le chemin du *ṛta*.' I do not regard these translations as correct, first, because they impose a different meaning upon *ánu emi* in 10. 66. 13 from that of *ánu eti* in 1. 124. 3; 5. 80. 4; secondly, because *ánu + i* does not govern two accusatives; cf. in addition 3. 12. 7 (where there are two verbs, *úpa prā yanti*, and *ánu yanti*); 7. 44. 5; and 8. 12. 3. The facts are these: in 10. 66. 13 *ṛtasya pānthām ánu emi sādhuyā* is a parenthesis suggested by the ritualistic *dāivyā hótārā prathamā puróhitā*, who are stock figures in the seventh or eighth stanzas of the *āprī*-hymns: see 2. 3. 7; 3. 4. 7 = 3. 7. 8; 10. 110. 7, and cf. of the more recent literature on the *āprī-sūktas*, Bergaigne, *Recherches sur l'Histoire de la Liturgie Védique*, Journal Asiatique, 1889, pp. 13ff.; Oldenberg, *SBE.* xlv. p. 9. The stanza 10. 66. 13, therefore, is to be rendered: 'We implore the two divine Hotar, the first Purohitas—straight do I go along by the path of the divine law (here the ritualistic *ṛtā*, or sacrificial law)—we implore the Lord of the Field, our neighbour, and all the immortal gods, the unfailing.' There can be no doubt that the repeated pāda means about the same thing in all three places, and that the author of 10. 66. 13 has borrowed it with loose and slightly secondary adaptation to the theme which he had in hand.

9. Antithesis as a text-critical aid.

1. 92. 11, and 1. 92. 12 (Gotama Rāhūgaṇa; to Uṣas)
vyūrṇvatī divó ántān abodhy ápa svásāraṁ sanutār yuyoti,
praminatī manuṣyā yugāni yóṣā jārāsya cākṣasā ví bhāti.

paçûn ná citrá subhágā prathānā sīndhur ná kṣóda urviyā vy
 açvāit,

áminatī dāiviyāni vratāni sūryasya ceti raçmibhir dṛçānā.

The two repeated pādas occur together in one stanza:

1. 124. 2 (Kakṣīvat Dāirghatamasa; to Uṣas)

*áminatī dāiviyāni vratāni praminatī manuṣyā yugāni,
 īyúṣīṇām upamā çāçvatīnām āyatīnām prathamōṣā vy ādyāut.*

There can be no question but what 1. 124. 2 is the source of the repeated pādas in 1. 92. 11 and 12. The antithesis between *áminatī* and *praminatī*, and *īyúṣīṇām* and *āyatīnām* cannot but be intentional and primary. Note also the parallelism between *áminatī* and *āyatīnām*; and *praminatī* and *īyúṣīṇām*. On the other hand, we ought to allow full weight to the really senseless *non sequitur* of the second hemistich in 1. 92. 11: 'reducing the ages of men, the woman shines by the light of her paramour (the sun).' For the meaning of *yugā* 'age,' i. e. 'period of time,' see Bāl Gangādhara Tilak, *The Arctic Home in the Vedas*, p. 176. The second hemistich of 1. 124. 2 recurs, with the variants *vibhātīnām* for *āyatīnām*, and *açvāit* for *adyāut* (cf. *açvāit* in 1. 92. 11), in 1. 113. 15. The probability is that this stanza also is secondary, because *vibhātīnām* disturbs the antithesis between *īyúṣīṇām* and *āyatīnām*, and because the connection between its two hemistichs is sufficiently loose:

*āvāhantī pōṣyā vāryāni citrām ketúm kṛṇute cékitānā,
 īyúṣīṇām upamā çāçvatīnām vibhātīnām prathamōṣā vy açvāit.*

Stanza 1. 124. 2 is the high-water mark of Vedic composition. The two antitheses *áminatī* . . . *praminatī* and *īyúṣīṇām* . . . *āyatīnām* mark as later imitations all repetitions that disturb this balance. The relation of the two pairs of antithetical words may be expressed in the proportion: *áminatī* : *āyatīnām* = *praminatī* : *īyúṣīṇām*. Or by the diagram:



10. A solecism.

1. 8. 5 (Madhuchandas Vāiṣvāmītra; to Indra)
mabāñ indraḥ parāḥ ca nū mahitvām astu vajrīṇe,
dyāur ná prathinā śávaḥ.

'Great is Indra, aye more than great: may greatness be to him that wields the club, strength extensive as the sky.' Pāda c is repeated in the following Vāḷakhilya stanza:

8. 56 (Vāl. 8). 1 (Pṛṣadhra Kāṇva; Dānastuti of Praskaṇva)
prāti te dasyave vṛka rādho adarḥy áhrayam,
dyāur ná prathinā śávaḥ.

Ludwig, 1018: 'O Dasyave vṛka! deine unerschöpfliche gabe zeigte sich, als fülle wie der himel an breite.' Grassmann, ii, 503: 'Es hat sich gezeigt, O Dasyavevṛka, dein reichliches geschenk, wie der Himmel breitet sich dein Ruhm aus.' Since *śávaḥ* means neither 'fülle,' nor 'ruhm,' the secondary application of the Vāḷakhilya pāda is clear. The use of the pāda is a mere solecism in this connection. The words *rādho áhrayam* are best rendered by 'gift that is not shabby.'

11. From real to mystic.

1. 22. 21 (Medhātithi Kāṇva; to Viṣṇu)
túd víprāso vipanyávo jāgrváṁsaḥ sám indhate,
viṣṇor yát paramám padám.

3. 10. 9 (Viṣvāmītra Gāthina; to Agni)
tām tvā víprā vipanyávo jāgrváṁsaḥ sám indhate,
havyavāham ámartyaṁ sahovīdham.

The repeated first hemistich appears in primary application in 3. 10. 9: 'The bards, skilled in song, on waking, have kindled thee (Agni, fire).' The application of the same idea in 1. 22. 21 is mystic: the bards kindle the highest stepping place of Viṣṇu, the sun-fire at its zenith, the abode of the blessed. Cf. 1. 22. 20; 1. 154. 5; 10. 1. 3 &c., and Hillebrandt, *Vedische Mythologie*, i. 354. We may admire the ingenuity which enables the epigonal poet to express the thought that the inspired song of the poets kindles the light of the heavens, but the fact remains that he has adapted an ordinary sense motif effectively, yet mechanically, to his high idea. Without the former (3. 10. 9) we should have hardly had the latter. Cf. also Oldenberg, *Rig - Veda Noten*, p. 17.

12. How an Indra line is turned into a Rudra line.

3. 22. 7 (Viçvāmitra; to Indra)

yājāma in námasā vṛddhām indram *brhántam ṛṣvām ajāram*
yúvānam,

yásya priyé mamátur yajñīyasya ná ródasī mahimānam mamāte.

6. 19. 2 (Bharadvāja; to Indra)

indram evá dhiṣāṇā sātāye dhād *brhántam ṛṣvām ajāram*
yúvānam,

āsālḥena çávasā çūçuvānsam sadyác cid yó vāvṛdhé ásāmi.

6. 49. 10 (R̥jiçvan Bhāradvāja; to Rudra)

bhúvanasya pitāram gīrbhīr ābhī rudrām dívā vardháyā rudrām
aktáu,

brhántam ṛṣvām ajāram suṣumnām řdhag ghuvema kavīneṣi-
tāsaḥ.

In the two Indra stanzas the pāda, *brhántam ṛṣvām ajāram yúvānam*, agreeing with *indram*, is altogether fit. Certainly *ajāram yúvānam*, 'youth that does not age,' with its obviously intentional implied antithesis, is a better sequence of words than *ajāram suṣumnām*, 'ageless and kind,' in the Rudra stanza. In adapting the pāda to Rudra (Çiva) the need of mentioning his precarious kindness was sufficiently urgent to procure the change. Cf. his epithets *mādhvās* and *çivá*; his *hásto mṛlayākuḥ* in 2. 33. 7; and more directly such a passage as 2. 33. 1, *ā te pitār marutām sumnām etu*. See also 1. 43. 4 and 2. 33. 6.—For 3. 32. 7^{cd} see Oldenberg, *Rig-Veda Noten*, p. 244; for *dhiṣāṇā* in 6. 19. 2, Geldner, *Ved. Stud.* ii, 83.

13. How a R̥bhu line is addressed to the Press-stones.

3. 60. 3 (Viçvāmitra; to the R̥bhus)

indrasya sakhyām r̥bhávaḥ sám ānaçur mánor nāpāta apáso
dadhanvire,

sāudhanvanāso amṛtatvām éire *viṣtvī çām̐bhiḥ sukṛtaḥ su-*
kṛtyáyā.

'The R̥bhus have obtained the friendship of Indra; they, the children of Manu, the workers, have bestirred themselves. The Sāudhanvanas, laboring on (pious) tasks, have obtained immortality, they the pious workers, through their pious work.' Cf. Ludwig, 164; Grassmann, i. 103; Bergaigne, i. 69, note: ii. 403, 409, 412, 418; Ryder, *Die R̥bhus im R̥gveda*, pp. 21.

22, 25. The fourth pāda is of the very essence of the Ṛbhu myth (see especially 4. 33. 4; 4. 35. 2, 7, 8); there can be no question as to its primary character. This pāda, with a single, obviously ritualistic variant, appears again, to wit:

10. 94. 2 (Arbuda Kādraveya Sarpa; to the Press-Stones)
 eté vadanti çatāvat sahásravat abhí krandanti hárítebhir
 āsábhiḥ,
viṣṭvī grāvāṇaḥ sukr̥taḥ sukr̥tyáyā hótuḥ cit púrve havirádyam
 āçata.

'They speak a hundredfold, a thousandfold, shout to us with their yellow mouth; the press-stones, laboring, they the pious workers, through their pious work, have come to the eating of the *havis* before even the Hotar.' Exact technical proof that the repeated pāda is here modulated secondarily cannot be rendered, but I am, nevertheless, certain that of the two phrases *viṣṭvī çām̐bhiḥ* in 3. 60. 3, and *viṣṭvī grāvāṇaḥ* in 10. 94. 2, the former is the mother; cf. *vivēṣa* . . . *çām̐bhiḥ* in 5. 77. 4, and the interesting epithets of the Ṛbhū in their *nivīd*, ÇÇ. 8. 20, *viṣṭvī svapasah*, and *çamyā çamiṣṭhāḥ*. The expression *suokr̥taḥ suokr̥tyáyā* also belongs primarily to divine beings; secondarily to a ritualistic instrument like the press-stones.

14. Principal and relative clause as a criterion of relative chronology.

1. 39. 6 (Kaṇva Ghāura; to the Maruts)

ūpo rátheṣu pr̥ṣatir ayugdhvam *pr̥āṣṭir vahati rōhitah*,
 ā vo yāmāya pr̥thivī cid açrod ābibhayanta mánuṣāḥ.

'And ye have hitched the spotted mares to your chariot; a red stallion acts as leader. Even the earth hath listened at your approach, and men were frightened.' Cf. Ludwig, 675; Grassmann, ii. 43; Max Müller, *SBE.* xxxii. 97. The word *pr̥ṣatir* which the translators render by 'antelopes' means in fact 'spotted mares,' because the Maruts have the epithet *pr̥ṣadaçva*. See Bergaigne ii. 378, and, very explicitly, Nāighan-tuka 1. 15; Bṛhaddevatā 4. 144 (catalog of the spans of the gods) where we have the express statement, *pr̥ṣatyō 'çvās tu marutām*. The word *pr̥āṣṭi* (*pra* + *sti*, like *abhīṣṭi*, *ūpasti*, and *pāriṣṭi*) means literally 'being in front,' 'leading horse.' It is the analog of *purogavá* and *πρόβυς*, 'leading steer.' Both refer

to what is known as a 'spike-team,' or, 'unicorn.' To a team of two animals a third is hitched in front for better guidance. See the author in *American Journal of Philology*, xxix, 78ff.

The pāda, *prāṣṭir vāhati rôhitah*, is repeated in a closely related stanza to the Maruts:

8. 7. 28 (Punarvatsa Kāṇva; to the Maruts)

yād eṣāṁ pṛṣati rāthe *prāṣṭir vāhati rôhitah*,
yānti çubhrā riṇānn apāh.

'When the red stallion guides as a leading horse their speckled mares at the chariot, then the bright Maruts approach and let the waters flow.' Subtly, and yet in a peculiarly certain way, this stanza is secondary, directly patterned after 1. 39. 6. The entire characteristic and imaginative description of the span of the Maruts in 8. 7. 28 is crowded incidentally, as it were, into a subordinate clause (note orthotone *vāhati* in 8. 7. 28; enclitic *vahati* in 1. 39. 6), whereas in 1. 39. 6 the description is the set theme of the first hemistich. I cannot doubt that this important bit of mythography was first stated in the explicit terms of 1. 39. 6, before it could be referred to incidentally, yet in the very same words, in 8. 7. 28.

15. Attraction to the Vocative.

1. 30. 21 (Çunaḥçepa Ājigarti, alias Devarāta; to Uṣas)
vayāṁ hī te āmanmahy āntād ā parākāt,
āçve ná citre aruṣi.

4. 52. 2 (Vāmadeva; to Uṣas)
açvéva citrāruṣi mātā gāvām rtāvari,
sākhābhūd açvinor uṣāh.

Bergaigne, *La Syntaxe des Comparaisons Védiques* (*Mélanges Renier*, p. 75 ff.; especially, p. 77, note 1), and Pischel, *Ved. Stud.* i. 91 ff. have treated the phenomenon of case attraction in comparisons; they show that the primary word in a comparison attracts to its own case-form the secondary, or simile word. On page 92 Pischel remarks that he has found scarcely more than one case of attraction to the vocative, namely, *āçve ná citre aruṣi*. But he has failed to note the parallel, which puts the stamp of imitateness upon 1. 30. 21. I do not wish to say that the vocative attraction in 1. 30. 21 violates any habit, notwithstanding its rareness, especially as Delbrück, *Altindische Syntax* cites, correctly, one more case from the

first book, 1. 57. 3. But of the two repeated pādas, above, one must be the model, and that is 4. 52. 2, making it likely, after all, that the construction in 1. 30. 21 is for the nonce. We must not forget the cases in which the secondary or simile word is in the nominative, while the primary word is in the vocative, e.g., 1. 16. 5; 1. 36. 13; 7. 13. 3 &c. More precisely, therefore, *āçve ná* in 1. 30. 21, imitates *açvēva* in 4. 52. 2. It is significant that all previous discussions of this vocative construction were without reference to the parallel nominative construction, tho the interdependence of the two is not to be doubted, especially as the final cadence of both lines is irregular (∪ ∪ ∪ ∪), and it is not to be supposed that two poets would happen upon the same metrical irregularity.

16. How a repeated pāda may teach construction.

6. 5. 1 (Bharadvāja Bārhaspatya; to Agni)

huvé vaḥ sūnúm sáhaso yúvānam *ádroghavācam matibhir*
yáviṣṭham,

yá invati dráviṇāni práçetā viçvāvarāṇi puruvāro adhrúk.

‘I call for you the son of might, the youth; him whose word is not false, the youngest (I call) with prayers, &c.’

6. 22. 2 (Bharadvāja; to Indra)

tām u naḥ púrve pitáro návagvāḥ saptá víprāso abhi vājáyantaḥ,
nakṣaddābhām ítáturim parvateṣṭhām *ádroghavācam matibhiḥ*
çáviṣṭham.

The modulation of the repeated pāda is interesting: *yáviṣṭham* for Agni (see Macdonell, *Vedic Mythology*, p. 91); *çáviṣṭham* for Indra. Çavasī is Indra’s mother; see the author in *ZDMG*. xlviii. 548, and cf. *çáviṣṭha* in Grassmann’s *Lexicon*. The word *ádroghavācam* does not determine the prior place of the repeated pāda. Though Indra is depicted in the Brāhmaṇas as a good deal of a liar, still, in the Rig-Veda this euphemistic epithet is assigned not only to him but also to Agni; see Bergaigne, iii. 181, 187. The value of the repeated pāda lies in its definite settlement of the meaning and government of *matibhiḥ*. Ludwig, 546, takes *matibhiḥ çáviṣṭham* in 6. 22. 2^d together in the sense of ‘gedankenstärksten.’ This is disproved by the parallel words *matibhir yáviṣṭham* in 6. 5. 1^b. This cannot mean ‘gedanken-jüngster.’ Translate 6. 22. 2: ‘Him our Fathers of yore ... (have called) with their prayers, him whose word is not false, the strongest.’ Cf. Grassmann, i. 253.

17. How a repeated pāda may teach a point or two in morphology.

4. 17. 3 (Vāmadeva Gāutama; to Indra)

bhinād girīm çavasā vājram iṣṇānn āviṣkr̥vānāḥ sahasānā ōjaḥ,
vādhīd vr̥trām vājreṇa mandasānāḥ sārann āpo jávasā hatāvṛṣṇīḥ.

‘He cleft the mountain, hurling his club with might, manifesting, exerting his strength. He hath slain Vṛtra with his club, rejoicing; the waters flowed in haste as soon as their bull (master) had been slain.’ The third pāda is repeated with a change from the third person verb *vādhīd*, to the first person verb *vādhīm* in an imitative stanza:

10. 28. 7 (Vasukrapatnī; to Indra)

evā hi mām tavāsaṁ jajñur ugrām kārman-karman vīṣaṇam
indra devāḥ,

vādhīm vr̥trām vājreṇa mandasānó 'pa vrajām mahinā dāçuṣe vam.

This stanza is, of course, put into the mouth of Indra. Ludwig, 970, in his note, suggests convincingly *indradevāḥ* for *indra devāḥ*; Grassmann, ii. 515, also scents the difficulty at that spot. Translate: ‘Thus they whose god is Indra (that is, the pious) knew me (Indra) to be a mighty and strong bull in every task: I have slain Vṛtra with my club, rejoicing, with might I have opened the stable for the pious.’ There can be no doubt that pāda c with its precarious analogical *vādhīm* (also 1. 165. 8) is a direct copy of 4. 17. 3^c. This is shown further by the nonce-formation *vam* in pāda d which is again analogical. Grassmann naively explains it in his Lexicon, column 1321, as ‘aus *varam*,’ but it is a product of proportional analogy which helps to fill in a smooth paradigm: *vam*, *vah*, *vah*. Both *vādhīm* and *vam* reflect the difficulty of stating secondarily the deeds of Indra in the first person, because they were originally conceived in the third person. We must note that *vah*, like *vam*, always stands at the end of a pāda. The grammatical forms mentioned are peculiarly sound criteria for determining the relative chronology of the two stanzas.

18. A truncated line, unchanged in meaning.

1. 80. 10 (Gotama Rāhūgaṇa; to Indra)

indro vr̥trāsya tāviṣīm nīr ahan sāhasā sāhaḥ,
mahāt tād asya pāuṇsyaṁ vr̥trām jaghanvān asrjad ārcann ānu
svarājyam.

This case is remarkable, because it is both definite and simple. The fourth pāda fails to end in an iambic dipody, and its verb has no object. Ludwig, 460, translates diplomatically 'als er den Vṛtra getötet liess er fließen;' Grassmann, ii. 80, more freely, 'schlug Vṛtra und ergoss die Fluth.' But the Rig-Veda tells in unmistakable language that the pāda is the truncated torso of another pāda, regular in its final cadence and the preceding anapaest, and duly furnished with that object which every reader of this Veda would supply anyhow, namely *sīndhūn*:

4. 18. 7 (Sainvāda Indrāditivāmadevānām)
 kīm u ṣvid asmāi nivído bhananténdrasyāvadyām didhiṣanta
 āpaḥ,
 māmāitān putró mahatā vadhéna *vṛtrām jaghanvān asṛjad ví*
sīndhūn.

4. 19. 8 (Vāmadeva; to Indra)
 pūrvīr uśasaḥ ṣarādaḥ ca gūrtā *vṛtrām jaghanvān asṛjad ví*
sīndhūn,

pāriṣṭhitā atrṇad badbadhānāḥ sirā indraḥ srāvitave prthivyā.

From these pādas a later poet over-familiarly has extracted the short form to suit his metre. Cf. also Oldenberg, *Rig-Veda Noten*, p. 83, to RV. 1. 82. 2.

19. A line soldered together from two, and vastly changed in meaning.

1. 142. 3 (Dīrghatamas Āucathya; Āpri-stanza to Narācaṁsa)
ṣuciḥ pāvako ádbhuto mádhvā yajñām mimikṣati,
 nārācaṁsaḥ trir á divó devó devēṣu yajñīyaḥ.

8. 13. 19 (Nārada Kāṇva; to Indra)
 stotā yāt te ānuvrata ukthāny ṛtudhā dadhé,
ṣuciḥ pāvakā ucyate só ádbhutaḥ.

9. 24. 6 (Viṣvamanas Vāiyaçva; to Pavamāna Soma)
 pávasva vṛtrahantamokthébhīr anumādyah,
ṣuciḥ pāvako ádbhutaḥ.

9. 24. 7 (The same)
ṣuciḥ pāvakā ucyate sómaḥ sutāsyā mádhvaḥ,
 devāvīr aghaçaṁsahā.

Stanza 8. 13. 19 offers a remarkably convincing instance of secondary workmanship, both from the point of view of form and contents. As regards the form, 8. 13. 19^c is evidently

pāda is the result of a sort of scooping out of the longer in the middle. Cf. the relation of *áriṣṭaḥ sārva edhate*, 1. 41. 2; 8. 27. 16, to *áriṣṭaḥ sá mārto víçva edhate*, in 10. 63. 13. Their relation may be almost expressed in the formula *áriṣṭaḥ sá [mārto víç]va edhate*. Here, however, the shorter pāda is the original, from which the metrically imperfect longer pāda is derived by additions which do not add to the sense.

21. How one line begets two others.

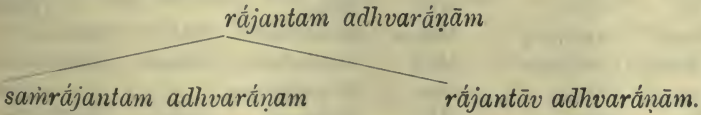
1. 1. 8 (Madhuchandas Vāiçvāmîtra; to Agni)
rājantam adhvarāṇām gopām ṛtasya dīdivim,
 vārdhamānam své dāme.

1. 45. 4 (Praskaṇva Kāṇva; to Agni)
 māhikerava ūtāye priyāmedhā ahūṣata,
rājantam adhvarāṇām agnīm çukrēṇa çociṣā.

8. 8. 18 (Sadhvaṇsa Kāṇva; to the Aṇvins)
 ā vām víçvābhir ūtibhiḥ priyāmedhā ahūṣata,
rājantāv adhvarāṇām aṇvinā yāmahūtiṣu.

1. 27. 1 (Çunaḥçepa Ājigarti; to Agni)
 aṇvaṁ ná tvā vāravantam vandādhyā agnīm námobhiḥ,
saṁrājantam adhvarāṇām.

The original form of the repeated pāda is doubtless *rājantam adhvarāṇām*, an Agni motif; cf. such expressions as, *pâtir hy ādhvarāṇām agne*, in 1. 44. 9; or, (*agnīm*) *netāram adhvarāṇām*, in 10. 46. 4. Oldenberg, *Prolegomena*, p. 262, rightly regards the group of hymns ascribed to Praskaṇva (1. 44—50) as related to and prior to the Vatsa group (8. 6—11). The pāda, *rājantāv adhvarāṇām*, as applied to the Aṇvins in 8. 8. 18, is obviously secondary in sense; it is equally clear that the trickily trochaic pāda, *saṁrājantam adhvarāṇām* in 1. 27. 1 is secondary both in form and sense. The chronological relation of the pādas may be expressed as follows:



The RGH Law in Philippine Languages.—By CARLOS EVERETT CONANT, Professor in the University of Chattanooga.

THE attention of investigators in the field of Indonesian phonology was early attracted to the remarkable correspondence of *r, g, h*, and *y* seen in Toba and Malay *urat*: Tagalog *ugát*: Dayak *uhat*: Lampong *oya* 'vein, nerve, sinew'.

The first formal statement of this varied representation of an originally single phonic element was made by the Dutch scholar H. N. van der Tuuk in what is known as the first van der Tuuk law, the phenomena of which have been further examined and classified by others, notably Brandes, Kern, Adriani, and Brandstetter.

According to this law the IN¹ parent speech possessed a certain consonantal sound which, being lost in some languages,

¹ Abbreviations used in this paper:

Ach.	Achinese	Inb.	Inibaloi	NJav.	New Javanese
Bgb.	Bagobo	Iran.	Iranun	OFavor.	Old Favor-
Bis.*	Bisaya	Jav.	Javanese		[lang
Bkl.	Bikol	Klm.	Kalamian	OJav.	Old Javanese
Bon.	Bontok	Knk.	Kankanai	Pamp.	Pampanga
Btn.	Batan	Kuy.	Kuyunon	Pang.	Pangasinan
Bug.	Bugis	Lamp.	Lampong	Phil.	Philippine
Chro.	Chamorro	Mad.	Madurese	Sang.	Sangir
Day.	Dayak	Mak.	Makassar	S.-Bis.*	Samar-Leyte
Duz.	Duzon	Mal.	Malay		[Bisaya
Favor.	Favorlang	Mentw.	Mentawai	Sbl.	Sambal
Form.	Formosan	Mgd.	Magindanau	SForm.	Singkan For-
Ibg.	Ibanag	Mkb.	Minankabau		[mosan
Ilk.	Iloko	Mlg.	Malagasi	Sumb.	Sumbanese
IN	Indonesian	Mongd.	Mongondou	Sund.	Sundanese
	Tag.	Tagalog	Tir.	Tirurai	

* Bis. includes the three great Bisaya dialects, Cebuan, Panayan, and that of Samar and Leyte, except on pp. 83, 84, and 85, where it includes only the first two named, the last being indicated by S.-Bis.

like Old Javanese, became in others variously *r*, as in Toba, Karo, Čam, and Malay; *g*, as in Tagalog, Bisaya, Formosan, Ponosakan, and Chamorro; *h*, as in Dayak, Sangir, and Bulu; and *y*, as in Lampong, Gayo, and Pampanga.

The following comparative table will illustrate the most natural operation of the law, that is, where the RGH consonant is intervocalic and hence least liable to the influence of secondary phonetic laws.

<i>R</i>	<i>G</i>	<i>H</i>	<i>Y</i>	<i>Zero</i>
Toba urat	OForm. ugat	Day. uhat	Lamp. oya	OJav. uwad
Mal. urat	Favor. oggach	Bulu ohad	Gayo uyöt	NJav. uwat
Ach. urat	Tag. ugât	Sang. iha	Pamp. uyát	Nias uwo
Mkb. urat	Bis. ugât		Batan úyat	Sumb. uwa
Mak. ura	Mongd. ugat			
Bug. ure'	Chro. gugat			

The languages of the OJav. type have developed a parasitic labial glide *w* between the two vowels thrown together by the loss of the RGH consonant. Chro. *gugat* has an initial parasitic *g*, as in *gunum* 'six'.¹ The phonetic changes seen in the other non-Philippine examples are due to the regular operation of secondary laws, and need not be detailed here. The Malagasi cognate *uzatra* shows *z* for RGH, as in Mlg. *zahitra* 'raft', beside Mal. *rakit*, Bis. *gákit*. This *z* is shown by Ferrand² to have evolved from a spirant *y* in OMLg. In Mlg. *vay*, *vey* 'burning coals', beside Mal. *bara*, Tag. *bága*, this spirant seems to have coalesced with the Mlg. *i*, the frequent representative of IN *a* in final position. The RGH consonant in final position is lost in Mlg., as in several other IN speech groups, e. g. Mlg. *uhi*, *uhu* 'tail', beside Mal. *ikor*, Toba *ihur*, Bis. *íkog*. Further it also becomes *r* medially, e. g. Mlg. *avaratra* 'North', beside Mal. *barat*, Tag. *habágat*, Bulu *awahat*. Čam has *r* initially and medially, but drops the RGH consonant finally, with compensatory lengthening of the preceding vowel; e. g. Čam *ratuh* 'hundred', beside Mal. *ratus*, Bis. *gatús*; Čam *barā* 'shoulder', beside Day. *baha*, Toba *abara*, Bis. *abága*; Čam *ulā*

¹ Compare my paper, *Consonant changes and vowel harmony in Chamorro*, pub. in *Anthropos* vol. v.

² *Essai de phonétique comparée du malais et des dialectes malgaches*, Paris 1909, p. 106.

'snake', beside Mal. *ular*, Ibg. *ulág*, and Jav. *ulā*, the Jav. showing the same loss and compensatory lengthening. Certain Phil. languages represent RGH by *l* (see below p. 73).

The Philippine Islands¹ form the center of the speech territory in which the consonant of the RGH series appears as *g*. Hence it is customary to classify as belonging to the Philippine group, not only languages of that archipelago, but such other speech groups as show the *g* of that series. Among the non-Philippine languages of this category are the Duzon and Iranun of N. W. Borneo, the Singkan Formosan and the Favorlang of Formosa, the Ponosakan and Mongondou of North Celebes, and the Chamorro of the Marianas. The following examples will further illustrate the *g* languages in non-Philippine territory.

Duz. *wagas* 'unhulled rice', Iran. *bugas*, Chro. *pugas*, beside Bis. *bugás*, Mal. *beras*, Day. *belas*.

Duz. *waig* 'water', Iran. *aig*, beside Mgd. *ig*, OJav. *er*, Mal. *ayer*.

Duz. *gamut* 'root', beside Tag. *gamút*, Ilk. *ramút*, Tonsea *amut*.

Duz. *niog* 'cocoanut', Chro. *niyo(g)*, beside Tag. Bis. *niüg*, Mal. *niyur*.

SForm. *pagig* 'ray fish', beside Tag. Bis. *pági*, Mal. *pari*, Day. *pahi*, where SForm. *pagig* shows final parasitic *g*, as in *wagiog* 'storm', beside Phil. *bagyu*.

OFavor. *tagga* 'blood', Chro. *haga*, beside Ibg. *dága*, Mal. and Čam *darah*, Bulu *raha*. The OFavor. *tagga* shows secondary gemination of *g*, as in *oggach* (Tag. *ugát*), and *t* for *d*, as in OFavor. *tarran* (Phil. *dalan*) 'way'. Chro. *haga* has *h* regularly for initial *d*.²

Ponosakan and Mongondou *dugi* 'thorn', beside Ibg. *dúgi*, Toba *duri*, Day. *duhi*.

Ponos. *gowii* 'night', beside Tag. Bis. *gab'i* and *gabí'i*, Ilk. *rab'i*, Sang. *hěbbi*, Nias *owi*.

¹ For the geography of the Philippine languages and dialects see Scheerer's sketch map in his work, *The Batán dialect as a member of the Philippine group of languages*, Div. of Eth. Pub. vol. v, part i, Manila 1908, p. 17.

² See Conant, *op. cit.*

Mongd. *doñog* 'hear', beside Bis. *dunúg*, Mal. *deñar*, Sang. *dinihě*.

In the three great languages, Tagalog, Bisaya (with its many dialect variations), and Bikol, together constituting the speech of seventy per cent of the entire population of the Philippine Islands, the RGH consonant invariably appears as *g* in all positions, initial, medial, and final. The same is true of Ibanag (North Luzón), Magindanau (South Mindanao), Sulu, and several other speech groups of minor importance. There are, however, a number of Philippine languages in which the RGH consonant develops other sounds, particularly *r*, *l*, and *y*, as exemplified by the following table, showing the consonant in question in initial, medial, and final position.

<i>G languages</i>	Initial	Medial	Final
Tag.	gamót 'root'	ugát 'vein'	íkog 'tail'
Bis.	gamút	ugát	íkog
Bkl.	gamót	ugát	íkog
Ibg.	gamút ^t	ugát ^t	(niúg 'cocoa-
Mgd.	gamut	ugat	ikug [nut']
Sulu	gamut	ugat	íkog
Bgb.	ramot	ugat	íkog

R languages

Ilk.	ramút	urát	(bibír 'lip')
Tir.	(rohok 'rib')	urat	igor

L languages

Pang.	lamót	ulát	ikól
Knk.	lamót	uwat	
Inb.	damót	ulat	ikól
Bon.	lamót	őăd, wăd, uăd	
Klm.	lamot	(darala 'girl')	(bibil 'lip')

Y languages

Pamp.	yamút	uyát	iki
Batan	yamot	úyat	(itioi 'egg')
Sambal	(yábi 'night')	(búyas 'rice')	(tolói 'sleep')

Remarks on the above table.—In the Ibanag examples *gamút^t* and *ugát^t* the final *t* has lost its original pronunciation, and, like the other surd stops *k* and *p*, has become a mere glottal stop (hamza) in Ibg. when final. I write the original surd

stop above the line, since it has its original value when supported by a suffix, *e. g.* *gamután*.

The intervocalic *rr* written by Bennásar¹ in his spelling of Tirurai words, *e. g.* *urrat* 'vein', *urrar* 'snake', is simplified to *r* in this paper, since it is not a case of gemination, but is a trilled *r* which would regularly be represented in the Spanish orthography by *rr* when intervocalic.

Tir. *rohok*, beside Mal. *rusuk*, Bis. Bgb. *gúsok*, has *h* for IN *s*, as in Tir. *liha* 'nit', beside Tag. *lisá*.

Tir. *igor* 'tail' shows *g* for IN *k*, as in Tir. *sigeu* 'elbow', beside Phil. *siku*.

The Kankanai *uwat* and Bontok *öäd*, *wäd*, *uäd*² show secondary loss of intervocalic *l*, the former with compensatory labial glide *w*, while the latter shows a tendency to reduce the initial *o(u)* to a labial semivowel, as appears from the variant *wäd*.

The *d* of Inibaloï *damót* is also secondary for Inb. *l*, with which it interchanges. Cf. Inb. *ulat* and *ikól*, and see Scheerer, *The Nabaloi Dialect*, p. 102.

Bagobo properly belongs to the *g* languages, as will appear below, *ramot* being one of the few anomalous examples of *r* representation of RGH to be found in that language.

Ibg. *niüg* is cognate with Mal. *niyur*, Tag. *niüg*; and Ilk. *bibír*, Kalamian *bibil* 'lip', with Mal. *bibir*, Ibg. *bibíg*.

Klm. *darala* 'girl' is identical with Bis. *dalága*, a reduplicated form of Mal. *dara*, Mgd. *laga*, *raga*.

For Btn. *itioi*, beside Tag. *itlug*, Mal. *telur*, see below (p. 81). With Sambal *yábi* compare Tag. *gab'i* and Ilk. *rabi'i*, and with Sbl. *búyas* and *tolói* compare Bis. *bugás*, Mal. *beras*, and Bis. *tulóg*, Mal. *tidor*, Jav. *туру*.

The r, l, and y languages in detail. Unlike the Tagalog, or pure *g* type, the *r, l, and y* languages show some irregular-

¹ *Diccionario Tiruray-Español*, Manila 1892, and *Diccionario Español-Tiruray*, Manila 1893. This rule of orthography is, however, not consistently adhered to by Bennásar, *e. g.* he writes *biarung* 'a kind of tree' in his *Observaciones Gramaticales sobre la lengua Tiruray*, Manila 1892, p. 3, while the same word appears as *biárrung* in the *Diccionario Tiruray-Español*.

² The Bontok examples throughout the paper are taken from Seidenadel, *The language spoken by the Bontoc Igorot*, Chicago 1909, Open Court Pub. Co.

ities, their characteristic consonant often interchanging with *g*. They therefore require individual examination.

The r languages. These are the Iloko, spoken on the N.W. coast of Luzón, and the Tirurai, spoken by a mountain tribe of South Mindanao. Bagobo, also spoken in South Mindanao, is very similar to Bisaya in many respects, and generally has *g* like that language. It is possible that the sporadic cases of the *r* representation in Bagobo may be due to the influence of some neighboring mountain dialects, or to Malay. The inconsistencies of its vocalism, doubtless due to the same influence, have been pointed out in my paper on the pepet law.¹ It will appear from the following comparative table that the interchange of *r* and *g* follows different norms in the two *r* languages, and that *r* is more persistent in Tir. than in Ilk. It will also appear that Bgb. is properly a *g* language, as above stated.

	<i>Iloko</i>	<i>Tirurai</i>	<i>Bagobo</i>	
Mal. rebah 'to fall'	rebbá	rebá and gebá	gobbá	Tag. gibá
Mal. rusuk 'side'	rósok	rohok	gosok	Bis. gúsuk
Mal. rakit 'raft'	rákit	gakit		Ibg. gákit
Pamp. ayán 'light, quick'		raán	gaan	Tag. ga'án
Toba abara 'shoulder'	abága	wará		Ibg. abagá
Mal. duri 'thorn'	dúri	durái	dugi	Bkl. dúgi
Toba uras 'to wash'	úgas	urah(en)	horas	Sulu hugas
Mal. bara 'hot coals'	bára	bará	baga	Bis. bága
Mal. barat 'west wind'	abágat	barat	habagat	Tag. habágat
Day. besoh 'satiated'	bussúg	besor	bossog	Bkl. basóg

The vocalism of the first syllable of Ilk. *rebbá*, Tir. *rebá*, *gebá*, Bgb. *gobbá*, Tag. *gibá*, and that of Ilk. *bussúg*, Tir. *besor*, Bgb. *bossog*, Bkl. *basóg*, is according to the pepet law, and the consonantal doubling in the Ilk. and Bgb. examples, according to the law of gemination of a consonant following original pepet.² Tir. has both *rebá* and *gebá* with slightly different meanings, while Ilk. has only *rebbá*, and Tir. has *g* in *gakit* beside the Ilk. *r* of *rákit*. But in three of the examples Tir.

¹ *The Pepet Law in Philippine languages*, to appear in an early number of *Anthropos*, to which journal it was sent for publication several months ago.

² Cf. Conant, *Pepet Law*, and Brandstetter, *Wurzel und Wort in den Indonesischen Sprachen*, Luzern 1910, p. 41, who has independently discovered the same law for Ilk.

has *r* where Ilk. has only *g*, namely *wará*, *urah(en)*, and *besor*. The *h* of Tir. *rohok* and *urah(en)* has been treated above (p. 75).

An examination of the Iloko vocabulary reveals a large number of *r:g* variants. The following are selected from a long list:

Ilk. *ribak* 'fragment of pottery', beside the later, but less common *gibak* (Ibg. *gíba^k*); Ilk. *baró* 'new', beside *bágo*, in the sense of 'newcomer' (Mal. *baru*, Tag. *bágu*); Ilk. *darás* 'quick, prompt', beside *dagás* (Toba *doras*, Day *dähes*, Tag. *dag'ás*); Ilk. *bekkór* 'convex', beside *bekkóg* 'concave'; Ilk. *bibir* (obsolete) 'lip', beside the modern *bibig* (Mal. *bibir*, Ibg. *bibíg*). Ilk. *girái* 'notch' shows this interchange by metathesis in the reduplicated *rig-rigáyan* 'thing notched, leaf with notched edge'.

It appears from a study of all the material for Ilk. that the original representation of the RGH series in that language was *r* unless disturbed by secondary laws. This *r* has been preserved in a large number of the most common words, *e. g.* *rósok*, *ramút*, *urát*, *bára*, *dúri*, *busór*, *tíker*. In other cases the *r* and *g* forms exist side by side, sometimes with different shades of meaning, as seen in the above examples, while in some cases the new *g* has entirely replaced the older *r*. Furthermore some *g* words have crept in from pure *g* languages, chiefly Ibg. and Tag.

The most striking difference between Ilk. and Tir. in the RGH representation is perhaps the treatment of the RGH consonant in final position. It is more commonly *r* in Tir., while *g* prevails in Ilk., *e. g.* Tir. *besor*: Ilk. *bussúg* of the above table; Tir. *bëwër* 'lip', beside Modern Ilk. *bibíg*; Tir. *igor*, beside Bis. *íkug*; Tir. *sawer* 'scatter', beside Bis. *sábweg*; Tir. *rëër* 'neck', beside Bis. *lí'og*, Tag. *lí'ig*, Mal. *leiher*; Tir. *urar* 'snake', Ilk. *úleg*.

But for the *g* of this last Ilk. example, see below p. 77.

As a general rule both languages have *g* when preceded by original pepet and followed by a non-pepet vowel; *e. g.* Tir. *begás* 'rice', Ilk. *bagás*, Tag. *bigás*, Bis. *bugás*, Mal. *beras*, Toba *boras*, Day. *behas*; Tir. *tegás* 'hard', Ilk. *sagát* (metathesis), Tag. *tigás*, Bkl. *tagás*, Bis. *tugás*, Bgb. *tuggás*, Mgd. *tegás*, Mal. *teras*, Toba *turas*; Tir. *begat* 'weight', Tag. *big'át*, Bis. *bug'át*, Toba *burat*, Day. *behat*. Both languages have *r* between the two

pepet vowels in Tir. *feres* 'to press out', Ilk. *perrés*, Sund. *peres*, Day. *pehes*, Sang. *pěhasě*.

An examination of the vocabularies of these two languages during the preparation of the present paper has revealed the following special law for the liquids *l* and *r*: *Iloko and Tirurai, like Toba and Dayak, do not admit both l and r in the same Grundwort.*¹

In Ilk. this is avoided by the *g* representation of RGH in words having an *l*; e. g. *úleg* 'snake', beside Mal. *ular*. In Tir. it is avoided either in the same way, e. g. Tir. and Ilk. *láyag* 'sail', beside Mal. *layar*, or, and this is by far the more common, by an assimilation of liquids in which the *r* of the RGH series generally assimilates the neighboring *l*, e. g. Tir. *urar* (Mal. *ular*), as is regularly the case in Toba and Day., e. g. Toba, Day. *rayar*, beside Mal. Sund. *layar*, Tag. Bis. Ibg. *láyag*. But exceptionally the RGH *r* is assimilated to the neighboring *l*, e. g. Tir. *lilei* 'post' (Tag. *halígi*, Mal. *diri*), where the Tir. *l* of the RLD series prevails. The following tabulation will show at a glance how the law affects the two languages.

<i>Iloko</i>	<i>Tirurai</i>	<i>Other languages</i>
<i>láyag</i> 'sail'	<i>láyag</i>	Mal. Sund. Ach. <i>layar</i> , Toba, Day. <i>rayar</i> , Tag. Bis. Bkl. Ibg. Bgb. Sulu <i>layag</i>
<i>búlig</i> 'bunch of bananas'	<i>bulik</i> (?)	Mal. bulir, Toba burir, Bis. Bkl. <i>búlig</i>
<i>ribuk</i> 'roil, disturb, confuse'	<i>rebur</i> , <i>ribur</i>	Mal. lebur, OJav. labū, Mak. laboro', Mgđ. lebug, lebuk, Bis. lubúg, Bgb. lobbog, Pamp. labúg
<i>úleg</i> 'snake'	<i>urar</i>	Mal. ular, OJav. Cam ulā, Mak. ulara', Toba uluk, Pang. ulég
	<i>rarei</i> 'run'	Mal. Mak. Bug. lari, Mgđ. Bgb. lagui, Bis. Bkl. lagiu
	<i>rëer</i> 'neck'	Mal. leiher, Sang. lehe, Kuyunun liëg, Bis. Bkl. Sulu li'ug, Ibg. Mgđ. lig, Bgb. alig
<i>arigi</i> or <i>adigi</i> 'post'	<i>lilei</i>	Mal. (ber)diri, Day. jihi, Sang. dihi, Bulu arihi, Tag. Bis. haligi, S.-Bis. Bkl. harigi, Mlg. andri

¹ As the question whether IN roots are to be regarded as dissyllabic or monosyllabic has not yet been settled, I employ the convenient term *Grundwort* following the terminology of Brandstetter, *Wurzel und Wort*, p. 3 *et passim*.

For further *l* assimilation in Tir., compare Tir. *lual* 'except', Mal. Sund. *luar* 'outside'. The *r* prevails in the Ilk. cognate *ruar*, in which it agrees with Toba, Day. *ruar*. Compare also Tir. *lalan(en)* 'prohibit', beside Mal. Sund. Mak. *laraan*, Toba, Day. *raraan*, Sulu *lān* (for **lalan*).

The *g* of Ilk. Tir. *lāyag* may also be explained as a case of stereotyped Phil. *g* to be treated below (p. 82). The surd *k* replaces the sonant *g* in final position in Ilk. *rībuk*. This wavering between final surds and sonants is not uncommon, not only in this language, but elsewhere in the Philippines and in Chamorro.¹ It is possible that Tir. *bulik* 'a kind of wild banana' is to be connected with Ilk. *būlig*, in which case we should have, instead of the regular Tir. assimilation, an example of final RGH *g* becoming *k* just as in Tir. *rībuk*; cf. also Tir. *tanuk* 'sound', beside Mgd. *tanuk*, Tag. *tunóg*, Pang. *tanól*.

The l languages. In Kalamian (North Palawan), Pangasinan, and the related Igorot dialects Inibaloi, Kankanaí, and Bontok, the RGH consonant appears regularly as *l*, exceptionally as *g*, which sometimes becomes the surd *k*. The *l* of these languages is considerably more constant than the *r* of the *r* languages, as will appear from the following table and the additional examples given below.

<i>Kalamian</i>	<i>Pangasinan</i>	<i>Inibaloi</i>	<i>Kankanaí</i>	<i>Bontok</i>	<i>G languages</i>
lamot 'root'	lamot	damót	lamót	lamót	Bis. gamút
labii ² 'night'	lábi	kalbian	lafi	lafi	Tag. gab'i
kabala 'shoulder'	abalá	awáda	abála		Ibg. abagá
	ulát 'vein'	ulat	uwat	ōād	Bgb. ugat
bibil 'lip'	bibil				Bis. bibíg
tenal 'voice'	tanól				Bkl. tanóg

The Inb. secondary *d* for *l* in *damót* and *awáda*, and the loss of intervocalic *l* in Bon. *ōād* are explained above (p. 5).

Klm. *kabala* has an initial parasitic *k* as in *kolo* 'head', beside IN *ulu*. This *k* may also appear medially, as in *takon*

¹ Cf. Conant, *Consonant changes and vowel harmony in Chamorro*.

² Corrected spelling for the Span. orthography *lavii* of Father Jerónimo de la Virgen de Monserrate in his *Vocabulario Castellano-Calamiano*, pub. by Retana in the *Archivo del Bibliófilo Filipino*, vol. ii, Madrid 1896. On this spelling and the whole subject of Span. confusion of *b*, *v*, and *u*, see my *F and V in Philippine languages*, p. 2, note.

'year', beside Tag. *ta'ón*, and finally, as in *polok* 'ten', beside Bis. *puló*, and generally, perhaps always, stands in the place of the glottal stop (hamza).

As the *r* languages avoid the concurrence of *l* and *r* in the same word, so the *l* languages do not allow two *l*'s in the same word when such would be the result of the *l* representation of RGH. In such cases RGH generally appears as *g*, e. g. Pang. *ulég* 'snake', Ibn. *úleg*, Knk. *eweg*, Bon. *űvűg*, beside Mal. *ular*, Tir. *urar*, the Knk. and Bon. examples showing regular loss of intervocalic *l* (see above, p. 74); Klm. and Pang. *ilog* 'river', beside Tag. *ilog*, Mal. *alur*.

The correspondence of Klm. *kilog* 'egg' with its Pang. cognate *iknól* (Tag. Bis. Ilk. *itlug*, Mal. *telor*) is interesting as showing the different evolution in the two languages of the RGH consonant in the same word with an original *l*. In Klm. *kilog* RGH appears as *g* and the original *l* remains unchanged, while the slightly pronounced *t* of Phil. *itlug* degenerates to hamza, which shifts, as often in Klm., to the other side of the vowel *i* and there appears regularly as *k* (see above). In Pang. *iknól*, the RGH consonant persists as *l*, and by a dissimilation of liquids the original *l* becomes *n*, to which the *t* is then partially assimilated, becoming *k*. Precisely the same evolution as to liquids is seen in Pang. *moníl* 'bunch of bananas' (Bis. *búlig*, etc. See table p. 77). In this example, furthermore, the *n* produced by dissimilation acts in turn on the initial labial sonant stop *b*, changing it by partial assimilation to the labial nasal *m*. In Klm. the persistence of final *l* of the RGH series in a word beginning with an original *l* is shown by *dikel* 'neck', beside Tag. *lí'ig*, Bis. *lí'ug*, Mal. *leiher*, Tir. *rëër*. Here the repetition of *l* is avoided by changing the original initial *l* to its corresponding sonant stop *d*. The vocalism of the last syllable follows the pepet law, and the parasitic *k* takes the place of the hamza seen in the Tag. and Bis. cognates.

While the *r* languages generally have *g* for RGH when this is preceded by a pepet vowel and followed by any other vowel, Pang. shows *l* under the same circumstances, e. g. Pang. *belás* 'hulled rice', beside Tir. *begás*, Ilk. *bagás*; Pang. *belát* 'weight', beside Tir. *begát*.

The material at hand for the other *l* languages is not sufficient to permit of classification in this particular.

Pang. also shows *l* as the first element of a consonantal group following any vowel, *e. g.* Pang. *ulsá* 'deer', beside Ilk. *ugsá*, Toba *ursa*, Mal. *rusa*; Pang. *belwás* 'alzar ó coger lo que está dentro del agua', Tag. *bigwás* 'tirar el anzuelo'; Pang. *pelsá* 'boil, carbuncle', Tag. *pigsá*, Bis. Bgb. *pugsá*. The last two examples have pepet vocalism of the penult. The exceptional *g* of Pang. *begsái* 'paddle', beside Pamp. *bagsái*, Bis. Sulu *búgsai*, Bgb. *bugse*, Chro. *pogsai*, is probably to be explained as a case of stereotyped *g* (see below, p. 82).

The y languages. As in Gayo and Lampong, the RGH consonant appears as *y* in the Phil. languages, Pampanga, Batan, and Sambal, where it also appears exceptionally as *g*, though most of the exceptions may here be referred to the stereotyped class. The regular representation for Pamp. and Btn. is shown by the following examples:

Pamp. *uyát* 'vein', Btn. *úyat*, Gayo *uyöt*, Lamp. *oya*, Tag. *ugát*, Day. *uhat*.¹

Pamp. *dáya* 'blood', Btn. *rayá*, Ibg. *dága*, Chro. *haga*, Day. *daha*, Pang. *dalá*, Ilk. Tir. *dára*, Čam, Mal. *darah*.

Pamp. *payáu* (modern *payó*) 'hoarse', Gayo *payo*, Mal. Ilk. *parau*, Tag. *págau*, Day. *pehau*.

Pamp. *yamút* 'root', Btn. *yamot*, Tag. *gamút*, Pang. Klm. *lamót*, Ilk. *ramút*, Tonsea *amut*.

Btn. *itioi* 'egg', Lamp. *telui*, Mal. *telor*, Bgb. *tollog*, Tag. *itlúg*.

Pamp. *íki* 'tail', Lamp. *ikui*, Gayo *uki*, Mal. *ikor*, Toba *ihur*, Tir. *igor*, Pang. *ikól*, Tag. Bis. *íkog*, Day. *ikoh*, OJav. Čam *ikú*, Mlg. *uhi*, *uhu*.

When final, the *y* becomes *i* and coalesces with a preceding *i* in both Pamp. and Btn., as in Btn. *bibí* 'lip', Ibg. *bibíg*, Mal. *bibir*; Pamp. *búli* 'cluster of bananas', Bis. *búlig*, Mal. *bulir*, Jav. *wuli*, Mlg. *vuli*, *buli*. With a preceding *a* it forms the diphthong *ai* in both languages, as it does in Lampong, *e. g.* Pamp. *tikái* 'reed-mace, cattail', Bis. Bkl. *tikog*, Ilk. *tíker*, Mal. *tíkar*, Mlg. *tsihi*, *tihi*, *šihi* (the examples showing regular pepet vocalism of the ultima); Btn. *vudái*, *budái*¹ 'snake', Lamp. *ulai*,

¹ The Batan word may now be included under Brandstetter's *Variation 3* under *Schlange*, (*Mata-Hari*, p. 34), since the only difficulty it presents is the prefixed *v* or *b*, which can easily be explained as an initial parasitic labial glide before the labial vowel *u*. In fact it is pronounced much like the Span. *b* in *bullir*.

Ibg. *ulág*, Pang. *ulég*, Mal. *ular* (pepet in ultima). With a preceding *o* (*u*) the *i* (<*y*) forms the diphthong *oi* (*ui*) in Btn. as in Lamp., *e. g.* Btn. *itioi* 'egg', Lamp. *telui*; Btn. *busoi* 'enemy', Ilk. *búsor*, Pang. *busól*. In Pamp. the final diphthong *oi* (*ui*) thus formed contracts to *i*, *e. g.* Pamp. *íki* 'tail' (but Lamp. *ikui*). Other examples for Pamp. are *ápi* 'lime', Tag. *ápog*; Pamp. *atní* 'sound', Tag. Bis. *tunóg*, Bkl. *tanóg*, Ibg. *tannúg*, Pang. *tanól* (pepet in penult); Pamp. *absí* 'sated', Tag. Bis. *busog*, Bkl. *basóg*, Ilk. *bussúg*, Bgb. *bossog*, Ibg. *battúg*, Tir. *besor*, Day. *besoh* (pepet in penult). The Pamp. examples *atní* and *absí* show a very common characteristic of Pamp. pointed out in a previous paper,¹ namely, the metathesis of initial consonant + vowel.

In Pamp. RGH regularly appears as *y* when preceded by a pepet vowel, whatever be the character of the following vowel, *e. g.* Pamp. *báyat* 'weight', Pang. *belát*, Tir. *begat*; Pamp. *abyás* 'rice', Pang. *belás*, Ilk. *bagús*, Tir. *begás*; Pamp. *asyád* 'sting (of insect)', Tir. *seged*, Tag. *sigíd*, Bkl. Bis. *sugúd* (pepet in both syllables).

The material for Sambal is meager, but sufficient to enable us to classify that language here: Sbl. *yábi* 'night', Tag. *gab'í*, Pang. *lábi*, etc.; Sbl. *búyas*, *búya* 'rice', Tag. *bigás*, etc.; Sbl. *ráyo*, *láyo* 'run', Bis. Bkl. *lagíu*, etc.; Sbl. *tolói* 'sleep', Tag. *túlog*, Mal. *tidor*, Day. *tiroh*, Mlg. *turi*, *turu*. It appears from the last example that final *y* is treated in Sbl. as in Btn. and Lamp.

In Pamp. RGH frequently appears as *g*, but more often in final position than initially or medially, *e. g.* Pamp. *gatús* 'hundred thousand', but Btn. *yatús* 'hundred', Mal. *ratus*; Pamp. *abágat* 'west wind', Pang. *abaláten*, Bulu *awahat*; Pamp. *sagáp* 'to skim', Tag. *sagíp*, Toba *sarop*, Mal. *sarap*, Day. *sahep* (pepet in ultima); Pamp. *ilúg* 'river', Tag. *ilog*, Mal. *alur*; Pamp. *amóg* or *amíg* 'dew of morning', Tag. *hamóg*, Ilk. *ámor*, Pang. *amól*. The *g* of these examples is anomalous, and an explanation of its irregular appearance in place of the natural *y* is impossible at this stage of our investigation, as is the case with many *g*'s of the RGH series in the *r* and *l* languages. Pamp. *gatús* is probably to be explained as a borrowed word originally taken into the language with the meaning of an

¹ *Pepet Law.*

indefinitely large number, just as in Tag., where the same word means million according to the dictionary of Noceda and Sanlucar. 'Hundred' is *dalan* in Pamp. (*limañ dalan* 'five hundred'), and the same word in Tag. *daan*, with secondary Tag. loss of intervocalic *l*. It is quite possible that Pamp. *ilúg* and *sagáp* are cases of stereotyped Phil. *g*, but *abágat* and *amóg*, together with a considerable number of other *g* examples of unmistakable RGH origin, remain to be explained. On the other hand, the RGH *g* is doubtless rare in Btn. The available material for that language is not copious, and I have noted but one certain example in point, namely, Btn. *agsa* 'deer', beside Ilk. *ugsá*, Pang. *ulsá*, Toba *ursa*, Mal. *rusa*. The *g* frequently seen in Rodriguez's *Catecismo* corresponding to IN *l*, e. g. Btn. *ogo* 'head', beside IN *ulu*, is replaced by the modern *h* (Span. orthography *j*), and is the regular treatment of IN *l* in that language. Sambal has *ilug* 'river' (Mal. *alur*), but shows the regular *y* in *tolói* 'sleep,' where Pamp. (*tulúg*) and the *r* and *l* languages show persistently *g*, which in the last two types may be due to the laws of liquids (see above, pp. 77, 79).

The three-fold origin of the Philippine g. The *g*'s of the Phil. languages may be divided into three classes according to their origin, namely original *g*, the *g* of the RGH series, and that of the RLD series.

In a considerable number of words *g* persists uniformly in the languages of the archipelago unless affected by some secondary law. In order to determine whether the *g* in such cases is original or belongs to the RGH series, comparison must be made with material from other IN languages. Thus the word for 'rayfish' is *pági* in Tag. Bis. Bkl. Mgd. Ibg. Pamp. Pang. Ilk., and *fági* in Tir., where *f* is regular for IN *p*¹, and it is only by comparison with the non-Philippine cognates Mal. Sund. *pari*, Day. *pahi*, that the *g* of the Phil. words is shown to be of RGH origin. We have here what may be termed a stereotyped Phil. *g* of the RGH series.

On the other hand, the *g* of Tag. Mgd. Sulu, Pamp. Pang.

¹ Conant, *F and V in Philippine languages*, Division of Ethnology Publications, vol. v, part ii, Manila 1908, trans. into Japanese by Mr. R. Torii, *Journal Anthropol. Soc. of Tōkyō*, vol. xxiv, No. 283, Tōkyō, Oct. 1909.

lúgi 'loss' is original, as evidenced by Mal. Jav. Sund. Toba, Mak. Bug. Day. *rugi*. Other examples of original *g* are Tag. Pamp. Tir. Bgb. Mal. Jav. Sund. Toba, Day. *dagañ* 'trade, merchant', and Mgd. Mal. Jav. Sund. Day. *getas* 'cut (as string)', Toba *gotas*, Bis. *gutas*, Ilk. *gessát* (metathesis and gemination), Pamp. *agtás* (metathesis), Ibg. *gattá^t*, these last cognates showing regular pepet vocalism of the penult.

Some words show one stereotyped form running through one group of Phil. languages while a stereotyped variant appears in another. An example in point is the IN word for 'indigo', which shows a medial RGH consonant in Mal. Sund. Čam *tarum* (cf. Bahnar *trum*, Khmer *tróm*), Mak. *taruñ*, Day. *tahun*, Jav. *tom*, while Toba has *tayum* where we should expect **tarum* according to the RGH law. Now the Luzón languages Tag. Pamp. Pang. Ilk. have *táyum* following the Toba variant, while the languages of the southern Philippines, Bis. Bkl. Bgb. Mgd., have *tágum* following the RGH type. Further investigation of such variants would doubtless throw additional light upon the history of Malayan migrations to the Philippines.

Pang. Ilk. and Ibg., like the non-Philippine languages Toba, Karo, and Mentawai, have also a *g* representing the consonant of the RLD series.¹ This correspondence is shown by the following comparative table.

<i>R</i>		<i>L</i>	<i>D</i>	<i>G</i>
'rice (unhulled)'				
Jav. pari			Mal. padi	Karo page
Sund. pare			Čam padai	Toba page
Mak. pare			Mkb. padi	
Day. paräi				
Tir. farei	Tag. pálai			Pang. pagéi
Bkl. pároi	Pamp. pálai			Ilk. págai
S.-Bis. párai	Sulu pāi (<*palai)			
Btn. parāi				

¹ This *g* has been pointed out for Ibg. and the non-Phil. languages by Kern, *Taalvergelijkende verhandeling over het Aneityumsch, met een Aanhangsel over het klankstelsel van het Eromanga*, Amsterdam, 1906, p. 11, *et passim*, and by Brandstetter, *Prodromus zu einem vergleichenden Wörterbuch der malaio-polynesischen Sprachen*, Luzern 1906, p. 61; *Mata-Hari*, Luzern, 1908, pp. 22, 26.

Sang. r		Sang. i	
R	↓	L	↓
D			
G			
'how much?'			
Jav. pira		Bali pida	Mentw. píga
Day. pirä			
Mlg. firi			
Tir. firoi	Tag. ila		
Bgb. pira	Pamp. pila		Pang. pigá'
Bkl. pirá	Bis. píla		
S.-Bis. pira	Mgd. pila		Ibg. píga
Kuy. pirá	Sulu pila		
'nose'			
Jav. iruñ	Mad. eloñ	Mal. hiduñ	Karo iguñ
Sund. iruñ		Cam iduñ	Toba iguñ
Day. uroñ		Ach. hiduñ	
Mlg. uruñ, uruna		Mkb. (h)iduañ	
Tumb. ñiruñ		Duz. idón	
Sumb. uruñ			
Tir. iruñ	Tag. ilón	Bgb. idon	Ilk. agón
Mgd. hiruñ, ñiruñ		Mgd. hiduñ	Ibg. igún
Klm. aroñ	Bis. ilón		
Kuy. irón	Sulu ilón		
S.-Bis. irón			

Further examples of this conspicuous *g* in Pang. Ilk. and Ibg. are the following:

Pang. Ilk. Ibg. *magá* 'dry', beside Tag. Pamp. Bis. *malá*, Bkl. S.-Bis. *mará*.

Pang. Ibg. *lagá*, Ilk. *lága* 'weave matting', beside Tag. Pamp. Bis. *lála*, S.-Bis. *lára*, Bkl. *rára*, where Bkl. assimilates the original initial *l* to the *r* of the RLD series.

Pang. Ilk. Ibg. *sigi* 'throw grain into sieve', beside Tag. Pamp. *sili*, Mgd. *siri*.

Pang. Ilk. *suga* 'thorn', Ibg. *tugá*, Toba *suga*, beside Tag. Bis. *sula*, Mal. *suda*.

Pang. *sogód* 'comb', Ilk. *súgud*, Ibg. *tugúd*, beside Bis. *súlod*, Tir. Bkl. S.-Bis. *surud*, Mgd. *surut*.

Ilk. *agék* 'sniff', Ibg. *agók*, beside Tag. *halík*, Mgd. *alek*, Bis. *halók*, S.-Bis. *harók*, Tir. *árek*, Bkl. Bgb. *hadók*. This last example shows regular pepet vocalism of the ultima throughout.

In Pang. an interesting exception to this *g* representation of an intervocalic RLD consonant is to be noted. By a special law of Pang. and its related Igorot dialects, an intervocalic

consonant of the RLD series does not become *g* in a *Grundwort* whose initial or final consonant is the velar nasal *ŋ*. In Pang. the RLD consonant becomes a liquid, *l* or *r*, in such words, while Ilk. and Ibg. show the regular *g*. This is illustrated by the following examples.

Pang. *elén* 'nose', Knk. *elén*, Bon. *ilen*, Inb. *idón*, but Ilk. *agón*, Ibg. *igún*, Karo and Toba *igun*, beside Jav. *irun*, Tag. *ilón*, Čam *idun*, etc. (see table p. 84).

Pang. *orín* 'charcoal', Inb. Bon. *úlin*, but Ilk. *ógin*, Ibg. *ugin*, beside Tag. Bis. Pamp. Mgd. *úlin*, Bgb. *úrin*.

Pang. *narán* 'name', Inb. Knk. *ńaran*, Bon. *ńáčan*, *ńádan*, but Ilk. *ńagan*, Ibg. *ńagán*, beside Tag. Bis. Mgd. *ńalan*, Bkl. S.-Bis. *ńaran*, Kuyunon *aran*, Isinai *ńaron*, Bgb. *ńadan*, Chamorro *naan*, Jav. *ńaran*, Mlg. *ańaran*, *anńaran*, *anarand*.

The "Field of Abram" in the Geographical List of Shoshenq I.—By M. G. KYLE, Professor Biblical Archæology, Xenia Theological Seminary.

THE Palestinian list of Shoshenq I on the South wall of the Temple of Karnak is one of the best known of Egyptian inscriptions, having been published by Rosellini (*Monumenti Storici*, 148), Champollion (*Notices Manuscrites*, ii. 113), Lepsius (*Denkmäler*, iii. 252), and Brugsch (*Geographische Inschriften*, ii), though never completely by any of them. Prof. Maspéro has given (*Recueil de Travaux*, vii. 100) selections from the list designed to assist and correct an understanding of Champollion's text, and Prof. W. Max Müller has rendered the same service to all the previous publications and also added a few names never before published in his *Egyptological Researches for the Carnegie Institute*, pp. 51—54, plates 75—87.

Many names in the inscription are destroyed and so lost absolutely, unless a duplicate list be somewhere preserved for future discovery. All the names fully remaining are easily legible, but owing to the facts that some hieroglyphic signs have more than one phonetic value, that, of others, the phonetic value is uncertain, and that the exact equivalency between Semitic and Egyptian characters has never been completely made out, the transliteration of these names is difficult and in a large number of them yet uncertain, and even if transliterated correctly, the identification of the names either with classical or with biblical names and still more with modern names is very problematical; and the task is rendered complex, not only by reason of the phonetic problems, but by reason of the additional fact that the ancient scribe was considerably puzzled over some phonetic and linguistic problems of his own. Some of these problems arose from his ignorance of the Palestinian tongues, some from the list which he copied not being always in exact Geographical order and probably, as

Müller thinks, written in Phoenician script. There will be room for a long time to come for additional identifications and for the correcting of mistakes.

A recent identification of names 71 and 72 as "The Field of Abram" drawing 71 to 72 and making one name there-of, it is proposed in this paper briefly to examine, as probably one of the mistakes to be corrected. We will proceed by the simple method of bringing before us by the aid of the black-board as clearly as possible, all the epigraphical evidence for the various renderings which have been given to the signs on these two shields, that we may be able to estimate correctly the value of this new identification, which is put out in recent times by Prof. Spiegelberg (*Aegyptologische Randglossen*, 1904, p. 14) and in popular form by Prof. James Henry Breasted. Whether either of these scholars be indebted to the other or whether each worked independently, I do not know.

The text placed on the board is that of Prof. Müller. With this text in hand, I made a careful examination of the inscription at Karnak in 1908 and found it copied with that scholar's accustomed accuracy. The list here as published is absolutely correct, not even minute typographical errors, as so often in published texts, have crept in here.

Prof. Breasted, who now brings forward the identification "The Field of Abram," (*A History of Egypt*, 1905, p. 530, *Ancient Records*, 1906, pp. 352—353) does not give there-with his copy of the text, but only the transliteration and identification. It is thus impossible to say whether or not his text agreed with any of the other published copies of the text. If his text differed from Müller's, then he used an incorrect text, which in most cases would set aside the identification altogether. If his text agreed with Müller's, then this transliteration and identification is to be discussed.




The identification, "The Field of Abram," is a very interesting one and, if correct, will be welcomed by every one, but before critics and theologians shall build too many theories there-upon, it is well to understand the exceeding, not to say insuperable, difficulties which lie in the way of the identification.


(1) The inscription on shield number 71 needs but little discussion. Egyptologists differ somewhat about the correct transliteration. Müller prefers "Pa Hekla" which follows exactly the text, always a good way, while Breasted changes

the final vowel to "u," Semitic "i." But it is generally agreed that the whole expression is a Canaanite word with the definite article, the article being translated into Egyptian, and means "The field" here in a relation to what follows similar to the construct state.



(2) The relation between the inscription on shield 71 and that on shield 72 is of the utmost importance. In the identification, "The Field of Abram," 71 is carried over to 72 and made a part of the name. This is impossible; a proper name would not have the article, which the scribe here does not transliterate as though he supposed it could be a part of the name, but translates into the Egyptian definite article; besides, this same combination of "Field," or "Fields," with a following name occurs in the inscription of Shoshenq I, as it still remains, eight times (Nos. 68, 71, 77, 87, 94, 96, 101, 107), an examination of which makes very evident that this is the Egyptian way of representing the Palestinian expression found so often in the Bible, "The villages of," and that "Hekla" means "vicinity," "neighbourhood" or "community" and in the plural, as 107, "Environs" or "villages." Thus the name following "Pa Hekla," in this case identified as "Abram," stands alone. No such complex name as "the Field of Abram" was intended.


(3) But is the name on shield 72 Abram? This is the question of greatest moment. No special importance attaches to this shield at all except for this question. A detailed analysis of the name gives the following:



(a) The first sign , the canal," as a syllabic stands for "mer." This syllable "mer" occurs with great frequency in proper names, especially of Egyptian kings, where it is represented sometimes by  the canal" and sometimes by  the hoe."


That these two signs were always, in these names, interchangeable is not quite certain, but that in the New Empire, from which this inscription comes, they were interchangeable, is certain. "Mer" is used in at least twenty seven of the royal names, as Mer-pa-ba, Mer-em-ptah, and various names compounded with the phrase "meri-amon, loved of amon." In some sixteen of these twenty seven  the canal" is used, beginning with Ramses II and including Shoshenq I, for whom this inscription under discussion was made. So, if this sign on shield 72 be intended for "mer," it would be the perfectly


natural and proper and to-be-expected use of it, and the probability that it should be so transliterated is very great. Moreover, a Semitic name from Palestine beginning with the syllable "mer" is quite to be expected also, as there are twelve Bible names (aside from some Persian and other foreign names), beginning with "mer." Brugsch (*Geographische Inschriften*, p. 68) reads this sign "mer," so, also, Rosellini quoting Lepsius.


But the ", canal" is thought by some to be also an alphabetic character used in transliteration as an equivalent for the Semitic "𐤎." It is so used by Brugsch in this same list (*Egypt under the Pharaohs*, Broderick edition, p. 376), wherever the sign occurs at the beginning of a name, notwithstanding that he had read the sign "mer" in his *Geographische Inschriften*. Erman, also, according to Breasted (*Ancient Records*, p. 353), so reads the sign in this instance, though Erman in his *Egyptian Grammar*, translated by Breasted, makes it only probably equivalent not to "𐤎," but to "𐤎'." Müller also finds the ", canal" used sometimes as the equivalent of "𐤎." ³/₄


But it can not be shown that Shoshenq's scribe always used this sign for an initial "𐤎" in the list which he was copying, for even if it could be shown that wherever the ", canal" occurs at the beginning of a word he used it for "𐤎," it remains that in three, and probably four, instances (Names, 32, 66, 108 and 12(?)) he used another hieroglyph for initial "a," which may have been an "𐤎" in the Canaanite list which he was copying.

(b) The second sign, ", the crane," is usually a syllabic for "ba" or "bi" and is certainly so used here, and the Egyptian scribe with this list of names before him, probably in Phoenician script, must have chosen this sign intentionally, as he has placed after it the character "𐤀" a determinative of rather indefinite signification which sometimes in transliteration indicates for us the end of a syllable (Müller's *Researches for Carnegie Institute: list of Shoshenq I*, names 13 and 38; *list Thothmes III*, name 84; *list of Rameses 333*, name 73), besides, had he wished an alphabetic character for "b," he had it at hand in the much more usual ", the boot." Brugsch, in the *Geographische Inschriften*, p. 68, strangely mistook this sign

for ", the goose" and transliterated it "s," but corrects this in his *Egypt under the Pharaohs*.

(c) The third sign ", the mouth," either "ro" or "ra," is here also most probably a syllable, for though it is very often used as an alphabetic character, it, also, is here followed by the termination of a syllable. But the Egyptians did not clearly distinguished between "r" and "l." This sign was used for both these letters, as in the well-known instance in the name "Israel" in Mer-em-ptah's hymn of victory. Maspéro in the *Transactions of the Victorian Institute*, 27, 83, so transliterates it here.

(d) The fourth sign ", the half part" is a New Empire sign for "m." It admits of no discussion, and, indeed, none, I believe, has arisen concerning it. But as the preceding syllable is closed, it begins a syllable here and can not, without straining, be suffixed to the preceding syllable "r" to make "ram" in the name "Abram." It should be followed by a vowel and in this case the scribe has written the vowel.†

(5) The fifth sign, ", the arm," according to Erman in his *Egyptian Grammar*, translated by Breasted, is equivalent to Semitic "y" and, in any case, whether one accepts the equating of Egyptian and Semitic vowel letters or not, is the strongest of the Egyptian vowel letters, but is entirely ignored in the transliteration "Abram."

The examination of the reading "The Field of Abram" may be summarized thus:

(1) The inscription on Shield 71, "Pa hekla," is not a part of the name, but a Canaanite descriptive phrase like "The villages of," or "The environs of."

(2) The first sign of shield 72, "the canal," may be an "a" but it may also be the syllable "mer," as it usually is.

(3) The second sign, "the crane," is clearly intended by the scribe to be a syllable, a "b" followed by a vowel and not joined immediately to the "r" following.

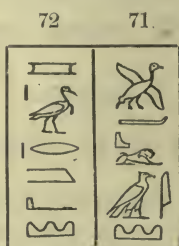
(4) The third sign, "the mouth," is probably an "r" but quite possibly an "l" and in either case, is also followed by a vowel making a complete syllable.

(5) The fourth sign, "the half part," "m," can not naturally be joined to the "r" preceding, but should begin a syllable.

(6) The last sign, "the arm," is a strong vowel letter which

ought not without special reasons to be ignored in the transliteration, and in fact is needed after the "m."

The most probable transliteration yielded by this analysis is "Merbiroma" or "Abiroma" or perhaps better still "Abirama." The identification "Field of Abram," scarcely comes within the bounds of possibility, certainly has little probability, and any theological or critical discussion made to depend upon it is exceedingly precarious, not to say hopeless.



List of Palestinian Cities by Shoshenq I
From W. Max Müller's *Egyptological Researches*.

Printed by W. Drugulin, Leipzig (Germany).

The K-Suffixes of Indo-Iranian. Part I: The K-Suffixes in the Veda and Avesta.—By FRANKLIN EDGERTON.

Chapter I.

Description of the Suffixes.

1. The ultimate aim of this paper is to give a complete and detailed account of the suffix *-ka* and related suffixes in Sanskrit and Avestan, covering all their occurrences throughout the entire history of the languages, so far as these are accessible. For both theoretical and practical reasons, however, it has seemed best to divide the Sanskrit field, and the first part of the work will deal exclusively with the Vedic period. In that term I mean to include Mantras, Brāhmaṇas, Āraṇyakas, Sūtras and Upaniṣads, so far as their linguistic matter is available. I have gathered the materials for the investigation in the first place from Monier-Williams's *Lexicon*, 2nd edition, supplemented and verified by constant reference to the larger and smaller Petersburg lexicons and to the original texts. The number of cases in which I discovered mistakes in the redaction of M.-W.'s lexicon was so small as to be entirely negligible; the small sprinkling of wrong references &c. which have come to my notice originated in nearly every instance in the *Pet. Lex.* itself. I feel therefore especially appreciative towards the work of the redactors of the Oxford lexicon, Profs. Leumann and Cappeller, whose careful scholarship has given us such a valuable aid to this sort of research.

2. There is, however, no Sanskrit lexicon in existence which even approaches the completeness which would be attained by good word-indices of the various works included. In the Veda, with which alone we are now concerned, this deficiency is especially felt in the Sūtra and Upaniṣad periods. These

seem to have been only scantily covered by the Petersburg lexicon; and the successors of Boehtlingk and Roth have done little to fill the gap. Fortunately we now have, in Col. Jacob's excellent Concordance, a word-list of the principal Upaniṣads; and from this have been extracted scores of words in *-ka* which would otherwise have been unnoticed. As for the older Vedic works, the indices to the RV. and AV. by Grassmann and Whitney have been used with profit, and from Whitney at least several AV. words have been discovered which are not in any lexicon. These facts are mentioned as showing the crying need which exists for indices of the principal Vedic works. Until they are produced any such undertaking as the present one must rest for the most part on the more or less unstable ground of the dictionaries.

3. It is hardly necessary to defend the division of the subject into the Vedic and Post-Vedic periods. In the Veda we find the small beginnings of several of the commonest uses of the Classical suffix *-ka*. There is no Classical use of the suffix which is not foreshadowed in the Veda; but there are one or two Vedic uses which practically die out before Classical times. That is to say, we find here, as in most other linguistic points, that in general there is a line of cleavage between the Veda and the Sanskrit of later times, although as a matter of course the two periods shade into each other, and there is in reality no such sharp break as we are compelled to make for practical purposes. In fact, as far as the suffix *-ka* is concerned, the Upaniṣads show uses which agree much more closely with the language of the Mahābhārata than with that of the Brāhmaṇas, to say nothing of the Vedic mantras. Nevertheless, I have not ventured to disturb the traditional classification, which of course is on the whole justifiable, and have included the Upaniṣads in the Veda.

4. The suffix *-ka* in all its ramifications is one of the commonest suffixes of the Classical Sanskrit language; and although it is much less common in the Veda, it is by no means rare from the earliest times.

5. I shall not at present attempt to go extensively into the question of the prehistoric (I.E.) suffix or suffixes from which the Sanskrit *ka* is derived. According to the theory of gutturals now usually accepted, Skt. *k* may go back to I.E. *k* or *g*. And accordingly two independent suffixes, I.E. *-kos* and

-gos, are actually assumed by Brugmann as antecedents of Skt. *ka*,—certainly not without much show of probability (cf. Lat. *-quus* and *-cus*). Whether right or wrong, this division of the suffix is not only unnecessary but quite impossible within the Sanskrit language itself. It must be said that the suffix *-ka* on the whole presents itself to the feeling of the investigator as a single unified and coherent suffix, which in the early language at least is quite clearly and narrowly circumscribed in its use. The widely divergent meanings which forms of the suffix show in some later developments are all demonstrably secondary in point of time, and in most cases it is furthermore easy to trace their semantic evolution from one or another of the more primitive uses.—In Chapter VI we shall take up the use of the suffix in Avestan, and shall also add a few words on its appearance in Lithuanian (based on Leskien's work). From these may then be deduced, in a very tentative and experimental way, an outline of the apparent uses of the suffix in the *Ursprache* in so far as they are indicated by these languages.

6. *Forms of the ka-suffixes*.—The Veda has a few adverbial forms (*īdhak* &c.) where the suffix is simple *-k*. There is a small group of words of doubtful relationship in *-ku*, usually preceded by *ā*; they are very few in number, and show no agreement as to signification, so that I have not thought it worth while to make an independent chapter of the suffix *-ku* or *-āku*, but have treated these words along with the *ka* suffix. The Classical Skt. has a few words which seem to show a suffix *-ki*, generally forming patronymics; cf. *sāūrāki* (M.S. 3. 1. 3) which may be a Vedic instance. Otherwise all the suffixes which we treat here end in *-ka* masc. or neut. and *-kā* or *-kī* fem.

7. *The feminine -ikā*.—In all cases of masc. and neut. words in the suffix *ka* preceded by *a*, whether the *a* is part of the base or of the suffix, it is possible (and in most cases usual) to form corresponding feminines in *-ikā*, rather than in *a-kā* or *a-kī*. This rule applies to all periods of the Skt. language from RV. onward (cf. *iyattakā -iyattikā*, a RV. instance). The fem. forms *akī* and *akā* are, however, not rare; and even *ikī* appears to be found from an *aka* masculine in one or two cases (see s. v. *ātīkī*, General Index), though this is not certain.—Because of the regularity of the fem. in *ikā* it becomes unnecessary—and

in fact impossible—to set up a separate category for these words. Where a masculine word in *-aka* requires a feminine, the ending *ikā* is to be expected; and all statements in this thesis are to be understood with that in view. It should at the same time be borne in mind that *akī* and *akā* also occur, sometimes from the same words which also form the more regular fem. in *-ikā*. There seems to be no rule by which it can be determined antecedently what form of the feminine is to be expected.

This formation appears to be an inheritance from something of the same sort in the *Ursprache* (cf. the Lithuanian phenomena mentioned in § 117). It is doubtless connected with the fem. suffix *ī*, associated so commonly with masculines in *a*. The regular fem. of any adjective stem in *a* was formed with *ī*; and it was an easy step, therefore, to form a fem. in *i-kā* (with *ī* instead of *ī*, § 32b) to a masc. in *a-ka*, by taking the fem. of the original adjective as a base. This was then generalized into a “suffix *ikā*,” applied as a fem. to any masc. in *-aka*, even when no fem. base in *ī* could have existed. Other formations from feminine adjectival bases are *lohinīkā* (Āp. Gr. &c.) from the fem. of the adj. *lōhita*; and even *hāriknikā* (AV.) from a fem. **hāriknī* (not preserved) to *hārita*, like *āsiknī* to *āsita*.

8. *The Secondary Suffix ka*.—The suffix *ka* is essentially a secondary suffix: i.e. it is affixed to nominal or pronominal stems. There are a few words in which it has the appearance, at least, of being added directly to roots or verbal bases; we shall deal with them later. Secondary *ka* may be divided into four subdivisions. For practical reasons, because I have been unable to invent any concise and appropriate names, I have had recourse to numbers in designating them. I realize that this arbitrary method of nomenclature is open to grave objections. But any truly descriptive names for these categories would be so cumbrous as to be quite incapable of practical use; and it has therefore seemed better to me to have recourse frankly to numerals as arbitrary symbols instead of applying incomplete or misleading epithets.

A. **The Suffix 1 ka.** (Nouns or Adjectives of Similarity or Characteristic.)

9. The suffix *ka* is added to nominal stems to form other nouns or adjectives, with the meaning “partaking of the nature

of," "having the characteristics of," "similar to," "like;"—or, it is added to adjectives or adverbs to form nouns or other adjectives or adverbs with the meaning "characterized by," "having the quality of."

This is the most primitive use of the suffix, at least as a secondary suffix. All other secondary uses are developed out of it.

Ex.: *nābñikā*, navel-like cavity, < *nābhi*, navel.—*mañika*, hump, water-jar, < *mañi*, pearl, lump &c.—*nāḍīkā*, throat, < *nāḍī*, tube.—*madhyamikā*, middle finger, < *madhyamā*, middle.—*pūṭīka*, n. of a plant, < *pūti*, foul-smelling.

10. (*The Diminutive ka*.)—From the meaning "similar to," "like,"—the suffix *ka* often comes to mean "only similar to," i. e., "not equal to," and thus arise the well-known diminutive, deprecatory and contemptuous uses of the suffix, which probably existed once in all Indo-European languages, but which are more striking and prominent in Sanskrit than anywhere else. In Sanskrit the suffix may be added with some such force to nouns, adjectives, pronouns, adverbs, participles, and even (once) to a finite verb-form. A detailed classification will be undertaken in Chapter IV; for the present it will be enough to distinguish the following main heads.

I. *True Diminutives* (of size, importance, &c.): as *kanīnakā*, little boy, < *kanīna*, boy.—*muḥukā*, moment, < *mūhu* (or *muhū*).—*arbhakā*, tiny, < *ārbha*, small.—*babhrukā*, brownish, < *babhrū*, brown.—*abhimādyatkā*, a little tipsy, < *abhimādyat*, drunk.—*hōṭṛka*, secondary priest, < *hōṭṛ*, priest.

II. *Endearing Diminutives*: as *ambikā*, dear little mother, < *ambī*, mother.—*putrakā*, sonny, < *putrá*, son.

III. *Pitying Diminutives*: as *kṣullakā*, poor (helpless) little, < *kṣudrá* (**kṣullā*, prakritized form).

IV. *Diminutives of Inferiority* with evil connotation, often called *Pejoratives*: including—

(1) *Contemptuous Diminutives*, where the idea of smallness carries with it that of weakness or wretchedness and contempt: as—*usrikā*, worthless bullock, < *usrá*, bull.—*rājakā*, wretched kingly, < *rājan*, king.—*bhinnaka*, crushed and worthless, < *bhin-nā*, broken.

(2) *Pejoratives* in the narrower sense, or *Imprecatory Diminutives* as I have ventured to call them, because the suffix is often equivalent to a curse or imprecation accompanying the

word to which it is applied: as—*açvakā*, accursed horse, < *áçva*, horse,—*anantaka*, accursed *Ananta* (a serpent-demon).—*rūpakā*, evil phantom, < *rūpā*, shade.—*kṛtaka*, artificial, false, < *kṛtā*, made.—*anyakā*, other scoundrels, < *anya*, other.

(3) Diminutives of *Obscene Humor*, in a certain range of popular composition which is offensive to modern sensibilities, and presumably for that reason little noticed as yet. For instance, in the lascivious ribaldry of some of the Kuntāpa hymns, and in parts of the Açvamedha ceremony, various slang terms of extreme vulgarity appear with this suffix: as—*dhānikā*, *dhārakā*, the vagina, < *dhāna*, *dhāra*, receptacle.—*çlakṣṇikā* adj. slippery, of the sexual organs in coition, < *çlakṣṇā*, slippery.—*muṣkā*, testicle, < *mūs*, mouse.

Modern parallels will doubtless occur to everyone.¹

V. *Generic Diminutives*, with nouns of masculinity and femininity—like Ger. *Männchen*, *Weibchen*: as—*vīrakā* and *maryakā*, male (*Männchen*), < *vīrá*, *mārya*, man; so *dhénukā*, *mahīlukā*, female. See § 87 ff.

VI. Diminutive as attribute of the *female sex*, and grammatical concomitant of feminine gender. See § 90 below. Not to be confused with the foregoing, which is of totally different nature and origin. Ex.: *pradātrikā*, a female giver, < *pradātṛ*, giver.—*candrikā*, the moon (as fem.) < *candrā*, moon (masc.).

B. **The Suffix 2 ka.** (Adjectives of Appurtenance or Relationship.)

11. Next, the suffix *ka* forms secondary epitheta, mostly adjectives, from nouns or pronouns, with the meanings "connected with," "having to do with," "belonging to," "of;" and these secondary words, in many if not most cases, take Vriddhi in the first syllable. Here are to be included the patronymics

¹ These three categories, and especially the imprecatory and contemptuous ones, are closely connected. It is often hard, and sometimes next to impossible, to decide which idea predominates in a given word. For instance in the refrain *nābhantām anyakēṣām jyākā ādhi dhānvasu*—RV. 10. 133. 1 ff.—there seems to be no doubt that an imprecation is hurled at certain enemies: "Let the damned bowstrings of the others, devil take them! be torn off from their bows!" But while this idea predominates, it would be rash to deny the presence also of a contemptuous note; for it is quite like a Vedic charm-maker to dwell with great insistence on the scorn he pretends to feel for enemies, however much he may really tremble before them. Indeed, this is a common trick of magic in every age and land.

which are occasionally formed with this suffix.—This heading is of course developpt out of 1 *ka*.—Ex.: *pācuka*, animal (adj.), of an animal, < *pācu* or *paçú*, animal (n.).—*ātmaka*, of the *ātmán*.—*cāturhotṛká*, of the *cāturhotṛ* (rite).—*dévaka*, divine, < *devá*, god.—*asmāka*, ours, of us < *asmā* (pron. stem), we.—*napātka*, pertaining to a grandson, < *nápāt*, grandson.

Whitney, whose entire treatment of the suffix suffers from over-reliance on the native grammarians, does not recognize the use of the simple *ka* with Vriddhi, and calls *bhāvatka* (classical) < *bhavat* “anomalous.” Instead he follows the Hindus in setting up (1222j, k, l) two Vriddhi-taking secondary suffixes, *aka* and *ika*, of which he says that no instances of *aka* (unless *māmaká*) and few of *ika* have been noted in the Veda, —meaning, doubtless, the Vedic Mantras.¹ The facts are these:

In the second category of the suffix *ka*, the non-possessive secondary adjectives,² the derived suffix *ika* (see § 14) makes a strong bid to drive out of the field its competitor *ka*. In the Veda, if we count *i*-stems like *āgnika* &c. as having the suffix *ika*, there have been recorded 118 words in *-ika*, 50 in *-ka* (besides 3 in which *ka* follows an *i*-stem with no Vriddhi). Among the *-ika* words, Vriddhi overwhelmingly predominates; in the *-ka* words, it appears in more than half the cases. Exact figures cannot be given with safety, because in some cases the primary word had itself a Vriddhied vowel, and in others its stem ended in *-i*. There are only 13 cases where *ika* in this sense certainly occurs without Vriddhi, out of 118. Out of the 50 clear cases of the suffix *-ka* (i. e. where the suffix cannot be confused with *ika*) 21 clearly have Vriddhi, 19 clearly do not have it, and 10 are doubtful. Of the 21 which have Vriddhi, 14 are formed from *a*-stems (or *an*-stems, weak grade in *-a*), but *seven from stems in other finals*, showing conclusively that *the suffix must have been ka, not aka*. The Classical language adds many other instances; this suffix is much commoner there than in the Veda. The supposed secondary Vriddhi-causing suffix *aka* is largely or wholly a grammatical fiction; in the Veda at least, it never existed at all. Instead

¹ But even so restricted the statement is inaccurate; e. g. *cāturhotṛká* < *cāturhotṛ* (M.S.) and *kāveraká*, patronymic from *kāvera* (AV.); also *tāvaká* (RV.) analogous to *māmaká*, and others.

² Which alone are concerned here, since Vriddhi occurs nowhere else.

we must recognize this secondary Vriddhi-causing use of the suffix *-ka* added both to *a*-stems and to others. Tho never excessively common, it occurs earlier and more frequently than the grammars have so far given it credit for.

C. **The Suffix 3 ka.** (Adjectives or Substantives of Possession.)

12. The third category of the secondary suffix *ka* is made up principally of secondary adjectives (as in the case of 2 *ka*) with the meaning "having," "possessing;" also "consisting of," with numerals,—a frequent use. Ex.: *parutka*, having joints, < *párus*, joint.—*dvārakā*, n. of a city, "City of Gates," < *dvāra*.—*āṇḍīka*, having bulbs, < *āṇḍī*, egg, bulb.—*catuṣka*, having or containing or consisting of four, < *catús*; so *daṣaka* &c.

This force of the suffix is not very common with unpounded words. But because of the accidental appropriateness in semantics, it was added frequently to *Bahuvrīhi* compounds, and gradually came to be felt as peculiarly appropriate to them. There are a few instances of this in the Vedic mantras. In the Brāhmaṇas it becomes not uncommon; its frequency constantly increases in the Sūtras and especially in the Upaniṣads, where it flourishes with as much luxuriance as in the later language.—In the early parts of the Veda it is interesting to note that it is much commoner when the last part of the compound is not an *a*-stem, and is especially frequent with consonantal stems, showing a vigorous (even if unconscious) striving after uniformity of declension at that early time. By means of the harmless suffix *ka* any Bahuvrīhi (as in later Skt. any noun whatever) not of the *a*-declension could be easily brought into line with the *a*-stems, which formed the great bulk of the noun declension.—See § 53ff., especially 54. Examples are: *acakṣuṣka*, having no eyes, < *a* + *cākṣuṣ*, eye.—*trīkadruka*, having three *kādrus*, < *trī* + *kādru*, a sort of vessel.—*saptadhātuka*, having (consisting of) seven elements, < *saptā* + *dhātu*, element.

D. **The Suffix 4 ka.** (Active or Verbal words.)

13. In a few secondary formations,—to wit: *ántaka* ("Ender," Death, < *ánta*, end) *ṣṭataka*, *hlādaka*, *yācanaka* and *vīmanyuka*—the suffix *ka* has distinctly an active verbal force. These words may be more conveniently treated in connection with the derivative *ka*-suffixes which show the same value; see § 19. The origin of this usage lies perhaps partly in some of these derivative suffixes themselves, and certainly in part

in the "primary" *ka* words of corresponding meaning (see § 28).

14. **The Suffix *ika*.**—This is a secondary adjective-forming suffix whose range of meaning exactly coincides with 2 *ka* and 3 *ka*, but chiefly with 2 *ka*; in the possessive-adjective sense it is very rare. It must of course have originated, by clipping, from *i*-stems + suffix *ka*. The adjectives formed with it show meanings like "connected with," "belonging to," "of." It almost always (in these meanings, = 2 *ka*) causes Vriddhi of the first syllable; and if the primary word is a compound, it occasionally takes Vriddhi in the first syllable of both its parts. I have found only 13 cases in the Veda where Vriddhi does not occur. See § 11.—The Vriddhi-causing suffix *ika* is a mark characteristic of the language of the *Sūtras*, where it is very common. In the *Brāhmaṇas* it is rare; in the *Mantras* almost unknown; in the *Upaniṣads*, while not uncommon, it is much less frequent than in the *Sūtras*. Ex. (= 3 *ka*): *tūṇḍika*, having *tūṇḍa*'s (tusks or teeth).—(= 2 *ka*): *jyotiṣtomika* of the *jyotiṣtoma* (rite).—*āgniṣtomika*, of the *agnīṣtomā* (rite), *ānuyājika*, of the after-sacrifice (*anuyājá*).—*cāturthika*, of the 4th (day), < *caturthā*, fourth.

15. **The Suffix *aka*.**—This appears (certainly in the Veda) only as a "primary" suffix, added to verbal rather than to nominal bases,—if we rule out the two words *madhvaka* and *prṣātaka*, apparently formed from *mādhu* and *prṣat* respectively.¹ Perhaps a **madhva* and a **prṣāta* are to be hypothetized.—Three uses of "primary" *aka* occur. Of course they cannot be primitive; they must have arisen through suffixal adaptation from secondary noun formations in *a-ka*; but one of them at least becomes so widespread that it cannot be denied its independence. The other two stand on more uncertain foundations; but on the whole some limited range may best be allowed to them too.

16. (1) Most dubious, and showing least claim to independent rank, is this branch of the suffix *aka*. The RV. contains two words in which *-aka* seems to convey the force of a *gerundive-adjective*. They are *sāyaka* "to be cast," and as a noun "arrow;"

¹ Note that neither has Vriddhi; cf. § 11, where the supposed "secondary suffix *aka*" is dealt with. Cf. also *patantaka* (Word List, s.v.).

and *su-lābhikā* (fem. to *-*aka*)¹ "easily to be won," from the roots *si* and *labh*. It has been usual among grammarians to class *sāyaka* with 3 *aka* as a participial adjective, which does violence to its meaning (not "throwing," but "to be thrown"!)

No noun *sāya* exists with any meaning from which it could possibly be derived. As for *sulābhikā*, though by some mental contortions it might be derived from the noun *lābha*, it is certainly much more simple and natural to regard it in the other light. The only objection is that there seems to be in *sulābhikā* as used in RV. 10. 86. 7 (the only occurrence) a suggestion of the obscene (erotic) Diminutive. It is an epithet address by Vṛṣakapi to Indrāṇī; the whole passage where it is found reeks with that licentious vulgarity which naturally suggests such a value in the suffix *-ka*. (See §§ 85, 86.) This, however, does not seem to me necessarily inconsistent with the derivation of the word put forward. Appearing in such a context any word in *ka*, however reputable in origin, was bound to take on the vulgar coloring which was a prominent characteristic both of the suffix in general, and of the verses in which the word appeared. Probably the original force of the word was gerundival, and the obscene suggestion is secondary.

17. (2) Secondly, in a small group of words the suffix *aka* seems to give the value of a noun of action, when added to a verbal root. As the primary suffix *-a* often has this meaning, it is easy to see how this force of *aka* originated, through the medium of *-a* + secondary *-ka*. There are not many of these words which occur without the occurrence of a parallel noun in *-a*; they number not more than seven or eight in the entire Veda. But a careful consideration of the words and the passages where they occur has convinced me of the genuineness of this use of the suffix. No certain instance appears before Brāhmaṇa times.—The root has the same form which is found in the next category of *-aka*.—The nouns are mostly neuter (e. g. *āçaka* in *ân-āçaka*, not-eating, a fast, < *aç-* eat);

¹ It has been suggested to me that *sulābhikā* might be considered to have an *active* value; in other words, that the usual interpretation is wrong, and that the word means "well embracing, giving a good embrace." This is possible; but against it must be reckoned the fact that this active force of the suffix *aka* is practically not found in the earliest period of the language. In fact, the RV. has not a single instance.

but one certain fem. in *-ikā* occurs—*abhiméthikā* (QBr.) < *abhi-*—*√mith*. See § 95.

18. (3) The only commonly recognized use of primary *-aka* is its use in forming nouns of agent or adjectives of participial value from verb-roots. It is a late development, by analogy from certain words in simple *-ka*. There is not one instance in the RV.; for *pāvāká*¹ (so explained by Sāyaṇa—“*çobhaka*”—“purifying”) and *sāyaka* (see § 16) do not fit semantically. The earliest instances are all nouns of agent (1 or 2 in AV., 2 in VS., 2 in the Brāhmaṇas). Of six instances in the Sūtras, five are nouns. Only in the Upaniṣads does the suffix acquire any frequency, and only here does it develop into a regular verbal adjective, equivalent to a present participle, and sometimes taking participial constructions. The Upaniṣads have over 30 examples. They represent, in this respect as in others, approximately the condition of the later language. See §§ 96, 97. Ex.: *abhikróçaka*, reviler, < *abhi-kruç*, revile.—*samjīvaka*, animating, < *sam-jīv*, animate.—*yācaka*, begging, a beggar, < *yac*, beg.

19. The origin of the suffix is not quite so simple as might appear at first sight. It is, indeed, not uncommon to find the primary suffix *-a* giving the force of a noun of agent, or even of a verbal adjective. But it so happens that there are very few demonstrable cases in the Veda where to such a noun or adjective was formed a secondary noun or adj. in *-ka*. The nouns *vādhaka* (AV.), *cāraka* (QB.), *ghātaka*, *varaka*, *prasarpaka* (Sūtras) are among the few clear instances (from *vadhā*, *cara* &c.); and three out of these five do not comply with the custom of *-aka* words in regard to the form of the root (see § 20). Because of this fact, and because the words *vadhā* &c. occur, while the suffix *aka* was at that time scarcely felt to be in existence, it is better to regard these words as derived from the nouns *vadhā* &c. and containing secondary *ka*. But they represent a transition stage.—There are furthermore certain other *-ka* formations which assisted in the process. Primary *ka* seems to show this meaning; so *pīvaḥ-sphākā* (AV.)

¹ *pavāká*, not *pāvāká*, is demanded by the meter throughout the RV. The word contains no active force, but is simply an adj. meaning “clear, bright.” Its exact formation is not certain, though its connexion with *√pū* is obvious; it is probably a primary derivative, but cannot be clast with
3 *aka*.

"dripping with -fat" from *sphā(i)*. See § 28.—And secondary *-ka* forms four or five words with a similar force. The noun *ántaka* (AV. &c.) has from its first appearance a quasi-active value; it is translated "ender," and is a frequent epithet of death. Closely parallel to *ántaka* are the two words, *çítaka* and *hlādaka* (in the fem. *ikā*) RV. 10. 16. 14 = AV. 18. 3. 60.—Though they cannot be anything but secondary derivatives from the adjective *çítā* and the noun *hlāda*, they have markedly active meanings: "cooling" and "refreshing," or, as it were, "refreshmenting." Most translators recognize this; that it was so felt by the Hindus from the earliest times is shown by the extremely interesting parallel TĀr. 6. 4. 1, where in the same verse *hlādukā* appears for *hlādikā*. The suffix *uka*, as we shall see (§ 22), is the regular Brāhmaṇa formation for verbal adjectives, like *-aka* of later times. It thus appears that the TĀr. compiler felt the words distinctly as verbal, and, perhaps unconsciously, changed *hlādikā* to look like an *-uka* formation from *Vhlād*. That *çítikā* did not in like manner become **çítukā* is due simply to the fact that no root **çīt* existed, from which such a form could be derived.¹ The word *vīmanyuka* "freeing from anger, allaying wrath" is in like manner an active derivative from *vīmanyu* "free from anger;" cf. suffix *uka*, § 22.

20. The root-syllable must be metrically long before *aka*, and unless it ends in two consonants or in one consonant preceded by a long vowel, it is strengthened,—by Vriddhi of *a*, by Guṇa of other short vowels. A final vowel, long or short, always takes Vriddhi. These rules hold for the Veda without exception,—except that if *kṛttikā* (see General Index) is really a noun of instrument or agent from *Vkṛt* with *aka* (*ikā*), the root in this case doubles its final consonant by way of strengthening, instead of guṇating its vowel. There are further exceptions and complications in the Classical language which I shall not go into here. If *dhuvaka* (see § 96) is really a Vedic occurrence, it also is exceptional.

21. The Suffix *uka*.—(1) *Secondary*. There are four words in the Veda which have the appearance of containing a second-

¹ *Yācanaka*, beggar, < *yācana*, request, is another instance of secondary *-ka* with active meaning, forming a sort of noun of agent. But as this word does not occur until Upaniṣad times, it may be due to analogy with the suffix *-aka* (cf. *udbhrāntaka*, § 44 end, Note).

ary suffix *-uka*. But two of these are ἀπαξ λεγόμενα and ought perhaps to be emended: one is analogical, and the fourth is very doubtful. The adjectives *dhārmuka* and *sāmnāhuka* appear, each once, from *dharmā* and *sāmnāha*; they correspond in meaning and in the Vriddhi vowel to the *ika*-adjectives, and perhaps *-ika* should be the reading instead of *-uka*; compare, however, the Classical Skt. words *kārmuka* < *karman*, and *nān-duka* n. pr. apparently < *nanda*.—On *mahīlukā* “female,” < *mahilā* “woman” see § 89; it has its *-u-kā* by analogy from *dhenu-kā*. The only other possible case of secondary *-uka* in the Veda is *kāṇukā* RV. 8. 77. 4, an epithet of soma-vessels which has never been satisfactorily explained. I suggest tentatively a derivation from *kāṇā*- “one-eyed.” Such a figure might easily be suggested by a jug with a small opening and a large bulging body. The vowel *u* is the most serious obstacle to the etymology.

22. (2) *Primary*. The chief use of *uka* is in the formation of the well-known verbal adjectives with participial meaning (and construction, in many cases). The chief sphere of these words is, as has been often observed, the Brāhmaṇa literature. There are very few occurrences in the Saṁhitās; and they are not numerous in the post-Brāhmaṇical literature. Even in the epic, however, the formation continues to show a few feeble signs of life. These may be artificial or learned reminiscences. Ex.:—*vyāyuka*, running away, < *vi-i*, run away.—*ārdhuka*, prospering, < *ṛdh*, prosper.—*upadāsuka*, failing, < *upa-das*, fail.

In separating Saṁhitā from Brāhmaṇa occurrences, the Black YV. texts present difficulties, in that by intermingling the two they make it impossible to tell from lexical references whether a given passage is Saṁhitā or Brāhmaṇa; while some of the texts are unpublisht and hence inaccessible to the ordinary student. However, all the recorded instances of the suffix *-uka* in the publisht texts of the YV., both White and Black, have been examined, and they have turned out to be all, without exception, in Brāhmaṇa passages. The Saṁhitās, apparently, do not have the suffix. This must be largely accidental, however, since there are several clear cases in the AV.—The few cases in the Sūtras that are known to me are all but one repeated from the Brāhmaṇas. The Chā. Up. has one new instance, and as has been said there are a few in the later language. But the formation practically is born and dies with the Brāhmaṇa period. Of the 71 words, represent-

ing 57 different verbal roots, found in the Veda, 67 are found in the Brāhmaṇas (incl. Āraṇyakas), and most of them nowhere else.

23. That the *uka*-formation is somehow connected with the "present tense formatives" in *u* (i. e. with dissyllabic bases in *u*) is probable antecedently, and is borne out by the fact that some of the earliest instances are formed from such verbs. The only R.V. example is *sānuká* < $\sqrt{\text{san}}$, present *sanóti*. Here the suffix was probably in reality primary *ka* (q. v.) added to the present stem *sanu-*, and not *uka* at all; cf. *pīvaḥ -sphā-ká* &c. Another, tho somewhat later appearing, case of the same thing is *rdhnuka* (Āçv. Grh.) beside *ārdhuka* (Br.) < $\sqrt{\text{rdh}}$; *rdhnuka* is from the present stem *rdhnu*, and has in reality the primary suffix *ka*, though for convenience it is classed with *-uka*. Compare further the secondary formations in which *-ka* adds an active (verbal) force. (§§ 13—19.) Of especial interest here is *vīmanyuka* "allaying anger" from *vīmanyu* "free from anger."—In some words in the early language it is hard to say whether the suffix is secondary *-ka* or primary *-uka*: e. g. *pramāyuka* (A.V. &c.) "perishing," < *pra-√mī*, beside *pramāyu* of identical meaning.—From a blend of these various formations arose the suffix *uka*.

24. The root has the same form here as with the suffix *aka*. A final vowel has Vriddhi; a non-final long vowel is unchanged; a non-final short vowel is unchanged except before a single consonant, in which case it takes guṇa (but *a* takes vriddhi). Irregular is the vriddhi in *nirmārguka* (TS.) < *nir-√mrj*; also the short vowel in *-kasuka* (*vī-*, *sām-kasuka*- A.V.). It should be further remarked that the present stem may replace the root: cf. *sānuká* and *rdhnuka* above; also *nañçuka* besides *nāçuka* < $\sqrt{\text{naç}}$, pres. stem *nañç*; *vibhinduka* < *vi-√bhid*.—The root *han* forms *ghātuka* as is to be expected (see Pāṇ 7. 3. 22).

In one instance *uka* seems to show the gerundival use which we have noted in one or two *aka* words, and which also crops out in the suffix *-āka*. This is *an-ālabhukā* (KS; TBr.) < *ā-√labh*, "not to be touched," of a woman in menstruation. This case seems to be the only one with *uka*.—This turn of meaning, appearing sporadically in different forms of *ka*-suffixes, may have appertained to the primary suffix *ka*, tho signs of it are scanty (see § 28).

25. **The Suffix ūka.**—This is added to *intensive* verb-stems

forming verbal adjectives, like the *uka* words from simple roots. The *ū* has the accent. The suffix seems to have arisen by a sort of proportional analogy to *uka*, but makes its appearance curiously early, one instance being found in RV., and that too from a root which is not addicted to *u*-formations: *jāgarūka* "wakeful," RV. 3. 54. 7. The only other Vedic examples are *dandaśūka* (VS.) and *yāyajūka* (ÇBr.). The Classical Skt. has one or two more.—*salalūka* RV. 3. 30. 17 was explained by the Hindus as belonging here, as if from \sqrt{sr} ("*sararūka*"); but it is most uncertain and probably of different character; see General Index s. v. It seems to be clearly a noun, probably a *nomen actionis*, and so quite different from this suffix.

26. The Suffix *ika*.—This is the most problematic of the derivative *ka*-suffixes. It may never have been felt very definitely as a productive suffix. Many cases included under it are doubtful or entirely uncertain in etymology, and some of them may contain not *ika*, but secondary *ka* added to a lost stem in *i*. Cf. *āçarika*, *vi-çar-*, from $\sqrt{çr}$, in dissyllabic form *çarī*.

In so far as we can analyze the suffix *ika*, it appears to be primary as a rule, and most often imparts the value of a verbal adjective or noun of agent, like *aka* and *uka*. So *-rjika*, *dūṣika* &c. Of like meaning is *drçikú* "beholder," $\sqrt{drç}$,—the only instance of the "suffix *iku*" (see § 29 d).—In two words, *iṣikā* and *drçika* "splendid (i. e. to be seen)," the suffix seems to have gerundival force (see § 24).—There are two abstract nouns, *mṛḍikā* "mercy, favor" < $\sqrt{mṛd}$ and *drçika*, *-kā*, appearance, < $\sqrt{drç}$.—Three or four *ika* words have the aspect of secondary noun formations from *a*-stems; the *a* is dropt before the suffix. The most plausible example is *kaṣikā* "weasel" < *kāca*. Whether these are really from lost feminines in *i* cannot be determined.—In some *ika* words the *i* represents a stem-final *i* or *in* before suffix *-ka*; see §§ 31, 32, 36.

27. The Adverbial Suffix *-k*.—In half-a-dozen very ancient adverbs there appears a suffix *-k*, added to vocalic stems of nouns or adjectives, apparently merely as an adverb-forming affix. It is probably a petrified form of the adjectival suffix *-ka*, in its first and original sense (1 *ka*).¹ I find no proof of

¹ It is, however, possible that this group of words really contains a form of the suffix *añc/ac*. The main objection to regarding them in this

the existence here of any developed meaning of *ka*, such as the diminutive. The words are: *ṛdhak* or *ṛdhāk* "separately" < base **ṛdha*, cf. *ardhā*; *niṇīk* "secretly" < *nīnyā*, cf. § 29 a; *pṛthak* "in a scattered manner," cf. *pṛthú*, *pṛthā* "palm of the hand;" *prabāhuk* "on an even line" < *prabāhu*; *viṣunāk* "in various directions" (with possibly a suggestion of imprecatory-diminutive value, see s. v. *sānaka*, Chap. IV, § 80); < *viṣuṇa*; *vṛthak* "lightly" &c. < base *vṛtha*, whence the (instrum.) adv. *vṛthā* (= *vṛthak*).—*manāk* probably does not contain this suffix, but a form of the root-suffix *añc*, like *prātīka* &c. *Manānāk*, supposed by some to be from *manāk*, cannot possibly be so explained either formally or semantically (see Ludwig on RV. 10. 61. 6). Ludwig would derive it from *manu* in some way, but neither this nor any other explanation so far offered is satisfactory. The word looks as if it contained some form of the root *anaç*: *naç* (ἄνεγκον). But it is still too dubious in etymology and meaning to permit any safe conjecture as to the suffix. Could *manānā* be connected?

28. **The Primary Suffix *ka*.**—The words which are thrown together under this head are so varied in meaning, and in many cases so problematic in etymology, that I despair of giving any intelligible or intelligent classification of them. There seems to be a group of them containing more or less suggestion of that verbal adjective idea which we have found in the suffixes *aka*, *uka*, and *īka*, as well as in secondary *ka* (4 *ka*, § 13). This is clearly present in *pīvaḥ-sphākā* < *Vsphāi* and a few others; perhaps in *stokā* < *Vstu* in *ghṛta-stāvas* (AV.); *mūka* < *μύ-ω*, *mū-tus*; *pāka* < *Vpā* ("suckling?"), *jāhakā* "hedgehog," apparently < *Vhā* and others.—Whether in *sumēka* < *Vmī* "well-established" we have a gerundival use (see § 24) is not certain. Words like *glōka* and *ḡṣka* (Av. *huška*) are perfectly clear in their etymological belongings, but do not fit in very well as to semantics with other words of this class. Some of the words are hopelessly obscure and may not contain a suffixal *ka*.—I shall give the list (§ 103) in alphabetical order, not attempting to classify the words semantically.

light is the short quantity of the vowel before *-k*; the suffix *-ac* in combination with a vocalic stem regularly produces a long vowel + *k*.

Chapter II.

Saṁdhi.

The Saṁdhi of stem-finals before the *ka*-suffixes.

A. The Saṁdhi of Secondary -ka. §§ 29—37.

29. *ā*. Before secondary *ka* the stem-final *ā* regularly remains unchanged. But:

a) Final -*ya* of a stem appears to be reduced to -*i* before *ka* in a few cases. *pārṣṭhika* (*Kāty. Gr., Lāṭy.*) < *prṣṭhyā*.—*bhāṣika* (*Kāty. Gr., Ṣāṅkh. Gr.*) prob. < *bhāṣya*.—*maṅgalikā* (AV.), best derived < *maṅgalya*.—*ninīk* (adv.) (RV.) < *ninīyā*.

Note.—In *usrikā* (RV.) < *usrā* the *i* is due to analogy from *usriya*. It would be impossible to regard the suffix as -*ika*, since the word is obviously a contemptuous dim., and *ika* is never used in that sense, at least in the Veda.—Similarly the *Bahuvrīhis* -*varṣika*, -*ṣīlika*, -*cārika*, -*saṁnyāsika*, all from stems in *a*, are influenced in their vocalism by the parallel and equivalent words in -*varṣin* &c.

b) In one instance final *a* seems to be dropt entirely: *ṣālka* < *ṣalā*. It is possible that *ṣālka* may be really a primary derivative from the (hypothetical) root of *ṣal-ā*. In this connection it should, however, be mentioned that the lexicographers quote a word *kinjāla*—not yet found in the literature—with the same meaning as *kinjalka*—"plant-stalk"; and cf. further AV. *nəmadka*, from and = *nəmata*.

c) In some cases *ā* seems to be substituted for *ā* before *ka*. The words are all more or less problematical, and some of them are entirely obscure. Those which seem most plain are: *ekākīn* (*ēka*, *ekakā*); *chattrāka* (*chattra*); *taṭāka* (*taṭa*); *nabhāka* n. pr. (*nabha*?); *paṭākā* cf. *Vpaṭ* (primary?); *ṣalākā* (*ṣalā*); *pracalākā* (*pracala*).—Very dubious are *ṛkṣāka* (*ṛkṣa*?); *pin-yāka* (?); *pīnāka* (πίναξ, OSlav. *pini*); *sāūrāki* (patron.; from **surāka*?).

These words, or some of them, may be derived from lost stems in *ā*. Yet the appearance of *ekākīn* is not encouraging to this theory; for although the fem. *ekā* exists, there is nothing about *ekākīn* to suggest a derivation from it. Furthermore we should expect the derivatives to be fem. on such a supposition, whereas these words are nearly all masc. or neut. Metrical considerations may have affected some of them. See also § 30 a.

Note.—*ṣyāmāka* has a justifiable *ā*; see § 30 a, Note 1.

d) Here belong also one or two words in -*āku*: *pṛdāku* < **pṛda*- cf. *πῆδος* (loanword); *mṛdayāku* < *mṛdaya* (metrical?).—

kyāku "mushroom" is of unknown etymology. (The pronominal word *yuvāku* is from the base *yuvā*, and the n. pr. *ikṣvāku* [or *-kū*] seems to be derived from *ikṣú*, though this cannot be regarded as certain. The only other Vedic word in *ku* is *dr̥çikū*, see Chap. I, § 26.)

30. *ā*. The stem-final *ā* before *ka* either a) remains unchanged, b) is reduced to *ā̃*, or c) is changed to *i* in fem. words in accordance with the powerful tendency of *i* to usurp the place of all other vowels before fem. forms of the suffix *ka* (cf. § 7).—Naturally, most of these *ā*-stems are fem.; and the *ka*-derivative generally follows the primitive word in gender.

a) *ā* remains *ā* before *ka*.—*vīṇākā* (ifc.) = *vīṇā*; *kanyākā* < *kanyā*; *jyākā* < *jyā*; *rasnākā* < *rasnā*; **vayāka* (in *vayākin*) < *vayā*(?); *māinākā* metronymic < *ménā*; in Bahuvrīhi cpds., *-vapāka*, *-saṁkhyāka*.—More problematic, but still probably belonging here, are *balākā*, *rodākā*, *ropaṇākā*, *çāriçākā*, *-prṇākā*, from lost primitives.

Note 1.—*çyāmāka* (VS.) "millet" may be derived directly from the noun *çyāmā* (only Class. Skt.) "a kind of grain," or from *çyāmā* used in a vaguer way as the fem. base of the adj. *çyāmā-ā̃*; this fem. base is frequently found in composition.

Note 2.—Pronominal words in *āka* (*āku*) are to be regarded as formed from bases in *ā*; only the *ka* (*ku*) is suffixal. See Wh. Gr. 494; Thumb 357; Brugmann Gr. II¹ p. 830. The existence of these pronominal bases in long vowels is unquestionable; they appear frequently in derivatives and in composition as the "stems" of the pronouns. The exact meaning of the long vowel is problematic and need not concern us here. In the Veda we find *mākī*, *mākīna*, *asmāka*, *yusmāka*, *yuvāku* from the bases *mā*, *asmā*, *yusmā*, *yuvā*. On *mākī* see General Index s. v.

b) *ā* > *ā̃* before *ka*. Especially in Bahuvrīhis; *-ambaka* < *ambā*; *-ālkhyaka* < *ālkhyā*; *-saṁkhyaka* < *saṁkhyā* (cf. *saṁkhyāka* above); *-saṁjñaka* < *saṁjñā*.—Also: *tārakā* < *tārā*; *cikitsakā* < *cikitsā*; *mānasthaka* (? perhaps from a cpd. of *Vsthā*); *menakā*—metron. < *ménā* (cf. *māinākā* above); *çilaka* n. pr., perhaps < *çilā*.

c) *ā* + *ka* > *ikā*. I know of only three clear examples in the Veda: *akṣamālikā* (Up.) < *akṣamālā*; *nāsikā* (RV.) < *nāsā*; *mākṣikā* (RV.) < *mākṣā*. These RV. words show how early began the encroachment of *ikā* on all other fem. forms of the suffix *ka*.—Most *ikā* feminine words are formed directly from *aka* masculines.

Note.—*mahīrukā* < *mahilā* has its *u-kā* by analogy from *dhēnukā*; see Chap. IV, § 89.

31. *ī*. Regularly remains unchanged before *ka*. In a few doubtful cases it seems to be lengthened to *ī*, but this is probably only apparent. So the crucial word *kalmalikīn* (RV.), < *kalmalī*?; *punḍārika* cf. *punḍarī-srajā*, but cf. also *punḍarīn* (only Lex.).—*pūtika* (once also *-ika*) apparently < *pūti* (adj.). *-valika* probably < *valī*, not *vali*.

32. *ī*. a) In Bahuvrīhis *ī* remains before *ka* invariably. *-tantrika*, *-patnīka*, *-samidhenika*, *-sāvitrika*.

b) In other derivatives it either remains, or (more often) is reduced to *ī*. Especially when the *ka* derivative is fem. the *ī* is usually reduced, so that the word ends in *-ikā*; cf. § 7.

ī remains: *āṇḍika* < *āṇḍī*; *tūṣṇika* < *tūṣṇī*; *nāḍikā*; *lohinīkā*; *valika* (see § 31); *hlīka* < **hlī* = *hrī*; *dūṣikā* (also *-ikā*) < *dūṣī*; *ṛalmīka* cf. *vamrī*, Lat. *formica*; *sūcika*.

ī > *ī*: *kuçikā* prob. < *kuçī*; *gavīnikā* < *gavīnī*; *gopikā*; *mahā-nāmnika*; *avaghaṭarikā*; *avacarantikā*; *karkarikā* < *karkarī*; *dhayantikā*; *dūṣikā* (cf. *dūṣikā*); *pratīcīkā*; *mukharikā* < *mu-kharī*(?); *vajrasūcīkā*; *hāriknikā*.

NB.—*dyumnika* and *varṣika* are from *-in* stems, q. v.

33. *ū*. Remains unchanged before *ka* regularly.

a) Here as with *ā* and *ī* there are a few cases in which *ū* seems to be lengthened. Word or sentence cadence may be the cause of this. *Kambūka* (AV.) "rice husk" < *kambu* "shell." *madhūka* n. pr., apparently < *mādhu*.—*çālūka* (AV.) a plant, cf. *çālu* (Class.) a fruit,—*ābhūka* "powerless" < *ābhū* "empty."—*ūlūka* "owl," onomatopoetic, cf. *ulūcus*, *ulūla* (see § 79, s. v. *ūlūka*).—*karkandhūkā* (AV.) should be read *karkandhūkā*, as the parallel RV. Kh. stanza reads.

b) The word *madhvaka* (Adbh. Br.) "bee" is probably an instance of some sort of adaptation, whose nature cannot be decided. At first sight it looks like a suffixal *-aka* added to *mādhu*; but this is most unlikely.

c) *ikṣvāku* n. pr. may be derived from *ikṣú* + *āku*; see under § 29 d.

34. *ū*. This would doubtless remain unchanged before *ka*, but I know of no clear instance in the Veda. The following words are doubtful as to etymology: *ānuṣūkā*, *bībūka*, *maṇḍūka*, *valūka*, *salalūka*.

35. *ṛ*. Remains unchanged before *ka*. *mātrka*, *hōtrka*; in Bahuvrīhis, *-pitrka*, *-yantrka*.

a) *pradātrikā* "giver" (fem.) < *pradātṛ* shows the fem. suffix

ikā (see §§ 7, 38), not to be confounded with the suffix *-ika*; before it *r* appears in its consonantal form.

36. *Consonants.* Consonantal stems before *-ka* appear in their weakest stem-form. The ordinary rules of internal combination are generally observed. But the sibilants *ç* and *ṣ* appear in the form found in composition, and some *s*-stems are irregular.

an-stems: *tāmaka*, *udakā*, *-carmaka*, *-nāmaka* &c.

in-stems: *-sākṣika* (in Bahuvrīhi cpd.) < *sākṣin* and *-hastika* < *hastin* are the only Vedic instances found which shows the *ī* we should expect. *dyumnika* < *dyumnin* and *varṣika* < *varṣin* have taken over *ī* from the nom. sg. masc. of the *in*-declension.—On *-varṣika*, *-çīlika*, *-cārika*, *-samnyāsika* see § 29 a, Note; they probably come from stems in *-a*, but are influenced by *in*-stems.

nt-stems: *-bṛhatka*, *ejatkā*, *-datka* &c.

t-stems: *napātka*, *pratiçrútkā* (noun) and *prātiçrutkā* (adj.) < *pratiçrut*; *-pariçritka* (Bah.).

iyattakā (*-ikā*) < *iyat* and *mṛttikā* = *mṛd* are peculiar. The insertion of the glidal vowel *a* (*i*) seems to have been merely euphonic. No significance is to be attached to it, and probably not to the doubling of the *t* either (this latter is only a matter of word cadence); *iyattakā* is a dim. from *iyat*, and it is scarcely conceivable that the suffix is anything else than plain *ka*, tho in a disguised form; cf. Av. *daitika* < *dat* (§ 108). Why the *t* of the nom. sg. should appear in *mṛttikā* instead of the *d* of the stem *mṛd*, I cannot say; but to set up a suffix *-taka/-tikā* goes too much against probabilities. It is hard to imagine an analogical process by which such a suffix could have arisen in these words, and the instances are too few to make such an assumption safe. Cf. *kṛttikā* < *Vkṛt* under primary *-aka*.

d-stems: (Bahuvrīhis) *-upaniṣatka*, *-nivitka*, *-pariṣatka*, *-samvitka*. For *mṛttikā* < *mṛd* see under *t*-stems.

dh-stems: *-samitka* < *samidh*, *upānatka* < *upānah* (orig. *-nadh*).

c-stems: *-tvakka*, *-vākka*, *purorukka*.

ṣ-stems: (see above) *ṣatka* < *ṣaṣ* (only known Vedic instance).

ç-stems: *-dikka* < *diç* (only known Vedic instance).

s-stems: appear regularly with *s* after *a*, *ṣ* after *i*, *u*; *anīyaskā*, *-tapaska*, *-tejaska*, *medaska*, *-rajaska*, *-retaska*; *mastīṣka* (? No **mastis* occurs); *catuska*, *dhanuṣka*, *cakṣuṣka*, *-yajyuṣka*.

a) *-āçīrka* (Bahuvrīhis) < *āçīs* is due to analogy with cpds. in which *s* was followed by a sonant, as *āçīrdā* &c.

b) *parutka* < *pārus* is due to analogy with stems in *ṣ*, which take *ṭ* before *ka*. The proportion is $\dot{\text{ṣ}} : s = \dot{\text{ṭ}} : t$.—Cf. also *pāruccheṣa*.

37. *Stereotyped Endings*.—When *ka* is added to a word having a stereotyped ending, or an ending which does not vary according to a nominal declension, the word is always treated as if it were formed from a noun stem in *-a*, whether it is so or not: the *ka* is added to this (often imaginary) *a*-stem, and then the ending of the original word is attached to the *ka*-derivative, the *-a* of the suffix of course disappearing. This gives the word the appearance of being formed with an infix *-ak-*.

So in the case of adverbs like *ārakāt* < *ārāt*, *ālakam* < *ālam*, *ṣanakāis* < *ṣanāis*, in which the original base actually was *āra-*, *ṣana-*, *āla-*.

But also: *asakāū*¹ < *asāū*, as if the stem were *asa-* and the ending *-āu*; and the extraordinary verb-form *yāmaki* < *yāmi*, as if *yāmi* were a nominal form from a stem *yāma-*.

B. *Samdhi of the Secondary Suffixes ika, uka, ikā, and the fem. ikā*.

38. In the Veda these do not appear after *ā*-stems. A final stem vowel disappears before them without trace, except *r*, which becomes consonantal *r*. Consonantal stems before them appear in their weakest *pre-vocalic* stem form; e. g. *ṣāçvatika* < *ṣāçvant*; *paramavyomnika* < *-vyoman*; *āparāhnikā* < *-ahan*, and so other compounds of *ahan*. Apparent exceptions like fem. *tādātmikā* come as a rule from masculines in *a-ka* (suffix *ka*), or are derived from parallel bases in *-a* (as *śāḍahika* < *śāḍahā*, not *-ahan*).—In the classical language, however, this rule no longer holds; particularly *an*-stems take the form in *-a* before *-ika* (the *a* dropping). In the Veda *sāman* and its compounds follow this habit: *sāmika* (*Lāty.*), *jyāiṣṭhasāmika* < *jyēṣṭhasāman* &c.

39. The *primary* suffixes require no remarks under this heading; the treatment of verbal bases before them, in so far as it is capable of discussion, has been taken up under the respective suffixes.

¹ The grammarians allow *asuka* as well *asakāū* < *asāū*, but it has not been reported as occurring in the literature.

Chapter III.

The Secondary Suffix *ka* (excl. diminutives).

The Suffix *ka* (excl. diminutives) §§ 40—48. Meanings see Chap. I, § 9. (About 110 words.)

40. a) Forms nouns from nouns; meaning "like."

antaká, border (ÇB.), < *ánta*, end.

kambúka (AV.), husk of rice, < *kambu*, shell (see § 33).

kīlaka (U.), the middle part of a mantra, < *kīla*, post.

kumbhaka (U.), the holding of the breath after filling the passages with air—a religious exercise; the appearance of the performer suggested a pot, hence the name. < *kumbhá* pot. See § 95.

kúṣṭhikā (AV.), dew-claw, < *kúṣṭha* (cf. also § 90, 91).

cūlaka (U.), the top of a column, < *cūla*, crest.

chattrāka (B.), mushroom, < *chattra*, shade, umbrella (see § 30)

(Class. *chattraka* = mushroom).

naḍaka (S.), hollow of a bone, < *naḍá*, reed.

nāḍikā (AV.), throat, < *nāḍī*, tube.

nābhikā (B.), navel-like cavity, < *nābhi*, navel.

bhāṣika (S.), general rule, < *bhāṣya*, speech, commentary (see § 29 a).

maṇika (B), hump, water-jar, < *maṇi*, pearl, lump &c.

valika (S.), thatch; reed, sedge, < *vali*, fold, or *vali*, edge of a roof.

41. b) The signification of the *ka*-derivative is often so like that of its primitive that it is hard or impossible to distinguish any difference between them, so that the *ka* seems to be meaningless. The Hindu grammarians recognize as a distinct category this "meaningless *ka*" (*anartha*). Sometimes, however, the exigencies of meter explain the addition of *ka*. So:

ástaka (AV), home, = *ásta*.

gavīnikā (AV.), groins, = *gavīnī*.

(The same pada repeated in TS. has *gavīnī*.)

iṣukā (AV.), arrow, = *iṣu*.

pīyūṣaka (RVKh.), biestings, = *pīyūṣa*.

(The same pada in AV. has *pīyūṣa*, but is deficient in meter.)

42. c) Sometimes, again, the suffix is used as a convenient means of bringing into the ordinary *a*-declension words of less usual stem-formations (mostly consonantal stems). This may explain the following (and cf. I, 12);

āmīvatkā (YV.), pressing, = *āmīvat* (pres. part.). See Gen. Index; cf. *vikṣīnatkā*, *vicīvatkā*.

udakā (RV.), water, = *udān*. The stem *udakā* was at first used, apparently, only in the nom. acc. sg. *udakām* to replace the form **uda* < *udān*, which never occurs. The form *udakām* is found 8 times in RV. and 17 times in AV., while the oblique cases occur only once in RV. and 6 times in AV. The oblique cases of *udān* on the other hand occur 19 times in RV. and 4 times in AV.; its nom.-acc. is not found. As the oblique cases of *udakā* increase in frequency the stem *udān* becomes correspondingly rare.

pratiṣṛútkā (VS.), Echo, = *pratiṣṛut*.

bṛhatka (B.), n. p., < *bṛhát*, adj. (But cf. also § 46).

vikṣīnatkā and (inferior) *vikṣīnakā* (YV.), destroying, epithet of gods, = *vikṣīnant*; see General Index.

vicīvatkā (YV.), sifting, discriminating, epithet of gods; see General Index, and cf. preceding and *āmīvatkā*.

stúkā? (RV.), tuft of hair; prob. not "primary *ka*" (Whitney), but rather from the noun *stu* in *prthú-stu*.

43. d) But in many cases there seems to be no evident reason for the appearance of *ka*.—It may be that one or another of the words which are grouped under this heading will seem to sharper senses than mine to show some differentiation between the primary word and the *ka*-derivative. It is morally certain that some of them would have presented differences to an ancient Hindu. It is possible that some of them are diminutives of some sort, tho I have sought in vain for some sign of this in the various passages. However that may be, of the general fact there can be no doubt; from very early times the suffix *ka* became in some cases so colorless that it might be added without change of meaning to nouns, and even to adjectives. This usage increases greatly in frequency in the later language. Even if, then, a few of the examples quoted prove to be wrong, the principle is undoubtedly right.—Note that the usage is rarest in the Mantras and commonest in the Upaniṣads.

44. Nouns:

avadhūta (U.) n. of an Upaniṣad = *avadhūta*

ātmabodhaka (U.) n. of an Upaniṣad = *ātmabodha*

urvārukā (RV.) in a late and interpolated verse, a sort of gourd,
= *urvāru*

- kāntaka* (AV.), thorn = *kaṇṭa* (only in cpds.)
karkataka (U.), crab = *karkata*
karnaveṣṭaka (S.), earring = *karnaveṣṭa*
kiṇjalka (S.), plant-stalk = *kiṇjala* (only Lexx.) see § 29 b.
kramuka (B.), betel-nut tree = *kramu* (only Lexx.) (also *krmuka*)
gavīdhuka or *gavē-* (TS.), coix barbata = *gavīdhu* (*gavedhu*) (not Vedic)
gopikā (U.), protectress = *gopī*
cakraka (U.), wheel = *cakrá*
jarāyuka (B.), after-birth = *jarāyu*
jīvikā (S.U.), manner of life, cf. *jīvā*, life (Possibly primary *-aka*; cf. § 95)
tāarakā (AV.), star = *tārā*
nikharvaka (B.), billion = *nikharva*
parūṣaka (S.), n. of a tree, and its fruit = *parūṣa*
pracitaka (S.), n. of a meter = *pracita*
bhāradvājakī (B.), skylark = *bharadvājī* (f. of *-ja*)
bhikṣuka (S.) mendicant = *bhikṣu*
maṇipūraka (U.), n. of a mystic circle on the navel, = *maṇi-pūra*
mṛttikā (VS.), clay = *mṛd* (see § 36)
yaṣṭikā (U.), club = *yaṣṭī*
rūpaka (B., U.), image; species = *rūpā*
lokapālaka (U.), earth-protector = *lokapālā*
varāhaka (U.), n. of an Upaniṣad = *varāhā*
vahyaka (S.), draft-animal = *vahya*
vārddhuṣika (S.), usurer = *vārddhuṣi*
vikalpaka (U.), hesitation = *vikalpa*
-vīṇākā (S.), flute = *vīṇā*
vyādhaka (S.), hunter = *vyādha*
ṣyāmāka (YV.), millet, = *ṣyāmā* (? cf. § 29 c, Note)
saṁtanika (B.), n. of a Sāman, = *saṁtani*.

Note.—*ajāvīkā*, neut. sg., “goats and sheep,” is the equivalent of the (masc. plur.) dvandva *ajāvī*. The *-ka* seems to have a sort of collective force, not exactly paralleled elsewhere.

45. Adjectives:

- āgantuka* (S.), accidental, = *āgantu*
āvapantikā (AV.), pres. part., scattering, = *āvapantī*. (Note in Whitney's edition seems to imply dim.—i. e. pejorative—force, like *avacarantikā* &c. But as it is applied to the

bride scattering grains in the marriage ceremony, this is hardly conceivable. In the AV. passage the *-kā* might be metrical, but not in the GrS., where it is also used [unless they depend directly on the AV. passage; note that some parallel passages, as MantrBr., read *āvapantī*]. Might this be a case of the “feminine” Diminutive—§ 90?)

ūrdhvaka (U.), raised. = *ūrdhvā*

kṛtsnaka (S.), all, = *kṛtsnā*

caturthaka (U.), fourth = *caturthā*

tūṣṇīka(m) (S.), silent(ly), = *tūṣṇī(m)*. Doubtful and prob. corrupt.

mṛḍayāku (RV.), or *mṛḷ-* merciful, = *mṛḍaya*, cf. § 29 d.

svaka (U.), own, = *svā*

Note.—The word *plāṣuka* (B., S.), rapidly growing up, < **pla* = *pra* + *āṣū*, takes *ka* because of its quasiparticipial meaning, being influenced by the suffix *-uka*. Similarly *udbhrāntaka* (U.), roaming, = *udbhrānta*, from the analogy of words in primary *aka*, several of which are found in close proximity to the word *udbhrāntaka* in Nṛsut. Up. 7.

46. e) Often the suffix forms substantives, from adjectives or other words, with the meaning “characterized by” (such a quality or thing). When the primitive word is an adjective the derivative is frequently no more than a substantivized adjective. As such it is particularly adapted to the formation of proper names.

Substantive from adjective:

abhiniviṣṭaka (S.), ? (acc. to Knauer) stale (of food); < p. pp. of *abhi-ni-viṣ*.

invakā (SV., B.), n. pr. of a Sāman, < *inva*, pervading.

iṣṭakā (YV.), brick, < **iṣṭā*, burnt, IE. *Vaidh* burn. Cf. Av. *iṣtya*.

kuṇika (S.), n. of a man, < *kuṇi*, adj., having a withered arm.

ghātaka (S.), n. of a kind of wood, < *ghāta*, smitten.

cāraka (B.), wanderer, < *cara*, wandering.

jayantaka (U.), n. of a man, < *jayanta*, victorious.

taṭāka (B.), pool, < *taṭa*, declivity, bank.

dyumnika, n. of a man, *dyumnin*, glorious.

nyastikā (AV.), epithet of a plant, < *nyastā*, thrown down. (§ 91.)

pūtika (TS.) or *-ika*, n. of a plant, < *pūti*, foul (see § 31).

pṛthuka (B.), flattened grain, < *pṛthū*, flat.

perukā (RV.), n. of a man, < *perū*, delivering.

pracalāka (S.), chameleon } < *pracala*, moving &c.
pracalākā (TS.), cloudburst }

prasarpaka (S.), assistant or spectator at sacrifice, < *prasarpa*, adj.
madhyamikā (U.), middle finger, < *madhyamā* (cf. § 90).

muṇḍaka (U.), n. of an Upaniṣad, < *muṇḍa*, shorn.

rohītaka (MS.), n. of a tree, < *rōhita*, red (in Class. Skt. also applied to the tree *rohītaka*).

vādhaka (AV.), n. of a wood, < *vadhā*, smiting &c.

varaka (S.), suitor, < *varā*, desiring (also n., suitor).

varṣika (S.), n. of a meter, < *varṣin*, raining.

viçvaka (RV.), n. of a man, < *viçva*.

çamakā (S.), n. of a plant, perhaps < *çama*?

snātaka (B.), one who has ceremonially bathed, a *grhastha*,
 < *snātā*.

Substantive from noun (which must have been felt adjectivally):

cēlaka (B.), n. of a man, perhaps < *cela*.

daṇḍaka (S., U.), n. of certain meters, < *daṇḍā*.

vamrakā (RV.), n. p., "Antman", < *vamrā*, ant. Called dim. by Nāigh., followed by BR., but this seems very unlikely. It is rather a noun of characteristic.

vṛṣaka (SV., B.), n. of certain sāmans, < *vṛṣan*.

saṃpātika (S.), n. of certain demons, < *saṃpāti*.

Miscellaneous:

tiraçcikā (S.), a horizontal region, < *tirāçci*, loc. sg. of *tiryañc*.

47. f) The suffix furthermore forms adjectives of characteristic, mainly from adjectives, adverbs and numerals.

ādhika (S., U.), additional < *ādhi*.

ānuka (B.), subordinate < *ānu*.

antikā (RV.), near < *anti*.

āvakā (AV.) (subst.) n. of a plant < *āva*.

ekākīn (AV.), solitary, < *ēka*.

viçvaka (U.), all-pervading, < *viçva*.

sān-samaka (AV.), united, < *samā*.

From numerals, forming adjectives with a sort of distributive force: *ekakā*, singly; *dvakā*, by twos; *trikā*, by threes—all RV.

One adjective of material (others in Classical Skt.): *sidhraka* (S.). made of *sidhra*-wood.

48. g) Presumably growing out of the usage described in § 46, we find a few rare and abortive appearances of the suffix in formation of abstract nouns, with the force of the English suffixes -ness or -hood. The few Vedic cases are:

madhūlaka (AV.), sweetness (or, honey) < *madhūla*, sweet.

māṭṛka (U.), "das Mutterwesen" < *māṭṛ*.

lohinīkā (B.), red glow < *lōhinī*, fem. of *lōhita*.

sūtaka (S.), birth, childbirth < *sūta*.

Note.—Logically the treatment of the Diminutive *ka* should follow here, it being a phase of the suffix *ika*. But for practical reasons, because of its importance and the space it requires, it has seemed best to devote a separate chapter to it.

The Suffix 2 ka. §§ 49—52 incl. Meanings see § 11. (53 words.)

49. Here no additional remarks or semantic distinctions are necessary, and we need only give the words, practically all of which are adjectives, as they occur. The words which have Vriddhi are: (21 words)

āpartuka (S.) < *apartū*

āmalaka (U.) < *amala*

āraṇyaka (U.) < *āraṇya*

ārunaketuka (TĀr.) < *aruna* +
ketu

āṇḍakā (B.) < *eḍa*

kāverakā (AV.) < *kāvera* (pa-
tronymic)

cāturhotṛkā (MS.) < *cāturhotṛ*

tādātmaka, ikā (U.) < *tad-ātman*

tāvakā (RV.) < *tāva*, gen. sg.
of *tvam*

¹*pārṣṭhika* (S.) < *prṣṭhyā*, cf.
§ 29 a.

50. Those which may or may not be considered as having Vriddhi: (10 words)

ātmaka (U.) < *ātmān*

āitareyaka (B.) < *āitareya*

tāluka (U.) < *tālu*

tāittirīyaka (U.) < *tāittirīya*

trāividya (S.) < *trāividya*

-dhāvanaka (S.) < *dhāvana*

pāçuka (S.) < *pāçu* or *paçu*

pāçubandhaka (S.) < *paçubandhā*

prātiçrutkā (U.) < *pratiçrut*

bhāumaka (B.) < *bhūman*

mānuṣyaka (U.) < *manuṣyā*

māmakā (RV.) < *māma*, cf.
tāvakā

māṇīnākā (TĀr.) < *mēnā* (metro-
nymic)

rāivataka (U.) < *revata* (patro-
nymic)

vāibhītaka (TS.) < *vibhīta(ka?)*

çārīraka (U.) < *çārīra*

sāmsparçaka (S.) < *samsparçā*.

bādhaka (B.) < *bādhā?*

(*māḱī, māḱīna*) < *mā*—see § 30 a,
Note.

vājasaneyaka (S., U.) < *vājasa-
neyā*

çātyāyanaka (S.) < *çātyāyana*

¹ *Note*.—This must be admitted to be not a *certain* case of the suffix *ka*, as against *ika*. Nevertheless it is hardly likely that the entire syllable *-ya* would disappear before *-ika* without any trace;—at least I know of no parallel for such a phonetic change, whereas § 29 shows parallels for the reduction of *-ya* to *i* before *ka*.

51. The words which fail to show Vriddhi (19 words):

agnihotraka (U.) < *agnihotra*.
asmāka (RV.) < *asmā*- see § 30a

Note.

gānaka (VS.) < *gaṇá*.

cikitsaká (B.) < *cikitsā*.

ṛt̥t̥iyaka (AV.) < *ṛt̥t̥iya* (as noun).

dévaka (U.) < *devá*.

nápātka (RV.) < *napāt*.

madhūka (S.) < *mádhu*.

madhvaka (B.) < **madhva*? see § 33 b.

mantraka, ikā (U.) < *mántra*.

māmaka (RV.) < *māma*, cf. *māmaká* § 49.

markāṭaka (S.) < *markāṭa*.

menakā (B.) < *ménā*, metro-nymic; cf. *māināká*.

yantraka (B.) < *yantrá*.

yuváku (RV.) < *yuvā*- see § 30a Note.

yuṣmāka (RV.) < *yuṣmā*- see § 30a Note.

sūtikā (AV.) < *sūtí* (cf. *prasūtikā*, Cl., and *-prasūta*, AV.).

svastika (U.) < *svastí*.

hotraka (B.) < *hotrá*.

52. A few un-vriddhied words from bases in *ī*, where it is impossible to say whether the suffix is *ka* or *ika*. The overwhelming preponderance of Vriddhi with *ika* has led me to classify them here, while vriddhied words from *i*-stems are for the same reason put under *-ika*. (3 words):

kuçiká (RV.) prob. < *kuçí*.

bálhika (AV.) < *bálhi*.

mahānāmnika (S.) < *mahānāmnī*.

The Suffix 3 *ka*. §§ 53—55.—Meaning see § 12.

53. This category consists mainly of adjectives (which, however, are frequently substantivized), like the foregoing. It is on the whole not frequent in the Veda, except in the developed use with Bahuvrīhis.—Especially to be noted is the use of the suffix with numerals, in the sense “consisting of,” “containing.”

Parenthetically it may be noted that the suffix *-ika* has the value of 3 *ka* in two AV. words: *tūṇḍika*, having a snout or trunk, < *tūṇḍa*; and *paryāyiká*, having (i. e. composed in) strophes, < *paryāya*. This seems to be the extent of the usage.

The following words show *ka* in its third use (21 words):

(From numerals:) (8 words.)

áṣṭaka (B.)

ekatrinṇaka (U.)

catuṣka (S., U.)

daṣaka (S.)

pañcaka (S.)

pañcaviṇṇaka (U.)

ṣaṭka (S.)

ṣaḍviṇṇaka (U.)

(From other words:) (13 words.)

ariṣṭaka (S.), having the disease *áriṣṭa*

āṇḍika (AV.), having egg (—like bulbs) < *āṇḍī*

janaká (B.), n. of a king < *jána*?

dāyaka (S.), heir, < *dāyá*, inheritance

dvārakā (U.), n. of a city, “City of Gates” < *dvāra*

nimustika (Āit.Ār.), of the size of the fist, < *nimusti*, a measure of that size

parutka (S.), having joints < *pārus* (see § 37 fin.)

mādhuka (B.), n. of a man (“rich in honey”) < *mādhu*

muktikā (U.), n. of an Upan., “String of Pearls” < *muktā*

muṣṭikā (U.), n. of a prizefighter < *muṣṭi*, fist

vasnikā (B.), prize (“having value”) < *vasná*, value

śālyaka (VS.) porcupine (“having darts”) < *śalyá*, dart

hlīka (KS.) possest of modesty < **hlī* = *hrī*

54. *Bahuvrīhis*.—Very scarce in the Mantras (2 in RV.; 5 in RV.—AV. together); they become not infrequent in the Brāhmaṇas, but can hardly be called common until the Sūtra-Upaniṣad time. There are 42 words found in the Mantras-Brāhmaṇas together, and 54 which occur for the first time in the Sūtras and Upaniṣads, making 96 for the entire Veda. In the later language the cases are numerous.—That non-*a* stems predominate as primitives (cf. § 12) is shown by the statistics; of 96 words, 37 are from consonantal stems, 37 from stems in other vowels than *ā*, and only 22 from *a*-stems.

For Saṁdhi of stem-finals see Chap. II.—The most striking facts are that *ī* always remains unchanged, while *ā* may do so, but more often is shortened before *ka*.—Four stems in *a* change *a* to *i* before *ka*, through the influence of parallel *-in* stems of like meaning. They are *-cārika* < *cāra*, cf. *cārin*; *-varṣika* < *varṣá*, cf. *varṣin*; *-ṣīlika* < *ṣīla*, cf. *ṣīlin*; *-saṁnyāsika* < *saṁnyāsa*, cf. *saṁnyāsin*.

a) The heteroclite stems *akṣi* (*akṣan*) and *asthi* (*asthan*) use either form of the stem before *-ka*, as also (in the Veda) before the pada case-endings (Wh. 431). The same verse in different parts of the Vedic literature may vary in this regard. Thus *anakṣikāya svāhā* TS. 7. 5. 12. 1, but *anakṣakāya svāhā* KSA. 5. 3.—*anasthikāya* (*-akāya*) *svāhā* TS. (KSA.). Cf. *asthābhyah svāhā* VS. 39. 10, TS.; but *asthibhyah sv.* KSA. 3. 6. Cf. also the Bahuvrīhis *anastha*, *anasthan*, *anasthi*, *anasthimat*—all of which are found.

The corpus of variants revealed by the Vedic Concordance, which I have been able to examine through the kindness of Prof. Bloomfield, further reveals the fact that in a number of cases the same pada in different texts varies by adding *ka* to, or dropping it from, a Bahuvrīhi stem. Examples are *anaṅgá* : *anaṅgaka*, *aprāṇá* : *aprāṇaka*, *amanás* : *amanaská*; and *avajihva nijihvika* HG. 1. 15. 5^a cf. *avajihvaka nijihvaka* ApM. 2. 21. 32^a. The second word in both places should probably be emended to *nir-jihvaka*. A form *-jihvika* as a Bahuvrīhi-final is quite inexplicable.

The list gives the final parts of the compounds only, in alphabetical order; the stem-form of the original word is added where it is not obtainable by simply striking off the *-ka*.

55. List of Bahuvrīhi *ka*-words.

word	occurs	stem final	word	occurs	stem final
-aṅṇaka	U.	a	-kaṇṭhaka (<i>sahá-</i>		
-akṣaka < <i>aksán</i>	KSA.	(an)a	lc.) (< <i>kaṇṭhá</i>)	AV.	a
-akṣiká (< <i>áksi</i>)	TS.	i	-kadruka (<i>trí-k.</i>)		
-agnika	B.	i	(< <i>kádrū</i>)	RV.	u
-aṅṇaka	KSA.	a	-karṇáka (< <i>kár-</i>		
-anūka	U.	u	ṇa)	TS.	a
-ambaka (<i>tryā-</i>)			-kalpaka	U.	a
< <i>ambá</i>	RV.	ā>a	-keṣaká (< <i>kéṣa</i>)	AV.	a
-aṣṭitika	U.	i	-cakṣúṣka < <i>cákṣus</i>	U.	s
-astaká (< <i>ásta</i>)	AV.	a	-carmáka < <i>cār-</i>		
-asthaka < <i>asthán</i>	KSA.	(an)a	man	TS.	(an)a
-asthika (< <i>ásthi</i>)	TS.	i	-cārika < <i>cāra</i> cf.		
-ākhyaka < <i>ākhyā</i>	U.	ā>a	cārín	U.	a>i
-ādika	U.	i	-citika (in <i>śāt-c.</i>)		
-āṣṭirka < <i>āṣṭis</i>	TS.	s>r	(< <i>cíti</i>)	B.	i
-āsandika	S.	ī	-jihvaka < <i>jihvā</i>	S.	ā>a
-ukthaka (<i>sók-</i>)			-tantrika	B.	ī
(< <i>ukthá</i>)	B.	a	-tapaska	U.	s
-upaniṣatka < <i>upa-</i>			-tamaska	U.	s
<i>niṣad</i>	U.	d>t	-tūlaka, -ikā	U.	a
-upasatka < <i>upa-</i>			-tejáska (< <i>téjas</i>)	U.	s
<i>sád</i>	S.	d>t	-tvālika < <i>tvác</i>	U.	c>h
-upānatka < <i>upā-</i>			-tsaruka	B.	u
<i>nah</i>	S.	(d)h>t	-datka < <i>dánt</i>	U.	(n)t
-rṣika (in <i>sarṣika</i>)	S.	i	-dantáka (< <i>dánta</i>)	TS.	a

word	occurs	stem final	word	occurs	stem final
-dikka < dīç	B.	ç>k	-yonikā	S.	i
-dhātuka < dhātu	U.	u	-rajaska	U.	s
-dhūmaka	U.	a	-raçmika	S.	i
-navaka	U.	a	-retáska (< rétas)	B.	s
-nāmaka < nāman	S.U.	(an)a	-lepaka	U.	a
-nivitka < nivíd	ĀitĀr.	d>t	-lómaka (or -áka)		
-patnīka	B.	ī	< lóman	TS.	(an)a
-pariçritka	S.	t	-vapāka	B.	ā
-pariṣatka < pari- śád	S.	d>t	-varṇaka	U.	a
-paçuka	S.	u	-varṣika < varṣá		
-pitṛka	S.	r	cf. varṣin	S.	a>i
-pūro' nuvākyāka			-vastuka	U.	u
< yā	B.	ā>a	-vākkā < vác	B.	c>k
-purorúkka < pu- rorúc	B.	c>k	-vibhaktika	B.	i
-pūrvaka	U.	a	-viṣuvatka	S.	(n)t
-prajāpatika	B.	i	-vṛttika	U.	i
-prāṇaka	KSA.	a	-çīrśaka < çīrśán	TS.	(an)a
-bāhuka	S.	u	-çīlīka < çīla cf.		
-binduka	U.	u	çīlin	B.	a>i
-bṛhatika	S.	ī	-ṣatka < ṣás	S.	ṣ>t
-brahmaka < brah- mán	S.	(an)a	-saṁvitka < saṁ- víd	U.	d>t
-bhasmaka < bhás- man	B.	(an)a	-saṁkhyaka < saṁ- khyā	U.	ā>a
-majjúka < majján	TS.	(an)a	-saṁkhyāka < saṁ- khyā	U.	ā
-manaska	KSA., U.	s	-saṁjñaka < saṁjñā	U.	ā>a
-mānsāka (< māt- sá)	TS.	a	-saṁnyāsika < saṁ- nyāsa cf. saṁ- nyāsin	U.	a>i
-mānaka (see In- dex s. v.)	B.	a	-samitka < samídh	S.	dh>t
-medáska (< médas)	TS.	s	-sākṣika < sākṣin	U.	(in)i
-yajúṣka < yájus	B.	s	-sāmidhenīka	B.	ī
-yantrika	S.	r	-sāvitrīka	S.	ī
-yūṣka < yūs	S.	s	-snāvāka < snāvan (or -ván)	TS.	(an)a
			-hetuka	U.	u

The Suffix 4 ka. Meaning—see § 13.

56. The five words belonging here have been already quoted; they are (5 words):

ántaka (AV.), ender, death < *ánta*, end.

yācanaka (U.), beggar < *yācana*, request

vīmanyuka (AV.), freeing from wrath, < *vīmanyu*, free from wrath.

çītaka (RV.), cooling < *çītá*, cool.

hlādaka (RV.), refreshing < *hlāda*, refreshment.

Unclassified (Secondary) *ka*.

57. All, or nearly all, the following words in suffixal *ka* have evidently a secondary suffix. But it is impracticable to separate them into the various categories, either on account of the uncertainty of their origin, or in a few cases because, though they are clear as to general derivation, it cannot be determined which branch of the suffix they belong to. For instance, *só-maka*, a proper name, might mean "Sóma-like" (1 *ka*), "of or belonging to Sóma" (2 *ka*), "having *sóma*" (3 *ka*, cf. *mádhuka* n. pr.), or it might be a diminutive.—In most of the following cases, however, the etymologies are unknown; and often even the meaning of the word is not clear. Whatever can be said about them will be said in the General Index (q. v.), under the individual words. They are recorded here merely for the sake of completeness.

58. List of Unclassifiabiles. (87 words.)

<i>añjalikā</i> (or <i>nyañj-</i>)	<i>kāmikā</i>
<i>āmanika</i> (or <i>āmanaka</i>)	<i>kirikā</i> (or <i>gir-</i>)
<i>arātakī</i>	<i>kūçavartaka</i> (?)
<i>avacatnuka</i>	<i>kuṣītaka</i>
<i>ādhaka</i>	<i>kustuka</i>
<i>ānuṣūkā</i>	<i>koçātaka</i>
<i>ārcatkā</i>	<i>kyāku</i> ?
<i>ikṣvāku</i> (or <i>-kú</i>)	<i>klītaka</i>
<i>utpātika</i>	<i>kṣitikā</i>
<i>uddālaka</i>	<i>khāṇḍika</i>
<i>upānasyaka</i>	<i>golattikā</i>
<i>ūlmuka</i>	<i>ciccikā</i>
<i>ṛkṣāka</i>	<i>chūbuka</i> (cl. <i>cibuka</i>)
<i>orimikā</i>	<i>-jalāyukā</i> in <i>tṛṇa-j.</i>
<i>kakāṭikā</i>	<i>jānukā</i> (or <i>nī-j.</i>)
<i>kānaka</i>	<i>jumbakā</i>
<i>kāplaka</i> (or <i>kālpaka</i>)	<i>ḍerikā</i>
<i>kalaṇka</i>	<i>dhārikā</i> and <i>ā-dh.</i>
<i>kalmalikān</i>	<i>dūtaka</i>
<i>kaçōka</i>	<i>nabhāka</i>

<i>narāka</i> and <i>nāraka</i>	<i>mādāṇaka</i>
<i>pakvaká</i>	<i>rodākā</i>
<i>patantaka</i> (suffix <i>aka</i> ? Cf.	<i>ropañākā</i>
§ 15, footnote.)	<i>vārtikā</i>
<i>patākā</i> (primary?)	<i>valūka</i>
<i>parisāraka</i> (- <i>aka</i> suffix?)	<i>vasuká</i> (2 <i>ka</i> or 3 <i>ka</i> ?)
(<i>partikā</i> , <i>patikā</i> - corrupt.)	<i>vālukā</i>
<i>pājaka</i>	<i>viḥkr̥ndhikā</i>
<i>pāvakā</i>	<i>visráṇsikā</i>
<i>piṇyāka</i>	<i>vīndāraka</i>
<i>pīnāka</i>	<i>ṣayāṇḍaka</i>
<i>pīppakā</i>	<i>ṣayāṇḍaka</i>
<i>puṇḍārīka</i>	<i>ṣāriṣākā</i>
<i>pīḍāku</i>	<i>ṣālūka</i>
<i>prṣātaka</i>	<i>ṣipivīṣṭakā</i> (1 <i>ka</i> ? cf. General
<i>prahastaka</i>	Index s. v. and § 45)
<i>prāṣātika</i>	<i>ṣilaka</i>
<i>baṭaraka</i>	<i>ṣr̥ṇkhāṇikā</i> (v. l. <i>siṅgh-</i> &c.)
<i>balākā</i>	<i>ṣāṭnaka</i>
<i>bṛbūka</i>	<i>salalūka</i>
<i>maḍūṣikā</i>	<i>śilika-</i>
<i>maṇḍūka</i>	<i>sómaka</i>
<i>mānasthaka</i> ?	<i>sāūrāki</i>
{ <i>mastaka</i>	(<i>sphaṭika</i> - primary?)
{ <i>mastīṣka</i>	<i>hātaka</i>

Chapter IV.

The Secondary Suffix Ka. Diminutives.

(About 180 words.)

59. It is not always easy or possible to draw the line sharply in any given case between the various diminutive values of the suffix *ka*, as laid down in § 10—which see. The diminutive of pity is almost always associated with contempt; without that idea it is doubtful whether it is found at all in the Veda. There are very few words in the Veda which show a marked endearing force of the suffix; in so far as it occurs it is usually found along with simple diminutive force (smallness). Again, the imprecatory and contemptuous uses are often hard to distinguish; nevertheless they are essentially distinct. They may, and very often do, exist quite independently of each other.

60. In treating of adjectives and pronouns having this suffix, it is to be noted that the diminutive idea (of whatever variety) usually belongs not so much to the adjective or pronoun itself as to the noun with which they are connected,—or rather to the whole complex idea; the diminutive notion pervades, as it were, the atmosphere of the whole sentence. So e. g. AV. 20. 136. 14 *kumārikā piṅgalikā*—"wretched little yellow girl;" it is an open question whether *piṅgalikā* (from *piṅgalā*, tawny) has the suffix *ka* in the sense of our suffix *-ish*, so frequent with color words (*piṅgalakā*- "yellowish"), or whether the suffix has simply the contemptuous diminutive force, which is then, so to speak, transferred from the noun *kumārikā* to its modifying adjective. I incline to the latter view in this case; the occurrence is by no means rare in the Veda, and is so simple and natural that it is hardly necessary to dwell on it.

We shall now proceed to classify the *ka* diminutives by lists, according to the divisions laid down in § 10.

I. True Diminutives. (72 words.)

61. The suffix is applied—

- a) to nouns—indicating an object of the same kind as the primitive, but smaller.
- b) to adjectives of smallness—emphasizing and exaggerating that quality.
- c) to adjectives of color,—indicating a color approaching or suggesting the original color (Eng. *-ish*, Ger. *-lich*).
- d) rarely to other adjectives and adverbs—indicating qualities approaching but falling short of the original quality.
- e) principally to nouns—indicating not physical smallness, but relatively secondary importance of the object denoted. Related to, but distinct from, the diminutives of pity and contempt; such notions are absent here.

62. a) *Diminutives of Size*—nouns. (51 words.)

akṣamālikā, "little rosary," n. of an Up.—Mukt. Up. 1. 36
< *akṣamālā*

alābuka, the fruit of the bottle-gourd (*alābu*) < *alābu*

AV. 20. 132. 1, 2 = RVKh. 5. 15. 15 *ād alābukam ékakaṃ alābukam nīkhātakam*. "Just one little *alābu*, a little *alābu* cut into just a little."

avaghaṭarikā, kind of lute, ÇaṅkhCr. 17. 3. 12.—Prob. Dim., cf. *ghāṭarī*, lute.

avatakā, little spring, AV. 2. 3. 1. So Ppp., adopted by Bl. and Ludwig;] Wh. keeps the Çāun. MSS. *avatkā*, which is scarcely interpretable. < *avatā*.

avikā, little sheep, ewe-lamb. RV. 1. 126. 7; AV. 20. 129. 17. Prob. Dim. < *āvi*.

(In an obscene passage; is the suffix perhaps due to that fact? See § 85.)

indragopaka, little firefly. Amṛt. Up. 36 ("Marienkäferchen," Deuss.) < *indragopa*.

(1) *upajihvikā* RV. 8. 102. 21 &c. } names of sorts of ants.
 (2) *upajikā* AV. 2. 3. 4; 6. 100. 2 &c. } Whatever the true inter-
 (3) *upadikā* ÇBr. 14. 1. 1. 8 } relation of these words
 may be, it is safe to say they are diminutives. Bl. (AJP. 7. 482 ff.) derives (2) from (3), and then (1) from (2) by popular etymology. Is *upadehikā* (Class.) in like manner a popular etymology < *upadikā*, and is *dehikā* (Class.) further etymologized from that? Or are two quite different stems confused in this group, the bases *deha* and *jihvā*?

-kaṇikā, a minute particle of anything, in *vaṭa-k*. Sarvop. 2. < *kāṇa*.

kanānakā for *kanī-*, pupil of the eye, only TS. 5. 7. 12. 1. Corrupt for *kanī-*, as shown by fact that the same pada in other places (VS. 25. 1. 2; MS. 3. 15. 1; KSA. 13. 2) reads *kanī-*.

kanīnakā (RV. 10. 40. 9, VS. 4. 3 &c.). *-akā* (RV. 4. 32. 23), *kanīnakā* (ÇB. 14. 5. 2. 3), *-ikā* (AV. 4. 20. 3 &c.), pupil of the eye, from *kanīna*, *-ā*. Bloomfield (AJP. 17. 400, Note 2) has shown conclusively that in all the known occurrences these words mean "pupil of the eye," and never "boy" or "girl."

kanyākā, pupil of the eye, Āit.Ār. 3. 53. 5. < *kanyā*.

karkandhukā, tiny jujube-berry, AV. 20. 136. 3 (where MSS. and Edd. *kārkaṇdhūkā*) = RVKh. 3. 22. 3 (has correctly *ukā*). See *alpikā* under § 86. The obscene meaning pervades the passage so thoroughly that this word might also be classed there. < *karkāndhu*

karkarikā, little lute, AV. 20. 132. 3.

< *karkarī*, lute, RV. and Çāṇhkr.

kārṇaka, tendril or handle ("earlet"), ÇBr. 9. 2. 3. 40; KātyÇr. 18. 4. 6, 7. < *kārṇa*. Cf. § 86.

kuṇḍikā, little pot. SaṁnyUp. 4. 1. Of the pot of the Saṁnyāsin, in a description of his modest belongings. Dim. < *kuṇḍa*.

kumārakā, *ikā*, boy, girl, RV. 8. 69. 15 &c. &c. *kumārā*, á.
kṣurikā, "little dagger or razor," n. of an Up.Kṣur.Up. 1 <*kṣurā*.
khanātaka, prob. "little shovel," Āp.Çr. 17. 26. <**khanāta*.

NBD. makes it an adj. "dug up;" but it is clearly a noun, being connected with *samūhaka* (q. v.) by *vā*. Neither it nor its primitive **khanāta* occurs elsewhere, but prob. *Dim*.

golaka, little ball, Çāṅkh.Gr. 4. 19; Gobh.Gr. 4. 4. 20. <*gola*.
cāṇḍātaka, a short petticoat, ÇBr. 5. 2. 1. 8 &c. Derivation unknown; *Prob. Dim*.

jātaka, a new-born child, Kāuṣ. 11. <*jātā*.

jālaka, little net, web, BrhĀrUp. 4. 2. 3. Prob. *Dim*. <*jāla*, web.

tarūṇaka, a young sprout, AV. 10. 4. 2. The verse is hopelessly obscure in its application, but some sort of dim. use may be assumed. <*tāruṇa*,

nāsikā, nostril, RV. 10. 163. 1; AV. 10. 2. 6 &c. <*nāsā*, nose.

pādukā, slipper, ĀçramUp. 4. *Dim.?* <*pādū*, foot.

pipīlaka, (*ika*?) and (most often) *ikā*, ant; AV. 7. 56. 7 &c. &c. <*pipilā*. See Word-List s. v.

putrakā, little son, RV. 8. 58. 8. Cf. § 67. <*putrā*.

-prṇākā in *hariṇa-p.*, the (fem.) young of any animal. No **prṇā* occurs, but it is clearly a dim. Cf. Class. Skt. *pr-thu-ka*, Lt. *pario*, *πόρις* &c.

prapāṭhaka, little section, subdivision of cert. works

<*prapāṭha* "lecture."

priyaṅgukā, little panic-seed, Sāmavidh.Br. 2. 6. 10. <*priyāṅgu*.

māksikā, fly, RV. 1. 119. 9 &c. *Dim.* <*māksā*, fly.

maçāka, gnat, AV. 4. 36. 9 &c.—The cognate Lith. *maszalai* with suffix IE. *-los* points to a *Dim. -ka*.

mukharikā, the bit of a bridle, KātyÇr. 16. 2. 5 (BR. wrongly 4) according to Sch. <*mukharī* (not otherwise found). The word

is in any case ultimately <*mukha* and is prob. *Dim.* <*mukharī*.

muhukā, moment, RV. 4. 16. 17; 4. 17. 12.

<*mūhu* (or *muhú*) adv. acc.

mūtakā, little basket, ÇBr. 2. 6. 2. 17. <*mūta*.

mūṣaka, rat or mouse, Gārud.Up. 2 }
-ikā, rat or mouse, VS. 24. 36. } <*mūṣa* (Class.).

rāsnākā, little girdle, Kāṭh. 25. 9. <*rāsnā*.

vajrasūcikā, "little sharp needle," n. of an Up., also called *vajrasūcī*. *Mukt.Up.* 1. 33. <*vajrasūcī*.

**vayāka* (in *vayākīn*), prob. "little tendrils," RV. 5. 44. 5. <*vayā*.

So Sāyana and Ludw.; somewhat dub.; epithet of the soma-plant.

valmīka, ant-hill, VS. 25. 8 &c. cf. *vamrá*, -ī, ant.

Doubtful. The -*ka* is prehistoric, but certainly suffixal, and probably dim.; cf. *formīca*, μύρμηξ. If *valmīka* meant originally "little ant," its semantics have wandered peculiarly.

vāmanaka, dwarf, Garbh.Up. 3. Dim. < *vāmaná*, dwarf.

vibhīdaka, the *vibhīda(ka)* nut used as a die. RV. 7. 86. 6; 10. 34. 1. < *vibhīda*.

Although the form *vibhīda(-ta)* does not occur until later, the -*ka* was clearly felt as dim.—Cf. *vibhītaka* Imprec. in § 79.

viṣāṇakā, n. of a plant, AV. 6. 44. 3.—Prob. "little horn," referring to horn-shaped leaves or flowers. Kāuṣ. even takes it as a real "little horn," not as a plant at all, and this may be right.—The other alternative is to regard the suffix as possessive (3 *ka*); *viṣāṇakā*, "horned." This is on the whole less likely, though possible. Cf. *ṣāphaka*. < *viṣāṇa*.

ṣāphaka, n. of a plant, AV. 4. 34. 5 &c. Comm. says "a hoof-shaped plant;" prob. therefore "little hoof" rather than "hoofed;" cf. *viṣāṇakā*, to which the same questions apply. < *ṣaphā*.

ṣalākā (once *āka*, Kāth. 26. 1), little stake or twig, TS. 6. 3. 1. 2 &c. < *ṣalā*; cf. 29 c.)

ṣālka, splinter, TBr. 1. 1. 9. 9 &c. Cf. § 29 b. prob. < *ṣalā*.

ṣaṣaka, (little) hare?, Adbh.B. in I. St. 1. 40.

< *ṣaṣā*; no very clear dim. force.

samūhaka, little sweeper, Āp.Çr. 17. 26. (NBD., "heap"). See *khanātaka*.—The word *samūha* only occurs as a n. of action, not as a noun of instrument; doubtless it must have been used in the other sense too, as this word shows,—for *samūhaka* clearly has that meaning. The whole sense of the passage suggests also diminutive value. Otherwise it would be possible to call *samūhaka* a noun from *sam* + *Vūh* with primary *aka*. < *samūha* (?).

sūcika, "little needle," epithet of a stinging insect, RV. 1. 191. 7. < *sūcī*.

I do not think any imprecatory or other pejorative force is present here.

63. b) *Diminutives of Size*—adjectives. (8 words.)

añīyaskā, more tiny, AV. 10. 8. 25. *bālād ékam añīyaskām*, "one is more tiny than a child." < *añīyas*, comparative.

arbhaká, tiny, RV. 1. 114. 7 &c. (see also § 72) < *ár̥bha*.
alpaká, tiny, AV. 20. 136. 3 (see Obsc., Dim., § 86); ÇBr. 1.
 7. 3. 25 &c. < *álpa*.

kañiṣṭhaká, smallest, AV. 1. 17. 2 } < *kañiṣṭhá* (or
(kañiṣṭhikā, little finger, ÇBr. 3. 1. 2. 4 &c.). } *kān-*) superlative.
kṣullaká, tiny, TS. 2. 3. 8. 3. But see § 68.

< **kṣulla* < *kṣudrá*, prakritized form.

daharaka, short, KāuṣBr. 19. 3. < *dahara*.

bālaka, young; a child, KṛṣUp. 19; MukUp. 2. 7. < *bāla*.

çiṣuká, young (animal), AV. 6. 14. 3. < *çiṣu*.

64. c) *Diminutives of Degree—adjectives of color*. (6 words.)

kālakā, „blackish,” n. of an unidentified bird. VS. 24. 35. < *kāla*.

kṛṣṇaka, prob. „blackish,” n. of a plant, Kāuṣ. 80. < *kṛṣṇā*.

piṅgalaká, *iká*, tawny(ish?), AV. 20. 136. 14.—But see § 60.

< *piṅgalá*.

babhruká, brownish, ÇBr. 1. 6. 3. 3; (*bá-*) an ichneumon VS.

24. 26. < *babhrá*.

lohitaka, reddish, red. Āp. (NBD.; no reference quoted.) < *lōhita*.

çyāvaka, „brownish,” n. of a man, RV. 8. 3. 12; 8. 4. 2.] < *çyāvā*.

Examples are more plentiful in Classical Skt.

65. d) *Diminutives of Degree—other adjectives (and adverbs)*.
 (3 words.)

abhimādyatká, somewhat drunk, ÇBr. 1. 6. 3. 4; 5. 5. 4. 5.

< *abhimādyant*, pres. p. *abhi-* *V* *mad*.

nīkhātaka, cut into a little, AV. 20. 132. 2—see *alābuka* § 62.

< *nīkhāta*.

çanakāis, adv., quite gently, softly, RV. 8. 80. 3 &c.

< *çanāis* (*çān-*).

The German word *sachtchen* exactly renders *çanakāis*.

66. e) *Diminutives of Importance* (without contempt). (4 words.)

upapātaka, a minor sin, NārUp. 5; KālāgUp. 2. < *pāta*, sin

pātaka is also found, but dim. force is hard to find in it;

it has rather the aspect of a nomen agentis. The prefix

upa- adds dim. force, and there is no doubt that in *upa-*

pātaka at least the suffix *-ka* suggested diminution to the

consciousness of the hearer.

ékaka, „just one (little, valueless),” AV. 20. 132. 1—see *alābuka*,

§ 62. < *éka*.

dēvikā, an inferior class of goddesses, ĀitBr. 3. 47, 48; ÇBr.

9. 5. 1. 34. < *devī*.

hótrka, assistant-priest, secondary Hotṛ, ÇBr. 13. 5. 4. 24 &c. < *hótr*.

II. Diminutives of Endearment. (7—8 words.)

67. The paucity of Vedic material under this head is partly due to the character of the literature, whose atmosphere is to a large extent unfavorable to "*Kosenamen*." But after taking this into consideration, it is surprising that the number should be so small. Following are the only cases which seem to me clear enough to warrant classifying them here.

ambikā, dear little mother, *Mütterchen*. VS. 23. 18 &c.

< *ambā* or *ambī*.

ambālikā, dear little mother, *Mütterchen*. VS. 23. 18, ÇBr. 12. 2. 8. 3 &c.

< *ambālā* or *-lī*.

ambe (MS. *amby*) *ambike ambālike* VS., ÇB., MS. *ambe ambāly ambike* TS. &c.; see Ved. Conc.

(The suffix *-lā* is also diminutive.)

ulūkhalaka, dear little mortar (*Mörserchen*, Gr.), RV. 1. 28. 5.

< *ulūkhalā*.

yác cid dhī tvām grhégrha ulūkhalaka yujyāse ihā dyumāt-tamanī vada jāyatām iva dundubhīh

"However thou mayst be used in every house, O dear mortar, yet sound most clearly here!"

jīvikā, in *jīvikā nāma stha tā imān jīwayata*, MS. 4. 8. 7, 115. 5; ĀçvÇr. 6. 9. 1; ĀpÇr. 14. 20. 8. Addressed to the waters, in a magic formula or charm; "ye are *jīvikās*,—do ye then make this man live (*jīv*)!" The same formula with *jīvā* in place of *jīvikā* occurs in the same places quoted and in others (see Ved. Conc.). Cf. also AV. 19. 69. 1 ff., especially 4. Verse 1 reads *jīvā stha jīvyāsam*—, "ye are alive (*jīvā*); may I live!" Vs. 4 reads *jīvalā stha jīvyāsam*—. Whitney renders *jīvalā* "lively." But note the diminutive suffix *-lā*, and cf. *jīvikā*. The occurrence of both these words with diminutive suffixes in practically the same connection shows that neither of them is accidental. They were both evidently felt as carrying the same quasi-endearing, coaxing idea which is found in *ulūkhalaka* and *maṅgalikā*. Although this meaning seems clear enough here, to render it in English is a different proposition, and one which I do not feel equal to attempting at present.

pādakā, little foot (*Füßchen*, Gr.), RV. 8. 33. 19.

< *pāda*.

saṁtarām pādakāu hara—"keep your little footies together," spoken in a playfully affectionate way.

putrakā, little sonny, RV. 8. 69. 8.

< *putrá*.

Dim. of size, with addition of some endearing force.

maṅgalikā, (adj.) of good omen, AV. 19. 23. 28.

< *mangalya* (see § 29 a).

The word clearly refers to the hymns of AV. 18, which are funeral hymns. Lanman is right in remarking (note to Whitney's translation) that it is a euphemism for this particularly ill-omened class of hymns. The suffix *ka* perhaps adds something to this euphemistic touch by giving it a turn akin to the endearing diminutive (cf. *ulūkhalaka* and *jīvikā*). It would be futile to try to bring this out in translation.

(*sūbhadrikā*), courtesan, VS. 23. 18.

< *sūbhadra*; cf. "*Freudenmädchen*."

This word may have been, and probably was, originally a playfully endearing dim., but in this passage, where alone it seems to be found, the suffix is rather imprecatory; see § 79.

III. Diminutive of Pity. (3 words.)

68. In the Veda this almost always carries with it the additional idea of contempt. It is almost doubtful whether the Veda knows the suffix *-ka* with the connotation of simple pity in a good sense at all. All the following instances are capable of being treated as terms of contempt.

unmantaka, insane, only Ācram.Up. 3. The exact formation of this word is uncertain, though its general etymology (*ud* + $\sqrt{\text{man}}$) is clear enough. No **manta* or **unmanta* occurs. If the *ka* is diminutive, as seems likely, it belongs under this head.

kṣullakā, tiny, cf. § 63, 72. This word, < **ksulla* = *kṣudrá*, regularly carries with it (at least in the Veda) the idea of weakness, as well as smallness. So QBr. 1. 8. 1. 3—*yávad vāi kṣullakā bhāvāmo bahvī vāi nas tāvan nāṣṭrá bhavati*,—"As long as we are poor (helpless) little shavers, we are in great danger." In this case we seem to have a true Dim. of Pity.—More often the word takes on contemptuous force; see § 72.

pradrāṇaka, very poor, Chā.Up. 1. 10. 1.

< *pra*, intens, + *drāṇa*, poor.

Probably pitying dim. No idea of contempt seems to be prominent.

IV. Diminutives of Inferiority with evil connotation, often called **Pejoratives**. (94 words.)

69. They arise from the above-mentioned diminutives of pity and inferiority (§§ 66, 68) and may be conveniently divided into three classes (§ 10); 1. Contemptuous—§ 70—76; 2. Imprecatory—§ 77—84; 3. Obscene—§ 85—86.

1. Contemptuous Diminutives. (29 words.)

70. In these the idea of smallness carries with it that of weakness or wretchedness and contempt. Applied to nouns, adjectives, participles, pronouns, and adverbs. Common from the earliest times. As has been said, this category is often difficult, of not impossible, to separate from the imprecatory diminutive, with which it is closely connected. In many of the words quoted under each head something of the other idea is also present.

Following are the words which show more or less clearly a contemptuous use of *ka*, arranged according to the parts of speech.

71. a) Nouns.

āhallika, "prattler"? BrhĀrUp. 3. 9. 25. A term of reproach whose mg. and etymology are not certain, but prob. containing some pejorative notion.

usrikā, miserable bullock, RV. 1. 190. 5 (see § 29 a, N.). < *usrā*.

yē tvā devosrikām mānyamānāḥ pāpā bhadram &c. "The evil ones¹ who reckon thee, O God! (Bṛhaspati) as a wretched bullock," &c.

kumārakā, RV. 8. 30. 1—see § 72 s. v. *arbhakā*.

kumārikā,¹ (despised) little girl, AV. 10. 4. 14; 20. 136. 14.

< *kumārā*.

AV. 10. 4. 14—*kāirātikā kumārikā sakā khanati bheṣajām*—"Even the wretched little *kirāta*-girl, even she—a worthless creature (*sakā*)—digs up a remedy (which is sufficient to destroy the serpents)." In a charm against snakes. The idea is that a worthless person of very little power or influence can destroy the hostile serpents. The *kirātas* were a despised mountain tribe. See § 72 s. v. *kāirātikā*.

This verbal minimizing of the power of adversaries is a common characteristic of all magic, and we shall have occasion to note it more than once in dealing with our suffix, which is peculiarly adapted to this purpose. Cf. RV. 1. 191. 11—16, and see s. v. *kuṣumbhakā*, *ṣakuntikā*.

¹ Either accent.

For AV. 20. 136. 14, where *kumārikā* also occurs, see § 72 s. v. *piṅgalakā*.

kuṣumbhakā, venom-bag of an insect, RV. 1. 191. 15, 16.

< *kuṣumbha*, id.

vs. 15—*iyattakāḥ kuṣumbhakās takām bhinadmi ācmanā tāto viṣām prā vāvṛte pārācīr ānu samvātaḥ*.

16—*kuṣumbhakās tād abravīd girēḥ pravartamānakāḥ vṛcīkasyārasām viṣām arasām vṛcīka te viṣām*.

15. "A wretched, feeble thing is that miserable little poison-bag! I smite it with a stone; then the poison has departed into remote places."

16. "Thus spake the accursed little poison-bag, slinking down from the mountain: 'The poison of the accursed stinger is powerless.' Thy poison, accursed little stinger, is powerless."

The power of the poison is belittled; the speaker declares with all possible vehemence that he despises it, and that it cannot do him any harm. See s. v. *kumārikā* and *çakuntikā*. Of course imprecatory, as well as contemptuous, force pervades the *ka* suffixes which bristle in this passage; I have tried to bring out both ideas in the translation.

The word *kuṣumbhakā* is often translated "venomous insect," as if it contained the suffix 3 *ka* and meant "possessing a *kuṣumbha*." It seems clear, however, that it has just the same meaning as *kuṣumbha* (e. g. AV. 2. 32. 6), plus a pejorative value. Our modern preconceived ideas, based on modern prejudices, of what such stanzas ought to say in order to give "good sense," are of practically no weight whatever with verses of this kind, which may even be intentional nonsense. The meaning "poison-bag," incidentally, fits in vs. 15, at least, quite as well as the other meaning. And as for vs. 16, we can only say that the poet speaks of the poison-bag as crawling down from the mountain, and there is an end of it. If anyone demands that logical sense be extracted from this abracadabra, I respectfully request that he identify the mountain (*girī*) alluded to, and explain why the *kuṣumbhakā* (whatever its meaning) should be crawling down from it.—A parallel stanza to vs. 16 is AV. 5. 13. 9; see § 73 s. v. *avacarantikā*.

vṛcīka, "stinger," scorpion, from *Vraçc*. The *ka* may be in origin primary and not diminutive; but that it is *felt* as

diminutive in this passage is evident. The imprecatory force of the suffix is strong in this word,—stronger than the contemptuous, perhaps.

dévaka, (wretched, worthless) god, RV. 7. 18. 20. < *devá*.

dévakan cin mānyamānām jaghanta.

“The wretched fellow who thought himself a godling, forsooth! (*cid*) him didst thou (Indra) slay.”

dhanuṣka, small, poor bow, Lāṭy 8. 6. 8. < *dhānus*.

pāṇḍaka, eunuch, weakling, Kāth. 28. 8; 13. 7. < *pāṇḍa*, id.

nāpuṇsaka, eunuch, hermaphrodite, QBr. 5. 5. 4. 35 &c.

< *na-puṇsa*.

pūlkaka or *pūklaka*, n. of a despised tribe. MS. 1. 6. 11. < ?

In Classical Skt. they are called *pulkasa*; the dim. suffix *-ka* is prob. present in the word.

rājakā, worthless kinglet, RV. 8. 21. 18. < *rājan*.

citra id rājā rājakā id anyaké yaké sūrasvatīm ānu &c.

“Citra is a *real* king; worthless kinglets truly are the other wretches (*anyaké*) who (*yaké*) live about the Sarasvatī” &c.

viśadhānaka—see under § 79.

viṣpuliṅgakā, (miserable) little spark?, RV. 1. 191. 12.

< *viṣp(h)ulinga*.

trīḥ sapta viṣpuliṅgakā viśasya pūṣyam akṣan. The exact meaning of the word is not entirely clear, but it must be a contemptuous formation < *viṣphuliṅga*, like *çakuntikā* (q. v.) in the preceding verse, and with a similar application, viz. used in minimizing verbally the power of the poison. See also *kuṣumbhakā*, and cf. *kumārikā*. The *viṣpuliṅgakāḥ* must be some weak and worthless creatures, at all events.

vṛççika, scorpion, RV. 1. 191. 16 &c. &c. See on *kuṣumbhakā*, and, also § 79.

çakuntakā, ikā, (wretched, accursed) little bird. < *çakūnta*.

RV. 1. 191. 11 *iyattikā çakuntikā sakā jaghāsa te viṣām sō cin nū nā marāti nō vayām marāmārē asya yōjanam harīṣṭhā mādhu tvā madhulā cakāra*.

“A miserable little creature is that little bird!—*she* has swallowed thy poison; yet she shall not die; we too shall not die! Far off is thy course; the sun-god has turned thee into honeyed honey.”

Another case where the power of a hostile object (poison) is belittled in words, the idea being that the very words by their magical power accomplish the things stated to be al-

ready accomplished. "Even a wretched little bird has eaten the poison without injury; what harm can it do us?"

AV. Ppp. folio 115 b, line 1—*çakuntikā dhayantikā*, see § 73.

VS. 23. 22, 23 and parallel passages, contain this word. They occur in the obscene parts of the Aṣvamedha ceremony; the use of the suffix belongs to the Dim. of Obscenity, and will be mentioned there—see § 85.

çalākakā, wretched little splinter, AV. 20. 130. 20. < *çalākā*.

See s. v. *yakā*, § 75.

72. b) Adjectives.

arbhakā, small, weak, wretched, RV. 7. 33. 6 (see also § 63).
< *ārbha*.

daṇḍā ivéd goḥjanāsa āsan pārīchinnā bharatā arbhakāsaḥ.

"Like ox-driving staves, the miserable Bharatas were crushed to pieces."

RV. 8. 30. 1—*nahī vo āsty arbhakó dēvāso nā kumārakāḥ*—

"Not one of you is a little wretch, o gods! nor a weak boy!"

AV. 1. 27. 3, in a charm against serpents, *nārbhakā abhī dadhr̥ṣuḥ* (cf. *kuṣumbhakā*, § 71, and comment.).—Similarly AV. 7. 56. 6,

ābhūka, powerless, weak, AV. 6. 29. 3.

< *ābhū*, which means simply "empty."

kāirātakā, ikā, of the *kirātas* (contemptuous), AV. 10. 4. 14.

< *kāirāta*, id.

See *kumārikā*, § 71.—They were a despised tribe. This word is a contemptuous formation from the adjective *kāirāta*. *kṣullakā*, tiny and wretched. See § 68, 63. < *kṣudrā* (**kṣulla*).

AV. 2. 32. 5 shows the word in a clearly contemptuous sense (with some imprecatory force added):

ātho yé kṣullakā iva sārve te krīmayo hatāḥ = "The tiny little wretches—all the worms are slain." In a vermin-charm.

piṅgalikā, tawny, AV. 20. 136. 14. < *piṅgalā*.

kumārikā piṅgalikā, "the wretched little yellow-girl."

This color-adjective may or may not partake of the force of the Dim. of degree otherwise common with such adjectives. See §§ 60, 64.

bhinṇaka, broken and worthless, MantraBr. 2. 7. 3. < *bhinṇā*.

athāi 'śām bhinnakāḥ kumbho ya eṣām viśadhānakāḥ.

"So their bag is crushed and powerless,—their cursed poison-receptacle." In a charm against poisonous insects.

In the word *viṣadhānaka* the idea of imprecation seems to outweigh that of contempt.

73. c) *Participles.*

ava'arantikā, slinking down, AV. 5. 13. 9. < *avacarantī*.

karnā gṛvāvīt tād abravīd girér avacarantikā

yāḥ kāṣcemāḥ khanitrīmās tāsām arasátamam viṣām.

"The eared hedge-hog said, as she slunk down from the mountain," &c.—The whole stanza is suggestive of RV. 1. 191. 16, and pada b is pada b of the RV. verse with the substitution of *avacarantikā* for *pravartamānakāḥ*, q. v. The sense of the *kā* is doubtless contemptuous. This stanza has less appearance of freshness and originality than the RV. stanza; it looks like a secondary and epigonal reminiscence of the latter. See § 71 s. v. *kuṣumbhakā*.

pravartamānakā, slinking down, RV. 1. 191. 16. < *pravartamāna*.

See *kuṣumbhakā*, § 71, and cf. *avacarantikā* above.

dhayantikā, sucking, AV. Ppp. folio 115 b, line 1. < *dhayantī*.

ṣakuntikā (MS. -ka) *me 'bravīd viṣapūṣpam dhayantikā*.

(For MS. *viṣapūṣpam* probably -*pūṣyam* is to be read; cf. RV. 1. 191. 12, and see § 71 s. v. *viṣpuliṅgakā*.)

"A miserable little bird said to me, as she sucked up the essence of the poison;—" (The following words in the MS. are not entirely clear to me; they are probably corrupt, and are in any case unimportant for the present purpose.) That the suffix *ka* here has contemptuous force is made clear by a comparison of RV. 1. 191. 11—16, of which this verse is a reminiscence. See *ṣakuntikā* in § 71, also *kuṣumbhakā*.

74. d) *Pronominal adjectives.*

anyakā, other (contemptuous), RV. 6. 21. 18.—See *rājakā*, § 71.

< *ānya*.

See also § 82, Imprecatory Diminutives.

iyattakā, *ikā*, so tiny and wretched, RV. 1. 191. 11, 15.

< *iyat*- "of such a size."

See *ṣakuntikā*, *kuṣumbhakā*, § 71.—In AV. 20. 130. 20 the MSS. have *uyām yakām ṣalókakā*, for which R.-Wh. read *iyattikā ṣalā*—; but the correct reading is probably *iyām yakā ṣalākakā*, as shown by RV.Kh. 5. 15. 10.

75. e) *Pronouns.*

sakā, *sakā*, *takād* &c., that (wretched or miserable little).

< *sa*, *sā*, *tad*.

RV. 1. 191. 11, see *ṣakuntikā* § 71.

AV. 10. 4. 14—see *kumārikā* § 71.

RV. 1. 191. 15—see *kuṣumbhakā* § 71.

Kāty. Cr. 13. 3. 21 *takā vāyam plavāmahe*. Parallel texts read *ime* or *etā* for *takā*. There is no apparent reason for the dim. or pejorative suffix. The verse is difficult and uncertain; see Garbe on Vāit. S. 34. 9.

RV. 1. 133. 4 *yāsām tistrāḥ pañcāçāto 'bhivlaṅgāir apāvapaḥ tāt sū te manāyati takāt sū te manāyati*

(Addressed to Indra.) "Of them (witches) thrice fifty didst thou lay low with blows (? *abhivlaṅgāir*); that deed of thine (*te* gen.) is highly praised,—yea, even that slight task of thine!" He means that this great performance (which is itself worthy of laudation) was nothing to what the power of Indra could do,—not that the performance was in itself slight. Grassmann's translation misses the point.

yakā, which (miserable person).

< *ya*.

RV. 6. 21. 8—see *rājakā*, § 71.

AV. 20. 130. 20 = RVKh. 3. 15. 10 *iyām yakā çalākakā* (see on *iyattakā* § 74) "that wretched little splinter."

Whether an obscene meaning is hidden in the phrase (which is quite likely) or not, the contemptuous idea is plain. See further § 85, Dim. of Obscenity.

76. f) *Adverb*.

ālakam, in vain (contemptuous and imprecatory) < *ālam*.

RV. 10. 71. 6; 10. 108. 7.—Applied to actions which fail, and which are not desired to succeed. In 10. 108. 7 the Paṇis tell Saramā contemptuously that her long journey has been useless (*ālakam*), since she has no power to get the desired cows away from them.

(IV. Pejoratives:) 2. **Imprecatory Diminutives.** (59 words.)

77. These are sometimes called simply Pejoratives, in a narrower sense. But this expression, if used at all, is better applied to this entire category, including the contemptuous and obscene words. I have applied the term *imprecatory* to this subdivision, because these words in *ka* often have just the value of the primitive words accompanied by a curse. This cannot be brought out in translation oftentimes, without over-translating the idea. And of course it cannot be prest too closely in the case of every individual word. Sometimes the idea is more deprecatory than imprecatory. But it always conveys the

impression of something bad,—something that is more or less emphatically disapproved of. And it differs from the foregoing subdivision in that the idea of contempt, if present at all, is at least not prominent, or not as prominent as the idea of hostility or vigorous disapprobation. As we have said, it is sometimes hard to say in given cases whether imprecation or contempt is more strongly felt. Proper names are peculiarly susceptible to the imprecatory *ka*, which casts a slur of some sort or other on the personage so denominated. It is especially common with names of hostile demons.—Besides the other parts of speech represented in the contemptuous *ka* words, we find here one remarkable verb-form containing the suffix. Following are the words which occur.

78. a) *Proper names.*

anantaka, n. of Āṣa, a snake-god, Gāruḍ. Up. 2; see *elāpatraka*.

He was regularly called *ananta*.

elāpatraka, n. of a Nāga or serpent-demon, Gāruḍ. Up. 2.

< *elāpatra*, id.

(*mahāilāpatraka* [*mahā-el-*] is another Nāga in the same section.) *elāpatra* is the name of a Nāga, found in the Classical Skt.—This chapter is a charm against serpents, personified as demons. A number of them are listed and exorcized by name. Names in *-ka* predominate (only one out of the 12 names lacks the suffix), and in many cases (as in this one) the same names appear elsewhere without *ka*. It is plain that an imprecatory force is felt in the suffix with all of them.

karkoṭaka, n. of a Nāga, Gāruḍ. Up. 2. See *elāpatraka*.

< *karkoṭa*, id.

kālīka, n. of a Nāga, Gāruḍ. Up. 2. See *elāpatraka*. No **kāli* occurs.

kulīka, n. of a Nāga, Gāruḍ. Up. 2. See *elāpatraka*. No **kuli* occurs.

chāyaka, n. of a demon, AV. 8. 6. 21; prob. imprec.

< *chāyā* (only occurs as common n.)

jāmbhaka, “crusher”, n. of a demon, VS. 30. 16.

< *jāmbhā* n. of a demon, AV.

takṣakā, n. of a Nāga, Gāruḍ. Up. 2, AV. 8. 10. 29, &c.

< *takṣa*, id. (Kāuṣ.)

tāuvilikā, n. of a female demon, AV. 6. 16. 3. Derivation unknown; prob. imprec. *-kā*.

padmaka, n. of a Nāga, Gāruḍ. Up. 2. See *elāpatraka*.

(and *mahāpadmaka*—same section.)

< *padma*, id.

palījaka, n. of a demon attacking women, AV. 8. 6. 2. The proposed etymologies are all merest guesswork; but the *ka* is probably imprecatory.

vāsuki, n. of a serpent-king, Gāruḍ. Up. 2; brother of Āṣa, who is referred to in the section as *anantaka*. *Vāsuki*, by its ending *i* and Vriddhi, suggests a patronymic formation < *vasuka*; but still the *-ki* may have been felt as imprecatory, in the connection where this passage occurs.

ṣaṅkhapulika, n. of a Nāga, Gāruḍ. Up. 2. See *elāpatraka*.

No **ṣaṅkhapuli* occurs.

ṣerabhaka (voc.), n. of a *kimīdīn* or hostile demon, AV. 2. 24. 1.

< *ṣerabha*,

which is joined with it in the same stanza. The opening of the exorcism is *ṣerabhaka ṣerabha!* (vocatives). Some sort of a serpent or dragon is doubtless referred to. The suffix *-bha* indicates that it is some animal; and the radical part of the word is probably connected with *ṣīra*—serpent (Pañc.). In any case the suffix, in this word as in *ṣevṛdhaka*, is plainly imprecatory.

ṣevṛdhaka, n. of a *kimīdīn*, AV. 2. 24. 2.

< *ṣevṛdha*.

Occurs in the stanza following the one which contains *ṣerabhaka*; this stanza opens in the same way with a corresponding address—*ṣevṛdhaka ṣevṛdha!*—The words are puzzling in this connection, because *ṣevṛdha* is otherwise an adjective of good signification, meaning “favoring, kindly.” It seems likely that the vague assonance of the words with *ṣerabha(ka)* suggested their use in this place; although it would be rather bold to suppose that the charm-maker forgot, or did not know, the regular meaning of *ṣevṛdha* (which was, nevertheless, a rare word). In any case the *ka* is imprecatory.

79. b) *Nouns* (not Proper Names).

armakā, heap of ruins, RV. 1. 133. 3.

< *árma*, id.

āvāsām maghavañ jahi ṣárdho yātūmátīnām vāilasthānaké armaké mahāvāilasthe armaké. On account of the fact that *árma* is only found as a noun, and that the *ka* is plainly pejorative, I prefer to regard *armakā* (as well as *vāilasthānakā* q. v.) as a noun (*árma* + imprecatory idea), rather than as an adjective, which some commentators prefer. Translate:

"Smite down, O Maghavan, the crowd of these witches into the fearful pit, the heap of ruins;—even into the great pit, the heap of ruins." It is indeed somewhat awkward to construe these four successive words as nouns in apposition to one another. But the pejorative notion seems so marked in the verse that I am unable to believe that *ka* is the mere adjective-forming suffix.

açvaká, accursed horse, VS. 23. 18 (repeated TS. 7. 4. 19. 1, 2 &c.).

< *áçva*.

In part of the Açvamedhá-ceremony. The Mahiṣī speaks: *sásasty açvakāḥ súbhadrikām kāmpīlavāsínīm*.—"If I do not perform the revolting ceremony required of me) this damned horse will sleep with (impregnate) the accursed whore (*súbhadrikā*) who lives in Kāmpīla." She does not want to do what she is compelled to do, but knows that if she does not, the benefits she desires from the horse will go to other women. The imprecatory idea is beautifully clear. Not "little" or "contemptible" horse (which would certainly not be said of the sacrificial beast at this solemn occasion), but "this horse, confound it!"—The *súbhadrikā* (q. v.) is supposed to personate vaguely any hostile or rival woman.

ūlūka (once *urūka*, Āit Br. 2. 7. 10), owl, RV. 10. 165. 4 &c.

Onomatopoetic base + *ka*; the owl was a bird of evil omen from the earliest times. Lat. *ulucus* as well as *ulula* point to a prehistoric pejorative.

āḍaká, ÇBr. 12. 4. 1. 4. Eggeling "a vicious ram," < *eḍa*.

on the ground of the suffix, the associations in the passage, and a similar meaning which the word has in Marathī. Otherwise *āḍaka* only occurs as an adj. < *eḍa*, with 2 *ka*, meaning "of the sheep *eḍa*." I think E. is right in his interpretation; ill-omened animals are dealt with in the passage. But as *āḍa* does not occur as a noun, and as the vriddhi-vowel is therefore inexplicable, I should emend to *eḍaka*.

kanákna, a sort of poison, AV. 10. 4. 22. Etymology unknown. Very possibly contains imprecatory *ka*.

kāsikā, cough (as a disease), AV. 5. 22. 12; 11. 2. 22.

< *kās* or *kāsá*.

In 5. 22. 12 *kāsikā* follows directly upon *kās* and *kāsá* in preceding verses, and the suffix is undoubtedly felt as imprecatory (or pejorative).

kuhaka, rogue, cheat, Māitr. Up. 7. 8. < *kuha*, id.
kuṣumbhakā, poison-bag, RV. 1. 191. 15, 16. See § 71.
 < *kuṣumbha*.

The word may contain imprecatory as well as contemptuous force.

jyākā, accursed bowstring, RV. 10. 133. 1 ff. (repeated as refrain). < *jyā*.

nābhantām anyakēṣāṁ jyākā údhi dhānvasu. "Let the damned bowstrings of the others, the scoundrels (our enemies), be smashed upon their bows!" Strongly imprecatory, tho a contemptuously belittling idea is also present to some extent.

In AV. 1. 2. 2 *jyākā* may be used for *jyā* for metrical reasons. Certainly no reason for a dim. use of any sort is discernible.

tīlvaka, a certain plant, Ç. Br. 13. 8. 1. 16; Āçv. &c. < *tilva*, id. only Lexx.; but cf. *tīlvila* (RV.), "fertile."—In the Ç. Br. passage it is found in a list of ill-omened trees, and the *ka* was probably felt as pejorative, whether it was so originally or not.

dūṣīkā, impurity from the eyes, VS. 25. 9 &c. < *dūṣī*, id. (*dūṣīkā*, Māitr. Up. 1. 3.)

Perhaps originally pejorative, though this force is not prominent in any of the passages where it occurs.

bāddhaka, captive, AV. 6. 121. 3. 4. < *baddhā*, id.

Used of one bound by sin or by hostile magic. Contains some sort of pejorative notion.

mākaka, a kind of evil demon, AV. 8. 6. 12. Perhaps cf. *makara*, a sea-monster. The suffix is doubtless imprecatory.

manaskā, accursed mind, AV. 6. 18. 3. < *mānas*.

adō yāt te hṛdī çritām manaskām patayiṣṇukām tātās te īrṣyām muñcāmi nīr uṣmānam nīter iva. In a charm against jealousy.—"That accursed restless mind that is located in thy heart,—from it do I let loose thy jealousy, as vapor from a skin." A brilliant example of the strongly imprecatory *ka*. A translation as a simple dim., "little mind" or the like, misses the point entirely; nor is the word contemptuous. It connotes strong disapproval. *tātās* = *mānasas* (*manaskāt te*.)

rūpakā, AV. 11. 9. 15, evil phantom. < *rūpā*, shade, shape.

Appears in a group of hostile spirits invoked to torment enemies. Although none of the commentators appear to have

struck this note, it seems to me clear that we have a pejorative (imprecatory) formation to *rūpá*, which has the meaning "specter" in VS. 2. 30, and "visionary appearance" in Ç. Br. 14. 7. 1. 14. The fem. gender is due to the influence of the other names of demons in the *çloka*, all of which chance to be fem. The translation "female jackal" has no basis except the fanciful identification with Av. *urupi*, which is Lt. *vulpes* and should not be connected with *rūpakā*.

vibhītaka, a certain tree, Ç. Br. 13. 8. 1. 16, among a list of trees declared to have evil names. The same word is also used of the nuts of this tree used as dice, and is in that case a simple dim. (see § 62). < *vibhīta*, id.

viṣadhānaka, cursed poison-receptacle, Mantra Br. 2. 7. 3.

< *viṣadhāna*.

The same pada in AV. 2. 32. 6 reads *viṣadhāna*.—See *bhinnaka* § 72, where the passage is given and translated.—I have hesitated long before separating the words *bhinnaka* and *viṣadhānaka*, which occur in the same line,—classifying one as contemp. and the other as imprec.; but the predominance of ideas in either case seems to demand it. Both notions are present in both words, to a certain extent.

viṣātakī, n. or epithet of a poisonous plant, AV. 7. 113. 2.

trṣṣāsi trṣṣikā (-asi Ppp.) *viṣā viṣātakyaṣi pāriverktā yāthāsasy ṛṣabhāsya vaçéva*. "Rough one, thou art an accursed rough one; *viṣā*, thou art *viṣātakī*; that thou mayst be avoided (be a *pāriverktā* wife), as a barren cow (?*vaçā*) of a bull." *Pāriverktā* is a terminus technicus for a disliked and neglected wife; TS. 1. 8. 9. 1 &c.

The imprecatory character of the word *viṣātakī* is fairly clear, but otherwise it is problematic.—*viṣā* occurs as the name of a plant in Suçr., and is probably here used as such, with intention to pun on *viṣā*, poison.—*viṣātakī* is either 1) the name of a poisonous plant, containing or punned upon as if containing the stem *viṣā*, or 2) an epithet of such a plant, or an epithet applied to the woman against whom the charm is directed, or loosely to both, and containing the base *viṣā* or *viṣā* extended by an element of uncertain value plus the imprecatory suffix *kī* (fem. of *ka*). Can the meter have anything to do with the extra syllable -*ta*? The Ppp. reading gives perfect meter to the whole

line; but it must be admitted that the additional *-asi* inserted in Ppp. has the appearance of a later attempt to improve the meter, which as a matter of fact far from improves the sense.

A striking parallel to *viṣā*: *viṣātakī* is the Classical Skt. equation *bhaṇḍitakī* = *bhaṇḍī*, also n. of a plant. No **bhaṇḍita* occurs, any more than **viṣāta*. As to the nature of the suffixal element or elements, I cannot pretend to have any opinion further than that the *-kī* is imprecatory.

viṣūcikā, a disease, a form of cholera, VS. 19, 10; TBr. 2. 6. 1. 5.

< and = *viṣūcī*.

visālpaka (Wh.) or *visālyaka* (MSS.), a certain disease, AV.

< and = *visalpā(-lyā)*.

E. g. AV. 9. 8. 5 (*visalpā* or *-yā* occurring in the same hymn.) The suffix is doubtless imprecatory.—Wh., emending to *visālpaka*, derives from *vi*—*√srp*. In support of this it may be noted that Suçr. uses *visarpaka* of “a spreading eruption,” like erysipelas; and that the root *vi*—*srp* is found in VS. with the meaning “to be spread or diffused over.”

vīṣṇika, scorpion, RV. 1. 191. 16 &c. See § 71 s. v. *kuṣumbhakā*.

The word may be a primary derivative; if its suffix is dim. at all, it is probably rather imprecatory than contemptuous.

vāilasthānakā, a horrible pit, RV. 1. 133. 3. See *armakā*.

< *vāilasthānā*.

Some commentators consider this word an adj., for which there seems to me still less ground than for holding *armakā*, q. v., to be one.

ṣipavitnukā, a kind of vermin, AV. 5. 23. 7. Probably imprecatory; cf. *ejatkā* (§ 81) in same verse. Derivation unknown.

sarabhaka, a kind of grain-devouring insect, Adbh. Br. (in I. St.)

1. 40. 5, 6. Probably imprec. < *sarabha* (with the animal suffix *-bha*). The word *sarabha* is only found as the name of a monkey (Rāmaṭup. Up.).

sūbhadrīkā, courtesan, VS. 23. 18. Cf. “Freudenmädchen.”

< *sūbhadrā*.

See s. v. *açvakā*; see also § 67. The suffix in this passage is plainly imprecatory (perhaps also contemptuous), tho it may have been originally endearing. The Mahiṣī uses this epithet as an invective against a (not necessarily definite) hostile or rival woman, whom she fears the horse will favor if she does not perform her disgusting share in the rite.

sphūrjaka, n. of a plant, said to be ill-omened, Ç. Br. 13. 8. 1.

16. *sphūrja*, id., only Lexx. Prob. an imprecatory formation.

80. c) *Adjectives*.

ūnaka, defective, lacking. Çāṅkh Çr. 7. 27. 27. < *ūná*, id.

kātuka, sharp, bad, RV. 10. 85. 34 = AV. 14. 1. 29.

< *kaṭu*, id.

krtaka, artificial, unreal, false, Gāuḍap. 3. 22. < *krtá*, made.

khārvikā, mutilated, AV. 11. 9. 16. Imprec. < *kharvá*, id.

khārvikām kharvavāsīnīm, of a female demon.

trṣṭikā, rough (imprec.) AV. 7. 113. 1, 2—see s. v. *viṣātakī*

§ 79.

< *trṣṭā*.

dūrakā, far off RV. passim; AV. 10. 4. 9. < *dūrā*, id.

Seems to be generally used in imprecatory sense; either

1) applied to dangers and enemies, which are desired to be "at a distance," implying an imprecation (as RV. 9. 67. 21; 9. 78. 5; AV. 10. 4. 9 of hostile serpents); or 2) if used of other things, usually with a deprecatory idea, as RV. 10. 58. 1—"Thy spirit which hath departed to a distance (as it should not have done), to Yama son of Vivasvant, that we make to return hither"—*yāt te . . . máno jágāme dūrakām* (of the soul of a dying man).

nāgnaka, *ikā*, naked, AV. 8. 6. 21—applied to demons.

< *nagná*.

Also used of wanton women. Imprecatory.

nirmitaka, conjured up, illusory, Gāuḍap 4. 70. < *nirmita*.

"Fixed, arranged," ppp. of *nis*—*Vmi*.—Of the illusious and tricks performed by magicians.

patayiṣṇukā, fluttering, unstable (imprec.) AV. 6. 18. 3.

See *manaskā* § 79.

< *patayiṣṇú*.

pāpaka, bad, evil. Ç. Br. 13. 5. 4. 3 &c. < *pāpá* (either acc.).

praticikā, AV. 19. 20. 4—of uncertain mg.; probably imprec.

< *praticī*, fem. of *pratyāñc*. Perhaps a noun—"offense"?

sanakā, old (imprec.) RV. 1. 33. 4 &c.; in this passage at least strongly imprecatory.

< *sána*, cf. *senex*.

dhānor údhi viṣuṇák té vyāyann úyajvānaḥ sanakāḥ prētim īyuh

"From the dhanu they fled away pellmell (*viṣuṇák*—in all directions), the old rascals who give no offering."¹

¹ Whether the *k* of *viṣuṇák* is also felt as having some sort of pejorative force is doubtful. The adverbs in *-k* (see § 27) do not otherwise show any signs of such value.

81. d) *Participles.*

ejatká, (subst.) kind of hostile insect, AV. 5. 23. 7.

< *ejant*, trembling.

Prob. imprec.; cf. *çipavitnuká* (§ 79) in same verse.

jyotāyamānaká, AV. 4. 37. 10 (edd.; MSS. -*maka*).

< *jyotāya-māna* pr. p. med.

epithet of demons; imprecatory dim.; “damned little twinklers.”

82. e) *Pronominal adjectives.*

anyaká, other (imprec.).

< *anya*.

RV. 10. 133. 1—see *jyāká*, § 79.

RV. 8. 39. 1 fin.—*nābhantām anyaké samé* (of enemies):

“Let the others, curse them! be crushed, all together!” See also § 74, contemptuous dim.

sarvaká, all (imprec.), AV. 1. 3. 6—9.

< *sārva*.

evā te mūtram mucyatām bahír bāl iti sarvakām

“So let thy urine be released, out of thee, splash! the whole horrid mess.”—In a charm against strangury and retention of feces.

83. f) *Adverb.*

ārakāt, from a distance, Ç. Br. 3. 2. 1. 19 &c.

< *ārāt*.

In the passage named there seems to be at least a deprecatory force discernible; it is said of a woman: “she hath disdained me from a distance (*ārakāt*),” i. e. rejected my advances with haughty scorn.

84. g) *Verb form.*

yāmakī, Çāṅkh Br. 27. 1, “I go basely, disgracefully”.

< *yāmi* “I go”.

no tv evānyatra yāmakī puñccalyā ayanam me astīti.

“Nor will I basely go over to another (meter than the *anuṣṭubh*; otherwise one would say) I am like a common prostitute.”

Brilliantly explained by Aufrecht—Z. d. d. mgl. Ges. 34 p. 175—6, and since then almost universally accepted.¹—Some Hindu grammarians prescribe the use of the suffix with any finite verb form, and especially with the imperative.—I cannot here go into the very interesting, but more than problematic, questions raised by Aufrecht as to further parallels for this use of the suffix with verbs.

¹ Boehtlingk accepted it at first, but later in the Abh. d. kgl. sächs. Ges. d. Wiss. (23 apr. 1897) attacked it—without sufficient reason, in my opinion.

(IV. Pejoratives:) 3. **Obscene Diminutives.** 13 words.

85. These belong to a certain style of popular humorous composition which crops out in one or two places in the Veda. They are related by their erotic character to the affectionate diminutives on the one hand, and by their debased vulgarity to the pejoratives on the other. Some of the examples also show a sort of playfully contemptuous force. Many of the passages are so filthy that they are scarcely translatable; and indeed most commentators either omit their translation or delicately veil them under decent Latin disguises. The use of a diminutive suffix with such words and in such passages is common to all languages, and easily comprehensible. Adjectives and pronouns take the same suffix by attraction, being colored by the nouns they are connected with (cf. § 60).

The passages of this nature found in the Veda are few but striking. Following are the words which occur.

86. Word list of Diminutives of Obscenity.

alpikā, ikā, tiny, RVKh. 5. 22. 3 = (except pada *d*) AV. 20. 136. 3. < *ālpa*.

yād alpikā svalpikā karkandhukēva pácyate
vāsantikam iva téjanam yābhyūmānā ví namyate.

An obscene verse; the adjectives *alpikā* and *svalpikā* go not with *karkandhukā* (q. v. § 62), but with the understood subject of the verbs (viz. the female organ).

asakāú, that (obs.), VS. 23. 22, 23 (the verses also repeated with minor variants in other texts, see Vedic Concordance). < *asāú*.

VS. 23. 22—*yakāsakāú çakuntikāhālag iti vāñcati āhanti gabhé páso nigalgalīti dhārakā*.

23—*yakó' sakāú çakuntakā āhālag iti vāñcati vívakṣata iva te mūkham ādhvaryo mā nas tvām abhībhāṣathāh*.

Translation of 22—"That little birdie (obs.) which bustles about with the sound *āhālag*—thrusts the phallus into the cleft; the female organ (see *dhārakā*) oozes (or, trembles)."

The verses are both filthy and not entirely clear in syntax. The Adhvaryu addresses the verse just translated to the women, at a certain stage of the Aṅvamedha ceremony.

The women reply with vs. 23, which is equally ribald and still more confused as to sense; it evidently includes a scoff at the Adhvaryu.

These verses are repeated, in whole or in part, and with minor variants, TS. 7. 4. 19. 3 (*dhāṇikā* for *dhārakā*); MS. 3. 13. 1; Ç. Br. 13. 2. 9. 6; 13. 5. 2. 4 &c. (see Vedic Concordance).

kārṇaka, AV. 20. 133. 3, an obscene slangy expression applied to the position of the two legs spread apart. < *kārṇa*.

dhāṇikā—the female pudendum—TS. 7. 4. 19. 3 (see *asakāū*, end), AV. 20. 136. 10, for *dhāṇikā*—RVKh. 5. 22. 8; cf. further *dhāna*. < *dhāna* "receptacle."

maṇḍūra-dhāṇikī (voc.), RV. 10. 155. 4, supposed to be a Bahuvrīhi cpd. meaning "having an impure pudendum."

dhārakā, the female pudendum (slangy-humorous).

< *dhāra* "holder."

VS. 23. 22 (see *asakāū*); Ç. Br. 11. 6. 2. 10.

maṇḍurikā (voc.), AV. 20. 131. 13, emendation of R-Wh. for *maṇḍūriti*, "vile woman" (?), cf. *maṇḍūra-dhāṇikī* s. v. *dhāṇikā*.
muškā, testicle, RV. 10. 38. 5 &c; du. female organ—AV. 6. 138. 4 &c. Obscene-slangy expression. < *mūś*, mouse.

yakā, which (obs.), VS. 23. 22, 23 &c.—see *asakāū* < *yā*.

See also § 75.

çakuntakā, *ikā*, birdie (obs.), VS. 23. 22, 23—see *asakāū*.

See also § 71.

< *çakūnta*.

çlakṣṇikā, slippery, AV. 20. 133. 5.

< *çlakṣṇā*.

Of the sexual organs in coition; obscene slangy expression.

sulābhikā (voc.), easily won, RV. 10. 86. 7.

< *su-Vlābh* cf. *lābha*.

Addressed by Vṛṣakapi to Indrāṇī in a very obscene passage. See § 16. Whatever the original force of the suffix in this word, it seems probable that it was felt in this passage as having dim. (obscene) value.

(*sv*)*alpikā*, very tiny (of the female organ), AV. 20. 136. 3—see *alpakā*.

hāriknikā, bay mare (dim., of obscenity?), AV. 20. 129. 3—4.

< **hāriknī*, f. of *hārīta*.

(= RVKh. 5. 15. 1.)—The whole passage is riddlesome; it is very likely of obscene application.

AV. 20. 130. 11.—RWh. read *ēnī hāriknikā hārīḥ* for the unintelligible MSS. reading. The same verse in RVKh. 3. 15. 8 has an equally senseless MS. reading. Even the emendation is obscure enough as to its real application,—which may indeed be said of the entire hymn.

V. The Generic Diminutive. (4 words.)

87. By this I mean the suffix *ka* applied to words denoting masculinity and femininity to form derivatives with meanings "male" and "female" respectively. The striking German parallels "Männchen" and "Weibchen" suggest that the suffix was probably diminutive in origin. It may have begun to be used with pet domestic animals, or in a similar way; at any rate the fact is, that "little man" came in Skt. as in modern Germ. to mean "male."

88. Prof. von Schroeder, in his article on the Apālā-hymn (RV. 8. 80), points out that *vīrakā* (vs. 2) must be used in this sense, since it is applied to Indra. Indra was the very emblem of virile power. It was natural enough, therefore, to call him *vīrakā*, "male" *par excellence*, while it would be absurd to suppose that he was addressed directly (the word is voc.) as "O little man!" or "Thou wretched manikin!"

maryakā, RV. 5. 2. 5, likewise means "male," being obviously contrasted with female animals (see the passage); it could not mean "Stierlein," as Grassmann renders it.

89. The feminine counterpart, which neither v. Schroeder nor anyone else seems to have noted, is *dhénukā*, "Weibchen," "female" of any animal or of the human species,—not "milch-cow." This becomes clear upon an examination of the passages where the word occurs.

So Pañcav Br. 25. 10. 23 *aṣvām ca puruṣīm ca dhenuke dattvā*—"giving two females, to wit, a mare and a woman."

Kāty Cr. 24. 6. 8 *tasyām aṣvapuruṣyāu dhenuke dadyuh*—"in it they offer a female horse-and-human-being" (note *aṣva* is not the fem. stem, but common gender. As in German, when "Weibchen" limits a noun, the noun stem keeps its masculine (i. e. common) form: Froschweibchen &c.)

Similarly Āṣv. Cr. 12. 6. 30.

AV. 3. 23. 4—in a charm for fecundity in a woman:

sā prasūr dhénukā bhava—"Be thou a fruitful female!" (not "milch-cow").

The word *mahīlukā*, AV. 10. 10. 6, used as an epithet of the cow, probably means nothing more than "female," "Weibchen," being derived from *mahilā* "woman."

The vowel -u- in *mahīlukā*, instead of -ikā which we should expect, is apparently due to the analogy of *dhénukā*.—The lengthening of the *i* in the second syllable is an instance of that widespread tendency to iambic cadence which is especially

marked in the language of the Veda. There are a number of parallels which might have been pointed out within this very treatise; but they are mostly self-evident.

VI. Diminutive of Femininity.

90. From the diminutive and endearing uses of the suffix was developed a tendency of the derivative *kā* (*ikā*) to be used merely as a mark of the feminine gender, when the primary word either had common gender, or its feminine character was not marked by its ending; or, when the primary word was grammatically masc. or neut. and the writer desired to treat it as a fem. Sometimes there is to our minds no very clear reason for putting the word in the fem. gender; but that does not alter the facts, nor greatly weaken our position. It is sufficient that we frequently find a fem. noun in *kā* (*ikā*) from a masc., neut. or common noun without *ka*, and without any other noticeable difference between the two.—The association of the diminutive idea with femininity is not rare in all languages and periods, and is easily comprehensible.—There are few examples in the Veda,—as is true also of the endearing dim., to which this is closely related. In the later language it is commoner, though never very common.

91. The examples here given are not exhaustive, even for the Veda, but they are some of those which show most reason for the use of the fem. diminutive.—Whether *dhēnukā* and *mahīlukā* (see § 89) have any right to be counted here is very questionable. Certainly this force of the suffix *ka* is quite distinct from the Generic Dim., to which those two words belong. (8 words.)

pradātrikā, giver (fem.), MS. 2. 5. 7. < *pradātṛ-*, giver.

candrikā, moon (as fem.), Rāmap.Up. 24. < *candrā* (masc.).

kūṣṭhikā, dew-claw, spur? AV. 10. 9. 23 &c. < *kūṣṭha*, entrails.

madhyamikā, middle finger, Prāṇ.Up. 1. < *madhyamā*.

pravalhikā, an enigma,—challenge; ĀitBr. 6. 33 &c. < *pravalha*.

nyastikā, n. or epithet of a plant, AV. 6. 139. 1. < *nyastā*.

The plants (rushes) were “thrown down” (*nyastā* < *ni-Vās*) as a seat for the bride in the marriage ceremony. Cf. AV.

14. 2. 22 where *ni-Vās* is used in connection with the same performance; and see my paper on the subject,—I. F. 24. 291.

kūṭhārikā (in *pāda-k.*, a position of the feet, QGr. 4. 8),

< *kūṭhāra*; “ax,” or “little ax.” No particular sign of dim. use.

bhūmipāçakā, a plant, = *-ça* (masc.).—Sāmav.B. 2. 6. 10.

(Continued in the next number.)

Notes on Village Government in Japan After 1600, II.—

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Additional Bibliography.

103. *KAGA SHŌ-UN KŌ*, 加賀松雲公, [life of Lord Maeda Tsunatoshi, A. D. 1643—1724], compiled by Kondō Iwawo, 近藤磐雄. Tokyo, 1909. 3 vols., lxxiv + 697, xvi + 804, xi + 630 + cxxii pages.

104. *Shō-un kō shō-den*, 松雲公小傳, [brief life of the same], by Fujioka Sakutarō, 藤岡作太郎. Tokyo, 1909. 1 vol., xxiv + 334 + 7 pages.

105. *Ishida Mitsunari*, (稿本) 石田三成, [life of Ishida Mitsunari or Katsushige, A. D. 1560—1600], by Watanabe Sei-yū, 渡邊世祐. Tokyo, 1907. 1 vol., xxiv, 336 pages.

106. *Reki-shi chi-ri*, 歴史地理, [monthly journal devoted to history and historical geography]. Tokyo, 1899—.

2. [To the note of this work add:] Part XII, vol. xiii, 1010 pages.

Abbreviations.

Ish	105. Ishida Mitsunari.
KSK	103. KAGA SHŌ-UN KŌ.
Rch	106. Reki-shi chi-ri.
Sho	104. Shō-un kō shō-den.

Notes.

(1) *Dependence of power on peace.* It is generally held that, shortly before his death, Tokugawa Ieyasu solemnly enjoined the great barons who had lately become his vassals, that the best among them should supersede his successor, should the latter fail in maintaining justice and peace in his government of Japan. For, said he, [quoting an old saying], the world was the world's world, and not one man's. *To*, IX. 826.

It matters little if this story is historically untrue, so long as the whole life of Ieyasu as a ruler and the whole structure of his system of administration substantiate, as they must be said to do, the sentiment implied in the alleged remark.

The same sentiment also animated many an able baron in the government of his fief. Uesugi Harunori (1751—1822), lord of Yonezawa, on yielding his position to his son Haruhiro, in 1785, instructed the latter

in the following terms: "The State [i. e., fief] has been transmitted by our forefathers, and should not be exploited for selfish purposes. The people belong to the State, and should not be exploited for selfish purposes. The lord exists for the State and the people, and not the State and the people for the lord." YZS, 355. Matsudaira Tsunatoshi (1644—1724), lord of Kanazawa, continually reminded his vassals that his fief had been entrusted to his house by the suzerain (the Tokugawa) and hence was not its private property, and that therefore the suzerain's laws should be observed, and the fief should be governed with great care and with justice. *To*, XIV. 300. Both these lords were regarded models of good administrators.

It would perhaps be truer to observe that Ieyasu and the two lords above mentioned, as well as other successful suzerains and barons, were all deeply influenced by the well-known political philosophy of China that Heaven appointed the prince for the good of the people, than to say that Ieyasu was the sole example that the others followed. (Cf. the author's *Early institutional life of Japan*, 1903, pp. 153—184.) To the latter, however, the Chinese ideal must have seemed the more commanding for the former's practical demonstration of its value. Reinforced by these worthy examples, it was seldom forgotten during the two and a half centuries of the Tokugawa régime that the lord's power should depend upon peace of his people. As for the deeper significance in this régime of the persistent idea of peace, we shall seek to find it in some of the following notes.

(2) *Political wisdom of Japan and China*. It is beyond the scope of this paper to note with what zeal Ieyasu collected classical and historical works of China and Japan, encouraged their publication and study, and himself derived from some of them a vast deal of practical wisdom. (E. g., *DSR*, XII, xiii, 877, 935—939.) After him, encouragement of learning became a traditional policy of his house, as is amply illustrated in Kondō Morishige's *Yū-bun ko-zhi*, 1817, (*Kon-dō Sei-sai zen-shū*, ed. Tokyo, 1906, II. pp. 99—348). The example of the suzerain was eagerly followed by the barons throughout the country. See the *Ni-hon kyō-iku shi-ryō*, edited by the Department of Education, Tokyo, 2d ed., 1903—1904, 9 vols. and supp.; Satō Sei-zhitsu, *Ni-hon kyō-iku shi*, Tokyo, 1903, pp. 267—480; articles by Nakamura Katsumaro, in *Shz.*, XVIII, Nos. 6, 8, 11; XIX, Nos. 3, 5, 6; (1907—1908).

Ambitious barons vied with one another in the encouragement and stimulus they gave to the study of the political-ethical teachings of China among their vassals. Schools were established, scholars famous throughout Japan for their learning were appointed as teachers, and the barons often personally supervised the work or even took part in the intellectual contest. It would be a mistake to suppose that these were merely literary pastimes with little relation to actual government. What was now studied was hardly the purely literary part of Chinese learning, such as was once in vogue among court nobles of Japan before the tenth century, but rather that remarkable combination of philosophical, ethical, social, and economical wisdom in the most condensed form which characterizes the purer teachings of Confucianism. Some of the simpler lessons of

the tenet were so intensely practical and so salutary in their effects on rural administration, that their learning sometimes exerted the most direct and profound influence on the welfare of the people. It was precisely for this reason that scholars of the right kind became powerful forces in the feudal society, and their teaching was sought by great barons with humble eagerness and had a large formative influence upon their careers as rulers. It is safe to assert that there were some scholar councillors of this description behind every lord noted for wise government during this period. The cases of Kumazawa Ban-zan, Arai Haku-seki, Muro Kyū-sō, Hosoi Toku-min, and others, will readily be remembered.

It is highly significant that political and social ideas and practices of China, especially under the Ch'ou dynasty, as were embodied in classical literature, exercised such a profound influence upon the feudal rulers of Japan after 1600. Their conception of good administration and of the rights and duties of the prince and subjects, and of the moral and economic principles of society, was, in its important features, thoroughly Chinese. The older and purer Confucian ideas, introduced into Japan from ten centuries before, now seemed not only to have become the subject of an absorbing study, but also to have given a model of social order and government. It is only after these ideas are mastered, and not before, that one may understand the sources and the force of most of the policies which guided such good suzerains as Ieyasu (1543—1616), Iemitsu (1604—1651), and Yashimune (1684—1751), and such exemplary barons as Tsugaru Nobumasa (1646—1710), Hosokawa Shigekata (1718—1785), Mito Harumori (1751—1805), Uesugi Harunori (1751—1822), and Matsudaira Sadanobu (1758—1829). Cf., e. g., *To*, XIV, 191—387; *Tnk*, 25 ff., 43 ff., 64; *Gz*, I, 10—11, 13—15, 30; II, 5; III, 1; *Zo*, I, 1030; *YZS*, 13—14, 261, 867—898; *Shr*; articles by Prof. Mikami Sanzhi in *Shz*, XVII, 1085—1125 (1906); XIX, 1—30 (1908). For this condition, neither the example set by the suzerain nor the intellectual zeal and receptivity of the baron would afford a satisfactory explanation. The reason was probably much deeper. It may be possible to demonstrate that many conditions in ancient China and modern Japan being singularly similar to each other, ideas and institutions born in the former appealed to the latter with peculiar force. It is an astounding fact in history that an old society should, after the lapse of thousands of years, find in another land or a miniature of its federal government sustained by agriculture and ruled by military forces, and teach it lessons of its own experience by means of the most concise and lucid of human speech.

(3) *Adaptation.* A careful examination of the Tokugawa régime is apt to reveal very little originality in its details. They were based either on conditions then in existence, on models found in Chinese literature or in the earlier history of Japan, or on modifications or combinations of these conditions and examples. The merit of the general system must be sought rather in its mastery of details, solidarity, and delicate balance, than in its originality.

(4) *Rulers and ruled.* Mencius quotes an old saying: "Some exercise the mind, others exercise physical strength, [some scholars say that this is the extent of the old saying and the following is Mencius's comment,

but the general opinion is otherwise]. Those who exercise the mind rule over others, and those who exercise physical strength are ruled over by others. Those who are ruled support others, and those who rule are supported by others." He then adds: "This is the common principle of the world." (故曰·或勞心或勞力·勞心者治人·勞力者治於人·治於人者食人·治人者食於人·天下之通義也) 孟子, chapter 滕文公, I, No. 4.

(5) *Warriors*. This English term is applied in this essay to the *bu-shi* (武士) class in the broadest sense of the word, that is, including the lords and vassals of all degrees, from the suzerain down to the lowest foot-soldier.

Samurai is expansive, and though it may be conceived as identical with *bu-shi*, it is even more susceptible than the latter of a narrower construction. The term *bu-ke* (武家) is used rather in contrast to *ku-ga* (公家), civil nobility, and may perhaps be rendered as military nobility.

(6) *Distinction between warriors and peasants*. The wearing of two swords, one longer than the other, and the bearing of a family name in addition to his personal name, were privileges denied to the commoner, but granted to the warrior as badges of his noble birth. There were, however, other and more significant marks of distinction. The peasant owed taxes both regular and irregular in nature; the warrior as such, namely, when circumstances had not reduced him to the position of a half-peasant, paid, if any, fewer and lower taxes, and, when his position was high, owed nothing but feudal aids and charges which never entirely lost the appearance of being voluntary contributions. The warrior's proper service was in government and warfare, and was considered noble, while that of the peasant was menial, and was rendered in terms of rice, money, and labor. That the laws governing the conduct of the two classes were largely apart from one another is well-known, the difference not being the least conspicuous in the forms of punishment inflicted on culprits of the classes. The peasant criminal was, for example, seldom allowed to disembowel himself for a capital offence, as was the warrior, but his death penalty consisted in decapitation with or without exposure of the head, in burning, or in crucifixion, according to the gravity of his offence. Cf. *Tk*, IX, 16; *Ksd*, 947; *KR*, II, No. 23. The education of the warrior emphasized the importance of martial arts, of honor, courage and endurance, and of learning in Confucian literature; that of the peasant inculcated passive obedience. He was not encouraged to study Chinese classics, as they contained political discussions and threw light on history. Even his practice in fencing was often discountenanced in later years of the Tokugawa period. The very views of life, and even the esthetic taste, were often radically different in the two classes.

The division was sharp, but the barrier was not insurmountable. Many a peasant, as well as merchant, was, either for his distinguished birth or service or for his exceptional virtues, honored with the special privilege to carry one or two swords for life, or to assume a family name for all time. *To*, XIII, 661; *Zo*, I, 620; *KRE*, 205—6; *Jh*, VII, 50—67. This distinction, however, hardly extended beyond the mere

external sign, which symbolized a quasi-warrior, but not a real warrior. Was it impossible to become the latter? Although it was often decreed that the warrior should not adopt a peasant's son as his heir (e. g. *DSR*, XII, ix, 223), cases of such adoption were not absent. The social mingling of the two classes took place in many a fief, notably in Satsuma, Tosa, and Yonezawa, where warriors continued or were encouraged to have their landed estates, despite the fact that the mutual contact was sometimes lamented as detrimental to both classes. E. g., *YZS*, 533, 571—572, 583—584, 748—750, 821. Peasants, however, never entered into the warrior class to the extent that the merchants did at Edo.

(7) *Population*. The official figures of the population of Japan, exclusive of the warrior classes, between 1726 and 1847, range between 25 and 27 millions. *SCR*, V, 7—8; *Nfz*, III, 15. Of these numbers, a preponderant majority consisted of peasants, as may be inferred from the following instances. In the fief of Mito, of the population of 229,239, in 1797, 221,900 were peasants, and 7,200 merchants. *Kw*, I, 1, 3—4. In Yonezawa, in 1776: 24,061 warriors, 80,488 peasants, 16,099 merchants, and 1,354 priests and others; total, 122,102. *YZS*, 228. Here the proportion of the warrior and merchant classes is unusually large. About 1830, in a fief in Kyūshū: 88,036 peasants, 18,321 merchants, 738 priests and others; total 107,095, exclusive of warriors. *Km*, VIII, 29. The warriors in the whole of Japan could not at any time have much exceeded 350,000, or, about 2,000,000 with their families and servants. (Cf. *SCR*, V, I.) Also see Notes 135—137, below.

(8) *Suzerain*. This term is used throughout this study to indicate the *Shō-gun*, which is an abbreviation of *Sei-i tai shō-gun* (征夷大將軍, Great general for subduing alien races on the frontiers). English writers about the time of the fall of the Japanese feudal government were wont to employ the word Taicoon (*Tai-kun*, 大君, great lord) for the same personage, *Tai-kun* being one of the several honorific titles by which the *Shō-gun* was popularly designated. A fuller discussion of this and other high offices of the Tokugawa government must be reserved for a later study of the feudal classes.

(9) *Intendants of the Suzerain*. Those were generally called *Dai-kwan* (代官, deputy-officials), only a few of the more important incumbents being especially termed *Gun-dai* (郡代, district-deputies). In early years of Japanese feudalism, the *dai-kwan* was not a regularly constituted official, but was exactly what his provisional title indicated, namely, a deputy or agent of any official whatsoever, not excepting the suzerain's Regents (*Shikken*, 執權). The Suzerain himself was sometimes popularly called *Kwan-tō no Dai-kwan*, Deputy in Kwan-tō (i. e., provinces about Edo), he being considered the deputy-general of the Emperor. In the sixteenth century, agents of the provincial governor-general (*shu-go*) and of the local comptroller (*jī-tō*) were often called, respectively, *shu-go-dai* (守護代) and *jī-tō-dai* (地頭代). The former of these two classes of agents were, in distinction for their greater importance than the latter, sometimes designated Great *dai-kwan* (大代官), *Kōri dai-kwan* (郡代官), or *Kōri bu-gyō* (郡奉行), *kōri* (*gun*) here meaning, not the definite territorial unit of that name, but

district in a loose sense. The term *dai-kwan* remained as the general name for all local agents, but also assumed a specific meaning as *jitō-dai*. The Tokugawa rulers, as was customary with them, accepted the current terms *dai-kwan* and *gun-dai* (abbreviated from *kōri dai-kwan*), but clearly defined their office, so far as the sphere of the Suzerain's direct rule was concerned, as his Intendants appointed from among his hereditary vassals to take charge of financial and judicial affairs of most of his Domain-lands. *Bu-ke myō-moku shō*, 武家名目抄, [cyclopædia of feudalism], compiled by Hanawa Hoki-ichi, 塙保己一 (1746—1821), and others, (in 441 chapters), ed. Tokyo, 1903—1905, chap. liii—liv, 613—630; *Dch*, Introduction, 75, 82, 83—84; *Ksd*, 840, 1612; *Ish*, 105, 106—107, etc.

The *gun-dai* were merely the most important *dai-kwan*. Their number was originally four (in Kwantō, Hida, Mino, and Kyūshū), but in 1792 the first was split into five *dai-kwan*, and later reorganized into three *gun-dai*. The official duties of the *gun-dai* were identical with those of the *dai-kwan*. *Tk*, I, 6—9; *Rch*, XIII, 419.

These duties were most multifarious. The *dai-kwan* received from the villages and transmitted to the Suzerain's government report on the census and the religion of the inhabitants, saw to the detail of assessing, collecting, and forwarding taxes, and supervised public works, the care of the forests, the tilling of new land, and the restoration of damaged land. His judicial powers were limited: he could on his own responsibility inflict only the penalty of beating, but should report on all graver offences to the central feudal government of Edo. It was morally binding on him to oversee the behavior of the peasants, and admonish them against extravagance and misdemeanor. He had extraordinary duties to perform on special occasions which concerned the person of the Suzerain, and in case of a riot or warfare. *Tk*, II, 27—31; IX, 17; *Smw*, 52—58.

His military powers as well as duties were, however, practically nil, for he was primarily a local administrator in control of peasants' affairs, and not a baron. He, as an Intendant, owed no knights' service, nor was the district to which he was appointed his fief. Not even hereditary was his post in a given district, only five out of the more than forty Intendants remaining in the same localities for generations. All Intendants received salaries which were paid out of the central treasury of Edo, and which were graded according to the relative importance of their districts. They were, with half a dozen exceptions, responsible to the financial department of the Suzerain's government, for, indeed, their functions, as well as their previous training, were first and foremost fiscal: they collected taxes from the people and delivered them to Edo, and observed other details of local government largely in order to secure the successful transaction of this essential business. *Tk*, I, 6, 9—11, 20, II, 3; *To*, XIII, 890; *SZ*, XV.

This is a point of the greatest importance in the whole range of the Tokugawa system. It may be seen that Japan's régime after 1600, when her feudal institutions were brought to their highest perfection, was really in part un-feudal; that is to say, in so far as the Suzerain's own domains were concerned, their administration was put in the hands of

his paid servants removable at will. It will be seen later that in many a baron's fief, also, similar conditions prevailed.

To return to the Intendants. In assuming the capacity already described, he took an oath that he would faithfully fulfil his official duties, and at the annual meeting in Edo of all his colleagues he listened to the reading of special instructions to the *dai-kwan*. *To*, XIII, 315—319, 846—847, 959, 1082, 1099; *XV*, 780; *JG*, III, No. 1; *I*, No. 1; *Jt*, I, i, 9—12; *TKR*, I, iv, 193—248. The following are instructions dated 1680:—"The people are the foundation of the country: the Intendant shall always study their hardships, and see that they do not suffer from hunger and cold. When the country is prosperous, the people are apt to be extravagant, and when extravagant, they are apt to neglect their calling; see, therefore, that they are not extravagant in food, clothing, and dwelling. The people are suspicious of officials distant from them, and then the officials suspect the people: see that neither of them entertain suspicion of the other. The Intendant should always be frugal, know details of agriculture, and carefully observe that the taxes are justly levied. It is essential that the Intendant should not leave his affairs to his subordinates, but undertake all things in person, and then all his subordinates will be dutiful. The Intendant and his subordinates should under no circumstances employ people of their district for private ends, or borrow from them or lend them money or rice. Always note the condition of rivers, roads and bridges, and repair them while the damage is still small; if there is a quarrel among the people, investigate it before it becomes serious, and, if it may be adjusted privately among the disputants, see that it is settled without partiality or trouble to any party. Always observe that all affairs are diligently settled, and especially that there are no arrears in the public accounts, so as to be ready for the possible transfer of the Intendant to another district or giving over of his district to a baron." *Tk*, II, 26—27.

It was customary with the Intendant of a distant post to stay in Edo and only periodically visit his district. In that case, one or more of his subordinates presided at the local office. These and other subordinate officials (*te-tsuke* 手附, *te-dai* 手代, *sho-yaku* 書役, etc.), many of them hereditary, were remarkably few in number, and served long years of hard work. They perforce led the most frugal and monotonous life, and in fact, whatever their illicit incomes, their regular salaries were mere pittance, the lowest clerks receiving nothing. *Tk*, I, 14—41; II, 3—4, 11—13, 25. The Intendant received a special small allowance, besides his regular salary, for the maintenance of his assistants and local offices. *To*, XIII, 846—847, 1082; *XIV*, 751; *XV*, 789; *Tk*, II, 13—25; *Jt*, II, i, 25—32; *Jo*, VI, 4—8; *Jh*, V, 6—11; *TKR*, I, iv, 249—271. From the financial stringency of the Suzerain's government, it was urgent that his Domain-lands should yield the maximum revenue with the minimum expenditures.

The following is a table of all the Intendants in 1867, with the relative importance of their districts in 1838 as shown in their assessed productivity in terms of rice. The *gun-dai* have *G*, and, hereditary *dai-kwan*, *h*, after their family names. 1 *koku* is nearly equal to 5 bushels. From *Tk*, I, 11—13, 20—24; II, 7—9.

Family names	Main office at	Number of paid assistants	Assessed productivity of the district in 1838
			koku
Kobori, <i>h</i>	Kyōto, Yamashiro	46	96,470
Sumikura	"	10	246
Kimura	"	7	30,807
Sumikura	"	20	? 20,531
Nakamura	Gojō, Yamato	18	61,732
Saitō	Ōsaka, Settsu	24	79,417
Uchimi	"	20	72,607
Ishihara, <i>h</i>	Ōtsu, Ōmi	24	101,883
Tadara, <i>h</i>	Shigaraki, Ōmi	39	55,354
Iwata, <i>G</i>	Kasamatsu, Mino	28	100,154
Tanaka	Nakaidzumi, Tōtōmi	25	63,958
Nakayama	Shidzuoka, Suruga	21	80,104
Ogasawara	Kōfu, Kai	25	84,540
Andō	Ichikawa, Kai	21	79,682
Masuda	Isawa, Kai	26	57,829
Egawa, <i>h</i>	Nirayama, Idzu	38	84,117
Imagawa	Edo, Musashi	24	134,923
Sasai	"	23	112,447
Ōtake	"	21	
Matsumura	"	19	
Kimura, <i>G</i>	Iwahana, Kōdzuke	26	
Kawadzu, <i>G</i>	Fusa, Shimoōsa	18	
Oguri, <i>G.</i> ; <i>h</i>			? 681,642
Fukuda	Edo	22	
Hōjō	"	17	
Yamauchi	Maoka, Shimodzu	28	
Ogawa	Edo	13	
Tada	Hanawa, Mutsu	14	57,296
Kuroda	Kōri, Mutsu	16	86,249
Mori	Onahama, Mutsu	14	83,783
Yamada	Shibahashi, Dewa	18	78,099
			69,957 + 147,676
Matsumoto	Nakano, Shinano	21	54,298
			69,574
Niimi, <i>G</i>	Takayama, Hida	28	114,052
Ōkusa	Idzumozaki, Echigo	16	71,388
Shinomoto	Midzuwara, Echigo	17	106,148
Miyazaki	Kumihama, Tango	15	67,744
Sakurai	Kurashiki, Bitchū	19	63,703
Yokoda	Ikuno, Tajima	14	74,183
Nabeta	Ōmori, Iwami	14	78,695
Kubota, <i>G</i>	Hida, Bungo	28	117,534
Takagi, <i>h</i>	Nagasaki, Hizen	17	36,677
41		894	3,281,578

(10) *The Suzerain's domain-lands and the barons' fiefs.* During the Tokugawa period, the importance of any territory was measured, not by its total extent, but sometimes by its area under cultivation, and much oftener by the officially determined productive capacity of this area stated in terms of *koku* (4.963 bushels) of rice. The total cultivated area of Japan, which had gradually increased, was officially stated at the end of the feudal rule, as 3,260,000 *chō*, or nearly 8,000,000 acres, although the actual area seems to have been nearer 12 than 8 million acres. *Chk*, 100—101. The total productive capacity of Japan, as officially accepted, increased from 18.5 million *koku* about 1600 to 25.8 about 1700, to 30.4 about 1835, and to 32.0 about 1868. *Koku-daka kō*, in *Dse*; *SCR*, V, 23, 38, 49; *Dch*, *Intro.*, 89, 94. When the total was about 26.4 million *koku*, it was apportioned, or, to be a little more precise, the lands which were estimated to produce the various amounts or their equivalents were distributed, approximately as follows:—

- | | | |
|--|--------------------------|---|
| 1. The Suzerain's Domain-lands under the Intendants | 3.28 million <i>koku</i> | |
| 2. The Suzerain's Domain-lands in the larger cities and other special places, which were under his special agents or temporarily entrusted to neighboring Barons | .93 | " |
| 3. The three Tokugawa branches of Tayasu, Hitotsu-bashi, and Shimidzu | .30 | " |
| 4. The Suzerain's smaller immediate vassals, all below 10,000 <i>koku</i> | 2.60 | " |
| 5. The Barons' fiefs | 18.86 | " |
| 6. The Imperial House | .10 | " |
| 7. The civil nobles | .04 | " |
| 8. Religious houses and persons | .31 | " |

Tk, II, 7—11. Cf. *SCR*, V, 51, 55—56.

Of these, the Suzerain's Domain-lands (Nos. 1 and 2 in the table) were known as *kō-ryō* (公領 or 公料, public domains or possessions,—the word 'public' applying, in the usage of the period, to all things pertaining to the government of the Suzerain, as distinguished from the barons'), and the barons' fiefs (No. 5) were called *shi-ryō* (私領, private domains). The former were sometimes designated *go-ryō* (御領, *go* being honorific), and were popularly styled even as *ten-ryō* (天領, literally, heavenly domains), so exalted was the Suzerain in the eyes of the common people.

The individual baron's Fief was popularly designated, if it covered an entire province (or *kuni*, 國), by the name of the province, but more frequently, even in that case, and of course when the fief was a part of a province or extended over several provinces, by the name of the central castle-town. Occasionally, the family name of the baron was used in denoting the fief. In all these instances, the name was followed by the word *han* (藩, original meaning: frontier defense, march); as *Nihonmatsu han*. The same word was used also as an adjective; as, e. g., *han-shi* (藩士, warriors of the fief) and *han-shu* (藩主, lord of the fief). To all intents and purposes, *han* may be translated as 'fief'. A grievous usage has grown up among native and foreign writers in English to render the word with the most inappropriate and misleading term,

clan, a practice which every lover of truth should strongly combat. The *han* was a territorial division, which retained its name independently of any change in its population, so long as it existed as an undivided fief. If such word as *ka-chū* (家中, in the family) was used to designate the immediate vassals of the baron of the *han*, its meaning was figurative, denoting that the vassals, who formed a minority of the population of the *han*, and who were never all of one clan, had sworn fealty to the successive lords of the baron's house, which itself was seldom permanent. There is not one leading feature of the *han* justifying the use of the word 'clan'.

(11) *Barons*. These include all the immediate vassals of the Tokugawa house owing military service and receiving in fief pieces of land valued above 10,000 *koku* for each man. There were 194 Barons in 1614, 240 in 1700, and 266 in 1865. At the last named date, the largest fief (Kanazawa) was officially registered as productive of 1,022,700 *koku*, and the average of the fiefs, about 70,000 *koku*. The class titles of the Barons in official documents were *sho-kō* (諸侯 princes) and *man-goku i-zhō* (萬石以上, those above ten thousand *koku*). The familiar title *dai-myō* (大名, originally, holder of a great *myō-den*, land bearing the name—*myō*—of the owner, original cultivator, or some other person or thing) was only half official as a general name for the barons. Sometimes, however, a distinction was made in public documents between *dai-myō* and *shō-myō* barons (holders of greater and lesser fiefs), but the line of demarcation is obscure and was probably never officially defined. *Ksd*, 1637 ff., 2244.

(12) *Baron's Bailiffs and land-holding vassals*. Despite the great diversity of detail in the village administration of the various Fiefs, the general outlines were drawn after the model of the Suzerain's Domain-lands. In the ordinary Fief, there were districts given in fief to vassals, besides those reserved for the Baron. These were often called, respectively, *kyū-nin mae* (給人前) and *o-kura-iri* (御藏入). (*Ish*, 108; *SDS*, I, 16.)

The management of the vassals' fiefs rested sometimes with the vassals themselves, (as was the case with the *hō-kō-nin mae*, 奉公人前, at Sendai; *ibid.*, 18), but oftener with village-heads with or without special agents placed above them. The ancient term *ji-tō* (地頭) was applied very loosely to indicate either the holding vassals or their agents. The vassals, so far as their rural affairs were concerned, or, at least, their agents and village-heads, were usually under the supervision of the Baron's Bailiffs, who in these instances had general control over all local affairs. *SDS*, I, 9, 10; II, 86, 104; *DSR*, XII, xi, 361, 363; vi, 586; *Gj*, I, 3; *BK*, I, 4–5.

These Bailiffs' business, however, concerned primarily the districts reserved for the Baron himself. They were nearly always of the warrior class, but, like the Suzerain's Intendants, did not hold their respective districts in fief, for they were paid servants usually removable at will. *YZS*, 107–108; *NTK*, 404. In many Fiefs, there were some Bailiffs who held their spheres, or at least regarded them, as in fief (cf., e. g., *YZS*, 565), but the tendency was toward making these cases exceptional.

The Baron's Bailiffs were generally of two grades, the names of which varied considerably in the different Fiefs. Perhaps the commonest grades

were *kōri bu-gyō*, 郡奉行, (other names being *gun-dai*, 郡代, *gun-tō*, 郡頭, *gun-zhi*, 郡司) and *dai-kwan*, 代官, (also *gun-dai*, *kōri moku-dai*, 郡目代), the first higher than the second. Some of the larger fiefs, however, had three or more grades, while the smaller had only one. *Kw*, II, 3; *Zo*, I, 1030; *Gi*, II, 24—25; *Mkr*, throughout.

Instructions to the Bailiffs were necessarily of the same nature as those given to the Suzerain's Intendants.

In the same manner that the Suzerain's government occasionally despatched special inspectors to observe conditions of rural administration (*To*, X, 610, 622, 661—662; XI, 495, 509, 596—599, 826; XII, 47—48, 64; XIII, 60, 67—68, 174, 237—238, 439, 444, 481—483; XIV, 410—414; XV, 11—14; *ZO*, I, 43; III, 1374; IV, 103), so also many a Baron sent about officials with similar missions (e. g., *YZS*, 98, 104—107, 285—286, 525—526). The practical value of these inspectors, as likewise of the general instructions to the Bailiffs, was often problematical. *Mi*, I, vi, No. 41. See Note 111, below.

(13) *Village*. The villages, or *mura* (村), were the smallest territorial units, and as such had a long and important evolution in Japanese history. Under the Tokugawa, they differed greatly in size and importance. The average *mura* was a historic entity composed almost exclusively of peasant families. The number and fiscal values of these families seldom underwent abrupt changes, and, as we shall see later, the productive capacity of each village was officially estimated and registered at an early date of this period, and was not revised except under an urgent necessity. Its agricultural character, its historic origin, and its comparative unity as a fiscal corporation, are the three dominant characteristics of the normal *mura* of the Tokugawa epoch.

The total number of *mura* in Japan was, in 1834, 63,493. Arai Akimichi, *Ni-hon koku-gun en-kaku gō*, 1860 (*SCR*, III, 9).

It is interesting to note that, all through the Tokugawa period, the extent of many *mura* in sparsely inhabited parts or on provincial borders remained more or less indefinite. *Dch*, introd., 93. These villages were in the historic process of finding themselves, which others had already gone through. They also emphasize the truth that a *mura* was often an aggregate of peasant families, or, more exactly, of peasant holdings and their fiscal values, rather than a mere area of territory. When the population grew dense in proportion to the land of the village, the latter's limits would be determined. There also appears to have existed some resisting power of the *mura* against arbitrary division or combination, so strong was its historic character. Where *mura* were altered, their old names persisted as the names of hamlets or homesteads (*aza-na* 字名, *sage-na* 下名), for historic names were too dear to be forgotten. (Cf. *Tnk*, 206.) When extensive areas were tilled and inhabited, they formed either distinct and seldom totally assimilated parts of the mother villages, or independant villages. *Dch*, Introd., 92.

Many villages preferred to *mura* other unit-titles which they had borne, or titles expressive of their geographical positions or genetic relations. *Ri* (里), *gō* (郷), *shō* (庄), and *makiri* (間切—in Ryū-Kyū), are illustrations of the former, and *tsu* or *minato* (津, 湊, harbor), *hama*

(濱, beach), *shima* (嶋, island), *san* (山—Buddhistic), *uke* (受—from the Chinese unit *shōu* 受?), *de* (出, offshoot), and *sabaki* (捌, rule) and *kaito* (垣内, 貝戸, 加井戸, separated), of the latter. *Ibid.*, 90—93; *Gei-han tsū-shi*, II, 479, 484, &c.

It would be extremely interesting to study, from old maps and from all the actual examples, the various types of settlement and of the arrangement of houses in the historic villages of Japan, to note the geographical distribution of these types, and to infer from these data the probable historic and economic reasons of the variation. It is, of course, to be expected that, even aside from the changes that have taken place since the end of the feudal régime, some villages are too old and too much altered from their original forms to be reduced to types or to lead one to safe conclusions as to their evolution. However, it is easy to see that there must be a great number of other villages in which may be traced with more or less clearness their original types or their subsequent alterations. Scarcely any extended study has yet been made in this fruitful field of research. One geographer has barely enumerated eight different types in existence, as follows:—1. a single row of houses on one or either side of a road or a river or on the sea-shore; 2. parallel rows of houses in similar positions; sometimes on ascending or descending terraces; 3. two such single or parallel rows intersecting each other at an angle; 4. a more or less circular or arcuated distribution of houses around a fortress, a temple, a great estate, or a small harbor; 5. a linear distribution with its one end closed against further extension, for instance, by an important temple, which is usually situated before a thickly wooded spot; 6. villages in which single houses are scattered with no system of arrangement; 7. those in which houses are found in small groups on advantageous spots; and 8. those in which houses are arranged and roads built in accordance with some preconceived regular geometrical plans. (Makiguchi Tsunesaburō, *Zhin-sei chi-ri gaku*, 3rd ed., 1903, pp. 904—907.)

Also see Notes 15 and 22, below. The striking case of the *Iya-yama* villages of *Iyo* deserves a special mention.

(14) *The Iya-yama villages in the province of Iyo* (伊豫祖谷山). About 180 square miles in extent, and situated on the sinuous course of the river Matsuo, the *Iya-yama* villages were completely protected from the outside world by high mountains and deep ravines. The latter were crossed over only by means of ropes made of twisted vines, for it was impossible to span the wide gorges with bridges. In the fourteenth century, this place was found to be occupied by a few hardy warriors with their retainers, who resisted encroachments, and stood against a powerful baron when all the rest of Shikoku had succumbed to him. In 1585, Iyo was given in fief to Hachisuka, but it was not till 1590 that he extended his authority to this part of the province. The chiefs either fled or were killed rather than surrender, and the region was well-nigh deserted. Afterwards old inhabitants were slowly induced to return, and surviving chiefs were permitted to re-instate themselves in their former positions. In 1612, the productive capacity of the land under cultivation was estimated as about 1200 *koku*. The chiefs, at that time

less than twenty, were granted hereditary rights as village-heads, as well as whatever land they might open beyond the cultivated area then registered.

Throughout the Tokugawa period, these privileges of the chiefs remained undisturbed. They owed a nominal military service in case of an emergency, which seldom occurred. The population gradually increased, as also the area tilled after 1612, which all belonged to the hereditary chiefs. At the fall of the feudal government in 1868, *Iya-yama* was found to contain nearly ten thousand souls, living in 36 villages styled as *myō*, (the reader will remember the word *myō-den* mentioned in Note 11, above), under the control of 21 chiefs (*myō-shu*, 名主, heads of the *myō*) belonging to seven old warrior-families. Peasants who cultivated the land that was examined and registered in 1612 were free, but those who lived on other land, which was in the chiefs' possession, were the latter's tenants, and stood in a servile tenure. *DSR*, XII, v, 321; x, 494—496; *Mkr*, 198, 216—217; *Dch*, 1230—1231.

These facts about *Iya-yama* are extraordinary and instructive, at least in the following respects: 1. they retained the old name *myō* for the village,—a point of interest at this stage of our discussion,—and *myō-shu* for the village-head; 2. the chiefs were warriors, and owed a knight's service; 3. they held their post by heredity; and 4. they held their tenants as serfs. For these reasons, we shall often recur to these isolated villages in the course of this essay.

It would be interesting to visit this region to-day and study its present conditions. A citizen of *Iyo* who has recently traveled across *Iya-yama* observes that it was still largely inaccessible, that the families of the chiefs were still greatly respected by the peasants, and that many of the latter were still notably intractable and defiant.

(15) *Classes of peasants.* The ordinary peasants, technically called *hyaku-shō* (百姓), constituted the bulk of the peasant population. Their status may be explained in connection with their landed holdings. The latter had each an officially fixed and registered productive value, and by this value the importance of the holding peasant was measured. (E. g., *YZS*, 506.) From the fiscal point of view, the holding was as important as the holder. A piece of land might be divided or transferred within certain limits, but its name (*aza*, 字) would probably remain the same (cf. *Mkr*, 332), and the new holder or holders would be responsible for the same amount of dues as had always been levied on the piece. Individual holdings were thus regarded as a sort of permanent entities, and in fact often proved more enduring than the peasant families who held them, for the latter might and did change.

Where these families remained unchanged, their heirs frequently transmitted through generations the same personal names, the peasant being forbidden to bear a family name; if the same families held the same pieces of land during successive generations, the names of the families and of the holdings became intimately associated with one another. Thus, a piece of land called *Mikubo* might for a century be held by *Zenkichi* succeeding from father to son. The latter would very reluctantly part with the former.

Such conditions were, however, far from being universal. Division

and transfer of land frequently took place, as we shall see later, both in accordance with and in violation of law. Peasant families came and went, and rose and fell, and the dull land also changed names or even aspects through natural calamities or human fortune. (cf. *GGI*, III, 1, 15, 16.) Often families altered more rapidly than land.

In a village where there were families much older than others, the former, especially if they were proportionately rich, were often called *sen byaku-shō* (先百姓, advance peasants), and enjoyed a degree of prestige. If they were original settlers of the village, they would be distinguished as *kusa-wake* (草分, grass-dividers). In some places, older families were *hon byaku-shō* (本百姓, main peasants), and later ones *waki byaku-shō* (脇百姓, side peasants). *DSR*, XII, v, 535—536; *GGI*, II, 17; III, 20. Often the land-holding peasants in a village were collectively called *sō hyak-ushō* (惣百姓, all peasants).

Few villages were regularly laid off like the townships in the newer American States. Japanese peasants were by nature gregarious and mutually dependent. Groups of houses would first spring up freely over widely separated spots, and as each spot became filled, virgin soil between the first spots would be settled upon and tilled, until an increased population should have turned with plough and spade all the available surface of the village. Peasants holding many pieces of land would find them scattered over too wide an extent for him alone to manage them. Also, as the village was well filled with small peasants, probably some of them would, impoverished by their mismanagement and by excessive taxes, mortgage and lose their patches of land, or perhaps abscond. Thereby the greater peasants would have their holdings added to, sometimes to their delight, but oftener against their will, when the taxes were heavy and the margin of profit small. From these and many other circumstances, all large peasants employed hired men as farm hands. This practice was common from the beginning of the Tokugawa period (cf., e. g., *DSR*, XII, iv, 196). About 1720, a well-informed writer affirmed that few landholders of 20 to 100 *koku* of recorded productivity could cultivate with their own hands more than a tenth of their holdings. (*Mi*, II, No. 15.)

The hired men were not all of a uniform status. Some were younger sons of other peasants, but these became fewer, for economic reasons that we shall examine later. Some others were hereditary servants (*fu-dai*, 譜第); these also decreased in number toward the end of the period, though they increased temporarily in hard years (*To*, XII, 621) and never disappeared throughout this period. There were many men all over Japan who had few or no holdings of their own, and would be willing to be hired for short periods as farm hands. These usually had no voice in the councils of the villages where they had their temporary domicile. If they became settled, or, perhaps, if they continued to live in their own villages, and worked as tenants, they were called *na-ko* (名子, sons of the *myō-den*; cf. Notes 11 and 14, above), *midzu-nomi* (水呑, water-drinkers), *mae-chi* (前地, front-land), and the like. In the Kanazawa fief, a *kashira-buri* (頭振?) owned his own dwelling-house; he had greater freedom of movement than the ordinary peasants. In Buzen,

some tenants lived rent-free in houses built by the landlord. In most places, the tenants were incorporated into five-man groups, which will be described below, but seldom had any voice in village administration. (*GGI*, II, 17; *Ggs*, 136; *Jh*, VII, 67—68; *Tk*, VII, 17—20; *Mkr*, 232, 235, 251, 305, 532; *YZS*, XI, 628; *Smw*, 82—84.) See Note 37, below.

It would be difficult to determine the average proportion of the various classes of peasants. In a village in Murayama Gōri, Dewa, there were, in 1772, out of the total number of 96 houses, 41 *hyaku-shō*, 23 *na-go*, 28 *midzu-nomi*, and 1 Buddhist priest. *Tk*, VII, 16. It was one of the most important characteristics of the Japanese peasants of this period that a large majority of them were small landholders. This paper aims to show some of the reasons for this remarkable condition. Cf. Notes 36, 37, 45, 64, 126, 141—143, below.

None of these peasant classes were serfs. The nearest to the latter were the hereditary servants of large peasants, but these were a decreasing minority of servants, and their relation to the masters was more personal than real, for they were attached to the latter's families rather than to the soil. The others were either temporarily employed laborers or tenant-farmers. The former married, and frequently established themselves as petty peasants, with the assistance of their benevolent masters, with whom they thus "divided kitchen", as the act was locally called (*Mkr*, 372—373). In fact, no law impeded the servants or tenants from acquiring land holdings and setting themselves up as full *hyaku-shō*. The *kashira-buri* had, as has been seen, even a larger freedom of movement than proprietors. This important point will be more fully discussed later.

A singular exception is seen in the case of the *ge-nin* of Iya-yama, (see Note 14, above), who were peasants living on lands belonging to the hereditary chiefs, or *myō-shu*. Peasants cultivating land registered in 1612 were, on the other hand, called *na-go*, and were ordinary *hyaku-shō*, owing thirty men's annual convée per family. The *ge-nin*'s corresponding convée was five men. It is briefly stated that the latter were much like serfs, held down to the soil of the *myō*. *Mkr*, 216—217. If so, it must have been owing to the fact that the hereditary chiefs were warriors personally overseeing the tilling of their landed estates. The *ge-nin*, therefore, must have stood in a much different position in relation to their lords from that of the tenants or servants in peasant families in other villages.

(16) *Village-officials*. Village-officials in the Suzerain's Domain-lands, and also in most of the Baron's Fiefs, consisted of three classes of personages of divers titles, whom we may call, respectively, Village-heads, Chiefs, and Elders. *Tk*, II, 33—34; etc.

The Village-head was variously designated as *na-nushi*, *shō-ya*, *kimo-iri*, and *ken-dan*, the first two titles being most common throughout Japan, while the last two were practically limited to the northern provinces of Mutsu and Dewa. The various titles were used with little system, the same village, or even the same document, sometimes using two or three titles to denote the village-head. (*Tnk*; *GGI*, I, 15, 16, III, 20; *DSR*, XII, v, 536—537; *Mkr*.) It is only in a general way that it

can be said that villages east of the Hakone Pass used the title *na-nushi*, and those west, the title *shō-ya*.

Kimo-iri (肝煎, roasting the liver, or 肝入, putting in the liver), is a title appearing from the end of the sixteenth century, and merely meaning utmost diligence [in the care of village affairs], as witness the familiar Chinese expression 'to break one's liver and bile' (摧肝膽), and such English phrases as 'putting one's heart into his work' and 'racking one's brains'. (Cf. *Nz*, I, 15; *DSR*, XII, v, 316. *Smc*, 101 note, is improbable). The term was not limited to the village-headship, but was applied to many other kinds of chiefs. As for *ken-dan* (檢斷, examining and deciding), its use seems to have dated earlier than *kimo-iri*. During the later years of the Tokugawa period, it was usually confined to town officials in the north, especially in the Sendai and Yonezawa fiefs. (*Nz*, I, 15—16; *Mkr*; *YZS*; *SDS*.)

The title *Na-nushi* (名主) was derived from *myō-shu*, written in the same characters, and meaning: head of the *myō* (名, name),—*myō* being an abbreviation of *myō-den* (名田, name-land), land bearing the name of the owner or original cultivator. The *myō-shu* of the Kamakura and Muromachi periods (from the late twelfth to the late sixteenth century) was, however, radically different from the *na-nushi* of the Tokugawa epoch, for the former was a little seigneur or at least a man of the warrior class, while the latter was essentially non-feudal, though sometimes vested with the right to wear swords and bear family-names. (*Dch*, Intro., 74, 84; *Nz*, I, 14; *DSH*, VII, 23; *Ksd*, 2243.) The transition of the title from the one to the other is not yet clearly traced, and falls beyond the scope of this paper.

Shō-ya (庄屋) was originally cognate with *na-nushi*. Literally, it meant a house (house-master) in the *shō-en*, large private estate which paved the way toward feudalism in Japan, and which in many instances remained for a long time as a territorial unit. (Cf. *Smc*, 100—101, note.) The owner of a distant *shō* would leave its management in the hands of his agents, who, being private men, were called by different ill-defined titles. Of these, *shō-ya* was one. In its exact form, it is not found in documents as early as is *myō-shu*, and it is difficult to say whether all the *shō-ya* were also originally warriors, as they generally were not under the Tokugawa. (*Nz*, I, 15; *DSR*, XII, i, 793 ff.)

It is interesting to note that, in the early years of the Tokugawa régime, there lingered exceptional cases of warrior village-heads at places where warriors did not live in castle-towns, but were settled in villages as petty seigneurs. These being influential among peasants, some of them became village-heads. There occurred, in 1603, a serious insurrection of one of these *shō-ya* in Tosa, where, at the coming of the baron Yamamouchi, some two thousand vassals of the old lord Chōsokabe had settled as farmer-warriors in different parts of the province. (*DSR*, XII, i, 734—749.) Many of their descendants retained their rôle of *gō-shi* (郷士, country warriors) throughout the Tokugawa period. There were *gō-shi* in a few other fiefs, and many of them must have served as village-heads. A conspicuous example is that of Iya-yama, where, as will be remembered, several old seigneurs remained as hereditary village-

heads for more than two hundred and fifty years. They even reverted to the old title *myō-shu* in 1616, after having for a brief period been called *na-moto* (名本). See Note 14, above.

As for the appointment of the village-head, it has been said that generally in western Japan, the headship was handed down from father to son in old, but not always the wealthiest, families; that in eastern provinces either a general election or an informal selection for life or rotation for an annual term prevailed; and that, as a consequence, the office possessed more dignity and worked with greater ease in the west than in the east. (*Jh*, VII, 28—31.) If this was true in a very general way, there were numerous exceptions to this contrast. Even in Fiefs and Domain-lands near Edo, an official appointment of the head without popular election or choice was not infrequent. (E. g. *Nz*, I, 15; *Mi*, I, iv, 32.) Even in cases of election, the authorities sometimes exercised a veto power or ordered reconsideration. (*Jh*, VII, 31.) It would seem, on the whole, that election or rotation was much less common than appointment, and tended to lapse into the latter. (*Smw*, 103—107.)

The duties of the village-head were, like those of the Intendant or Bailiff, varied and extensive. He acted as the medium between higher authorities and the village, both the former's orders and the latter's reports always passing through his hands. Deeds of sale and mortgage, as well as petitions and appeals from villagers, required his seal affixed to the documents. He assisted in the examination of the productive power of cultivated land. He divided among the people taxes due from the village, and collected and delivered them. He was responsible for the accuracy of the accounts of the village finances, and also for the correctness of all the regular records and reports. Public works and repairs, distribution of official loans and alms, examination of the census and the religion of the village, and the like, also devolved on him. Not the least important and delicate point of his duties was to guide the morals of the peasants, and prevent their extravagance and misconduct, by persuasion and personal example. Everywhere the importance of his moral qualities was strongly emphasized. (*GGI*; *YZS*, 506; *Smw*, 102—103.)

The village-head had, of course, no military or judicial power. He exercised police functions with the aid of villagers, and, in disputes among people, he offered his good offices to advise private reconciliation of the parties, in accordance with the policy of the feudal authorities to discourage judicial contest as far as was compatible with justice. (*GGI*, II, 7, 12, 36—37; III, 1.)

In return for these varied services, the village-head received a remuneration, which, in Domain-lands, seldom exceeded a half of one per cent. of the recorded annual productivity of the village. He was, also, remitted a part or the whole of the village dues, and in some instances given free labor on his farm of two or three days of all the peasants. He also received presents from villagers, and those must have been considerable when the head was virtuous and beloved by the people. (*Jk*, II, 46; *Jh*, VII, 32—33; *Tk*, VII, 15; *Hrs*, 1296; *Smw*, 107.) Between his heavy duties and small emolument, many village-heads in Domain-

lands became impoverished (*Mi*, I, iv, 32). In the Barons' Fiefs, great diversity of practice seems to have prevailed respecting the question of remuneration. In some places, the reward was much more liberal than in the Domain-lands, (e. g., *SDS*, II, 43, 46; *DSR*, XII, vii, 1158). The degree of the heads' usefulness and moral influence widely differed in different Fiefs, according to the general condition prevailing in their rural administration.

One head for each village was a rule usually followed, but sometimes two small villages were under one head, and one large village had two heads. In every village, the head was assisted by some half a dozen Chiefs ordinarily called *Kumi-gashira* (組頭, group-heads), but also known as *toshi-yori* (年寄, elders), *osa byaku-shō* (長百姓, leading peasants), *otona byaku-shō* (老百姓, older peasants; in a document of Ugo dated 1607 occurs the title *otonashiki mono-domo*, 'obedient fellows'), *osa-bito* (長人, leading men), and the like. In Yonezawa, the title *Kan-dai* (欠代) was used after 1801. Suwō had *kuro-gashira* (畔頭). The first name, *kumi-gashira*, suggests that, in some cases, the office originated with the heads of five-man groups, which are considered in Note 53, below. (*Tk*, II, 33—34; *Jh*, VII, 33; *DSR*, XII, v, 530—537; *Mkr*; *Hrs*, 1296; *Wig*, i, 47.) This title was, however, evidently not universal. The other titles would seem to indicate that the Chiefs had merely been leading peasants of the village. *Osa byaku-shō*, for example, was the title applied in some parts till a late period to peasants who held no official position, but whose forefathers were large landholders. (Cf., e. g., *DSR*, XII, v, 316, 530; with *Nz*, I, 16; *Jh*, VII, 34.)

The Chiefs were usually chosen by the village from among the chief families, for a term of one or more years, and the choice was reported to the authorities. (*Tk*, II, 33—34.) This, however, did not prevent the office from becoming confined to a limited number of persons in a given village. (*YZS*, 553; *NTK*, IV, 419—420.) The duties of the Chiefs were much the same as those of the head, whom they assisted. They sometimes received a slight remuneration, and, in addition to it, or instead of it, a remittance of village dues. (*Jh*, VII, 32; *Tk*, VII, 15.)

Besides the Head and the Chiefs, the average village had one or more Elders, whose function was to keep an eye on the conduct of the village-officials, to give counsel and admonition, and generally guard and promote the best interest of the village. They were chosen from among the most highly respected of the peasants, and usually served with little or no remuneration. They often enjoyed greater moral influence than the Head, but in public documents his signature and seal followed those of the Head and the Chiefs. (*Jh*, VII, 33; *NTK*, IV, 419; etc.) Their title was *hyaku-shō dai* (百姓代, representatives of peasants), *sō-dai* (惣代, representatives), *sō byaku-shō* (惣百姓, representative peasants), or *mura-bito gashira* (村人頭, heads of villagers). Where the Chiefs were called *kumi-gashira*, the Elders might be known as *osa byaku-shō*, a title which was applied to the Chiefs in other places. (*Tnk*; *SDS*; *Mi*.) This confusing identity of titles for the two different posts would seem to point to their common origin and later differentiation.

(17) *District-heads and groups of villages.* In larger Fiefs and Domain-

lands, as, for example, Yonezawa, Sendai, Kanazawa, Okayama, Hiroshima, Yamaguchi, Kurume, Kumamoto, and others, neighboring villages were grouped together for administrative purposes. The commonest name for the groups was the plain *Kumi-ai mura* (組合村, associated villages), but the old names *gō* (郷), *ho* (保), *ryō* (領), and others persisted in some places, as also the peculiar *tōri* (通), *suji* (筋), *te-naga* (手永), and the like. (*Dch*, Introd., 93; *YZS*; *Mkr*.)

The *to-mura* (十村, ten villages) groups were probably found only in the Kanazawa fief comprising for the most part the provinces of Kaga, Noto, and Etchū. These groups are said to have dated as early as 1604, and were originally composed of ten or twelve villages situated near together, but they grew larger and fewer, as time went on. At the end of the feudal régime, many a *to-mura* was found to comprise 30 or 40 *mura*. (*Mkr*, 475.) According to the normal scheme, however, which probably continued to be in practice in several districts of this fief, villages were to be organized as follows: five neighboring villages were under the supervision of an *ō kimo-iri* (great village-head), who was one of the *kimo-iri*, or heads, of the villages, and took the post of the general head annually by rotation; two such groups of villages, that is, ten villages, formed a larger division, and its head, called *to-mura kimo-iri* (ten-village head), was one of the two *ō kimo-iri* of the five-village groups, and served for life, but not by heredity; and five of the five-village divisions were likewise banded together under the control of an *ō to-mura* (great ten-village [head]) selected from among the five *ō kimo-iri*. (*Sho*, 142.) "To-mura" seemed later to have become the popular general name for this elaborate organization.

The heads of the *to-mura* were called *to-mura kimo-iri*, or simply, *to-mura*; sometimes, *osa byaku-shō*. The great majority of them were of the peasant class, though, like some village-heads, many of them were favored with the privilege of wearing swords and bearing family-names. A few were real warriors. None of them, however, seem to have held their districts in fief. They were directly responsible to the Baron's government, and not to his Bailiffs and land-holding vassals. (*DSR*, XII, ii, 854—859; *Mkr*.) The importance of such an institution in extending the Baron's authority throughout the Fief and in securing uniformity of rural government may well be inferred. The *to-mura* arrangement is said to have excited the Suzerain Yoshimune's admiration for its efficiency. (*To*, XIV, 300—301.)

More common for district-heads than *to-mura* were the titles *ō shō-ya* (大庄屋, great *shō-ya*), *ō kimo-iri* (大肝入), *sō shō-ya* (惣庄屋, *shō-ya*—general), *wari-moto* (割元, 割本, dispenser), *ō yoko-me* (大横目, great supervisor), *ō sō-dai* (大惣代, great representative), *ken-dan* (検斷, examiner and judge), *ō doshi-yori* and *chū doshi-yori* (大 and 中年寄, great and middle elders), and the like. (See *Mkr*; *YZS*; *Gsr*.)

They were generally great peasants, and, as heads of extensive regions, some of them wielded as large an influence as petty barons and bailiffs. Their service, which was similar to that of the village-head but magnified, was remunerated with a special slight levy imposed upon the districts. For the maintenance of the *to-mura*, for example, all the male

peasants between 15 and 60 years of age gave about $\frac{2}{5}$ peck of rice (*Mkr*, 259). This circumstance and the great power of the district-head had led to so many corrupt practices, that, in 1713, the Suzerain's government decreed that this office should henceforth be discontinued but in exceptional regions throughout the Domain-lands. (*To*, XIII, 318, 320; Note 59, [XXVII, 6], beldw.) This law did not affect the Fiefs.

(18) *Delegation and responsibility in China*. See the author's *Early institutional life of Japan*, chap. 3.

(19) *Inviolability of the official*. Each official represented in his proper sphere the power delegated to him in successive steps from the very highest authorities. He was a dignitary of the Suzerain or the Baron (公儀 or 君公の御役人), the honoric *go* (御) commanding respect from all persons below him (者共, 輩, 下下). He, on his part, for the same reason, showed extreme deference in addressing himself to his superiors. The latter were approached with reverence (乍恐), and were listened to with abject fear (奉畏候). It was a capital offence to use privately the Suzerain's family emblem or to pretend that a private undertaking was official (御用). (*KR*, I, No. 33; *GGI*, II, 19, 20.)

(20) *Sacredness of the laws*. We cannot tarry to go into the fruitful discussion as to the source and meaning of 'law' during the Tokugawa period. It may be stated, in short, that, whatever the origin of the ideas contained in the law, the latter became such only as it emanated from the higher authorities. Each law took the form of an official command, and was regarded as embodying the will of the ruler. It might gradually and naturally fall into disuse or be modified by custom, or even might at once be found to be unworkable, but it should not be wilfully altered or abrogated by the people without official sanction. The law was sacred, for it was the voice of the powers that ruled. Even a sign-board bearing an official proclamation was treated with reverence: it was surrounded with a fence, was guarded from fire, and was re-made when it wore out by exposure. (*GGI*, I, 12; II, 25.)

It is interesting to note that frequently the authorities sought to add to the majesty of a law by stating that its infraction would incur punishment from heaven (天道).

(21) *Punishment of feudal nobles*. This subject should be discussed in a separate paper on the feudal classes of this period.

(22) *Joint responsibility of corporate bodies*. Of the various kinds of corporate bodies mentioned, the cities and guilds form the subject for an independent discussion. As for the village communities, their joint responsibility will be more fully treated when we discuss the five-man group. In short, the whole or a part of the village, or its officials, were held responsible for the receipt and transfer of the official circulars, for the payment and delivery of the taxes, for the good behavior of all the members, for the arrest and surrender of robbers and incendiaries, for the maintenance of taxable estates, despite the running away of their present holders, and for a hundred other affairs. (E. g., see *GGI*, I, 6, 7, 14, 34; IV, 3, 8, 11, 12, 13, 15; *Ggs*, 5, 7—8, 134—135; *KR*, II, No. 44.) Cf., also, Note 144 b, below.

(23) *Framing laws with discretion*. An examination of a large body

of Tokugawa laws will strike one by the persistent recurrence, after important provisions, of the clause that cases requiring arrangements contrary thereto should be reported to the central government.

What might be termed discretionary laws, also, were abundant. Sometimes special laws supplied or modified general orders previously issued in the form of public moral exhortations or as informal measures, or *vice versa*; for example: an increase of population was generally encouraged, but an excessive increase in an old village was checked by prohibiting indefinite divisions of land-holdings; the peasants were continually taught to settle disputes by private adjustment, and yet the evil of suppressing litigation was provided against by law. (*To*, XIII, 315—316.) Cf. Notes 36, 45, 49, below.

(24) *Operating laws with discretion.* Judgments passed by the courts afforded numerous examples of the use of equity. This and the speed of rendering justice struck Kaempfer, who thought them exceptional (Engelbert Kaempfer, *History of Japan*, Engl. transl., new edition, Glasgow, 1906, III, 319—320), but who, it is to be feared, was acquainted only with favourable instances. (Kaempfer was in Japan in 1690—1692.) Good rulers emphasized the importance of equity and discretion. Ieyasu remarked: "Rules of conduct are generally fixed according to men's rank, but beware that time and place alter the *modes* (様子, *yō-su*). (*Iwabuchi ya-wa*, in *DSR*, XII, v, 115—116.) Iemitsu criticized his chief justices, as they, prompted by a desire for an exhaustive inquiry, put to the witnesses questions beyond their intelligence, which bewildered them without enlightening the issues. He also taught the distinction between what he termed the commissioner's decision (奉行の裁判) and the suzerain's decision (天下の裁判). In a dispute over a boundary, for example, the former would determine the truth, but the latter would add that a part of the land of the winning side be ceded to the other, if the correct division was certain to deprive many men of the losing party of their very means of sustenance. He did not praise a man who made a useful compilation of court decisions, for, thought he, no two cases would be exactly alike, and precedents were not always safe guides. (*To*, X, 1090—1092.) Tsunayoshi ordered that decisions should not be based on the consideration of immediate justice alone, but also on their probable effects on popular morals and customs. (*Ibid.*, XII, 107.) Uesugi Harunori was a living example of discretionary justice, and so were Hosokawa Shigekata and other barons noted for political wisdom. (E. g., *YZS*, 81—88, 262, 807; *Gi*, I, 2; etc.) Equity and judicial acumen combined in the highest state of efficiency in the person of Ō-oka Tadasuke (1676—1752). (*To*, XIV, 263—264.) Cf. *Wig*, i, 71—73; Prof. Mikami Sanzhi's articles in *Hrs*, 1088—1115.

(25) *Bending laws for equity.* Kuroda Yoshitaka (黒田孝高, 1546—1604), like many other Barons, had made gambling in his fief a capital offence. His vassal Katsura won a large stake one evening, and on his way home, with all the booty on his shoulders, unexpectedly met his lord, and, in bewilderment, improvidently exclaimed: "I have not been out gambling." His comrades gave him up as lost. The next morning he was summoned to Yoshitaka's presence. The latter asked

him how much he won the preceding evening, to which Katsura replied in exaggerated terms. "Bravo!" said the lord, "but it was a risky business to evade my law. Your foolish exclamation shows your fear of the law. If you fear it to that extent, rather observe all laws. Beware, too, that after too good a fortune usually comes ill luck. If I hear you have squandered your money, I shall punish you. Do not gamble. Do not buy luxuries, and be careful not to become bankrupt." During his rule, few of his vassals were punished capitally or banished. *Kuroda ko-kyō mono-gatari* in *DSR*, XII, ii, 72ff.

The evading of a barrier was punishable with death, but a peasant committing this offence on his way to Edo to lay before the central authorities an appeal over the head of an unjust local official, from whom he could of course secure no passport, was not punished therefor. He was allowed to testify that, as he came to a town just this side of the barrier, he lost his way and strayed into a forest, where he met a man who gave him a wrong direction; this brought him to a town just beyond the barrier. Slight falsehoods regarding the ages of the culprits who have just outgrown their minority, or time, distance, the length of weapons, and other circumstances, were frequently imposed upon the offenders by the magistrate himself, in order to extenuate their penalties when their cases called for equity. (The popular story of Yao-ya O-shichi, a maiden who set a building on fire with a hope to see her lover, and who honestly and innocently refused to testify that she was still in her minority, as the magistrate would have her do, is a pathetic illustration. She was a year too old to be a minor, and was, much against the wishes of the authorities and the people, punished capitally for incendiarism.) Perhaps for this need of considerate justice, it was customary not to allow the affidavit of the defendant to be shown him in writing, though he might listen to its reading. *Tk*, IX, 5-6, 15.

(26) *The peasant as the foundation of the State*. The constantly quoted maxim (derived from the *Shu-king*, *hia-shu*, iii. 2) is, 民は國之本なり, meaning precisely the caption of this Note. According to the economic conception of most rulers of this period, the peasantry was the only productive class of people, and furnished the wherewithal of maintaining government and all phases of national life. "Agriculture is the basis of all things and the treasure of the world. It is the peasants' honor to be engaged in it." Even if a peasant should be enabled to pay more taxes by becoming a merchant, „nothing was precious that had not been yielded by the soil." *YZS*, 99, 105. "Of the four classes of people, [i. e., gentlemen, peasants, artisans, and merchants], the peasants are the foundation of the State. . . . From the Emperor down to the common people, men's lives depend upon food and clothing. That food and clothes are fruits of the peasant's labor is self-evident." *Om*, ii, 44.

It will be remembered that the peasants formed nearly ninety per cent. of the entire population of Japan under the Tokugawa. See Note 7, above.

(27) *Peasants and warriors as against burghers*. The warriors and peasants, to a large extent, prospered and suffered together under varying conditions of the rice crop and its market value, whereas merchants

often profited when the others lost. The warrior's income was fixed, and the toiling peasant's was little more elastic, but the burgher seemed frequently to make fabulous fortunes with little labour. It will be well understood that, according to the current economic theories of the period, the merchant did not produce or increase the wealth of the nation, and gained where others lost. His apparently easy profits, therefore, made him an object of suspicion and hatred. Moreover, under the prevailing arrangement of the period, the warrior's income in rice was converted into money through the medium of merchants, who not seldom speculated on the rice at the warrior's expense. If the latter was improvident enough to spend more than his income, the merchants would willingly finance him with his future years' incomes as security, and thereby hold him in perpetual obligation. (*Bms*, 39—41.) Spiritually, too, there was much in common between the peasant and the warrior, beside much in antagonism between them both and the burgher. The former too prized physical vigor, simplicity and loyalty; the latter's venturesome and ostentatious habits, accompanied by a utilitarian and impersonal point of view, were disliked and feared as tending to debase and undermine the moral life of the feudal society. (*Ngh*, 228.)

The feudal legislation was largely influenced by these ideas and sentiments. To take a few illustrations, the suzerain's government once forbade merchants to undertake the opening of new land, (*To*, XII, 269), and always looked askance at, and often interdicted, their acquiring titles over cultivated land, (*Mkr*, 334, 335; *Mi*, II, vii, No. 27). Peasants noted for filial and other great virtues were rewarded with the privileges of bearing family-names and of wearing swords, but the latter privilege was sometimes denied to merchants equally virtuous (*To*, XIII, 661). On the face of law, at least, farmers and merchants might not adopt each other's occupation (*GGI*, III, 12; *KKK*, 545—546; *YZS*, 105—106; *TMK*, f. I, 33; *Mkr*, 246, 252—254) or enter into marriage relation, and the younger sons of the peasants might not serve in merchants' families (*Mkr*, 51—52; *YZS*, 527, 631). "As the minor occupation [末業, i. e., commerce, as distinguished from the major or chief occupation, 本業, namely, agriculture] seems to return much profit for little labor and therefore excites the peasant's envy and interferes with agriculture, it has been a custom in all ages both in Japan and in China to forbid him to marry a merchant's daughter." (*Ibid.*, 747.)

The rising influence of the burgher class was, however, so irresistible, and had so insidiously stolen over a large section of the warrior class, that, especially at Edo after the end of the seventeenth century, the mercantile mode of life and thought began deeply to affect the warriors (*Sb*, I, 59—66; V, 27—31; *Bms*, 25—26, 50—51). The same mode in its worse aspects, it was continually deplored, was corrupting the innocent peasants also (*Mi*, I, iv, No. 29). This important tendency falls beyond the limits of our essay.

(28) *Seperation of arms from land.* Further, see this *Journal*, vol. XXX, pt. III, pp. 270—271, (the 12th to 13th page of the Introduction to these Notes), and Note 60, below.

(29) *Tenants and farm laborers.* See Notes 15, above, and 37, below.

(30) *Ownership virtual and theoretical.* It is hazardous to make a general statement on the question of ownership of land. Law and customs varied in different places and at different times.

Just prior to 1600, when a general cadastral survey of Japan was made under Hideyoshi's command, each piece of land whose name and average productive capacity were registered was entered under the name of the actual possessor, regardless of the history of his possession. He was allowed to hold the piece even against the lord of the fief in which he lived. "It is strictly forbidden," says an order of a chief commissioner, "to give to the lord any of the cultivated lands recorded in the register." Was it ownership that was here recognized? It was, as is evident from an order of another commissioner, the right of cultivation (作職, *saku-shikî*), rather than ownership. "The right of cultivation over a wet or upland piece," says the order, "belongs to him under whose name it was registered during the recent survey. It is forbidden to allow the land to be taken by another person, or to take another person's land under the pretext that one has once had the right of its cultivation." (*Dch*, intro., 94—95.) These are illuminating orders, as coming from the commissioners of Hideyoshi, the autocratic suzerain bent upon enforcing a uniform land law throughout Japan. They may perhaps be said to reflect his policy of curbing the powers of the barons by directly protecting the rights of the peasants under them. Nevertheless, it is probable, too, that the right of prescription and the right of cultivation which he recognized in the actual holder were based upon a prevalent practice of the period.

Whatever the effects of these orders before 1600, it is hard to assume that the same principles ruled under the Tokugawa. During the early years of their suzerainty, one occasionally meets with deeds of sale in which it is apparent that what was transferred thereby was the right of cultivation rather than ownership. (Cf., e. g., *DSR*, XII, iv, 575—577.) It makes little difference if the right had been enjoyed through generations and was now transferred permanently. (Cf., e. g., *ibid.*, XII, x, 504 ff.) The same idea lingered in some Fiefs till long afterward. In Akita, for example, the peasants tilled the land which the Baron owned, the former owning not even sites for their houses, which were erected on cultivated land. (*Ibid.*, XII, xi, 169—170, from 秋田沿革史大成). In Kanazawa, the same theory was held: land was the Baron's (*on haka*, 御高), and if a peasant was too poor to meet his obligations, he was allowed only to sell the use, not the ownership, of his land. The process was called *kiri taka* (切高, dividing the assessed productivity, that is, not the acreage), and the price was euphemized as return-favor (*rei*, 禮). (*Mkr*, 335, 473—475.)

In several other places where, as in the greater part of Japan, people no longer remembered the distinction between the right of ownership and of cultivation, or, perhaps, the latter had long been assimilated with the former, the idea of transferring the mere use of land still adhered to tenant-farming. Tenant-farmers sold their right of tenancy to others, and pieces of land under long terms of lease changed hands with more or less freedom. The practice was especially prevalent in parts of Echigo,

Bitchū, and Tosa. (*Ibid.*, 476, 527, 530—531, 539—544.) This last usage seems highly significant.

Even where the holding peasant was to all intents and purposes regarded the owner of his land, the persistent fiction that he merely had the right of use lingered almost universally, and, in many places, unconsciously. This will be clearly seen in the following Notes 31—40.

The legal proof of a holding consisted of either an entry in the official register, a title deed, a deed of sale, or a receipt of the land dues. (*Mkr.*, 331—332, 336—340; *Wig.*, v, 1—20.)

(31) *Cultivated and uncultivated land.* As might be expected, the peasant's virtual ownership extended over cultivated land, but seldom over uncultivated or non-arable land adjacent thereto. The tenure of the latter was neither uniform nor always definite within the same Fief or Domain-land, Fiefs often presenting a great variety of tenures in juxtaposition. In Sendai, Tosa, and Higo, for instance, different kinds of fief land, village land, religious land, and private land, existed side by side, many of them in ill-defined tenures (*Mkr.*, 441—443, 445, 451).

Generally speaking, some of the following belonged to the Domain or the Fief, (it would be truer to the popular conception of the question to say 'the Domain or the Fief' than to say 'the Suzerain or the Baron,' for, thanks to the presence of intendants and bailiffs, the peasant's point of view in regard to landed property was rather impersonal): 1. grass-land next to rivers, lakes, and the larger ponds; 2. grass-land and woodland on the borders of villages and districts; and 3. forests specially reserved for public purposes. The privilege of cutting grass and smaller trees on these lands for fodder and fuel was often granted to villages or individual peasants, on payment of small dues or under other conditions, and the felling of larger trees for more permanent ends was allowed under varying terms. The border-land often played an important part in the economy of villages which had insufficient areas of cultivated land, and gave rise to many a serious dispute between them. (*TMK*, f. II, 1—106, pts. 人會山 and 株場; III, 149—181, 204—308, pts. 村境 and 山林境; *Mkr.*, 346, 431—434, 440, 442, 445—446.)

Some other land along rivers and ponds, and grass and wood land, were considered as common property of a village in which or the villages between which they were situated. In these cases, dues, if any, in return for the use of grass and trees were paid to the village, which made the necessary regulations. Larger lots were guarded by wardens. These men originally were, in many places, said to have been owners of these tracts, which they, under the pressure of the taxes levied on them, voluntarily turned them over to the village, and became their keepers. (*Mkr.*, 381, 420—424, 430—432, 435—440, 449.)

Some uncultivated and non-arable land was already in private ownership. Customs, of course, varied greatly in this matter. The narrow marginal patches about rice-fields, for example, were considered in some places as belonging to the owner of the fields, but, in some others, he owned the soil of these margins, but not the grass growing thereon, which was common property of the village. In Yonezawa, the holder of a piece of tilled land had a free title over the uncultivated land

bordering upon it. Most of the wood-land originally granted by the Fief to the village gradually passed, in Sendai, into the hands of large land-holders. The owner of uncultivated and waste land either did or did not pay taxes for its free use, according to the localities and to the origin of the lots. In most places, land of this description could be alienated with greater freedom than cultivated land. The authorities, however, actively interfered with an indiscriminate cutting of large trees, it being a traditional policy of all Japan in this period to preserve and increase forests so far as it did not interfere with the life of the peasants. (TMK, f. II, 91, pt. 株場, No. 1; Mkr, 333, 438, 441, 455.) See also Notes 36 and 66, below.

(32) *Right of seizure.* In Sendai, the government of the Fief might demand a piece of private land for official purposes, and recompense the holder with another piece of equal value. If such a piece could not conveniently be found, he might claim no pecuniary consideration for the land he surrendered. This latter outcome was called *tō-moku* (倒目, overthrowing the title). Mkr, 334. This is a solitary instance of the lord's lingering right of seizure. Even in Sendai, this practice was evidently rare, and it is difficult to find similar rights exercised elsewhere. Cf. Note 144b, below.

In some parts of Tosa, the system of making allotment and periodical redistribution of land, which was copied in Japan from China in the seventh century, (cf. the author's *Early inst. life of Japan*), had been resuscitated and in force for a considerable period, when the feudal administration was abolished. This subject is still obscure, but it seems unlikely that the system was extensively applied to peasants' holdings even in Tosa. Nor does it seem to have been in practice in any other part of Japan, save portions of the distant Ryū-kyū (Loochoo) islands.

(33) *Right of escheat or mortmain.* In the Suzerain's Domain-lands, landed property was confiscated (1) for grave offences, (2) for illegal mortgages and other fraudulent or unlawful transactions in land, (3) for an intestate succession in which the deceased's relatives were engaged in hopeless disputes. Technically, the first class of forfeiture seems to have been called *kessho* (闕所), and the others *tori-age* (取上). Throughout the period, a gradual trend toward leniency in all these cases is discernible, the moveable property of the culprits, the belongings of members of their families, and the claims and interests of their creditors and debtors, receiving greater and greater consideration. The most remarkable is the matter of the holdings of runaways who were only impecunious, not criminal. Once these holdings were probably confiscated, but the universal tendency was to forfeit them only when no relatives and no friends of the runaways were forthcoming to succeed to their estates. Even then, the forfeiture was reluctantly accepted by the authorities, and the estates were gladly restored to the original holders, if they returned, or to their kin.

As will be seen in the next Note, escheat in default of heirs was as infrequent as that for desertion.

Theoretically, land was to be forfeited for a repeated failure to yield

its taxes, but in this instance, also, the authorities were far from being eager to seize the land. When friendship or neighborly spirit did not come to the rescue, a village-official would offer his good offices, and the Intendant or Bailiff was not to show his hand until all resources were exhausted to save the land from confiscation.

It is apparent that all this leniency was not entirely due to official benevolence, but was largely influenced by the consideration that, owing to peculiar economic conditions, it was growing more and more difficult to find men willing to undertake the cultivation of confiscated or deserted land. (See Note 133, below.)

Land confiscated for whatever reason was either entrusted to the charge of relatives, village officials, or the village as a whole, or let out to tenants, the actual holders being held responsible for the regular dues from the land. It is also probable that pieces of land sometimes granted permanently to persons of exemplary virtues (cf. in Okayama in 1654; *Semetewa-gusa*, 責而者草, by Shibui Noriakira, 澁井徳章, IV, xii, 24) were parcelled out of confiscated cultivated land.

If the original holders had arrears either of taxes or of debts, all or part of the land they forfeited was sold in order to satisfy the claims, or else the present holders were obliged to meet them in instalments out of the income from the land, in addition, of course, to the payment of the regular taxes.

(*DSR*, XII, ii, 857; *To*, XII, 268; *BK*, I, 8; *TMK*, z. I, 126, pt. 家督相續, No. 4; z. II, 11, pt. 失踪, No. 8; f. I, 216—240, 闕所; *Mkr*, 170—219, 337—339; *JK*, II, 37, 40, 41, 53.) Cf. Note 144 b, below.

(34) *Succession testate and intestate.* Customs concerning succession showed great diversity. In some places, primogeniture, even representative primogeniture, was the rule; in others, simply agnatic succession. In these respective districts, the principles prevailed over other considerations, and when they conflicted with testaments, a compromise was effected by dividing the property and giving its major part to the oldest male son. When the heir was still a minor,—the minority ending between 14 and 20 years of age, according to localities,—a guardian or two were chosen from among the relatives and village officials, or else the boy was adopted as heir to his uncle or aunt or the second husband of his mother. The rigor of primogeniture or agnatic succession was further softened by a free law of adoption, which prevailed in all Japan.

In other places, the will was a common requisite for succession, and was binding even when the testator ran away, provided it was drawn up in due form. It either was accompanied with the seals of village officials and relatives, or was made alone by the testator and was kept strictly secret till it was opened after his death in the presence of relatives. The testator could nominate as heir one of his nearest kin other than his eldest son, if the latter was incapable or physically invalid, or even a woman. If a man died intestate, or if the will was not in correct form, it was incumbent upon his relatives and village officials to deliberate and decide upon a proper heir from among the former.

In some districts, none of the three agents, that is, primogeniture, the testament, and the council of relatives, were alone strong enough to decide

a succession, but the first two were weighed carefully in the last. In such instances, the relatives naturally were an important factor in the problem.

In all these various cases, however, the universal and predominant principle was that the name of a family should be preserved against all obstacles that could possibly be overcome. This idea prevailed throughout Japan, and exerted a tremendous influence on social order. It is a subject worthy of a full discussion. It is enough here to allude to it and say that the feudal authorities were obliged to respect this strong popular demand. Indeed, the principle was as strong among the warrior class as among the peasants, for neither probably had any other point of view regarding matters of the family. Escheat in default of a male heir in a peasant family would be unlikely to be in practice in such a society, for the independent peasant family was usually closely identified with hereditary holdings of land which had acquired names (*aza-na* 字名), and always subsisted on some landed estate, however small. The family should not die, and, if it would live, it needed land. An estate left heirless, therefore, was not confiscated until it was evident that there existed no worthy relative of any degree whatever of the deceased to succeed it or no person to be adopted.

Formal official sanctions were necessary in some places for adoption, guardianship, and succession. In others, the authorities were not even notified of these events, and the census was revised only once in the year. Even in the former cases, too, there was little official interference. (*GGI*, I, 8; II, 16, 18, 27—28; III, 8, 15, 16; *TMK*, z. I, 126—127, pt. 家督相續, No. 4; *Mkr*, 175—176, 267—300, 305, 347—374; *Wig*, v, 88—95; *Smw*, 90—91.)

(35) *Land, capitation, and house taxes.* The subject of taxation will receive special attention later in this essay. (See pp. 277—283 of this *Journal*, vol. XXX, pt. III, namely, the 19th—25th pages of the Introduction to these Notes, and Notes 95—113, below.) There it will be seen that the principle tax, that is, the land-tax, was assessed according to the officially determined annual productivity of each piece of cultivated land, which was considered an entity; that several other taxes were assessed likewise; and that each household or each male peasant as basis for assessment occurred only in some instances of village dues, as distinguished from the taxation of the Fief or Domain-land. Even the village taxes were levied in few places exclusively on houses or men. (*Mkr*, 257—260, 263, 413—415, 418—419, 423, 434.)

(36) *Alienation and division of land*, also, will be discussed more fully later. At the beginning of the feudal ages, when the warrior was an actual holder of land, it was he who was forbidden to alienate his land at will. Since the separation of arms from land, the burden of the prohibition naturally shifted from the warrior to the peasant. (Prof. Miura Shūkō, *Kamakura zhi-dai-shi*, 三浦周行, 鎌倉時代史, Tokyo, 1907, pp. 530—531; *Nns*, 95.) In the Suzerain's Domain-lands, at least, a permanent sale of land was illegal since the second quarter of the seventeenth century, and the principle soon prevailed over most Fiefs. It was, however, not only impossible, but also often injurious to peasants, to suppress transactions in land. Consequently, penalties for sales became

less severe in the Domain-lands from the eighteenth century, and everywhere sprang up interesting practices, both legal and illegal, whereby either the title or the use of land changed hands, though with varying degrees of freedom in different parts of Japan. Newly opened lands could be more freely transferred than old lands, house-land than tilled land, and uncultivated land than either, while in several Fiefs any land whatsoever could in one way or another be disposed of. The fictitious devices employed to preserve the semblance of observing the law forbidding the sale of land included practices analogous to usufruct and superficies, as well as sales for terms of years and mortgages with the original intention to foreclose. In spite of all this, however, the law against permanent sale persisted, and its principle was a legal tradition respected throughout the Tokugawa period. On the subject of alienation, see Note 127, below.

As for the division of land among children or other persons, which will again be taken up in Note 45, below, a similar tendency was marked. While the peasant might not divide his holdings indefinitely, he was at liberty to do so up to a prescribed limit. This limit, also, was in no place absolutely insurmountable, for the law was always accompanied with a proviso for cases of urgent need, and the latter was taken full advantage of in many a locality. The prohibition of indefinite division, however, and that of permanent transfer, formed two legal maxims that were never completely forgotten.

That the maxims were at the same time respected and evaded is highly significant, for it would seem to indicate the transitional state of the peasant's proprietary right over cultivated land. It was impossible positively to forbid him from disposing as he wished of his land, which he had long been accustomed to regard at least as much his own as the lord's; nevertheless, the feudal authorities shrank from admitting that the title over the land had passed to its cultivator. Nor could they even entertain such a thought, so long as their point of view was at all feudal, that is, so long as the means of maintaining their military functions were supplied by the agricultural land over which they could not imagine they had lost a right of superiority. Hence they avowed that they would be failing in their duties as benevolent rulers if they tolerated unlimited freedom in dividing and alienating land, which would result in making rich peasants richer and the poor poorer. It would, however, appear that it was not their paternalism alone, but also the controlling motive that transactions in landed properties should not be allowed to affect the revenue of the feudal State, that impelled the authorities to continue to interfere with them. This motive more than any other would seem to have determined the degree of latitude granted for the division and alienation of peasants' holdings. One would almost say that the Japanese peasant would have been the full owner of his land, but for the nature of his taxes.

(37) *Tenant farming.* The reflections of the last Note receive further confirmation from the conditions of tenant-farming. The limited right of alienation did not prevent the rise of comparatively large land-holders who employed tenants and laborers on their farms.

In some instances, single holders held entire villages, (e. g., see *TMK*, f. III, pt. 郡境, No. 4). The tenures of the tenant-farmers showed a great diversity, and their conditions duplicated certain features of the general destiny of landed property described in the preceding Notes. Land—if we confine ourselves to rice-land—was let for a term ranging between one and twenty or more years, often accompanied by no written statement, and the owner himself paying the taxes. The land might be revoked on due notice, if its cultivation was neglected and rent unpaid, but leases over twenty years were usually considered permanent, and could not be revoked but for exceptional reasons. Even an annual lease tended, notably in Echigo, to become permanent, and there were, as in Sendai, leases that were from the outset considered permanent, and could not be terminated even if the tenants would. The longer and permanent leases were sublet or transferred with ease in Echigo and Tosa, the tenants paying all the taxes due from the land, and considering themselves as good as proprietors. In Tosa and other western provinces, the real proprietor was called the 'holder of under soil' (*soko-chi mochi*, 底地持, or *shita-tsuchi mochi*, 下土持), and the tenant the 'holder of upper land' (*uwa-chi mochi* or *uwa-tsuchi mochi*, 上地持, 上土持), or, as one would say, of superficies. (*Ish*, 72; *To*, XII, 621; *TMK*, f. I, pt. 借地, No. 1; *Mkr*, 517—545.)

It is impossible to estimate the relative extent of tenant-farming in the whole of Japan in this period, but it may be inferred to have been small, though probably increasing. Cf. *Mi*, I, ii, No. 15. During the present reign, when the old restraints of division and alienation have largely been removed, and the tenants have relatively increased, about a third of the cultivated land in Japan Proper is estimated to be under tenant-farming, and probably as much as a fifth of the peasantry consists of tenants, part owners and part lessees constituting more than a half. (Cf. *Japan in the beginning of the twentieth century*, compiled by the Department of Agriculture and Commerce, Tokyo, 1903, p. 90; *Ngh*, 131.) Also see Note 15, above. Under the Tokugawa, the proportion of landholders to tenants must have been higher. This remarkably large percentage of landholders in the entire peasant population, together with as remarkably a small percentage of large landlords, constitutes a great fact that lies at the bottom of our whole subject. It is hoped that, before the paper is gone over, both the importance of this condition and the reasons therefor may be patent to the reader.

(38) *Change of residence.* The passing of a land-holding peasant from one Fief to another was not allowed, except under the not always practicable subterfuge that he was to become a member of a religious house in the latter. There was, however, less difficulty for a landless peasant to move, for his absence would not affect the Fief's revenue.

A man might, without relinquishing his present holding, succeed to a holding in another village within the same Fief, provided that the first holding was taken care of by his relatives and they paid the usual taxes. The census of the first village generally remained unchanged, despite the moving of one of its members, if his family stayed and if the title over his holding continued the same. It was on the holdings

that the taxes were levied, and it mattered little whether the holders lived in the village. In the second village, the new resident either was registered as a full citizen, or merely had his domicile, and paid the village dues, not the public taxes, except for the new holding to which he had succeeded. Sometimes a removal was authorized of a peasant without any holding in the village in which he wished to live, and then his financial obligation in the original village was of course uncanceled. No change of abode could in any event occur without an explicit sanction by village officials or Bailiffs.

In some localities, old residents of a village exercised a strong moral control over the new comers, whose continued presence they would refuse to tolerate, if they proved unworthy during a term of probation. Likewise, the villagers whom a man left behind sometimes demanded what was called farewell-money.

(*TMK*, z. II, pt. 入籍, Nos. 3 and 4; *Mkr*, 231—267.) Also see Notes 74 and 144b, below.

(39) *Marriage*. The passing from one village into another of a woman in marriage affected little the fiscal issue of either, and hence met no official interference. A marriage between persons of different Fiefs was, however, difficult, though not impossible if the woman was first adopted as daughter of a peasant in the man's village. Marriages between villages of the same Fief were contracted with merely formal sanctions of officials, while within the same village marriage or divorce involved little official formality, the act often preceding its registry by months or years. (*Mkr*, 45—65, 70, 105—116.)

It should be noted that, while official interference was absent, there was not wanting a vigorous moral sanction of the kin and of the village over all matters of marriage and divorce.

Nor should it be forgotten that when an increased population was desirable for the Fief or the village, marriages were encouraged by the authorities with paternal care, (e. g., in Yonezawa under Uesugi Harunori; *YZS*, 530—531, 746). See Note 140, below.

(40) *Right of pursuit*. It has been seen (in Note 33, above) that the land deserted by the runaway was not always confiscated. Nor was it necessary for the authorities to pursue him, if he owed no debts and no taxes in arrear, for the village was responsible for the taxes to be levied on all the taxable holdings within its limits, no matter if some of its members were absent. Either the runaway's relative or friend, or any other willing person, or the entire village, would be compelled to keep the deserted land under cultivation. Sometimes, when such adjustment was readily made, the disappearance of the person was not even reported to the Intendant or Bailiff, or, if properly reported, his name was not cancelled from the village census, until it was certain or probable that he was no longer living. A search was often ordered to relatives and villagers, but the degree of eagerness with which the search was conducted depended on the interest these men personally had in the matter.

If the runaway was in heavy debts or had repeatedly failed to return taxes, those persons who were liable to be held responsible for satisfying

the claims were ordered, very often on their own request, to institute a search lasting for a definite period, usually six months. Passports were supplied to pursuers for travelling in other Fiefs. During this time, periodical reports were made of the progress of the search, which thereafter was definitely prolonged (永尋). Lack of zeal in pursuit, if it was brought to official notice, and if it was accompanied with a possible failure to meet the claims, was punished with a reprimand, sometimes accompanied by a fine. The property of the deserter would be forfeited, in default of a relative or friend to maintain it and pay the arrears.

Thus, one never meets an instance of a rigorous pursuit conducted by the authorities themselves. From their fiscal point of view, land was more valuable than personal service, and the dues from the land, than the land itself. These dues and the village responsible for their payment were two things which had made the lord's right of pursuit lose much of its reality.

At Saga, a relative of a criminal runaway was imprisoned for fifty days, and, if the latter returned, he was either banished or killed, but it is evident that this severity was intended as exemplary punishment for such-like misdemeanors. It did not accompany a real right of pursuit. Elsewhere returning runaway does not seem to have been so harshly treated; in some fiefs which were particularly lenient, he was welcome, and was restored to his original estate, even when the latter had been taken up by a relative.

(*TMK*, z. II, pts. 失踪, Nos. 5, 7, 9, 10, 13, 26, and 除籍, Nos. 3, 9, 12; *Mkr*, 169—230; *Tk*, VIII, 20—21; *Jh*, VII, 70—86.) See, also, Notes 133 and 144b, below.

In the first years of the régime, however, when the warrior's direct power over the peasant was presumably greater than in later years, and when the idea of village-responsibility had not been elaborated, the pursuit of the non-criminal runaway was somewhat more strict, though generally not rigorous. At Iya-yama (cf. Note 14, above), it was an offence to retain a person in any part of the whole district who had run away from any other part, (A. D. 1607—*DSR*, XII, v, 321). At Iga and Ise, Bailiffs were responsible for the restoration of deserters, which probably meant, in practice, the collection of the taxes the latter owed for their estates, (A. D. 1609—*ibid.*, XII, vi, 586); at Okazaki, the wives and children of the remaining peasants in the village were imprisoned until the runaway was found, (A. D. 1611—*ibid.*, XII, vii, 1164—1165). The latter case was exceptional, for the Fief then needed labor for unusual public works. In some places the runaway was not molested if he remained within the same Fief, (A. D. 1611—*ibid.*, XII, vii, 1163). One fails to discover any instance of a concert of Fiefs for the pursuit or search of one another's deserters, (cf. A. D. 1611—*ibid.*, XII, ix, 230). The nearest approach to this was the law, by no means universal, that a runaway should be delivered if claimed from his original Fief or district, (A. D. 1609—*ibid.*, XII, vi, 772). Even if so claimed, however, he needed not always be restored, according to an order of the Suzerain's government, if his desertion was due to the bad government of an Intendant or a Bailiff (A. D. 1603—*ibid.*, XII, i, 206). In all these instances, two things will be

found to be common: first, the duty of search, wherever it existed, devolved primarily upon peasants; second, the reason for the search was fiscal, and not personal. Already the cumbersome and ineffective method of pursuit was giving place to the later system of the joint financial responsibility of the village as described above (A. D. 1608—*ibid.*, XII, v, 832).

(41) *A good lord.* Uesugi Harunori, pseudonym Yōzan, (1751—1822), is always cited as an exemplary lord, and his life largely influenced contemporary and subsequent administrators. From his boyhood he never ceased to study Chinese classics, as was customary with every well-bred feudal noble, and deeply imbibed the words of wisdom they contained on the care of the people. When he succeeded to the barony of Yonezawa at the age of sixteen, he took a secret oath to a deity that he would strive to be the true "father of the people". All his subsequent years were spent in an ever-increasing solicitude for the welfare of the peasants. With his continual struggle against obstacles, and his constant practical sense, benevolence, and unremitting industry, he achieved an incredible degree of success in building up new industries, improving agricultural conditions, reforming rural customs and morals, and making contented and loyal subjects of the once impoverished, dissatisfied peasants of the fief. His unbounded love of them found response in their beautiful affection and veneration for him. His death, which occurred in 1822, was lamented by all the Fief and all lovers of good government throughout the country. (YZS; NTK; Uyz; Om, vi, sup. 151 ff.)

Almost as illustrious for good rural administration are the examples of Tsugaru Nobumasa (1646—1710), lord of Hirosaki; Maeda Tsunatoshi (1644—1724), lord of Kanazawa; Hosokawa Shigekata (1718—1785), lord of Kumamoto; and Matsudaira Sadanobu (1759—1829), once lord of Shirakawa. (Tnk; KSK; Sho; Gi; Shz, XVII, 1085—1125; XIX, 1—30, 525—542, 880—893.)

(42) *Study of rural conditions.* An earnest study of the life of the silent peasant was another tradition in the political lore of China and Japan. A lord who was brought up amid court ladies in ignorance of the use of the sickle or of "the tree on which rice grew", was unfortunately not an altogether fabulous figure during the later years of this period, and his appearance was a curse to his fief. If his councillors had as low a sense of duty as he, his rule was certain to bring a disaster upon his house and his people.

All good lords had recourse to several well-known measures of obtaining intimate information of popular conditions. One of them was to raise efficient men of good birth of the peasant class to responsible posts in the rural administration. Land-survey, irrigation, and other important work were entrusted to their care, often with great success. (Cf., e. g., *Gi*, I, 22, 30—31; the case of Horie Arashiro employed by the suzerain, *Tbf*, 793—794.) Another measure was to establish a close connection between village-officials and bailiffs, (e. g., see YZS, 98, 104, 106—108; 804—806, *Zo*, I, 1030). Still another and always commended mode of approach was the Baron's frequent tours of the Fief under pretexts, (*DSR*, XII, v, 156; *Tnk*, 119; *Gsr*, 158; etc.). These often took the form of hawking, which, save a brief space of time at the end of the

seventeenth century, was a universal pastime of Suzerains and Barons throughout the period. Besides affording the much needed diversion and free exercise, the sport had the great value of bringing the lord out from the enervating influences of the inner chamber and into the heart of rustic life. It may be readily imagined that a sympathetic and observant lord could learn peasant conditions in a day of the game more than he could in years of study from treatises on rural administration. Ieyasu (e. g. *DSR*, XII, xiii, 73) and Yoshimune, and many good lords, made capital uses of this sport, visiting the poor, rewarding the virtuous, hearing complaints, discovering hidden talents, and, not seldom, testing the character of vassals and peasants.

Like many other well-conceived measures of the period, however, falconry was prone to abuses in the hands of an inconsiderate lord or his ignorant retainers. Places reserved for the fowling and for the brooding of falcons were often too extensive, and were protected against trespassing with too great severity. Hawks were sent up to Edo or distant castles, and then brought out into the field, with too much pomp, by officials who would disport themselves luxuriously at the expense of the villagers. When the lord himself came a-hunting, the nuisance was sometimes extreme, all the village being forced to run and wait upon the fowlers, who would perhaps heed neither the time nor the field of the peasant. Even under the most scrupulous lord, and with the strictest laws, some of these evils were unavoidable. (For falconry, *DSR*, XII, ii, 86—87, 521 ff., 547, 584, 789—790, iii, 604—605, 631, iv, 464, 558, v, 116, 158, 530, 965, viii, 83, 952—953, xiii, 1, 26, 36, 73, 213, 388, 669, etc.; *To*, IX, 614—615, X, 145, XIII, 530 ff., 555—556, 704, XIV, 320—336, 360—361; *Zo*, II, 931—933; *Gi*, I, 35—36, IV, 2—3; *Tnk*, 134—135, 190; *KB*, ii; *Jg*, II, i, 22; *Jo*, X, 10—11; *Jh*, X, 35—36; *Mi*, II, iv, No. 26; *TKR*, I, iv, 45—55; *Sg*, ii, 52—54; *Nns*, 17, 79—80; etc.) (The art of falconry began early in Japanese history. It was so universally practised and so highly developed, that Yashiro Hirokata devotes to it twenty-seven chapters, Bks. 179—188, 473—490, of his encyclopedic work *Ko-kon yō-ran kō*, 古今要覽稿, 584 chapters, 1821—1840).

(43) *Ideas of paternalism.* "The lowly peasants in ease today forget to think of the troubles of tomorrow. They would not appreciate the best law of the government if it causes them immediate inconvenience." The Bailiffs should frequently travel in the villages and study their conditions. "They should sometimes explain to leading peasants how beneficent the laws and orders are If there be disorderly villagers, they should be speedily punished. Then the people would respect and love the authorities. When their respect and love are assured, there would be no just order that could not be executed." (From an order to Bailiffs at Yonezawa in A.D. 1804. *YZS*, 804—806.) "Good government of the peasants consists in guiding them in such a manner that they would be industrious even unconsciously They are innocent and thoughtless: they should be led with both mercy and severity." "By mercy is meant winning through humanity; by severity, strict and swift punishment of wrongs. Mercy alone would tend to laxity; severity alone, to harshness. Both should be used according to circumstances."

(From similar orders, A. D. 1770. *Ibid.*, 80—88.) "It was said of old that peasants were easy to employ but difficult to govern. If they were well cared for by the officials, they would likewise care for the latter." (*Ibid.*) "If you go to them with your minds filled with the desire to improve their welfare, your countenance and tone of speech will unmistakably reflect it. They will never turn angry faces at you, if you yourselves do not show them false dignity." (From another order in A. D. 1777. *Ibid.*, 262.) "Nothing can be enforced against the peasant nature. The peasant nature is the genuine human nature If you ran counter to it, the peasants would not submit, and all the forces in the world would be unable to bend them. Having little sense of duty [such as inspires the warrior], the peasants are unable to control their feelings, but think only of their convenience. Hence it is said that no order contrary to this simple nature could be executed. Although they have a fear of punishment, they are nevertheless apt to violate a law which causes them present inconvenience. No government has ever endured against the peasant nature. It is, therefore, essential that the officials should learn to like what the people like, dislike what they dislike, and care for them with the same tenderness and wisdom as the parents bestow on their children." (A. D. 1770. *Ibid.*, 88—89.)

The following remark is attributed to Ieyasu himself:—"The amount of the taxes to be levied on the peasant is like the quantity of bait for the hawk; too much and too little are equally bad." *Tsk*, II, 48.

"It is a great mistake to suppose that the common people would do as the officials please," said a memorialist: "They would be patient in small things, but never obey and flatter the authorities, as does the warrior of to-day, when they are unjust It is the beginning of a trouble to suppress the peasants with mere official dignity." *Ibid.* 88.

(44) *Following and knowing.* 民可使由之,不可使知之. *Lun-yu*, VIII. 9. There is a different construction of this famous saying, according to which a free translation might be given as follows: "The people may be guided by injunctions, but may not possibly be enlightened as to their reasons." It is implied that the people are at liberty to learn the reasons in accordance with their individual intelligence, but it is physically impossible to make every one understand them. (See Chu-hi's commentary and K'ang-hi's Imperial edition. Nemoto Tsūmei, also, gives a similar interpretation in his *Ron-go kō-gi*, 根本通明. 論語講義, Tokyo, 1906, pp. 297—298). Whether correct or not, it is unlikely that this was the sense in which the saying was commonly understood in feudal Japan. The difference of interpretation depends largely on which phase of the complex meaning of the auxiliary 可 is emphasized.

(45) *Size of peasant's estates.* The author of this remark was a man of the Sendai fief (*SDS*, V, 9), where the maximum limit of the peasant's estate was fixed in 1728 at 5 *kwan* of productive value, equivalent at least to 50 *koku*. This limit applied, however, only to the old land registered in the official record, and not to land newly opened or acquired. Later, it seems, land acquired since 1787, also, was submitted to this limitation. It was roughly calculated that an estate of one *kwan*

in productive value could be managed by three men with a horse and support a family of five persons. (*SDS*, I, 9; V, 9; *Mkr*, 332.)

It is rather rare to see, as in Sendai, the maximum limit of an estate defined by law, although it was very common to prevent aggrandisement by a small number of peasants by limiting the freedom of alienating land by sale.

As for the minimum limit for the peasant's estate, which became almost universal under the Tokugawa, it appears that it did not begin to be defined with much rigor till the division of land, which was comparatively free during the first years of the period, was found to be going too far (cf. *Bms*, 11—15). In the first half of the seventeenth century, there were near Edo many peasants each holding as little as 6 or 7 *koku* and unable to keep a horse (*To*, XII, 90). Probably an earnest effort to restrict the division of land dated from the middle of the century (e. g., in 1656 at Okayama, *BK*, III, 7—8). Very soon it is found that the maximum extent was fixed, in the Suzerain's Domain-land, as 10 *koku* (49.6 bushels) of hulled rice in productivity or 1 *chō* (2.45 acres) in extent. (*To*, XIII, 315, 319; *GGI*, I, 2, 18; II, 5; III, 1, 2, 7, 16; *TMK*, z. I, 260—261, pt. 分地, No. 1.) Similar provisions prevailed in most Fiefs; sometimes ten *koku* was the limit for the ordinary peasant and 20 for the village-head (as in Shinano). In Kanazawa, 50 *koku* seems to have been the legal limit for all. In practice, however, divisions beyond these points were tolerated under certain conditions, and servants were set up as peasants with much smaller estates. (*Mkr*, 241, 334, 369—374; *SDS*, I, 27—29; *Wig*, v, 95—112.) See also Note 64 below.

That the laws limiting the size of an estate by restricting the alienation and division of land were never literally enforceable has already been suggested (cf. Note 36, above). That they, however, despite many transgressions, achieved their aim to a remarkable degree, may be established from the fact that, at the general land survey made in the early years of the present reign, a large majority of the peasants were found to be holders of small estates the average extent of which approximated the minimum limit established by the Tokugawa government. There were a little more than 6 million landholders, and more than 85 million entries of cultivated land. Each entry averaged 12.7% of an acre, and each landholder's estate, 14.2 entries, or, about 2 acres. (*Chk*, 171.) To this day, Japan remains a country of extremely small lots and small farming (*Japan in the beginning 20th century*, 98—99, 115), and the fact constitutes for the nation a most important economic condition. While this phenomenon has been largely due to the hilly nature of the country, it is apparent that the persistent policy of Tokugawa authorities to limit the size of the peasant estate has contributed to this result. It will be seen later that there were two other important reasons: namely, first, that the principal form of agricultural labour being manual, the working capacity of a peasant family was very limited; and, second, that the relatively high level of the taxes in comparison with rents, together with the difficulty of buying land, prevented the appearance of many large landlords.

(46) *Financial publicity.* There is a little confusion in the general understanding of this subject. Some think that every detail of public finance was open to the people, while others say that strict secrecy was observed. The truth is that some things were open and others concealed. What was not always withheld, and was in the Domain-lands ordered to be carefully inspected by the peasants, was the registered productivity of each piece of cultivated land, and the annual apportionment of the public taxes to each landholder, as well as the receipts and expenditures of the village finances. (Note 59, [IX, 5], [XI, 11, 12], [XXVII, 3].) Even this limited publicity was not granted in all the Fiefs. As for the manner of determining the productive capacity of a piece of land, which was in some localities bewilderingly intricate, and also the annual accounts of the Fief or the Domain-land as a whole, these were, even if the peasants were capable of comprehending them, never published among them, though some of them might learn a little by hearsay. Cf. *DSR*, XII, xi, 168; *SDS*, II, 20—21, 28; V, 9ff.; *Uyz*, 137—138; *To*, X, 734; XI, 568—569; XII, 269; XIV, 54. See also Note 110, below.

(47) *Publicity of the penal law.* For more than a hundred years after its foundation, the Tokugawa government made no attempt at an authoritative compilation of penal laws. The third Suzerain, Iemitsu (in office, 1623—1651), was not overjoyed when a private compilation of court decisions was made, for he thought that, no two cases of human disputes being precisely alike, precedents might hinder true justice (*To*, X, 1090—1092), so strong was the principle of equity and discretion. (Cf. Notes 23—25, above.) The need of authoritative compilations, however, must have long been felt, when the eighth Suzerain, Yoshimune (in office, 1716—1745), authorized a collection of edicts and orders of his predecessors, and himself assisted in compiling notes and orders concerning mainly judicial procedure and penal law. The latter (known as *Ku-zhi-kata o sadame-gaki*, 公事方御定書), was completed in 1742, and was augmented twenty-five years later with later laws as well as old pertinent materials, (which new edition is substantially our *TKR*, II). *To*, XIV, 214; XV, 249. About 1790 was made a briefer edition (*O-sadame-gaki hyakka jō*, 御定書百箇條, or, *Kwan-sei kō-chō sei-ten*, 寛政更張政典). The substance of these works has been done into German by Otto Rudorff in the *Mitteilungen der deutschen Gesellschaft für Natur- und Völkerkunde Ostasiens*, Band V, Supplement-Heft, Yokohama, 1889, S. 32—133.

These works were intended as a guide to the judiciary, and it was explicitly stated that they could not be expected to anticipate all future cases, to some of which it might be incongruous to apply principles contained in the compilations. (See Preface to the last work mentioned, the *Kyū-baku-fu o sadame-gaki*, 舊幕府御定書, in the *Hyaku-man tō* series, 百萬塔.)

These penal works were followed by very many private memoranda, more or less of the same nature, and some worthy compilations of general laws. (Cf. *KK*, IV, iv—vi.)

They nearly all related to laws for the peasant and merchant classes.

Any sly attempt at publishing laws and customs of the warrior class was met with severe repression. Nor should it be forgotten that most of the compilations contained laws which were intended primarily for the Suzerain's Domain-lands. Similar works in Fiefs (such as our *BK* and *BR*) were fewer and less extensive.

No penal compilation was allowed publicity. Some of the works of the seventeenth century that have been mentioned bear the post-scripts that they should be shown to none but the three councillors of the Suzerain, who had the right to sit at the high court of justice (*Hyō-jō sho*, 評定所). It was but true to human nature, however, to wish to see a hidden treasure because it was hidden. The authoritative penal compilations, therefore, found their way, in more or less imperfect copies in manuscript, into the libraries of many officials and commoners, where they were carefully concealed from the authorities. These copies have, since the fall of feudalism, been coming to light through second-hand book-dealers, some of them bearing titles indicating anything but the nature of the work. A copy on hand contains a curious preface, dated 1812, as follows:—"There is an old chest in my warehouse. One day, as I examined its contents, which were all worm-eaten manuscripts, I discovered these five volumes. They bore no title, but I found that they contained what might be called laws of the government. How my house came in possession of these books I had no means of telling, as they were very old. Since they should belong to the authorities, and should not be here, I had a mind to put them in fire or sink them under water. However, I did not like to destroy them. I have repaired the worm-eaten parts, rebound the work in four volumes, and now write this preface, and conceal the work in my warehouse. No one should see it. My descendants should keep it in secrecy, as if they did not know whether it existed or not, and as if they did not remember whether they had read it or not. Learn from it laws of the authorities only for your own enlightenment, and be careful not to tell others about them. In order that my intention may be evident, I give this work the title *Fuse-ya no ki*, [? a tree by an humble hut], and conceal it in the warehouse. Tate Anshū, at Yushima, [Edo]."

The statement that the penal law was never officially published requires some qualification. Although the peasant was usually told what to do and what not to do, but not how he would be punished for doing what he should not do, it was of course impossible to conceal the penalty for a very common offence, as, for instance, excessive charges for the post-house service. It was also desirable to let the people know the extreme severity of punishment for an act held to be particularly odious, such as gambling. (See *KR*, I, Nos. 13, 16, etc.)

(48) *Law and morals*. How largely these coincided with each other, not only in form, but also in matter, will be seen in Notes 55 and 59, below. From remarks given in Note 43, above, it will not be difficult to see that the very point of view of the rural administrator could not help being largely moral. Law and morals were undifferentiated rather than combined. When toward the end of the eighteenth century unusually large numbers of peasants were punished for unlawfully banding

together and rioting, the suzerain's government ascribed the increase of the cases, not to the evil-mindedness of the criminals, but to their ignorance and to the want of zeal on the part of village-officials to admonish them. (*To*, XV, 539, 657).

(49) *Right of appeal.* That a chain of delegation and responsibility, however carefully forged and tightly drawn, would be unable to hold a State in perpetual peace, and that the best conceivable equilibrium between law and equity would fail to prevent all injustice, was frankly admitted by practical administrators of ancient China and feudal Japan. They provided for certain rights of the people to appeal and petition even to the highest authority. "To stop the mouths of the people is more injurious than stopping the course of a river," Confucius is said to have remarked; "The river would overflow and destroy many men. The people would act likewise. Therefore, engineers dredge rivers and direct their courses, and rulers permit the people to express themselves." "If the people were not allowed to give vent to their thoughts," says an official instruction in Yonezawa, dated 1778, "their resentment would be pent up, and burst forth at a misfortune. When the people are silent under bad government, they are none the less lamenting it; if they were allowed to express themselves, the authorities might discover good points in their words, and at once correct the wrongs." (*YZS*, 261.)

In Japan the possible sources of wrongs for the peasants were: 1. a bad Suzerain or Baron or his councillors; 2. a bad Intendant or Bailiff and his subordinates; 3. bad village-officials; and 4. bad commissioners especially appointed by the authorities to take charge of particular affairs of rural government. Of these, the last three, being in immediate contact with the people, were the most frequent origin of grievances. Every effort was made by the higher authorities to protect the people from the possible arrogance or greed of these officials, who received minute instructions regarding their conduct toward the villagers. The latter, also, were continually reminded that the officials had been forbidden to receive presents, to be entertained, to enter into pecuniary transactions with the people, or to do aught to involve them in needless expense or hardship. The annals of the period abound with instructions and orders of this nature. (Cf. e. g., *DSR*, XII, v, 761; vi, 349; vii, 725; ix, 225; *To*, X, 666, 734; XI, 692; XII, 16—17, 269; XIII, 315—320; etc., etc.) Such was, however, the force of the theory of delegation that no law could completely prevent the meek peasants from being imposed upon by irresponsible officials. It was largely against abuses from these quarters that the right of appeal had to be granted and grandually though imperceptibly increased. (For the earlier form of this right, see Note 59, [II] and [III], below. Compare this with the later form as described below in this Note.)

There was another feature of this subject which should not be forgotten. If we turn to the first of the sources of wrongs enumerated above, we shall observe therein two forces one of which operated against the other. It was the traditional policy of the Suzerain's government at once to give to the Barons a large degree of autonomy, and to weaken them under every justifiable pretext. The first half of the policy served

to multiply opportunities for the second, and this result was not the least frequent in judicial affairs. A Baron, or, to be more exact, his council, having the power of life and death over the peasants of his Fief, and, in judicial and fiscal matters, being curbed by nothing but customs and conscience, might be betrayed into repeated acts of oppression, until the patient peasantry would at length rise in furious mobs or resort to a direct appeal to the government of the Suzerain. The riots would be severely repressed, and the appellants, as we shall see below, delivered up to the Baron as disloyal subjects. For, nominally, there was no appeal from the Baron, especially from the eighteen principal Barons, to the Suzerain. However, in case such a riot or appeal took place, the Suzerain might, provided the grievances were real, degrade or replace the Baron and have the wrongs rectified as far as possible. An appeal, therefore, over a Baron to the Suzerain, was explicitly forbidden but tacitly permitted to those brave peasants who staked their lives therefor. Cf. *Wig*, i, 84—85.

Let us now describe the normal process of appeal and petition. The peasant could address the authorities only through village-officials, whose certificate or presence was necessary if he would bring the matter to the Intendant or Bailiff. Without this formality, no ordinary petition or complaint would be entertained. (See *GGI*, II, 21, 23—24, 37; Note 59, [XX], below.) A complaint, however, against the village-head or subordinate of the Intendant or Bailiff, might be lodged directly at the latter's office, but this had to be done without disorder and with due notice to the village-officials, (*ibid.*, II, 24, 31, 37; *DSR*, XII, v, 531; *NTK*, 344—346).

An appeal could still be made from the Bailiff to the Baron's council or the Baron himself, again after notifying the Bailiff of the appellant's intention. This right was exercised from the beginning of the period (see *DSR*, XII, ii, 584, 586; iv, 196; v, 319), and probably dated earlier. This was the law, but its practical merit must have varied much in different Fiefs and at different times, according to the character of the Baron and his advisers.

A corresponding appeal over the intendant was carried to the Suzerain's high court of justice at Edo. The *Hyō-jō sho* (評定所, place of determination), as the court was called, was begun in 1631, and, as it was finally constituted, heard, besides appeals, disputes involving the jurisdictions of two or all of the three high commissioners of the Suzerain (i. e., *Zhi-sha bu-gyō*, 寺社奉行, commissioner of religious institutions, *Machi bu-gyō*, 町奉行, of the municipality of Edo, and *Kan-jō bu-gyō*, 勘定奉行, of finance) or unusually important cases in each commissioner's jurisdiction, and complaints and petitions from Barons and the Suzerain's lower vassals. (See *KR*, I, Nos. 1—12, II, Nos. 1—8; *TK*, II, i, 23—143, 403—502.) Although it was forbidden to local officials to suppress peasants' appeals (*To*, XIII, 316, 1082), it nevertheless became desirable, when the business of this court multiplied, to relegate it as far as it was practicable to the commissioners (*bu-gyō*, 奉行) at Kyōto and Ōsaka, and to order the peasants to settle their affairs wherever possible at local courts (*KR*, I, No. 15, II, No. 1; *TK*,

II, i, 192, 403 ff.; *To*, XIII, 1178). Besides, when they appealed to Edo, they were to notify the local officials, and bear the expenses. (*KR*, I, Nos. 3, 6, II, No. 24; *TK*, II, i, 71 ff., 92 f., ii, 98 ff.; *To*, X, 298, 301; *GGL*, I, 30.) Cf. *Wig*, i, 87—94.

From 1721, the Suzerain Yoshimune ordered a box (*me-yasu bako*, 目安箱) to be hung before the court at Edo, and, from 1726, in Kyōto and Ōsaka also, for the purpose of receiving appeals and petitions from common people and outlaws (*To*, XIII, 1178, XIV, 214—216). He himself examined their contents. That this would encourage appeals and bring about good results, as it did, in the hands of a good Suzerain might be imagined, but later it happened not seldom that corrupt commissioners intercepted appeals (e. g., *En*, 19). Sporadic efforts were made to restore this institution to real service (e. g., *Zo*, I, 112), but there is little reason to believe that they were followed by continued successes. Like so many other discretionary measures of this bureaucratic government, the use of this device, as has been the fate of similar practices in China, depended entirely upon the frail human nature of the officials.

When the wrongs of an Intendant were real, and when they were brought to the commissioners' notice in such a way as it was impossible to deny them, a summary justice could be expected by the appealing peasants (e. g., *DSR*, XII, i, 356). If the court failed to satisfy them, there was yet another way open to them, namely a direct appeal to the Suzerain in person while on a visit or in hunting. This was done in an appeal, not only from an Intendant, but also from a Baron. This irregularity was punished with imprisonment or death, and if the appeal was against a Baron, the appellant was guilty of the double offence of transgressing on the dignity of the Suzerain and of violating the rule that there was no appeal from a Baron. However, if the Suzerain happened to be eager for justice or for extending his power at the expense of the Barons, the complaint would be examined and satisfied, and the unjust Intendant or Baron degraded (e. g., *To*, IX, 614—615, XI, 929, XIV, 285). The following are two well-known instances of appeals to Edo.

In 1651 the young Hotta Masanobu succeeded to the lordship of Sakura, Shimo-osa, and was appointed a councillor to the Suzerain. Taking advantage of his youth and his absence in Edo, his councillors suddenly increased the land-tax to an enormous extent, and, rejected petitions from all the village heads of the Fief to reduce it to its former level. Large numbers of peasants sold their holdings, and, dividing their families, wandered out. In 1654, more than three hundred representatives repaired to Edo and complained at the residence of Masanobu, but were not listened to. Then a petition was made to one of his fellow-councillors, which also was returned. Kinchi (better known as Sakura) Sōgorō, one of the six representatives who had remained in Edo, boldly presented a petition to the Suzerain Ietsuna, as he was on his way to the temple at Ueno. The latter delivered the petition and the six men to Masanobu. He still believed his councillors, and allowed Sōgorō and his wife to be crucified, his four children to be beheaded, and the other five leaders to be banished. Later, however, the tax was restored to

the original rate, and the councillors punished. In 1660, Masanobu forfeited his Fief for another offence. Sōgorō has been deified by the peasants, and his story has been dramatized into a thrilling play. (See the *Tei-koku zhin-mei zhi-ten*, ed. 1904, 1428—1429; the *Han-kan-pu*, VI, pt. Hotta.)

The district Yashiro, in Uzen, was severed from the Yonezawa fief and restored to the Suzerain, in 1664, but its government was still put under charge of the same Fief. In 1863, the peasants of the thirty-five villages of this district complained unsuccessfully, even in Edo, against an unjust treatment from the authorities of Yonezawa. Finally, the petition was put in a beautiful lacquered box bearing the emblem of the Suzerain's house, and was purposely left in a restaurant, whence it was at once taken to the Suzerain. The district was definitively confiscated from the Fief, but the chief appellant was delivered to the lord of the Fief, who crucified him. (*Dch*, 4373; *Dai Ni-hon zhin-mei zhi-sho*, 2nd. edition, 1891, III, 36—37.)

(50) *The Chinese house-groups*. This institution is considered as old as the Chōu dynasty, and has, as will be seen in the following sketch, persisted throughout the long history of China. According to the *Chōu li* (周禮) and its commentaries, each of the six *hiang* (鄉) and six *sui* (遂), into which the Inner Country of China was divided, was organized as follows: in the *hiang*, five houses formed a *pi* (比) and were mutually (?) responsible (保, *pao*), five *pi* made a *lū* (閭), four *lū* a *tsu* (族), five *tsu* a *tang* (黨), five *tang* a *chōu* (州), and five *chōu* the *hiang*; in the *sui*, five houses formed a *lin* (隣), five *lin* a *li* (里), four *li* a *ts'uan* (贊), five *ts'uan* a *p'i* (鄙), five *p'i* a *hien* (縣), and five *hien* the *sui*. The five-house group was responsible for the mutual help and admonition of its members. This is the generally accepted view of the organization under the Chōu dynasty, although it would not be easy to prove either that the system in this advanced form was so old as the dynasty, or that, if so, it was put into universal practice. The general idea of the system, namely, that neighboring houses should with responsibility watch and help one another, and that the larger administrative divisions of territory should as far as possible be based upon this group as a unit and held together by a chain of responsibility, date apparently several centuries before the Christian era. They are found in practice in several different forms among the contending States into which the kingdom of Chōu became divided, and in Ts'in. The latter made five houses a group and two adjoining groups, consisting of ten houses, a unit with joint responsibility for the crimes of its members.

After the Christian era, the general idea, having come through the hands of various dynasties, was made under the great T'ang dynasty into a system which became the model for Japan to copy since 645. In this system, four houses made a *lin* and five houses a *pao*—this distinction is not clear, (some say, five houses made a *lin* and five *lin* a *pao*); a hundred houses formed a *li*, and five *li* a *hiang*. Under the Sung dynasty, the idea was elaborated by several administrators for use in their particular spheres, the general conception, however, being always the same.

It is not until one reaches the Ming dynasty that he finds the system

really extensively applied, as well as fully described. Barring local variations, generally ten houses formed a *kia* (甲, which was an old term), with an additional house of the group-chief (甲首, *kia-shôu*); ten *kia* formed a *li* (里, otherwise called *pao*, 保), with ten additional houses of heads (*li-ch'ang*, 里長), who each held the office in turn for a year. This personage, like the Japanese village-head, was assisted by several chiefs. Besides these, there was an elder (*li-lao*, 里老) in each *li*, who at first exercised a considerable moral influence, but who in later years of the dynasty was treated by officials as a mere publican, and in many a *li* declined to serve any longer.

An important part of the business of the *kia* was periodically to take the census of its members, in order to ascertain that none were suspicious characters and none adhered to evil religious sects.

Once in every month, the people in every *li* assembled at the public hall of the village (鄉約亭), where amid solemn music the *li-ch'ang* read and explained the Imperial instructions to the people. These instructions, which were always posted at the hall for exhibition, were intended to inculcate the spirit of concord and mutual service among peasant members. The instructions were arranged under six heads: 1. obedience to the parents; 2. respect of authority and age; 3. concord in the village, including mutual cordiality, and assistance for the sick, the poor, and orphans, and at funerals; 4. education of children, including reverence for the teachers, and rites of majority and marriage; 5. industry; and 6. abstention from evil deeds, the latter including the harboring of thieves and robbers, disseminating false stories, arrogance, extravagance, heresy, theft, quarrel, murder, disputes about water and forests, needless killing of cattle, and other offences.

The village-elder exercised certain judicial power over minor cases, though this feature of the village administration disappeared later with the elder's loss of influence.

The *li* had also a temple for the deity of the earth (里社壇) where, besides other minor rites, sacrifices were offered in spring and in autumn, followed by a feast for the peasants. On this occasion, a spokesman solemnly swore: "The people of our *li* should observe rules of proper conduct, and the strong shall not oppress the weak. Those who act contrariwise would be examined and reported to the authorities. The family of poor and forlorn persons shall be supported by the village for three years; the people shall assist each other in marriage and at funeral. Those who defy others or commit theft, fraud, or any other offence whatsoever, shall not be admitted into our company." Then the villagers sat down in the order of seniority, and passed the day in a happy feast.

There was, in accordance with a time-honored custom, another periodical occasion for conviviality of the village, (鄉飲酒禮), at which venerated seniors, ex-officials, and scholars, were given places of distinction, and the other villagers sat in the strict order of their ages, regardless of wealth.

The *li* also had its special granary (社倉), to which all the families contributed according to their means, and which was opened in case of a famine. This, too, was an old institution.

The village supported a primary school (社學), where the Imperial instructions already referred to and elementary laws were taught to such pupils as wished to enroll. It was the policy of the government to encourage the establishment of village-schools, but not to interfere with their affairs.

The laws of the present dynasty recognize the existence of *kia-shōu* and *li-ch'ang* organized in the same manner as that of Ming. They hold their office by rotation, and take charge of the affairs, including the financial, of the village. In some places, it seems, ten houses make a *p'ai* (牌), ten *p'ai* a *kia*, and ten *kia* a *pao*, each with its elected head. The Japanese authorities of the leased land at Kwantung in southern Manchuria are making use of the system of the joint responsibility of groups with considerable success in maintaining the peace of the villages against bandits and in arresting the latter.

See Prof. Tomidzu Hiroto, *Shū-dai go-ka no kumi-ai* (戸水寛人, 周代五家の組合, No. 5 of the *Hō-ri ron-sō* 法理論叢 series); *Nz*, I, 14; *T'ang lu-tiēn* (唐六典, ed. 1895), III, 9; *Ggk*, 9—10; Asakawa, *Early inst. life*, 214—215; Asai Torao, *Shi-na hō-sei shi* (淺井虎夫, 支那法制史, Tokyo, 1904), pp. 28—29, 43, 80, 185, 276, 332—336; the same author's article in the *Kokka Gakkwai zasshi* (國家學會雜誌) for April, 1906, pp. 63—84; *Ta-Ts'ing lu* (大清律, pt. 戶役, art. 雜革主保里長); the *Tō-A Dō-bun Kwai hō-koku* (東亞同文會報告), No. 115, p. 30; current numbers of the *Man-shū nichī-nichi shim-bun* (滿洲日日新聞).

(51) *The group idea copied in Japan.* Beginning with the year 645, Japan entered upon the great work of reorganizing her state-system largely on the basis of the Chinese institutions of the early T'ang period. (Cf. Asakawa, *Early inst. life*; J. Murdoch, *History of Japan*, vol. 1, Tokyo, 1910, chap. 5.) The Decree of the Reform of 646 contains the following: "For the first time, make a census of the families (戶籍), a record of financial accounts, and an equal allotment of land. Fifty families (戶) shall form a *sato* (里, Chinese pronunciation, *lǐ*), and every *sato* shall have a chief (長, Chin. *ch'ang*), whose duty shall be to examine the families (戶) and their members (口), to promote agriculture and sericulture, to forbid and examine misdeeds, and to collect the taxes and enforce forced labor." (*Ni-hon sho-ki*, 日本書紀, XXV. Tai-kwa year 2 month 1). In 652, the order was repeated: "Make a census of the families. Fifty families shall form a *sato*, and every *sato* shall have a chief. The head of the family (戶主) shall be the chief member of a house (家長). As regards the families (戶), five houses (家) shall be mutually responsible [? shall mutually protect; 保, Chin. *pao*], shall make one man the chief (長), and shall mutually examine [the conduct of the members]." (*Ibid.*, Haku-chi y. 3 m. 4. The older translations of these passages that occur in Asakawa, *op. cit.*, p. 275, and Aston, *Nihongi*, II, 208 & 242, cannot be accepted.)

In the *Ryō no gi-ge* (令義解, commentary, officially compiled in 826—833, on the Code of law which was edited in 700—701 and revised slightly in 718, 791 and 797) occur the following passages, (large letters probably indicating portions in the text of 700—701, and words of the

commentary being here put in parentheses)—“AS REGARDS FAMILIES, FIFTY FAMILIES SHALL FORM A SATO. (If there be sixty families [in the same neighborhood], ten of them shall be separated as a *sato* and have a chief. If there be less than ten families [in the same neighborhood], they shall be included in a larger village, and not be separated.) EACH SATO SHALL HAVE A CHIEF, whose duty shall be to examine the families and their members, to promote agriculture and sericulture, to forbid and examine misdeeds, and to collect dues and enforce forced labor. WHERE MOUNTAINOUS OR REMOTE AND SPARSELY POPULATED (. . .), [SATO] SHALL BE MARKED OFF ACCORDING TO CONVENIENCE (. . . . If [the neighborhood] does not contain ten families, it shall be made into mutually protecting groups of five houses, and included in a large village.) THE HEAD OF THE FAMILY SHALL BE THE CHIEF MEMBER OF A HOUSE. (The eldest son of the main line.) AS REGARDS THE FAMILIES, FIVE HOUSES SHALL BE MUTUALLY RESPONSIBLE [?], SHALL MAKE ONE MAN THE CHIEF, AND SHALL EXAMINE AND PREVENT MISDEEDS. IF A TRAVELLER PASSING THROUGH THE VILLAGE STOPS OVER NIGHT, OR IF A MEMBER OF A GROUP [保, Chin. *pao*, Jap. *ho*] GOES AWAY, THE GROUP SHALL BE NOTIFIED THEREOF. IF A FAMILY MEMBER RUNS AWAY, LET THE FIVE-HOUSE GROUP PURSUE HIM. . . .” (VIII, arts. 1, 5, 9, 10.) (For bibliographical comments of the two sources from which the above passages have been cited, see Asakawa, *op. cit.*, 7—17.)

In these passages, it is evident that the Japanese five-house group was a copy of the Chinese prototype, the idea and language of both being largely identical. One point, however, of great importance in the copy is not found in the model, namely, the 戶 (Chin. *hu*; Jap. pron. *ko*; corresponding native word, *he*), which I have purposely translated with the loose term ‘family’. It did not exclude the idea of a ‘house’, but oftener it consisted of persons living in near-by houses and mostly related to one another by blood-tie. Thus, sometimes scores of men and women formed one *ko* and had one *ko*-head. The fragments of census of the eighth century which still exist (*DKM*, I.) confirm the supposition to which some of the clauses quoted above point, that often neighboring houses were related to one another in blood. Indeed, an old record quoted in the *Ryō no shū-ge*, 令集解, commentary on the *Ryō* compiled in the latter half of the ninth century, says: [In organizing five-house groups], “Even if one family (*ko*) contained ten houses (*ka*), the family shall form its own limit [i. e., form a group by itself], regardless of the number of the houses [composing it]”. (*Ggk*, 12.) Add to these considerations the fact that in the language of China in this general period, 戶 and 家 did not differ much from each other in the average number of persons they contained, if indeed the two were not often identical, as they later came to be in Japan also. They could be confused, but not so in the Japan of the Reform period. (Cf. the excellent articles by Mr. Y. Shinmi on the Japanese family in the eighth century, in *Shz*, XX, Nos. 2—4, March-May, 1909.) Here the *village* (*sato*) was

built upon *families*, and the *group* was composed of neighbouring *houses* not infrequently related to one another. The inference is then irresistible that, as a whole, the Japanese copy of the house-group system must have been less purely administrative and more consanguinous in nature than the Chinese model.

This comparatively natural character of the Japanese institution is also notable in the group and village of the Tokugawa period. Here, however, the qualifying principle was oftener historic associations than ties of blood.

(52) *The group system resuscitated after 1600.* That the general idea of responsible groups of houses was not entirely forgotten during the long and eventful ages which intervened between the Reform and the battle of Sekigahara, is a point which falls beyond the limits of this paper. (See *Ggk*, 31—76; *Ggs*, 4—5; *Nz*, I, 6; *Dch*, introd., 74.)

As one reaches the years just before and after 1600, he finds that warriors, of the lower grades at least, were not seldom organized in groups of five or ten men responsible for their good behavior. (Under Hideyoshi, *Ggk*, 68—76; *Ish*, 78—79; *DRS*, XII, i, 773; in Yonezawa, *ibid.*, i, 638, 773, x, 43; in Saga, *ibid.*, i, 733; in Kōchi, *ibid.*, i, 736; at Uwazhima, *ibid.*, v, 402—403; in Iga, *ibid.*, v, 762; under the Mōri, *ibid.*, v, 551—554; in Edo, *ibid.*, ix, 559; &c.) Among peasants and burghers, it is probable that, though less frequently than among warriors, similar customs existed here and there. It, also, appears to have been Hideyoshi's intention to extend the system among the non-feudal, as well as feudal, classes all over the country. (*Ggk*, 72 ff.) The occasional mentions of groups found in documents of this age relating to different parts of Japan may, in some cases, refer to results of Hideyoshi's probable policy just outlined. Some other cases may be survivals of older institutions. In Mimasaka, for example, we find in deeds of sale dated 1603 and 1607 men styled 保 among witnesses, (*ibid.*, i, 855; v, 335). The ten-man groups (拾人組) in Iga and five-man groups (五人組) in Yonezawa in 1608, and the groups (組, 組合) in Ōmi in 1611, do not seem to have been new creations, (*ibid.*, v, 762, 831; ix, 224). Even if they had been recently organized, it is more probable that they were patterned after sporadic local survivals than that they were all created anew in accordance with an order of the Suzerain. The occasional *kumi-gashira* (*ibid.*, ix, 219, 224, &c.) may be heads of groups from whom evolved the later village-chiefs of the same title, (see Note 16, above). However that may be, it is certain that the groups, whether old or recent, were built upon the fundamental idea of the joint responsibility of their members, (see the above references to *DSR*).

That some places had entirely forgotten the system and had now to adjust themselves to it with difficulty may be inferred from the following example of Kyōto. "This year [1603]", says the *Tō-dai ki* (當代記, annals 1565—1615), "it happened that the burghers of Kyōto were organized in groups of ten men. This was by the Suzerain's order. All men of the city, high and low, were embarrassed, for if one man out of ten committed an offence, all the other nine would be punished therefor. This arrangement had been ordered because there prevailed robbery in Kyōto,

Fushimi, and their neighborhood. But the rich folks, being reluctant to be grouped with the poor, carried their treasures out of the city. This measure was said to have been unprecedented in the history of Kyōto." (*DSR*, XII, i, 773.) The writer is, of course, incorrect in his statement that the measure was unprecedented in Kyōto.

It is clear that from the first quarter of the seventeenth century, the Suzerain's government zealously extended the system to those places in his Domain-lands where it had died out. However, such an exhaustive institution could not be resuscitated in one day. It is found in operation about Edo already in 1626, (*To*, X, 64—65, 301), and, eleven years later, a comprehensive body of instructions was, through five-man groups, disseminated in the eighth Kwantō provinces and Kai, Shinano, and Idzu, (*ibid.*, 463—464; Note 59, [VII], below). Henceforth the system was continually used as the medium of securing peace and concord, and enforcing orders against Catholicism, the harboring of outlaws, the use of arms by the common people, and the like, at least in the provinces just named or in Domain-lands, (*ibid.*, X, 665, 672, 734, 965, 1052; XI, 204, 390; XII, 99, 499; XIII, 162, 770). It may be presumed that the system was fairly well installed in all the Domain-lands in the course of the seventeenth century. The search for Catholic converts and dangerous outlaws, the latter of whom, owing to peculiar conditions of the feudal organization, were gradually increasing, (cf. *Tbf*, 221—223), appears to have formed a special motive for the eager extension of the group system. A constant need for it must also have been felt in affording order and contentment to the people and in securing their sure support. The system made it possible to serve their ends at once with comparatively small cost and care to the Suzerain and with the satisfaction on the part of the people of exercising a large degree of self-government.

In the meantime, the merit of the system had commended itself to the Barons as well, who were prompted to adopt it by the surviving examples with which some of them must have been acquainted, as well as by the example and encouragement shown by the Suzerain's government. The latter advised the Barons, in 1661, to facilitate the search for Catholics by organizing groups of five men, (*To*, XI, 390,—Note 59, [XVI], below). As was usual with the Fiefs, however, there was a wide difference among them, both of the times in which the system was established, and of the forms it took. Some Fiefs had it, if indeed they had not inherited it from earlier times, in the first quarter (*DSR*, XII, v, 762, 831; ix, 219, 224) and even in the first decade after 1600 (*ibid.*, i, 855; v, 335). The system was in good order in Okayama in 1642 (*BK*, I, 4—12), and in Sendai in 1718 (*SDS*, I, 19), to take only cases of positive certainty. It is possible, however, that in some instances groups were not adequately organized till after 1800, (e. g., Shōnai in 1819, *Ggs*, 136).

(53) *The normal group.* All the known groups in villages were based on the same general principles and designed for the same general purposes with which the reader is now familiar. There was, however, a considerable difference in their names and forms, particularly in the Fiefs. The groups in the Domain-lands were probably all called, as in

many Fiefs, *go-nin-gumi* (五人組, five-man group), consisting usually of five—more or less—land-holding house-fathers, one of whom served as group-chief, by either election or rotation. The latter, called *fude-gashira* or *hittō* (筆頭, first writer), *han-gashira* (判頭, first seal), or the like, was seldom a very important personage in the government of the entire village. Neighbors would normally be in the same groups, (*GGI*, I, 13, 21; II, 8), but historic or social conditions largely interfered with this arrangement even in Domain-lands, (*Ggs*, 14—19). Cases were not wanting in which a group and neighboring houses were held responsible for offences, (*GGI*, II, 8—9; *KR*, I, No. 16; *Ggk*, 66; *YZS*, 44). Cf. *Smc*, 95—97.

To take a few variants found in Fiefs. Yonezawa changed its system several times during the period: it had five-man groups (*go-nin-gumi*) already in 1608 (*DSR*, XII, v, 831); in 1769, some of them seemed to be composed of relatives, and others of neighbors (一類五人組 and 家並五人組, *YZS*, 44, 366); in 1801, there had been groups for religious examination and for the collection of taxes (宗門組 and 所納組), which were now all incorporated into five-man and ten-man groups (*ibid.*, 743 ff.); and at the end of the feudal period, about fifteen men formed a larger group, which was divided into three smaller groups (*kumi-ai*), (*Mkr*, 143). At Iya-yama (cf. Note 14, above), every fifteen to twenty-five houses composed a group (*fu-shin-gumi*, 普請組, building group), which furnished thatch and rope when one of its members built or repaired his house, and supplied free labor till the work was completed. The houses, therefore, could not be disposed of without the consent of the group. (*Ibid.*, 217, 439.) In Suwō, the head of the five-man group was called *kuro-boshi* (黒星, literally, black star, *ibid.*, 187), the village-chiefs being designated *kuro-gashira* 畔頭, (the characters meaning, respectively, 'marginal land between rice-fields' and 'head').

These and other variations from the normal type were no doubt in some instances owing to peculiar social conditions of different regions, and in others, to the persistence of older institutions of similar nature. Among these cases of historic survivals, Professor S. Miura mentions some instances of ten-men groups and of irregular small groups of adjoining and opposite houses (*Ggk*, 66, 76). It is evident that, in many examples, abnormal types were only slowly, if at all, assimilated to the normal.

(54) *No person without group.* It was the fixed rule that every inhabitant in the village should belong to some group (*GGI*, I, 12, 13; II, 1, 17; III, 1, 15, 16, etc.). In many examples, however, only land-holders were full members of the groups, and their tenants and servants, priests attached to no temples, and the like, were included under the names of the owners of the land which they tilled or of the houses in which they lived (*ibid.*, *Mkr.*, 27—29; *SDS*, I, 19).

(55) *Edicts, sign-boards, and oral commands.* Occasional written orders were on *kaki-tsuke* (御書付) and on *fure-gaki* (御觸書). (E. g., *KR*, I, Nos. 3—6, 10—12, 19—40, etc.; *GGI*, I, 1, II, 33, etc.) Some orders came to the Intendants or Bailiffs, who transmitted them orally to the village officials or the villagers themselves. (E. g., *To*, X, 463, 665, 734, 1052, XI, 390, XIII, 318, etc.)

Public sign-boards (known as *kō-satsu* or *taka-fuda*, 高札, and *sei-satsu*, 制札, the latter term being sometimes technically applied to written prohibitory orders of the more special or less extensive applications) posted up in conspicuous places on streets, roads, or the coast, had for a long time been a common device of official proclamation, and were kept up throughout the period. (*DSR*, XII, iv, 196—197; v, 973—974; vi, 182; ix, 220; *To*, X, 298, 537, 663, 669, etc.; *Ksd*, 1513—1516.) They were revised throughout the Domain-lands in the first half of the eighteenth century and were thenceforth renewed at the change of the year-period (元) or the succession of the Suzerain, and when worn out by exposure. The nature of their contents may be gathered from the following specimens, which were seen most frequently in Domain-lands till the end of the period. (*Tk*, VIII, 10—20; *Jg*, II, i, 13—15; cf. *KR*, I, Nos. 13—18.)

[1] (About 2 feet high and 7 feet long.)

"Parent and child, brothers, husband and wife, and all relatives, shall be harmonious; mercy shall be shown even unto the lowest servants. Servitors shall be faithful to their masters.

"[Every one] shall be diligent in his pursuit, shall not be idle, and in every thing shall not exceed the bounds of his position and means.

"Fraudulent deeds, unreasonable speech, and whatever else that might do harm unto others, are forbidden.

"All kinds of gambling are strictly forbidden.

"One shall refrain from making a quarrel or dispute, and should one occur, shall not unnecessarily meddle with it. Nor shall he conceal a wounded person.

"Needless use of fire-arms is forbidden. Any one found violating this rule shall be reported. If one connives at the offence, and if it is discovered from another source, he will be adjudged guilty of a heavy offence.

"If there be thieves, robbers, or evil persons, their presence shall be reported. The person reporting will receive a sure reward.

"Do not congregate at an execution.

"The sale and purchase of persons is strictly forbidden. A man or woman servant may, however, serve for life or by heredity, if that is the voluntary agreement of the parties. If a hereditary servant or an old resident has gone elsewhere and settled down there with his family, he shall not be recalled, unless he is an offender.

"The above articles shall be observed. Any person violating them will be punished accordingly.

"Shō-toku 1st year 5th month—day, [1771].

"Commissioner."

[2] (About 1.3 by 2.1 ft.)

"Any one using fire-arms in a village shall be reported. If a person catching birds on forbidden grounds is arrested or discovered, he shall at once be reported. The person reporting will receive a sure reward.

"Kyō-ho 6th year 2nd month—day, [1717].

"Commissioner."

[3] (About 1.5 by 3.6 ft.)

"Christianity [Catholicism] has for years been under prohibition. Any suspicious person shall be reported. Rewards will be given as follows:—

"500 pieces of silver to a person reporting a Padre,

"300 pieces of silver to a person reporting a Friar,

"The same amount to a person reporting a re-convert, and

"100 pieces of silver to a person reporting individuals living in the same house with Christians or reporting converts.

"The reporter, even if he be a follower of the sect, [i. e., if he has recanted and reported against other Catholics], may be given 500 pieces of silver, according to the importance of the case he reports. If any one harbors a Christian, and if the latter is discovered from other sources, the village-head and the five-man group of the place will be punished together with the offenders.

"Shō-toku 1st year 5th month—day, [1711].

"Commissioner."

[4] (About 1.4 by 1.3 ft.)

"The assembling of many peasants for any kind of evil purpose is called *to-tō* (徒黨), and the forcing of a petition by a *to-tō* is *gō-so* (強訴) and the desertion of the village by them in concert is *chō-ten* (退轉, *tai-ten*). All these offences have a long time since been forbidden. If any such case is discovered in one's own or neighbouring village, it shall at once be reported. Reward will be given as follows:—

"100 pieces of silver to a person reporting a *to-tō*,

"The same amount to a person reporting a *gō-so*, and

"The same amount to a person reporting a *chō-ten*.

"According to the case, the privilege of wearing a sword and bearing a family-name may be granted to the person reporting. Even if he was one of the offending party, he would receive pardon and reward if he reported the name of the leader.

"When, owing to the absence of any one reporting, villages became restless, if in that case there be any village that arrested offenders and allowed none of its inhabitants to take part in the concert, the principal men so doing, whether village-officials or peasants, would be rewarded with pieces of silver and the privilege of wearing swords and using family-names. If there were any other persons who assisted in pacifying the village, they also would be rewarded accordingly.

"Mei-wa 7th year 4th month, [1770].

"Commissioner."

Oral instructions. Besides the regular oral commands delivered through official channels, some Barons followed the historic customs of China of giving the people of the village moral exhortations through teachers. These were usually Confucian scholars. Sometimes they were sent in circuit through the fief, villagers assembling to receive them and listen to their lectures. In the following quotation will be seen the character of the instruction. In 1835, some dozen representative peasants of the Nagoya fief, regretting that the custom once in vogue had been discontinued, petitioned that it be revived, and said:—"... If in plain language and with persistence it were taught year after year how high was the virtue of the founder of the régime [i. e., Ieyasu], how great was the benefit of the State and its merciful government, and, as regards our daily conduct, how important it was to be frugal, to practise filial

piety towards parents and fraternal respect for elder brothers, and to be diligent in agriculture and not to fall into other occupations, it is certain that, by the grace of benevolent rule, evil customs would be changed, and all the peasants would adopt simple and sincere manners. The government, also, would be much relieved of trouble . . ." (Quoted by Mr. K. Nakamura, *Shz*, XIX, v, 12—13.)

(56) *Repetition of orders.* Cf., e. g., Uesugi Kagekatsu's orders in 1603, 1607, and 1608, repeating substantially the same ideas, in *DSR*, XII, i, 637; v, 110, 831. Group-records often refer to instructions that had frequently been reiterated, (*GGI*, I, 1, 6). The Suzerain's government was extremely persistent, dwelling continually on identical points in language slightly altered from time to time, (*To*, X, 463—464, 665—666, 672, 734—735; XI, 41, 204, 585, 706; XII, 99 ff.; XIII, 162 ff., 319—320, 485, 697, 701, etc.; *KRE*, 産業部, I, 195 ff., etc.) See Note 59, below.

(57) *Group-records.* I venture the suggestion that the custom which was rather common among the warrior class for men charged with a mission to repeat almost verbatim the instructions given them, with an oath that they would be followed, (e. g., see *DSR*, XII, v, 319 ff., xi, 360 ff., xiii, 687—688; *To*, IX, 971 ff., etc.; also see Notes 9 and 16, above), was extended to the peasant groups, and became the origin of their records. These in substance re-stated all the important instructions that had been repeatedly given to the village and enforced through the instrumentality of the group, and was accompanied by the pledge of the peasants to observe them.

The group-records came into existence only by degrees. Professor Hodzumi quotes Mr. Oda as saying that they were first made in 1664, and adds that thereby the group system was almost perfected (*Ggs*, 8, 43), but I fail to trace the first part of this statement to its source, and entertain doubts about the second. The group system itself must have been far from being either universal or perfect in 1664, (see Note 52, above). As for the group-record, in Buzen it seems to have existed in a fairly complete form in 1657, and thirty years later was probably already so complete that between that date and 1836 there was little change in the substance of the articles the record contained. (*GGI*, IV, 22, and inferences from citations throughout the work.) As we note that the model articles for the group-record compiled by the Suzerain's government in 1725 (*Ggs*, sup. 1—19) are much the same as those of Buzen in 1657 and 1687, we infer that their substance must have actually appeared in the group-records in several places about the latter dates. At least, the practice of keeping the records appears to have pretty generally prevailed in the Domain-lands in 1722. (Cf. edict *To*, XIII, 749—750.) In the Fiefs, however, the group-record was still unknown in 1737 in some places even in provinces nearest Edo, (*ibid.*, 1203—1204; *KR*, I, No. 57). It was in the making in Yonezawa so late as 1769 or 1770, (*YZS*, 89, 91). In 1786, there were some regions which had not yet returned the religious census of their villages (*To*, XV, 783); if the performance of this duty, which was one of the first *raison d'être* of the group system, was still so remiss, one is forced to suppose that the very

system, still less the group-record, may have been but insecurely established in those places at that late date.

(58) *The reading and revising of the group-record. Seals.* For difference in the frequency of reading, see *GGI*, III, 6, IV, 20—21, 22; *Ggs*, 44—48, and for the frequency of revision, which was either annual, septennial, or indefinite, see *GGI*, IV, 22; *Ggs*, 136. The suzerain's government ordered, in 1722, that the articles of the group-records should be given to pupils in village-schools for their lessons in hand-writing. (*To*, XIII, 749.)

Seals. Each person had an officially registered seal of his own, which alone had to be used by him on all occasions. Every change of a seal was to be immediately reported to the village-head. A person's name on a document was not always signed by him, but under it he affixed his seal with his own hand. Though repeatedly warned, however, peasants were often inclined to leave their seals with village-officials and authorize them to use them when necessary. Counterfeiting another person's seal and drawing with it a false document was punishable with decapitation with exposure of the person before execution and of the head afterward. (*GGI*, I, 11, 22; II, 13—14, 28; *KR*, II, No. 62; *TK*, II, iii, 485—500.)

(59) *Laws for the peasants.* An attempt is made in the following summary to state, not topically, but chronologically, such orders and instructions as were given by the Suzerain's government to the peasants of the Domain-lands. It is hoped that this summary given in this form may be found useful to the student whose interest is more than merely institutional. (For specimens of group-records, the reader is referred to *Smw*, 177—210. For modern survivals, *GS*, *MK*, *MO*, *OO*.)

(I) 1603. An edict to the villages. (*TKR*, I, v, 226.)

[1] Peasants who have run away dissatisfied with the government of an official shall not be restored.

[2] Peasants with taxes in arrear shall pay them in the presence of the Intendant.

[3] Peasants shall not be killed. If one has committed an offence, he shall be arrested and examined at the Intendant's office.

(II) 1603. An edict to the villages. (*Ibid.*, 227.)

[1] Peasants running away dissatisfied with the government of an official may pay dues and live in any place in a neighboring district.

[2] If an unjust official holds a personal hostage from a peasant, the latter may appeal directly to Edo. Otherwise direct appeals are forbidden.

[3] How could the Edo government know details of local taxation? Appeals about taxation are forbidden.

[4] An appeal against an official may be made only with full preparation to leave his district.

[5] An appeal shall not be presented to Edo before the Intendant has been petitioned two or three times. A direct appeal may be made, however, if it contains complaint against the Intendant.

(III) 1608. An edict to the villages. (*Ibid.*, 228.)

[1] (The same as [I, 1].)

[2] (The same as [I, 2].)

[3] (The same as [II, 4].)

[4] (Similar to [II, 3].)

[5] (The same as [II, 2] and the first half of [5].)

[6] (The same as the last half of [II, 5].)

[7] (The same as [I, 3].)

(IV) 1616. (*Ibid.*, 229.)

[1] Henceforth, when commuting the land-tax in money, the rate shall be on the basis of 3 to 7 *shō* (about 1.8 bushels) to a straw-bag of rice.

[2] The *kuchi-mai* (口米) shall be 1 *shō* for a straw-bag.

[3] If commuted, the *kuchi-sen* (口錢) shall be 3 per cent.

(V) 1626. An edict. (*To*, X, 64—65.)

[1] A person finding hawks in nest [in a place reserved for hawks] will be rewarded, and his five-man group will be excused from keeping watch over the place. A person finding a new nest will receive a double reward.

[2] Any one stealing young hawks from a nest [in a reserved place] will, with his relatives, be beheaded, and his five-man group will be imprisoned. A person arresting and reporting him will, even if he was in collusion with him, be pardoned and rewarded with fifty pieces of gold.

(VI) 1628. An edict. (*Ibid.*, 126; *TKR*, I, v, 230.)

The peasant shall use only grass cloths and cotton cloths for their clothes, but their wives and daughters and village-heads may use pongee, but nothing of better qualities.

(VII) 1637. An edict to the Intendants and Bailiffs in the eight Kwantō provinces, Kai, Shinano, and Idzu. (*To*, X, 463—464; *TKR*, I, v, 231.)

[1] Examine the five-man groups with ever increasing zeal.

[2] Examine each district separately, so that there may be no bad man. If a wicked man is discovered, not only his five-man group, but all the district, may be punished, according to the nature of the case.

[3] Do not lodge a suspicious stranger. If after lodging a stranger he is found suspicious, the case shall be reported to the five-man group and village-officials.

[4] If there be persons wishing to settle in the district or in a newly opened place, their character and origin shall be investigated, and permission be given only to trustworthy persons.

[5] If a peasant wishes to go elsewhere as servant or for a commercial transaction, he shall report his destination to the five-man group and village-officials.

[6] If there be a robber or any other wicked man, his presence shall at once be reported. Even an accomplice will be pardoned if he so reports. If the offender is concealed and is discovered through other sources of information, the five-man group and even village-officials may be punished after examination. If a revenge from an accomplice or relative is feared, the report shall be made secretly; the authorities will reward the person reporting, and strictly command the offender not to avenge himself on him.

[7] If a suspicious character is found in hiding in a temple or wood, the village-officials and peasants shall arrest and deliver him to the Intendant or Bailiff, or, if that is impossible, pursue and arrest him where he stops. It is an offence to allow him to make his escape.

[8] When a wicked man is found in a village, an alarm shall be struck, and peasants from neighboring villages shall come together and arrest him. A peasant not coming to take part in the arrest will be punished after examination. If the Intendant or Bailiff is absent, the arrested offender shall be taken to Edo. The expenses therefor will be paid by the government.

(VIII) 1642. An edict to villages. (*To*, X, 665; *TKR*, I, v, 233.)

[1] (The same as [VI].) Materials of better qualities shall not be used even for collars and sashes.

[2] Festivals and Buddhist rituals shall be simple.

[3] Palanquins shall not be used in wedding.

[4] Blanket shall not be put over a saddle.

[5] A house unsuitable to one's position shall not be built.

[6] Tobacco shall not be planted on registered land, whether in a Domain-land or in a Fief.

[7] Every village shall plant trees and build up forests.

(IX) 1642. An edict to the Intendants. (*Ibid.*)

[1] All the previous laws issued for the peasants shall be strictly enforced.

[2] From this year, the villages shall not brew *sake*. Those who are licensed to sell *sake* on the high roads may sell it to travellers, but not to peasants.

[3] Instruct the peasants to mix other cereals with rice for their meals, and to save as much rice as possible.

[4] Rice for the taxes shall not be broken or poor rice.

[5] Accounts of the expenditures of the villages shall be made by them, with the seals of the village-heads and chiefs affixed thereto. They shall be examined and returned to the villages with the seals of the Intendants' assistants affixed.

[6] Fish-mongers and collectors of contributions to temples shall not be allowed to enter the villages.

(X) 1642. An edict to villages. (*To*, X, 672.)

[1] Let no weed grow in the fields.

[2] If there is a sick orphan or solitary person, or a family with too few members to cultivate its land, the whole village shall offer help.

[3] Irrigation shall be constantly taken care of.

(XI) 1644. An edict to the Intendants. (*Ibid.*, 734.)

[1] (The same as [IX, 1].)

[2] (The same as [VIII, 7].) Plant bamboos also.

[3] Help peasants, and encourage diligence, honesty, and frugality. See that they are not remiss in their public obligations and do not incur debts.

[4] Take a good care of water-courses, repairing embankments and dredging rivers every year in due season.

[5] Secret debts and sales are forbidden.

[6] Secret cultivation is forbidden. A place intended for new cultivation shall be reported.

[7] Tax-rice shall not be sold in the districts without an official order.

[8] In the Kwantō provinces, each straw-bag of tax-rice shall contain 3 to 7 *shō* (about 1.8 bushels), including 1 *shō* of *kuchi-mai*; when the tax is commuted in money, the *kuchi-sen* shall be 3 per cent. In the Kwansei provinces, a *koku* (4.963 bushels) of tax-rice shall include 3 *shō* (i. e., 3%) of the *kuchi-mai*. There shall be no further dues.

[9] In order that the laws will be observed, an annual instruction shall be given regarding the five-man group. A special care shall be taken, as heretofore, of the exclusion of Catholics. Examine every suspicious inhabitant, not excepting ascetics and beggars.

[10] When taxes are transported in boats, the captains shall be carefully instructed not to be dishonest.

[11] The assessment of the rice-tax shall be shown annually to the peasants, and receive their seals. The record of the returns of the tax shall be certified by village-officials, and the latter shall give receipts to the tax-paying peasants. The record shall be certified by the Intendant's clerk.

[12] (The same as [IX, 5].)

(XII) 1644. An oral order to the Intendants. (*Ibid.*, 735.)

That the luxury of peasants in dwelling and clothing should be stopped; that cultivated land should not be laid waste; etc.

(XIII) 1649. An edict to villages. (*To*, X, 965 ff.; *TKR*, I, v, 242 ff.)

[1] Peasants shall obey the laws, respect the Bailiff or Intendant, and be toward the village-officials as toward the parents.

[2] The village-officials shall respect the Bailiff or Intendant, shall not delay the collection of the taxes, shall not break laws, and shall instruct small peasants to be good. As the peasants would not do service to the government, if the order were given them by bad village-officials, the officials shall always be upright, impartial, and considerate.

[3] Weed and hoe the fields. Plant beans and pease between wet or upland fields. Rise early, work in the field during the day, and make rope and straw-bags in the evening. Do not be slack in whatever one does. Do not buy and drink *sake* and tea. Plant bamboos and trees near the house, and use lower branches as fuel. Select good seeds in early autumn. Mend or change sickles and spade every year before the 11th day of the first month. Make manure of horses' and human refuse, ashes, and hay.

[4] Peasants are too imprudent to think of the future, and recklessly eat up rice and other grains in autumn. Always spare food as in the first three months of the year; raise barley, millet, lettuce, *daikon*, and other crops, and save rice. If one remembers a famine, he shall not waste an edible leaf or stem. Every one in the house shall eat as simply as possible at usual times, but shall have plenty to eat at the seasons of hard work.

[5] Make every effort to get good oxen and horses, for the better these animals, the more hay they tread for manure.

[6] The wife shall weave diligently, and assist the husband till night.

A wife shall be divorced who, though beautiful, neglects her husband and spends time in eating, drinking, and seeking pleasures; but if she has many children, or has done special service to the husband, she may not be divorced. An ugly wife who is economical shall not be divorced.

[7] An outlawed warrior of uncertain origin shall not be allowed to live in the village. Do not harbor robbers' accomplices or other lawless men, for their discovery would involve the village in trouble and expense.

[8] In order to be thought well of by village-officials, rich peasants, and all other people in the village, one shall be honest in every thing, and shall not entertain evil thoughts.

[9] (The same as [VI].)

[10] In household economy one shall have a little idea of the merchant, so that he would not be imposed upon when buying or selling grains for taxes.

[11] If a poor peasant has many children, some of them shall be given or be hired out.

[12] The courtyard before the peasant house shall be open toward the south and be well swept over, in order that sand would not be mixed into the grains when they are thrashed and dressed here.

[13] Consult experienced men, and raise only what is suitable to the soil.

[14] It would greatly benefit the people if barley was planted wherever possible. If one district planted barley, neighboring districts would follow the example.

[15] Apply cauterization with moxa in Spring and Autumn, so as to prevent diseases.

[16] Do not use tobacco, for it is injurious to health, wasteful of time and money, and liable to cause fires.

[17] As soon as a notice of the tax for the year is received, the peasant shall devote his energy to cultivation, so that the crop might exceed the tax. If it is evident that the crop would be insufficient, he should borrow the balance before the rate of interest rises at the end of the tax-paying season. It would be wasteful to wait borrowing a little rice till the village has used much of the harvest in taxes, and to be obliged to sell clothes and implements at unreasonably low prices or to borrow at a high rate of interest. It is wise to deliver tax-rice promptly, for it might be diminished by mice, robbery or fire, while in hoarding.

[18] Rice shall be well dried before it is hulled, or it would crack and decrease in quantity.

[19] Consider the great importance of industrious and saving habits. For example, if an idle man borrowed only two straw-bags of rice for his tax, the principal and interest would in five years be fifteen straw-bags, when he would be obliged to sell his land, his family and himself, and involve his children in misery; whereas, if he saved two rice bags each year, the principle and interest would in ten years be 117 bags.

[20] (The same as [X, 2].)

[21] Though a poor peasant may be looked down upon by his neighbors, village-officials and every one else would alter their treatment of him,

if he improved his condition by industry, and he would be raised to a higher seat. On the contrary, one would be despised if he became poor, however rich he may have been. Therefore, be industrious and well-behaving.

[22] If there is one man who has become rich through honest industry, the village, and even the whole district and neighboring districts, would be influenced by his example. Bailiffs change, but peasants find a greater advantage in not changing their homes. How great a benefit it would then be to improve one's own estate!

If there were only one lawless man in a village, the whole village might become restless and quarrelsome. It would cause annoyance and expense to the village to arrest offenders and take them to the authorities. Therefore, care should be taken to prevent such misfortune. That depends on the Village-Head, who shall always instruct the small peasants in the right path.

[23] Be in harmony with neighboring villages, and do not quarrel or dispute with other fiefs.

[24] Have a deep filial regard for the parents. If, as the first principle of filial piety, one kept himself in good health, abstained from drinking or quarreling, behaved himself properly, and respected elder brothers, pitied the younger, and all brothers lived in concord, the parents would be especially glad. Such a person would be protected by Shintō and Buddhist deities, and his harvest would be plentiful. However anxious to show filial regard to the parents, one would find it difficult, if he were poor. If poor and consequently ill, he might become ill-natured, steal, break law, and be imprisoned, and then how the parents would grieve! His family and relatives would also be thrown into grief and shame. Hence, it is wise to be thoroughly honest and industrious.

[25] When money and rice and other cereals are saved, dwelling, food, and clothes would be procured as one wishes. In this peaceful age, there is no danger that savings might be taken away by an avaricious Intendant or Bailiff, but, on the contrary, they would insure the family of their owner against famines and other emergencies, and secure the wealth of his descendants.

[26] No class of people is so secure and peaceful as the peasants, so long as they render their taxes. They shall thoroughly understand this truth, and instruct it to their children, and zealously pursue their calling.

(XIV) 1650. An edict to Intendants and Bailiffs of the eight Kwantō provinces. (*To*, X, 1052.)

No peasant shall own a fire-arm. No fire-arms shall be used, except by licensed hunters, even in the woods where firing has been permitted. A person reporting an offender against this law will be rewarded, even if he was an accomplice. Concealment will involve the five-man group and village-officials in punishment, according to the nature of the case.

(XV) 1657. An edict to the Kwantō provinces. (There had been many robbers roaming about Katsusa. *To*, XI, 204—206; *TKR*, I, v, 249.)

[1] (The same as [VII, 1].)

[2] (Similar to [VII, 6].)

[3] (The same as [VII, 5]), when staying out even over one night.

[4] (The same as [VII, 3] and [XIII, 7].) As priests, ascetics, mendicant priests, beggars, and outcasts, may lodge robbers or be their accomplices, they shall not be allowed to remain, if they are not of certain origin or if they have no acquaintances in the village.

[5] There shall be watch-houses at suitable places in villages, to keep night watch for robbers. On the appearance of one, an alarm shall be struck. (The rest the same as [VII, 8].)

[6] (The same as [VII, 7].)

[7] (The same as [XIV].)

[8] The stealing of horses is said to be frequent. An unknown character passing through the village with a horse shall be requested to tell his destination. If he appears suspicious, his passing shall be notified by the village to the next, and so on. Do not buy a horse without certain recommendations.

(XVI) 1661. An edict to all the Barons. (*To*, XI, 390.)

On this occasion of the change of the year-period, public sign-boards prohibiting Christianity shall be renewed. Judging from the occasional arrests of Christians still taking place in many places, it is surmised that any region might yet contain Christians. Continue a diligent search throughout the Fiefs. For this purpose, peasants and merchants shall be organized into five-man groups. If a Christian is discovered in a village or town from another source of information, its officials may be punished after examination.

(XVII) 1666. Instructions to all the villages [in the Domain-lands?]. (*To*, XI, 585 ff.; *TKR*, I, v, 251 ff.)

[1] (The same as [IX, 1].)

[2] All sales of persons are forbidden. Personal service may be hired for periods less than ten years.

[3] Places reserved for hawking shall be strictly guarded, and roads and bridges in them repaired.

[4] Returns of taxes should be forwarded from point to point with promptness.

[5] (The same as [XVI].)

[6] (The same as [VII, 3, 5, 7, 8].)

[7] If a villager is accidentally wounded, it shall at once be reported. If a traveller quarrelled with another, or ran away after killing him, his passing into a next village shall be reported to the latter's officials, and their certificate of the report be asked for. It is an offence to kill the murderer privately.

[8] A permanent sale of cultivated land is forbidden. The village-officials and five-man groups shall put their seals on every deed of mortgage. Any of them refusing to affix his seal will be punished. A mortgage effected without these seals is illegal, and even the village-head and five-man group will be punished therefor.

[9] It is forbidden to evict peasants and seize their lands. If there is no son to succeed to a deceased peasant's estate, the case shall be reported, and a relative, whether man or woman, shall be, with official sanction, set up as successor. It is an offence to destroy the house, absorb the land, and obliterate the estate.

[10] (The same as [X, 2].)

[11] (The same as [VIII, 1, 5].) The purple and scarlet colors on clothes are forbidden, but other colors may be used at will.

[12] (The same as [VIII, 3].)

[13] (The same as [IX, 3].)

[14] (The same as [VIII, 2].)

[15] Not a horse and not a man shall be furnished to a man provided with no ticket issued by due authorities.

[16] Disputes about water and bounderies shall be referred to the authorities, and shall not be agitated privately.

[17] Do not secretly make new coins, or use illegal coins.

[18] All kinds of gambling are forbidden.

[19] Persons who are inharmonious with their families and cause dissention in the villages shall be reported.

[20] No money, rice, or other article shall be handed to any official or person whatsoever who is unable to show a proper certificate.

[21] Any Bailiff, Intendant, or village-official doing the slightest injustice to peasants shall at once be reported.

[22] Do not conceal land, old or new, [from assessment for taxation].

[23] Land that has long lain waste or virgin soil shall, with official sanction, be cultivated

[24] (The same as [VIII, 6].)

[25] Do not cut down trees and bamboos even for urgent need without official permission.

[26] It is forbidden to sell a house recently built and build another.

[27] When an official visits a village, he shall not be entertained with anything specially bought, shall pay for everything he needs and get a receipt therefor, and shall receive no presents from the village-head or a peasant. If he annoys peasants, the case shall be reported.

[28] Fires shall be carefully prevented, and, if one takes place, it shall be speedily extinguished. Any man tardy in coming out will be examined and punished.

[29] Storehouses in charge of villages shall be protected from fires and robbery.

[30] Dikes and water-gates shall not be opened without order. If they break from neglect and cause damages, the entire village will be punished.

[31] If a peasant owing taxes runs away, his five-man group or the entire village shall pay the taxes and search for him.

[32] An article offered at a price lower than the current price shall not be bought without a guarantee. No suspicious goods shall be bought.

[33] (Similar to [IX, 2].)

(XVIII) 1668. An edict. (To, XI, 639.)

[1] (The same as [VIII, 5].) Hotels on high roads are exceptions to this rule.

[2] (The same as [VIII, 1].) Use plain colors other than purple and scarlet, without patterns.

[3] (The same as [IX, 3].)

[4] Neither the village-head nor the peasant shall ride in a palanquin.

[5] Wrestling, *nō* dance, puppet show, and other public amusements, are strictly forbidden.

[6] (The same as [VIII, 2].) Extravagance shall be avoided at wedding or other joyous occasions.

(XIX) 1670. An order. (*To*, XI, 706.)

[1] (The same as [VIII, 5].)

[2] (The same as [XVIII, 2].)

[3] Do not sell in the village vermicelli, buckwheat cakes, *manjū*, *tōfu*, and other things the making of which wastes cereals.

[4] (The same as [IX, 2].)

[5] Cultivate, weed, and manure the fields with care.

[6] (The same as [X, 2].)

[7] There shall be no delay in paying taxes.

[8] (The same as [XVIII, 4].)

[9] No strangers who do not cultivate shall be allowed to stay in the village. If any one conceals such a person, he will be examined and punished.

[10] Nor shall a peasant who has run away from a judicial contest be concealed. The person harboring him shall be examined and punished.

[11] (The same as [XVIII, 6].)

(XX) 1670. An order. (*To*, XVI, 706—707.)

A peasant's petition shall be presented to the Intendant or Bailiff; if the Intendant fails to give justice, the peasant may bring his petition to Edo, after notifying the Intendant of his intention. If the petitioner failed to give this notice, his case, however just, would not be entertained. In the [eighteen] principal fiefs, the Baron's decisions shall be final.

(XXI) 1682. Public sign-boards. (*To*, XII, 99—100.)

(The same as Note 55, [1], above, except the part of the last article which deals with the period of personal service.) Men-servants and maid-servants shall not be hired for longer periods than ten years.

(XXII) 1682. Public sign-boards. (*Ibid.*, 100.)

(The same as Note 55, [3], above.)

(XXIII) 1682. Public sign-boards. (*Ibid.*, 100.)

[1] The sale and purchase of poisons and counterfeit drugs are forbidden under penalty. A person reporting an offence against this law, even if he was an accomplice, will be rewarded.

[2] Transactions in false coins are forbidden.

[3] Do not deal in recently published books containing uncertain matters.

[4] It is forbidden to corner a commodity, to force up its price by concert, and to raise wages likewise.

[5] All kinds of the assembling of peasants under oath will be severely punished.

(XXIV) 1711. Public sign-boards. (*To*, XIII, 162.)

(Identical with Note 55, [1], above.)

(XXV) 1711. Public sign-boards. (*Ibid.*, 162—163.)

(The same as [XXIII].)

(XXVI) 1711. Public sign-boards. (*Ibid.*, 163.)

(The same as Note 55, [3], above.)

(XXVII) 1713. Instructions to the peasants in the Domain-lands. (*Ibid.*, 319—321; *TKR*, I, v, 258 ff.; *GK*, No. 13.)

[1] Despite the minute instructions already given, villages have recently become more or less lawless and disorderly, peasants neglecting their work and indulging in luxuries. They are extravagant in dwelling, clothing and food, raise useless plants in places where grain should be raised, and, contrary to law, divide estates smaller than ten *koku* of productive power. Henceforth, the Village-Head and all the peasants shall observe all the laws previously issued, avoid all luxury, and devote all energy to agriculture.

[2] Recently, at the examination of land by the Intendant, villagers bribe his assistants, in order to secure low values attached to the land, and consequently tax-returns have decreased year by year, until in some places they are less than a half of their former amount. Nevertheless, those places do not seem to become richer, for the result is said to be due to continual corrupt practices of the lower officials. For the people in the Suzerain(公)'s Domains who till the Suzerain(公)'s land and thereby support their families and dependents in security, not to render taxes according to their means, but to squander wealth for private affairs, is very foolish conduct. The Intendants will henceforth supervise all financial matters, and their assistants have been instructed not to receive bribes, under a severe penalty. The peasants shall, therefore, devote their energies to cultivation, shall not be remiss in returning taxes, and shall report an unjust assistant to the Intendant. Village-Heads are also reported to be partial and corrupt. Henceforth, both the giver and the receiver of a bribe will be punished alike.

[3] (The same as [IX, 5], [XI, 11], with a reminder of recent laxity.)

[4] (The same as [XVII, 25], with a reminder of recent abuses.)

[5] (The same as [XI, 4], with a reminder of recent instances of farming out the work to unscrupulous contractors.)

[6] Some District-Heads have become avaricious and arrogant. Their office shall henceforth be abolished, and all village affairs shall be in charge of the Head and five-man groups of each village. Places that cannot dispense with District-Heads shall consult the Intendant.

[7] Village-officials are expected to advise peasants to adjust their differences as far as possible by mutual conciliation, but shall not suppress petitions which must be heard by the authorities.

[8] It is reported that lower officials of the storehouses of Edo detain peasants unnecessarily long when the latter come to deliver tax-rice, and that, when peasants come to Edo for presenting petitions, an Intendant's assistant compels them to stay at the house of his acquaintance at an unreasonable cost. All these cases, of whatever nature, shall be reported to the Intendant.

[9] Peasants frequently bribe officials for various purposes, as, for instance, when they fear that their village might be incorporated into a neighboring Fief, but as the affairs of the government cannot be ex-

pected to be changed by bribery, peasants should not listen to the argument of any person whatsoever seeking bribes.

[10] If the peasants concealed wrongs committed by an unjust Village-Head or assistant of the Intendant, and thereby caused their own difficulties to multiply, the persons concealing would be punished together with the offender.

(XXVIII) 1716. An edict. (*To*, XIII, 485.)

[1] (The same as [XIII, 2]. Cf. [XXI].)

[2] (The same as [VII, 3], [XIII, 7], [XV, 4].)

[3] (The same as [XVII, 3].) It has been forbidden for the mortgager, instead of the mortgagee, to pay the dues levied on the land on mortgage.

(XXIX) 1721. An edict to the Intendants. (*Ibid.*, XIII, 701.)

[1] The land that has been laid waste shall be again cultivated by the owner. If he is unable to do so, the entire village shall assist him; if the work is too difficult for the village, the Intendant shall supply the balance of the expense; and if that is still inadequate, the case shall be reported to Edo. Newly opened land shall be exempt from taxation from two to five years, after which its productive power shall be examined and the rate of the tax determined. A careful investigation shall be made as to whether there is not still some waste land capable of re-cultivation.

[2] Peasants who have served under warriors in Edo are often reported to wear swords after returning to the village. This shall be stopped, on the Village-Head's responsibility.

[3] It is forbidden to start a new trade, excepting that of the fishermen and hunters who sell their fish and game for livelihood.

[4] The building of a new Shintō temple and the making of a new Buddhist image, as well as gambling, habitual indulgence in amusement, unsuitable customs, and idleness in agriculture, are forbidden, as before.

(XXX) 1721. (*GK*, No. 15; *TKR*, I, v, 266.)

No estate shall be divided which is smaller than 10 *koku* in assessed productivity or 1 *chō* (2.45 acres) in extent. As the remainder after a division also shall not be smaller than this limit, it follows that a peasant holding an estate smaller than 20 *koku* or 2 *chō* may not divide it among children or relatives. Dependents shall be hired out in the village or take a suitable service elsewhere.

(XXXI) 1722. An edict to Intendants. (*To*, XIII, 750.)

Peasants cannot remember all the instructions which they have heard but once, and innocently commit wrongs. As there must be teachers of writing even in remote villages, these, whether priests or laymen, shall carefully instruct the people, and shall at leisure write down, for the pupils to copy or recite, the more important laws, articles of the five-man group record, and any other instructive matter.

(XXXII) 1725. Articles for the five-man group record selected by the suzerain's government. (*Ggs*, sup. 1—20; *DNR*, iv, 103ff.) (In this document, the articles are put in the form of a pledge from the people, not of a command from the officials.)

[1] The group, its examination, and its complaints. (The same as [VII, 1, 2, 6], [XVII, 20].) If one single inhabitant is left out of the group system, the village-officials will be punished.

[2] Unjust officials. (The same as [XVII, 21], [XXVII, 10].)

[3] Accounts. (The same as [IX, 5], [XI, 11, 12], [XXVII, 3].)

[4] Each one to have his seal registered.

[5] Wages for labor in public works to be properly receipted.

[6] Tax-rice. (The same as [XI, 7], [IX, 4].)

[7] The village shall be responsible for a safe delivery of the tax-rice done in full straw-bags of 3 *to* and 7 *shō* each. (Cf. [IV, 1], [XI, 8].)

[8] Annual taxes to be assessed by the Village-Head in the presence of representative peasants.

[9] Annual taxes to be demanded and receipted by the Village-Head exactly as they were assessed.

[10] Village store-houses to be guarded by the village against all accidents, and to be opened by all the village together even under an urgent order from the authorities.

[11] No bribes to officials. Peasants to enter a complaint against an unjust official at once to the Intendant.

[12] Officials visiting the village. (The same as [XVII, 27].)

[13] Wicked men. (The same as [VII, 6, 7, 8], [XV, 2, 6].)

[14] To report on loss by robbery, on robbers, and on discovery of articles once stolen.

[15] Strangers. (The same as [VII, 3], [XV, 4], [XIX, 10].)

[16] To report on a wounded traveller and the death of a traveller. A sick traveller to be taken care of, and reported to his home.

[17] Murderers. (The same as [XVII, 7].)

[18] Not to neglect cultivation, on pain of punishment, in addition to the ordinary taxes. A really helpless peasant shall be helped in cultivation by the village.

[19] No permanent sale of land.

[20] Deeds of mortgage to bear the seals of the Village-Head and the five-man group, and the term not to exceed ten years.

[21] Succession to heirless estates. (The same as [XVII, 9].)

[22] Planting of tobacco. (The same as [VIII, 6], [XVII, 24].)

[23] The post-horse service to be prompt and honest, (and same as [XVII, 15].)

[24] Official circulars to be promptly delivered to the next village.

[25] Trees of the forests not to be cut.

[26] Trees. (The same as [XVII, 25].)

[27] The roads and bridges charged to the village to be repaired and cared for, on penalty, without waiting for an order.

[28] [29] Reservoirs. (The same as [XVII, 30].)

[30] Cultivated land not to be extended over roads and other public works, or penalty to be inflicted on the Village-Head and the five-man group.

[31] Gambling forbidden, on penalty on all parties and the Village-Head and five-man group.

[32] Fires. (The same as [XVII, 28].)

[33] Tenants to have guarantors, and the land-lord and his five-man group to be responsible for their good behavior.

[34] Not to be guarantors to servants without sub-guarantees of their own relatives.

[35] Outlaws. (The same as [XIII, 7].)

[36] Secret hawking. (The same as [XVII, 3].)

[37] Not to allow a courtesan to be in the village, on penalty on the woman, the land-lord, and his five-man group.

[38] In weaving silk and pongee, to conform to the standard width and length for each piece.

[39] Christians. (The same as [XVI].)

[40] Disorderly men. (The same as [VII, 3, 6].)

[41] Guard-houses. (The same as [XV, 5].)

[42] Fire-arms. (The same as [XIV].)

[43] Horse-stealing. (The same as [XV, 8].)

[44] Not to divide an estate smaller than 20 *koku*, if of the Village-Head, or 10 *koku*, if of the ordinary peasant.

[45] Not to mortgage land or building belonging to a temple and guaranteed by the Suzerain's vermilion seal.

[46] All men and women to be industrious in farming and to engage in suitable subsidiary occupations, on penalty of the village-officials and the five-man group.

[47] Shintō and Buddhist services to be simple.

[48] Even salaried burghers not to wear swords at a dancing show.

[49] Peasants and burghers to wear plain silk, pongee, cotton or hempen clothes, according to their means, and not to use better materials. The servants to use cotton and hempen cloths for clothes and sashes.

[50] and [51] (do not concern peasants.)

[52] Mortgage. (The same as [XXVIII, 3].)

[53] Wearing swords. (The same as [XXIX, 2].)

[54] Shintō temples and Buddhist images. (The same as [XXIX, 4].)

[55] To instruct children not to be lazy and extravagant.

[56] Ferry-boats in Kwantō to bear the official brand.

[57] Sales of persons are forbidden.

[58] To report on men falsely calling themselves officials.

[59] Not to buy or take in mortgage stolen or uncertain goods, on penalty on the five-man group and the village-officials.

[60] Gambling strictly forbidden.

[61] Cultivation of wasted land. (The same as [XXV, 1].)

[62] No new Shintō or Buddhist service to be introduced. No public show without permission, on pain of penalty.

[63] Good care of water-works and equitable distribution of water.

[64] Not to present complaints too old or with insufficient proofs.

[65] Not to force persons in wedding to give drink or to throw stones at them.

[66] To report on a foundling, and not to give it to an uncertain person and without official permission.

[67] As before, the peasant shall not mortgage land without the seal of the Village-Head, nor the latter without the seal of another village-

official. As before, a mortgage is illegal in which the mortgager, and not the mortgagee, pays the taxes on the land in question.

[68] No mortgage whose term expired before 1716 shall be considered at court after ten years after the expiration of the term. Nor shall a mortgage after ten years after the date of the contract which states that the land would be restored at any time the debt is repaid.

(XXXIII) 1737. An^oedict. (*To*, XIII, 1203.)

[1] A deed of mortgage which does not bear the seal of the Village-Head, a deed of mortgage by a Village-Head which does not bear the seal of another village-official, a deed of mortgage which exempts the mortgagee from the payment of taxes on the mortgaged land and charges the mortgager to pay them, these three have been declared illegal long since, and must be so stated in the five-man group record. However, there still are people who present petitions on the strength of illegal deeds. Henceforth, village-officials shall frequently read the group record to the people. Mortgages whose terms have expired since 1716 would not be considered, were disputes concerning them brought to the court. Nor would a deed of mortgage stating that the land would be restored to the owner at any time the debt was paid be entertained, if the term of the mortgage has expired. This order shall be promulgated through the Kwantō provinces, the Fiefs receiving notice thereof from the nearest Intendant.

[2] It is reported that there are still some places in the Fiefs that have not made their five-man group records. These shall be made. The order therefor shall also be transmitted to the lords from their nearest Intendants.

(XXXIV) Articles of five-man group records (of Domain-lands) not included in the summaries already given. (*GGI*). (It should not be presumed that each article appeared for the first time in the year here given. Many articles were based on old laws still in force. Few articles in the later group-records were not repetitions.)

[1] Shimotsuke, 1743. The estate of an orphan shall be taken care of by the relatives and the village, who shall make a written agreement in order to prevent misunderstanding, and shall render the taxes on the land. The orphan on reaching the majority, shall take back the estate, and be set up as a peasant (*hyaku-shō*).

[2] Shimotsuke, 1743. An especial care to be taken of rivers and embankments when there is a long rain and danger of overflow.

[3] Shimotsuke, 1743. Villagers shall not feast at the expense of the village when they congregate on common business.

[4] Mino, 1759. Peasants shall not be discourteous to warriors.

[5] Mino, 1759. If any unusual and improtant thing takes place in the village, or in a neighboring village, or even in a Fief near by, it shall be reported.

[6] Mikawa, 1816. No new houses shall be erected without permission.

[7] Mino, 1831. Any person especially noted for filial piety to his parents, faithfulness to his master, benevolence to the destitute, or other virtues, shall be reported.

[8] Buzen, 1836. A village-official especially faithful in doing his

duties, considerate of the interests of small peasants, and consequently regarded by them with great respect, shall be reported by peasants.

[9] Buzen, 1836. Large bells, *torii*, and stone lanterns for temples shall not be made. No Shintō or Buddhist images, whether of bronze, stone or wood, larger than three *shaku* (3 feet) in height shall be made. A permission is necessary for making more than ten images at a time, even though they are of wood and do not exceed three *shaku*.

[10] Buzen, 1836. No Buddhist temple building larger than three *ken* (6 yards) in front and no shrine or pedestal larger than one and a half *ken* (3 yards) in front, shall be erected. Elaborate beam constructions with *hiji-ki* brackets shall be avoided.

[11] Yamashiro, 1848. Any matter that would be good for the government, and any measure, however old, which troubles people, shall be reported.

[12] Kōtsuke, 1863. The peasant shall not be disrespectful to officials even in another district, and shall not be discourteous to travellers.

(Note: The Notes 60—146 will appear in a subsequent number of the Journal.)

Vocalic r, l, m, n in Semitic.—By FRANK R. BLAKE,
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IN Indo-European philology vocalic *r, l, m, n* are equally as important as those sounds which are usually designated as the vowels *par excellence*. They seem to have been among the sounds possessed by the original common Indo-European speech, and many phenomena can be explained only by referring to them. For example the varying forms of the word for "wolf," Sanskrit *vrkas*, Greek *λύκος*, Gothic *wulfs*, Lithuanian *vilkas*, Old Bulgarian *vlūkŭ*, or again of the word for "hundred," Sanskrit *śatam*, Greek (έ)κατον, Latin *centum*, Gothic *hund*, Lithuanian *szim̃tas*, are best explained by assuming that the original vowel of the first syllable was in the first case vocalic *l*, in the second, vocalic *n*.¹

In the Semitic languages apparently no such important role is played by these sounds. It is usually supposed that they did not form a part of the sound material of the parent Semitic speech,² but there seems to be one form at least in which the positing of a vocalic liquid is possible.

In Hebrew, Biblical Aramaic, and Assyrian we find two negative adverbs whose chief component is the consonant *l*, viz., Hebrew *לֹא*, *לֹכֶן*; Biblical Aramaic *לֹא*, *לֹכֶן*; Assyrian *lā*, *ul*. In the first two languages the form *לֹא*, *לֹכֶן* is employed as the usual negative of declarative statements, and is regularly autotonic, while *לֹכֶן* is the negative of optative and subjunctive statements and is proclitic, as is indicated by the Maqqeph which joins it to the following word. In Assyrian *lā* is certainly the usual accented negative, while *ul* seems to be used, at least in many cases, in sentences in which some other element bears the chief stress, e. g., *edu ul êzib*, 'not one escaped', *nûru ul immarû* 'light they see not,' *ul zikaru šunu*, *ul sinnišâti*

¹ Cf. Brugmann, *Grundriss d. Vergl. Gram. der Indogerm. Sprachen*, 2^{te} Bearb. Strassburg, 1897, §§ 30, 77, 429—460, 497—532.

² Cf. Haupt, *Über die beiden Halbvocale ʔ und ʕ*, BA. I., p. 294.

šunu 'they are neither male nor female.' In Ethiopic, the only other language in which 'al occurs, we find it only in the quasi-verb አልፎ : 'albô 'there is not, has not,' and in the negative አክ : 'akkô, in both cases without accent. It seems therefore that these two series of forms may be ultimately of the same origin, *lâ*, *lô* being the representatives of the negative when accented, 'al, ul being the representatives, when proclitic. The latter forms may have been developed from the authotonic *lâ* as follows. With loss of accent the vowel *â* was shortened and finally disappeared, leaving only *l*, probably pronounced as *l̥*; this vocalic *l* developed a prothetic vowel which was pronounced with initial glottal catch; the *a* vowel of Hebrew, Aramaic, and Ethiopic 'al is due to the influence of this catch; in Assyrian the Aleph was probably lost, and then the form was written with *u*, the vowel that seemed to render the sound best.¹

Altho liquid and nasal vowels play so unimportant a part in the parent Semitic speech, there are a number of cases in which they appear to have been developed in the individual languages. In many cases, however, in the forms in question the liquid and nasal vowels themselves do not appear, but must be assumed in the transition forms from which they are derived, e. g., Nestorian Syriac ܕܝܠܬܐ : *dēlēlthā* is developed from the original *dihlatā* through the intermediate stages *dihlēthā*, *dihlthā*.

In classical Arabic, Ethiopic, and Assyrian examples of these vowels are rare. The perfect of the VII form in Arabic seems to be a case in point, انقتل *inqatala* being derived from *ngatala*,² a form developed on the basis of the imperfect by dropping the performative *ia*, but the treatment of *ŋ* + consonant does not differ from that of any combination of two consonants at the beginning of a word, as for example in VIII form اقتتل *iqtatla*. The varying forms of the word for 'man' مرء, امرء *mar'u*, *mir'u*, *mur'u*, *imra'u* may point to the presence of an *r*, the form being originally *mṛ'u*.

In Ethiopic the prepositional forms አምነ, አም — *əmna*, *əm* are to be derived from the original *mina* (cf. Arab. مِنْ before the article) through an intermediate stage *ṃna*; *əm* is derived

¹ Cf. *ultu* below p. 219.

² Cf. Haupt, *Nachträge und Berichtigungen*, BA. I p. 328.

from *ĕmna* by dropping of the final syllable after the accent had shifted to the first.

In Assyrian the writing *er* in forms like *unammer* 'make shine,' *uma'er* 'send,' instead of the regular *ir* may represent the *r* vowel in the unaccented syllable.¹ It is not impossible also that the preposition *ultu* 'from' is derived from an originally unaccented or proclitic form of *istū* or *iltu*, through the intermediate stage *l̥tu*. Notice that the vowel developed out of *l̥* is *u* in this case as in the negative *ul* above.

In Syriac the forms of this character are more numerous.² In the Eastern dialect words in which *r, l, m, n* followed by Shewa immediately precede the final syllable e. g., *dehletha* 'fear', syncopate the Shewa and develop a vowel before the consonant, e. g., *deheltha*. Between forms like *dehletha* and *deheltha* there must have been a series of intermediate forms like *dehl̥tha* with liquid or nasal vowel.

Words which begin with *r* followed by Shewa, e. g., *reqîâ* 'firmament,' often lose the Shewa and take a prothetic vowel instead written with *aleph*, e. g., *'arqîâ*; an intermediate stage *ṛqîâ* must also be assumed here.

After a word ending in a consonant the initial syllables *le, be, de* are often changed in poetry to *el, ev, ed*, e. g., *'ith elhôn*. In the case of *l* an intermediate stage *l̥* is to be assumed e. g., *'ith l̥hôn*; in the other cases the change is probably analogical.

In Hebrew, liquid and nasal vowels appear to occur in unaccented final syllables. These are found chiefly in the following classes of forms; viz.,

- a) Segholate nouns, e. g., סֵפֶר 'book,' רֶגֶל 'foot,' לֶחֶם 'bread,' שֶׁמֶן 'fat;'
- b) in Segholate verbal forms, e. g., יִגַּל, יִגְל, jussive Qal and Hiphil respectively of גִּלָּה 'reveal;'
- c) in forms of the imperfect with ו conversive which have recessive accent, e. g., וַיִּלָּחֶם 'and he fought.'

In the first two classes of forms the fact that the last syllable contains a liquid or nasal vowels and not short *e* followed by a consonant is indicated in the first place by the fact that such vowels are found in similar forms in other

¹ Cf. Delitzsch, *Assyr. Gram.*, Berlin, 1889, p. 89.

² Cf. Brockelmann, *Syrische Gram.*, Berlin, 1899, §§ 70—73.

languages, e. g., Eng. *taper*, *eagle*, *bosom*, *leaven*, the last syllables of which all contain liquid or nasal vowels in spite of the spelling: secondly by the fact that similar Hebrew forms ending in *u* or *i*, change these consonants to the vowels *û* or *î* e. g., בְּהוּ 'chaos' from *būhu* or חֲלִי 'sickness' (pausal form) from *hūlî*; so בֶּהֱן (i. e. *bōhēn*) 'thumb' from *būhn*. The fact that all other Segholate forms with the exception of those containing second or third guttural radicals are likewise spelt with Seghol in the last syllable does not militate against the assumption of liquid and nasal vowels in words ending in liquids or nasals. The Massorites, of course, knew nothing of such vowels and so spelt them, with the sign for an unaccented short vowel in a closed syllable + consonant, just as we do for example in English.

In the forms of the imperfect with ו conversive like וַיִּלָּחֶם 'and he fought,' we find of course plenty of forms that do not end in liquids or nasals also written with Seghol + consonant, e. g., וַיִּבְרָךְ, and the Seghol might in most of these cases be regarded simply as a modification of accented Ğere in forms like וַיִּלָּחֶם, וַיִּבְרָךְ. The correspondence, however, of וַיֵּאמֶר with unaccented Seghol + *r* to יֵאמֶר with accented Pathah + *r*, where Seghol + *r* evidently indicate the *r* vowel, since Seghol is not the representative of unaccented Pathah, seems to indicate that we have liquid or nasal vowels also in the forms with original *i* in the final syllable.

In all these forms, then, the spelling Seghol + liquid or nasal seems to be used to indicate vocalic *r*, *l*, *m*, *n*. Whenever, therefore we find these combinations in an unaccented position, we are confronted with the possibility of liquid or nasal vowels. There are several series of forms besides those just discussed in which these vowels seem to be present.

In a number of nouns with prefixed מ made from stems with initial *r*, *l*, *m* we find the vowel of the prefix written Seghol, e. g.,

מֶרְכָבָה 'chariot'

מֶרְחֵב 'wide space'

מֶרְחָק 'distance'

מֶרְקָחִים 'aromatic plants'

מֶרְקָחָה 'salve'

מֶלְקָחִים 'pinchers'

מֶלְתָּחָה 'wardrobe'

מֶמְשָׁלָה 'ruling.'

Here the Seghol befor ר might be explained as a partial assimilation of *i* to *r*, *r* being sometimes a guttural. But ר when it acts as a guttural regularly causes complete assimilation of the preceding vowel to *a* and not partial assimilation to Seghol; besides the forms with *l* and *m* remain unexplained. It is not improbable that in all these forms we have a vocalic liquid or nasal after the prefix מ indicated as we should expect by Seghol + consonant; thus, *mṛkēbāh*, *mḷqāḥaim*, *mṁšālāh*, &c. The form מְרִי 'thy rebelliousness,' from מָרִי is probably to be explained in the same way.

The possessive suffixes of the second and third person plural כֶּם, כֵּן, הֶם, הֵן as well as the independent pronouns of the second person plural אַתֶּם, אֲנִי, all have Seghol in the last syllable followed by *m* or *n*. This Seghol is said to be derived from an *i* which belonged originally only in the feminine, e.g., Assy. *šina* 'they,' but which has been extended by analogy to the masculine forms which originally had *u*, e. g., Assy. *šunu* Arab. *hum* 'they,' Assy. *attunu*, Arab. *antum* 'ye.'¹ The presence of Seghol in these syllables instead of the regular Gere is explained by Brockelmann as due to the fact that they were originally unaccented, and that the original vocalization is preserved even after the shift of the accent to the last syllable.² Such a levelling of the *i* vowel of the feminine has certainly taken place in the independent pronoun of the third person masculine הֵם, הֵמָּה 'they,' and it may have taken place in all the masculine forms above mentioned, but it is unnecessary to assume such a process. If, as we have supposed, the final syllable was originally unaccented, we may have here simply nasal vowels, in the masculine representing a reduced form of *um*, in the feminine, of *in*.

This conception of these endings also offers a better explanation of the third person plural suffixes *ām*, *ān* as in סוּסֵם, סוּסֵן 'their horses.' It is difficult to see how they could be contracted from **ahim* or **ahum* and **ahin*. These would naturally yield the diphthongal forms **aim*, **aum*, **ain* or contracted **ēm*, **ôm*, **ên*. If, however, we suppose *ahim* or *ahum* and *ahin* to have been first reduced to *ahm* and *ahn*, which

¹ Cf. Brockelmann, *Grundriss d. Vergl. Gram. d. semitischen Sprachen*, Berlin, 1907, §§ 104 d δ, 105 e γ, 106 g ε.

² Cf. Brockelmann, *op. cit.*, loc. cit.

with loss of intervocalic *h* become *am*, *an* or *am*, *an*, and under the influence of the accent *ām*, *ān*, the difficulty vanishes.

In the active participle of stems *tertiæ* ר + suffix of the second person masculine singular, such as for example יצִרְךָ 'thy creator,' the Seghol before the ר is explained as partial assimilation of *i*, which we find in such forms as אִיְבֹקְךָ 'thy enemy,' to the guttural ר. We find the same phenomenon, however, in חֲתָנְךָ 'thy father-in-law' (Ex. 18, 6) and in נֹתֵנְךָ 'giving thee' (Jer. 20, 4). Both the forms with ר and those with נ are best explained as containing liquid and nasal vowels, viz., *îôgyxā*, *hōthyxā*, *nōthyxā*.¹

In Exodus 33, 3 occurs the unusual form אֶכְלֶךָ 'I will consume thee' which stands for אֶכְלֶךָ, first person imperfect Piel of כָּלָה 'be completed,' with suffix of second person *singular* masculine. In the form in the text we evidently have an *l* vowel. The development from the normal form is to be conceived of as follows; *'akall^exā* > *'akal^exā* > *'akalxā* > *'aklxā*.

From what has been said it will appear that the part played by the liquid and nasal vowels in the Semitic languages is not entirely without significance. In the parent speech, it is true, they are apparently all but non-existent, but in some of its descendants, especially in Aramaic and Hebrew we find them developed in a number of cases. These cases serve to show that while these vowels in Semitic cannot compare in importance to the corresponding sounds in the Indo-European family, the possibility of their occurrence should be borne in mind in any study of exceptional forms.

¹ This form of the active participle is rare, the cases given being all those that occur with stems *tertiæ* ר or נ; no forms occur from stems *tertiæ* מ: from stems *tertiæ* ל we have only נִצְלֶךָ "thy redeemer," where *l* has become *al* under the influence of the guttural א; in the forms רִכְלֶמְךָ "thy trader" (Ez. 27, 20; 23) and תֹּאכְלֶכֶם "it shall devour you" (Is. 33, 11) in which the conditions are similar to the above, the *a* may be explained as due to the influence of the ם which acts as a guttural; in תֹּאכְלֶכֶם it may be simply analogy with the other forms of the imperfect.

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The Interrelation of the Dialects of the Fourteen-Edicts of Asoka. 2: The dialect of the Gīrnār redaction.—
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BEFORE at once proceeding to give a summary of the special features of this dialect there are a few points which require our consideration.

First of all I would remind the reader that the Gīrnār redaction of the Fourteen-Edicts of Asoka is a translation from a Māgadhan original, and that the dialect of this Māgadhan original has left traces in text of the Gīrnār recension. This is a universally acknowledged fact.¹

Secondly, I wish to investigate Senart's theory of learned and historical spelling as applied to the Gīrnār redaction. Against his assumption regarding the Shāhbāzgarhi and Mansehra recensions see the excellent arguments of Johansson, *Shb.* ii, § 77 (but on the history of *s*, *ś*, *ṣ*, *rth*, *rdh*, *rt* see Michelson, *AJP.* 30, pp. 287ff., 294ff., 416ff.).

It will be noticed that in the Gīrnār version, *r* is retained after preceding stops and sibilants; but is assimilated to following stops, sibilants, and nasals; it is kept before a following *v* (see Michelson, *AJP.* 30, p. 290; cf. also *JAOS.* 30, p. 88). To Senart the forms with *r* retained are simply learned historical spellings. Franke seems to have been painfully undecided as to whether *r* in combinations with consonants in Shb., Mans., and G. was actually pronounced or was graphical only; and if pronounced as to whether it was or was not due to the influence of secondary Sanskrit: see pages 50, 54, 55, 56, 71, 72, 115, 117. And at the bottom of page 72 he gave his case away to Senart.

Whatever may be the merits of Franke's theory of secondary Sanskrit, I am convinced that no influence of it is to be seen in the inscriptions of Asoka.

¹ This seems to be a suitable place to remind the reader of the works of Konow and Senart, cited in part I, on this dialect.
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There is no fluctuation in the non-writing of *r* in the Gīrnār text before immediately following nasals, sibilants, or stops. Why then do we find fluctuation in the case of stops and sibilants immediately followed by *r*, and *r* when immediately followed by *v*? If the *r* in these cases is only a learned and historical spelling, why is it that we never find a learned and historical spelling with *r* in the first cases? It should be noticed that in the 'Māgadhan' dialects *r* is assimilated to all adjacent consonants. We are therefore justified in making the deduction that *pr*, *sr*, *rv*, &c. represent the actual pronunciation in the Gīrnār dialect; and that where we have *p* (*pp* medially, written *p*), *s* (medially *ss*, written *s*), *vv* (written *v*) etc. for these respective combinations, they are 'Māgadhisms'; and that the assimilation of *r* to immediately following stops, sibilants and nasals was native to the Gīrnār dialect. Senart himself admitted the principle of 'Māgadhisms' (see *Indian Antiquary* 21, p. 174); why he never thought of applying it to these cases is unclear to me. Against his theory of learned and historical orthography may be urged the fact on the 'Māgadhan' inscriptions we never have *r* (which would become *l*) written in conjoint consonants; but why do we never find a learned or historical spelling with *r* (*l*) in them? Surely we should look for historical or learned spelling in a document written in the imperial official language, if anywhere. Again corresponding to Indic *pr* in the Gīrnār text we have *pr* 60 times, *p* 32 times. That is by actual figures *pr* is a trifle less than twice as common as *p*. But it should be noticed that *paṭi* (*paṭi* once) is found eleven times; and *paṭi* is a most undoubted 'Māgadhism'; see Michelson, *IF.* 23, p. 240. And *piye* is found once: this too may be classed as an obvious 'Māgadhism'; cf. *piye* in the 'Māgadhan' versions of the Fourteen-Edicts as well as in the various redactions of the Pillar-Edicts. Even Senart admits that the final *e* of the Gīrnār word is a 'Māgadhism'; why then should he not admit that the initial *p* for *pr* is also one? Subtracting these 12 cases of obvious 'Māgadhisms' we have 20 cases of *p* for Indic *pr* and 60 cases where *pr* is retained. That is to say that *pr* is found three times as often as *p* for Indic *pr*. Moreover it is only after the 4th edict that *p* for *pr* is frequent: in edicts 1—4 *pr* is retained 35 times, *p* for *pr* occurring but 3 times. The very obvious 'Māgadhism' *paṭi* occurs twice; the sole

remaining form with *p* for *pr* is *Piyadasi*, and the most sceptical would scarce consider this as true to the native dialect. Now if there is anything in the whole theory of 'Māgadhisms'—and this theory has been held as far as I know by all who have investigated the dialects of the Asokan inscriptions—it is clear that all cases in which *p* for Indic *pr* is apparently found in the Gīrnār redaction of the Fourteen-Edicts are 'Māgadhisms'. Now if *p* for *pr* is a 'Māgadhism' so are *k* for *kr*, *t* for *tr*, &c. In these, however, the 'Māgadhisms' are as frequent as are the true native sounds; and in some cases more frequent. Gīrnār *ithījhakhamahāmātā* is an exceptionally good example to show that *t* for *tr* is a 'Māgadhism'; the *th* for *str* is one as is also the *kh* for *ch* (really *kkh* and *cch*); see Johansson, *Shb.* 2, p. 23, and Michelson, *JAOS.* 30, p. 88. In short the true native word should be **istrījhachamahāmātrā*, cf. Mansehra *istrij[h]achamahamatra* as contrasted with Kālsī *ithidhiyakhamahāmātā*. The fact that Shābhāzgarhi *ī[striḍhi]yachamahamatra* also shows 'Māgadhan' influence points distinctly in the same direction; for the principle involved see Franke, Pāli and Sanskrit, p. 109, footnote 2, and compare Michelson, *AJP.* 30, p. 427; 31, p. 57. (Note the true native Gīrnār *mahāmātresu*; the 'Māgadhism' *dhammamahāmātā* occurs 3 times: cf. Dhāuli, Kālsī, Delhi-Sivalik *dhammamahāmātā*, Jaugaḍa *mahāmātehi*.) The fact that Mansehra *Amḍha-* is a 'Māgadhism' (see *IF.* 24, p. 55) is good evidence that Gīrnār *ṃdha-*, i.e. *Amḍha-*, is also one. This at once lays G. *dhuvo* open to the same suspicion, cf. Kālsī *dhuve*, Jaugaḍa *dhuvaṃ*. In the remaining cases of stops + *r* 'Māgadhisms' are in full possession except in the combination *br*, and here the 'Māgadhism' *b* is twice as frequent as native *br*. But the forms are too few and too isolated to be any criterion. Observe that 'Māgadhan' *paṭi* (*paṭī*) outnumbers native Gīrnār *prati* (*pratī*) more than two to one; while it has completely wiped out native *prati* in the Mansehra redaction, occurring over a dozen times; similarly 'Māgadhan' *aṭha-* has nearly everywhere usurped the place of native *athra-* in the Shābhāzgarhi recension (see *IF.* 23, pp. 240, 241; *AJP.* 30, p. 294ff.). So that mere numbers are not necessarily a deciding factor in every given case.

As an explanation of the fact that in the Gīrnār redaction 'Māgadhisms' for *pr*, &c. are so prevalent, it may be said that the dialect of Gīrnār agreed with the 'Māgadhan' dialect in

assimilating *r* to immediately following stops, thus causing certain forms to be identical in both dialects; for this reason it was difficult for the scribe to abstain from substituting *p* for *pr*, etc. Now in the dialect of the Shāhbāzgarhi and Mansehra recensions 'Māgadhisms' are comparatively rare (outside of *paṭi* for *prati*) in the case of stops + *r*; the reason for this is that in this dialect *r* was not assimilated to any adjacent consonants except in the combination *ārṣ(y)* and perhaps in the combination *rṇ* (see *AJP.* 30, p. 289; *JAOS.* 30, p. 89; and my essay on the etymology of Sanskrit *punya-* which is in *TAPA.* 40). As long as *r* was not assimilated to immediately following stops as in the case of the 'Māgadhan' dialect, there was comparatively little danger of a 'Māgadhism' occurring for a stop + *r*. Such 'Māgadhisms' as are found are readily to be recognized by the non-agreement of Shb. and Mans. Of course there are other means of detection; e.g. Mans. *tini* has a 'Māgadhan' *-ni*; cf. Kālsī *tini*; hence the initial *ti-* of Mansehra *tini* is open to the same suspicion, and as a matter of fact there is other evidence to show conclusively that it is a 'Māgadhism'; compare the Shāhbāzgarhi correspondent.

Let us now turn to the treatment of the Indic sibilants + an immediately following *r*. For Indic *sr* we have *sr* 5 times and no other correspondent. It is therefore certain that *sr* is the true native Gīrnār combination of sounds. It is as absurd to consider the *sr* as a purely historical and learned spelling as it is to regard the spelling *asti* (found repeatedly) for *atthi* (which would be written *athi*: it never is found in the Gīrnār redaction). If *sr* was a purely historical and learned spelling, we certainly would find *s* written at least once which is not the case.

The history of Indic *sr* goes a long way in assuring us regarding the history of Indic *śr*. Corresponding to Indic *śr* we have *sr* 11 times, *s* (really *ss* medially) 10 times. But *s* (medially really *ss*) is the sole 'Māgadhan' correspondent to Indic *śr*. What is simpler than to explain the *s* of the Gīrnār text as a 'Māgadhism'? And it should be noticed of *samaṇa-* (which occurs 6 times, either in the nom. or gen. pl., and always in compounds) there is no reason why we should not regard the lingual *ṇ* as the sole trace of the native word precisely as in the case of Mansehra *kayaṇa-* (for *kalayaṇa-*; the

credit of discovering this belongs to Franke), and *panatika* (on which see Michelson, *AJP.* 31, pp. 58, 59). Per contra note *brāmhaṇasramaṇānaṃ* at G. iv. 2 with true native *br* and *sr*. And Gīrnār *guru-susūsā* betrays 'Māgadhan' influence in the vocalism: see Michelson, *AJP.* 30, p. 287; in fact the form coincides exactly with the 'Māgadhan' word *susūsā*, and for this reason it is not reliable evidence for the history of *śr* in the Gīrnār dialect. It is then not at all venturesome to include the 3 other cases of *s* for *sr* (Indic *śr*) among 'Māgadhisms'. And it should be particularly noticed that *seṣṭe* at G. iv. 10 has a 'Māgadhan' final *e* for native *aṃ* as even Senart would admit: cf. Kālsī *seṭhe*, Dhauli *se[the]*; for this reason we may doubly suspect the initial *s* of being a 'Māgadhism'; see also *AJP.* 30, p. 293.

We have now to consider the correspondents to Indic *rv*. In the case of the correspondents to Sanskrit *sarva-* and its adverbial derivatives we have *rv* 15 times, *v* 18 times. But *sava-* (i. e. *savva-*) and *savata* (i. e. *savvatta*) are the sole correspondents to Sanskrit *sarva-* and *sarvatra* respectively in the 'Māgadhan' redactions. It is therefore highly probable that the forms with *v* in the Gīrnār version are 'Māgadhisms'. A decisive proof that this is the case is the following: Corresponding to Sanskrit *sarva-*, *sarvatra* in the Shāhbāzgarhi recension we have forms with *vr* (i. e. *rv*) as well as *v* (i. e. *vv*), but these latter are in a distinct minority; but in the Mansehra redaction we find forms with *vr* (i. e. *rv*) only. It therefore follows that the forms with *v* (i. e. *vv*) in the Shāhbāzgarhi are 'Māgadhisms': see Johansson, *Shb.* ii, § 65; Michelson, *AJP.* 30, p. 285; the statement in *JAOS.* 30, p. 82 is an error. Now if Shb. *sava-*, &c. be a 'Māgadhism' it is impossible to escape the conviction that Gīrnār *sava-*, &c. is also a 'Māgadhism'. It will be recalled that the Gīrnār dialect is most intimately related with the dialect of the Shāhbāzgarhi and Mansehra redactions: see Senart, *Indian Antiquary*, 21, p. 172; Michelson, *AJP.* 30, p. 291, *JAOS.* 30, pp. 87—89, *TAPA.* 40, p. 28. Below I have tried to show that the falling together of Indic *s*, *ś*, *ṣ* into *s* is a relatively late development in the Gīrnār dialect; and in my judgement the assimilation of *r* to following stops, sibilants, and nasals is likewise of recent origin, say shortly before the historical transmission. (This last does not apply to the assimilation of *r* in the combinations *ārs[y]*.)

rn: these I consider old.) Then the dialects of the Shāhbāzgarhi, Mansehra, and Girnār recensions of Asoka's Fourteen-Edicts would be very much more intimately related than hitherto suspected.

The Girnār correspondents to Sanskrit *pūrva-* offer considerable difficulty. At v. 4 we have *bhūtaprurvam*; obviously the first *r* should be eliminated. At iv. 5 we have *bhūtapuve*. This is wholly nonsensical. The final 'Māgadhan' *e* should be noticed. In this we have the key to the situation: 'Māgadhan' *puluve* has completely distorted the native word. At vi. 2 the text has *bhūtapurva* (*m* is graphically omitted). But the true reading is *-pruva*. Here too we have *u* preceding the *v* in imitation of the 'Māgadhan' form; but the scribe was dimly conscious that in the Girnār word there ought to be an *r* somewhere, and so inserted one, albeit in the wrong place. (Some may seize upon Girnār *-pruva* as a proof that Shb., Mans. *pruva-* is not merely graphical for *purva-* but represents the true pronunciation. But see Michelson, *AJP.* 30, pp. 289, 290, 426; 31, pp. 55—57.)

It is barely possible that Girnār *bhātrā* is for **bhrātrā* by dissimilation, but it is far more likely that the initial *bh* is simply a 'Māgadhism' for *bhr* as is shown by Mansehra *bhatuna* for *bhratuna* (so the Shb. redaction) altered by 'Māgadhan' *bhātīnā*.

I think *pitṛā* (not *pitā*) should be read at xi. 3. The words *pitā* and *bhātā* (at ix. 5 and xi. 3 respectively) are hyper-Māgadhisms exactly as Shb. *ayi*, on which see Michelson, *IF.* 24, p. 55; and *JAOS.* 30, p. 85.

The statistics given above are made on the basis of the Girnār text in *EI.* 2, and the fragments in *WZKM.* 8 and *JRAS.* 1900¹. They are wholly independent from the figures published long ago by Senart.

Shāhbāzgarhi and Mansehra *pravrajitani* makes it highly probable that the *v* of Girnār *pavajitāni* is a 'Māgadhism' as is the initial *p* for *pr*, if indeed this latter is not the true reading. Similarly with respect to *tivo*. Now if the *mb* of *Tambapamṇi* be a 'Māgadhism'—the Shāhbāzgarhi and Man-

¹ I have not included *savesu* of Senart's smaller fragment, because I suspect that this fragment is identical with the fragment published by Bühler. The grounds for this belief I hope to publish at any early date.

sehra redactions support this view: see Johansson, *Shb.* ii, p. 1, Michelson, *IF.* 24, p. 55—as is the *am* for *ām* (see below), then the rule should be given: *R* is not assimilated in the Girnār dialect to preceding adjacent consonants but is assimilated to adjacent following consonants except *v*.

The lengths to which Senart is carried by his theory of learned and historical orthography, is well illustrated by his discussion of Girnār *n* and *ṇ* (*Indian Antiquary*, 21, p. 171 = *Les Inscriptions*, 2, p. 430). He acutely observes that though Girnār possess *n* and *ṇ* in the interior of words where etymologically required, yet in case-endings we have *n* where Sanskrit shows us that *ṇ* was to be expected. He further notes that the 'Māgadhan' dialect possesses only *n* as the correspondent to Sanskrit *n* and *ṇ* alike. He therefore argues that Girnār *ṇ* does not represent the actual pronunciation and is only a learned and historical spelling. Now Senart can be excused from not noting the same apparent substitution of *n* for *ṇ* in case-endings in the dialect of the Shāhbāzgarhi and Mansehra redactions (Johansson, *Shb.* i, p. 166, 52 of the reprint; Michelson, *JAOS.* 30, p. 87, *AJP.* 30, p. 422) for two excellent reasons, to wit, Bühler had not published his edition of the *Shb.* text nor the Mansehra version when Senart first wrote his arguments. But since the charge of a promiscuous use of *n* and *ṇ* in the Girnār dialect as correspondents to Indic *n*, cannot be maintained (see Michelson, *IF.* 24, pp. 53, 54), he certainly should have ascribed the use of *n* for *ṇ* in the case-endings of G. to the influence of analogy. Considering the fact that in Pāli this same analogical use of *n* for *ṇ* obtains almost exclusively, and is frequent in suffixes (see *AJP.* 31, p. 64 and my article on the etymology of Sanskrit *punya*—which is in *TAPA.* 40)—there existed ample material in the texts published at the time for him to have made this observation—his failure to do this is regrettable. In justice, however, it should be said that Senart admitted that he could not prove his case in this particular instance.

Special features of the dialect of the Girnār redaction of the Fourteen-Edicts.

Special features of the dialect of the Girnār redaction of the Fourteen-Edicts as compared with the dialects of the other redactions are:

1. *A* is retained before *m* in *majhamena*.

Strictly speaking, we can only contrast this retention with the change to *i* in the 'Māgadhan' dialect as the Shb. version differs in the wording where we otherwise would find a correspondent, and in the Mans. text there is a lacuna in the corresponding passage.

2. *A* is retained after *v* in *ucāvaca*- (see the reading of J. in ASSI).

3. *A* for *o* of the other versions in the foreign name *Aṃtiyako*.

4. The combination *ary* becomes *er* (*samacerām*).

5. The combination *ava* is retained in *bhavati*.

See Michelson, *AJP.* 30, p. 287; *JAOS.* 30, pp. 78, 88.

6. The *i* of *vacigutī* (Shb., Mans., K. *vacaguti*).

Shb., Mans., K. *vaca*- is a transfer from **vacas* to the *a*-declension. The point of departure for the transfer of *as*-stems to *a*-stems in Middle Indic languages was (as has been long known) the nom. sing. which coincided with the nom. sing. masc. of *a*-stems. The *vaci* of *vacigutī* is identical with *vaci* in Sanskrit *vacibhedāt*. In *vaci* I see a fossilized locative singular. Though in Sanskrit we have the inflection *vāk*, *vācam*, *vācā*, *vācas*, *vāci*, &c., it is clear that originally there was gradation exactly as in the case of *pāt*. This is shown by Avestan *vāxš*, *vacim*, *vaca*, *vācō*, *vacas-ca*, *vacam*. The levelling of the gradation Skt. *vāk*, Latin *vōx*, Greek *ὄψ* is secondary; see Brugmann, *Grundriss*², 2. 1, p. 131.

7. The first *i* in *P[i]rīṃdesu*.

We cannot be absolutely positive that this is a peculiarity of G. as Shāhbāzgarhi *Pulī[de]ṣu*, i. e. *Pulīṃdesu* is a 'Māgadhim', as is shown by the *l*. It is unfortunate that the Kālī correspondent is so damaged that it is impossible to tell what the vowels of the first two syllables were with certainty. The first may have contained *u*, but the second apparently has no vowel-indicator, so that we must read *a*, a palpable blunder for *i*. To sum up, *Pul[a]deṣu* should be read *Pulīdeṣu*, i. e. *Pulīṃdesu*. I have previously pointed out the fact that 'Māgadhim' are especially frequent in the names of peoples, countries, &c. See *AJP.* 30, p. 426; *IF.* 24, p. 54, 55. On Gīrnār *Tambapannī*, see my observations above in my discussion of learned and historical orthography, and below in my discussion of the history of *ā* when followed by *ṃ* + a consonant. To these may be added *Satīyaputo*, G. ii. 2, *Satīyaputra*, Shb. ii. 4, *Satīya[putr.]*, Mans. ii. 6; cf. Jaugaḍa *Satīyapu*, Kālī *Satīyaputo*. For this reason Gīrnār *Satīyaputo* has no bearing on the origin of the word. Bühler overlooked this fact. (Note also the Māgadhan *t* for *tr* in *-puto*.)

8. The second *ũ* of *susrūsā* (in compounds only) and *susrusatām*.

See *AJP.* 30, p. 287. Delhi Sivalik *sususāyā* must be kept apart from Girnār *susrūsā* because DS. *bhūtānam* corresponds to Girnār *bhūtānam*. Thus it is patent that DS. *sususāyā* is a secondary shortening from *susūsā*-. Formerly I explained the Girnār *ũ* as being more primitive than the Skt. *ũ* of *śusrūsā*, comparing Avestan *susrusamnō* (*JAOS.* 30, p. 79). If I could formulate any phonetic law that would account satisfactorily for the *ũ* of G. *susrūsā* as being of late origin, I should greatly prefer it. It is undeniable that in a few cases the Middle Indic languages are more, or equally as, primitive as Sanskrit. But as a whole I feel that this has been rather overdone. See below in my discussion of *ā* when followed by *m* + a consonant.

9. Vocalic *r* becomes *a* for the most part, but dental stops are not thereby converted to linguals, e. g., *kata*-.

See *AJP.* 30, p. 421. There is not the slightest evidence that *r* ever becomes *i* in our dialect. See *Classical Philology*, 5, pp. 219, 220.

10. Vocalic *r* becomes *a* in *mago* (Shb. *mrugo*, K., J., Dh. *mige*).

On Mans. *mruige* and *mrige*, see *AJP.* 30, p. 424.

11. Long vocalic *r* becomes *a* in *dadha*-.

The 'Māgadhan' correspondent is *diḍha*-. On Mans. *driḍhra*-, see *AJP.* 31, pp. 55, 56. Shb. *diḍha*- is a 'Māgadhism.'

12. The *e* of *lekḥāpitā*.

13. Long *ā* is not shortened before medial *m*, e. g., *apabhāṃdatā*.

The *m* is graphically omitted in *niyātu*; this is a third person plural as is shown by Kālsī *nikhamamtu*, Dhauli and Jaugaḍa *nikhamāvū*. The correspondents of the Shāhbāzgarhi and Mansehra redactions are not decisive. The *m* is likewise omitted in *Pāḍā* (Shb. *Paṃḍa* at xiii. 9) and *aparātā* (Shb. *aparamta*, K. *apalamtā*) exactly as in *dhammasambādho* (Shb. [*dhra*] *masambādho*), *ki* at ix. 9 and xii. 2 for *kiṃ* elsewhere in this version; *karoto* (for *karomto*); and possibly in *karote* at ix. 3 if not purely an error induced by *karote* at ix. 1 and 2 where a singular is in place. At v. 5 Bühler reads *Kambo*-, i. e. *Kamboja*-. As a matter of fact the correct reading is *Kāmbō*-. [*Kambo* in Bühler's fragment of the thirteenth edict (on Senart's smaller fragment, see above) is a 'Māgadhism', if the correct reading.] At v. 5 Bühler reads *Gāṃdhārānam*. Yet it is not impossible that the correct reading is *Gāṃ*- as there is a large crack in the stone at this point which prevents us

from being positive as to which reading is correct. If the true reading be *Gaṃ-*, then it is a 'Māgadhism' as is the case with *Tambapaṃṇī* (Kālsī *Tambapaṃṇi*; see my discussion of learned and historic orthography above). As I pointed out above in my discussion of *P[i]rīṃdesu*, 'Māgadhisms' are common in names of countries, peoples, &c. That *ni-yātu* is Sanskrit *yāntu* and not Sanskrit *yantu* is clear from Sārnāth *yāvu*. According to the St. Petersburg lexicons Sanskrit *Pāṇḍa-* is merely an error for *Pāṇḍya-*. If so it must be a very old one as evinced by the Aśokan inscriptions. It is not possible that in some dialects postconsonantal *ḍy* became *ḍ* phonetically? Then Mansehra *Pa[m]ḍiya*, Shb., Mans. *Paṃḍiya* would be 'Māgadhisms', and Skt. *Pāṇḍa-* a borrowing from some Middle Indic vernacular. Formerly (*JAOS.* 30, p. 79) I held that as *ā*, and this only, corresponds to Skt. *ān* = original *ṇī* (*atikātaṃ*, iv. 1, v. 3, viii. 1, *atīkrātaṃ*, vi. 1 = Skt. *atīkrāntaṃ*; *chāti[m]*, xiii. 11 = Skt. *kṣānti-*), the Gīrnār *ā* was more primitive in this respect than Sanskrit as it is admitted that the *n* of Skt. *krānta-*, *dānta-*, &c. is analogical in origin. I thought that as in Gīrnār *-ām-* never occurs in these cases, it was impossible to regard the omission of *m* as merely graphical. Prof. Bloomfield at the meeting of the AOS. adversely criticised this point, and after a subsequent discussion with Dr. Sturtevant, I am ready to admit that the forms cited are too few to form a sound basis for the proposed theory inasmuch as *m* is often graphically omitted in other cases. At the same time it is well to mention the theory in the hopes that new evidence will turn up to either establish or completely disprove it. A single form with a medial *m* would do the latter. Shb. and Mans. *atīkrataṃ* are merely graphical for *atīkraṃtaṃ* (which occurs in both).—I likewise stated in *JAOS.*, l. c., that this theory proved that G. was not a linear descendant from Sanskrit. If this theory is wrong, that would not invalidate that claim. For the fact all the Aśokan dialects point to a loc. sing. **-smi* (G. *tamhi*; &c.) [not **-smin* (Skt. *tasmin*)] shows that not a single Aśokan dialect is such a descendant. A further proof of this as applied to the Gīrnār dialect is *idha* (Skt. *iha*).

14. Long vowels are not shortened before two consonants (*nāsti*, *brāhmaṇa-*, *mahāmātresu*, *Rāṣṭika-*, *parākramāmi*, *parākramena* [not *pārākramena* as Bühler reads] *ātpa-*, [Skt. *ātma-*], *bhātrā*).

It is clear that *bamhaṇa-* at ix. 5 is merely a blunder for *bāmhaṇa-* which is found in this version: note the blunders *dānaṃ*, *etārisaṃ*, *nātikena* in the same edict. Similarly *brahmaṇa-* [not *brahmaṇa-* as Bühler transcribes] in the fourth edict is merely a blunder. See *IF.* 24, pp. 53, 54; *AJP.* 30, p. 295. It should be noted that *rāṇā*, *rāṇo* can be in themselves

either *rāñā*, *rāño* or *rāñña*, *rāñño* respectively. Pāli and Prākṛit show that they are to be read *rāññā*, *rāñño*. It will be remembered that on inscriptions ñ can stand for ññ, m for mm exactly as s for ss. Compare Bühler, *Epigraphia Indica*, ii, p. 91. *Sūpāthāya* at i. 9 is graphical for *sūpāththāya*. This is shown by Dhāuli *sūpathāy(e)*, Kālsī *sūpathāy[e]*, Jaugaḍa (*sū*)*pathāye*. As a long vowel is regularly shortened in these redactions before two consonants these forms are merely graphical for *supatthāye*. Hence Gīrnār *sūpāthāya* is for *sūpāththāya* (Skt. *sūpārthāya*). Just so with *mahāthāvahā* at x. 1 cf. Kālsī *mahathāvā* (read *mahathāvahā*). Pāli is likewise confirmatory for these two cases. Similarly *asamātaṃ* (Skt. *asamāptam*; Kālsī and Dhāuli *asamatī*). *Parākamate* is a 'Mādhism' for **parākramate*. Similarly *parākamena* at x. 4 if this is the correct reading which at least is not certain. If *tadātpano* stands for **tadātvana-* we have another example. If it is a blunder for **tadātpāya*, we still have a case. It should be mentioned that *āñapayāmi*, *āñapitaṃ* do not belong here: they come from the simplex ñ-, compounded with ā-. This is shown by Pāli and 'Māgadhan' versions of the Fourteen-Edicts. There remain some unexplained apparent exception. Note that we have *kiti* at x. 1 but at x. 2 *kiti*. It is quite likely that the vocalism of the 'Māgadhan' original of which the Gīrnār version is a translation, is responsible for this: cf. Jaugaḍa *ki(t)ī*, Dhāuli (*k*)*īṭī* and (*kī*)*ṭī*, i. e. *kittī* (local peculiarity for **kittīm*, Skt. *kīrtim*). For 'Māgadhan' influence in the vocalism of words in the Gīrnār redaction, see Michelson, *AJP.* 30 p. 287, *JAOS.* 30, p. 90. A case in point is *dasayitpā* for **daseptā*; cf. Shb. *draṣayitu* for native (and Mans.) *draṣeti* 'Māgadhan' *dasayitu* has been the disturbing factor in both cases: see *AJP.* 31, p. 60. At ix. 9 we have *svagāradhi*. This certainly corresponds to Skt. *svargārāddhi-*, cf. the preceding *svagaṃ ārādhetu* (Skt. *svargam ārādhayitum*), *svagaṃ ārādhaṃtu*, vi. 12, and the correspondents of the other versions. But it should be noted that the ninth edict has many blunders of *ā* for *ā* (see above). So *svagāradhi* might be one for **svagārāddhi* (i. e. *svagārāddhi*). But we have *ārādho hoti* at xi. 4. Here we can ascribe the *a* with confidence to 'Māgadhan' influence (Kālsī *āladhe*), for the following *hoti* is a 'Māgdhism': see *AJP.* 30, p. 287; *JAOS.* 30, p. 78; and above. Hence it would be plausible to attribute *svagāradhi* to such influence. But the reading of the Dhāuli text (which alone has a correspondent) is uncertain. In either case, it is not against the law proposed. The correspondents to Skt. *pūrva-* cannot be taken into consideration, for *bhūtapuve* and *bhūtapruva* have both 'Māgadhan' *u*: see my discussion of learned and historical orthography. *Bhūtaprurvaṃ* has at least one blunder as it is; so *u* for *ū* might be another. See Bühler, *EI.* 2, p. 453; Michelson, *AJP.* 30, p. 184. *Dighāya* at x. 1 is very difficult.

The Sanskrit correspondent is *dirghāya*. The 'Māgadhan' versions have a different word in the corresponding passage, and both the Shāhbāzgarhi and Mansehra versions have 'Māgadhisms' in the corresponding passages. Of course the fact that the 'Māgadhan' versions have a different word does not preclude the possibility of the particular 'Māgadhan' text of which G. is a translation from having had a form precisely the same or very similar to the Girnār form. It will be remembered that frequently the versions do not agree in the wording. In this way *dirghāya* might be due to 'Māgadhan' influence. It may be mentioned that once *dirghāya* was read *dirghāya*, but I am convinced from the plate in EI. that this is not the true reading.—The most obstinate of all to explain is *anusasṭi* (this or other cases of the same word occurs 4 times, including the occurrence in a fragment of the thirteenth edict, and always in the compound *dhammānusasṭi*). *Nāsti* (Skt. *nāsti*) occurs half a dozen times, there being no other correspondent to Skt. *nāsti*. It would therefore seem impossible that *anusasṭi* can phonetically stand for Skt. *anuśasṭi*-. At the same time I hardly dare ascribe the *a* to 'Māgadhan' influence because of the frequency of the word. Perhaps this timidity is wrong as *paṭi* is frequent in G. and outnumbers native *prati* two to one. Also *thaira*- (or other forms of this) occurs three times, and the initial *th* looks like a 'Māgadhim', though another explanation (see below) is possible. Finally it should perhaps be queried if G. *anusasṭi* is not Skt. *anuśasṭi*-, not *anuśasṭi*-.

15. The diphthong *ai* in *thaira*- and *traidasa*-.

The origin of this diphthong is not wholly clear. Without question the *e* of Dhāuli *ted(a)sa*, Kālsī *t[e]dasa*, Prākṛit *terasa*, *teraha* is to be associated with the *ai* of *traidasa*. According to Pischel, *Grammatik*, § 119, the prototype was **trayadaśa*, the *e* then being a result of contraction. The trouble with this explanation is that *-aya-* in G., Dh., and J. otherwise is uncontracted (cf. *JAOS.* 30, p. 91). Franke, *PuSkt.*, p. 104 rejects Pischel's explanation, and says the *e* is for *i*. This leaves Girnār *traidasa* hanging in the air. Johansson, *Shb.* i, p. 136 (22 of the reprint) suggests that the Middle Indic dialects in this case are very archaic and that Skt. *trayodaśa* is analogical. This last no doubt is the case, but I hardly like to start from this point of view. Phonetically there is nothing for or against his proposition as *-ayē-* is unique at present as far as the phonetics are concerned. (J's prototype is **trayazdaśa* which would become **trayēdaśa*.) Similarly regarding *thaira*-. Pāli and Prākṛit *thera*- postulate some such intermediary form as the Girnār word (Pischel, l. c., § 166). But here again, the loss of *v* between *a* and *i*, and the subsequent contraction of these vowels is unique.—A further note on *thaira*-. The word apparently contradicts the law that *sth* becomes *st* in our

dialect (*gharastāni*). The 'Māgadhan' versions have an entirely different word as correspondents. Still that does not preclude the possibility of a 'Māgadhan' **thela*- having distorted an original **staira*-. Cf. my remarks on *dighāya* above. It is very bold to assume descent from a prototype that bore the same relation to Skt. *sthavira*- as Gr. *τέλω* to *στέλω*, though I still believe in spite of Pischel that Pkt. *chepa*- is similar a case as compared with Skt. *śepa*- (IE. *sk̑*- and *k̑*-). It might be a late product. Cases like *-as sth*- phonetically became *-asth*-, and this was wrongly divided *-as th*-. Hence a form **thavira*- beside *sthavira*-. But this is purely speculative.

16. The combinations *viy* and *vy* fall together in *vy* (kept apart as such in the Kālsī dialect): *vyasanam*, *vyamjanato*, gerundives in *-tavya*-, *divyāni*.

Bühler wholly inconsistently transcribes the same symbol initially by *vy* but medially by *yv*. Why he made any distinction is not clear to me. If we transcribe *divyāni*, we must transcribe **yvasanam*, *yvāpatā*, &c. But such a combination would be unpronounceable. His appeal to Pāli *yha* from *hya* is wholly irrelevant as we do not have *yv* from *vy* in Pāli. As I am ignorant of the modern Indo-Aryan vernaculars, I cannot criticise his argument from this source.

17. The combination *duv* becomes *dv* (*dvo*, Vedic *duvāu*).
 18. The combination *dv* becomes *db* (*dbādasa*).
 19. The combinations *suv*, *sv* (kept apart as such in the 'Māgadhan' dialects) fall together in *sv* (*svāmikena*, *svagam*).
 20. The combinations *tv* and *tm* become *tp*; *catpāro*, gerunds in *-tpā*, *ātpa*- (Skt. *ātma*-).

There is considerable dispute as to the exact value of the ligature which Bühler transcribes by *tp*. There is no question but that the true order of the letters is *pt*, and some (Pischel and Franke) maintain that this represents the actual pronunciation. But it is universally admitted that the actual spelling is no criterion; and some (Burnouf, Ascoli, Bühler [*EI.* 2, p. 210], Johansson) have tried to show that the real pronunciation was *tp*. The linguistic arguments that have thus far been adduced, in my opinion, have a negative value, some tending to show that the pronunciation was *pt*, some *tp*. And it should be especially noted that no arguments from the dialect itself have been brought forward but only from allied languages. The following linguistic argument, especially when taken in conjunction with Bühler's palæographical one, seems to me conclusive proof that *tp* was the pronunciation: *Dbādasa* corresponds to Sanskrit *dvādaśa*; and there is no question but

that *db* represents the correct order of the letters. Now if Indic *dv* becomes *db*, then Indic *tv* surely should become *tp*. Hence gerunds in *-tpā* (Skt. *-tvā*) are to be read as such. This settles the reading *ātpa-* (Skt. *ātma-*) without further arguments. The fact the Singhalese gerunds in *-pata* point to *-ptā* (Skt. *-tvā*), does not show that the Gīrnār gerunds in *-tpā* are really *-ptā*, for a stage *-tpā* is presupposed between *-ptā* and *-tvā*; and the metathesis of *tp* to *pt* can be specifically Singhalese. Oertel recently (*Lectures*, pp. 221, 222) has tried to defend the view that we really have *pt* and not *tp*, admitting a stage *tp* between *pt* and *tv*, but saying that *pt* was substituted for the unusual combination *tp* because *pt* was a frequent combination. Inasmuch as the *p* in the combination of original *pt* was assimilated in this (e. g. *asamātaṃ*, Skt. *asamāptam*) as well as other Asokan dialects and in Pāli and Prākṛit, I confess that I am not convinced by this line of reasoning. Senart, admitting that the ligature should be transcribed *tp*, in accordance with his theory of learned and historical spelling on the inscriptions of Asoka—which seems to me to be quite untenable—contends that the actual pronunciation was *pp*.

21. The combination *sm* becomes *mh*: *tamhi*, **tasmi*, cf. Skt. *tasmin*.

22. The combination *hm* becomes *mh*: *brāmhana-* (for the other variants of this word see above).

23. *R* is assimilated to all adjacent following consonants except *v*; it is retained after preceding adjacent consonants, and before *v* when that follows immediately: *athāya*, *dhamma-*, *Priyadasi*, *priyo*, *sramaṇa-*, *sarvatra*.

The apparent exceptions are 'Māgadhisms'. See my discussion of learned and historical orthography above.

24. The combination *-arṣ-* and *-arṣy-* become *-ās-*: *vāsa-*, Skt. *varṣa-*, *kāsaṃti*, **karṣyanti*, cf. Skt. *karīṣyanti*.

See Michelson, *IF*. 24, pp. 53, 54; *AJP*. 30, p. 289; *JAOS*. 30, p. 89. I give this as a characteristic of G. because the final product is such, whether or not the phenomenon is to be associated with a similar one in Shb. and Mans. (as I think likely). The chronology I formerly assumed is a trifle inexact; we need only assume that in Gīrnār the *r* was assimilated and the gemination simplified with compensatory lengthening before *rś* reached a stage *rṣ*; we cannot know whether in G. the sibilant in the first case had already become a dental. Note 'Māgadhan' *vasa-*, i. e. *vassa-* = Gīrnār *vāsa-*, Skt. *varṣa-*.

25. Original *rś* converts a following intervocalic dental *n* to a lingual *ṇ*: *vimāna-dasaṇā*.
See Michelson, *IF.* 24, p. 53.
26. Aryan *št* (Skt. *ṣṭ*, Av. *št*) and Aryan *šth* (Skt. *ṣṭh*, Av. *št*) fall together in *st*: *tisteya*, *seste* (a 'Māgadhism' for *srestam*).
See Michelson, *AJP.* 30, p. 291; *JAOS.* 30, p. 89. It is likely that this is to be brought into rapport with the change of Aryan *št* and *šth* to *st* in the dialect of Shāhbāzgarhi and Mansehra. I list the phenomenon here because the final result is different in the two dialects.
27. An original palatal sibilant converts *st* beginning the next syllable to *st̥* (*dhammānusast̥i*).
See the references cited under 26. I have much less hesitation than formerly in connecting this process with the law in Shb. and Mans. that original *ś* converts a following intervocalic *s* to *ś*. For convenience I repeat the law I gave in *AJP.*: A palatal sibilant converts a following dental sibilant to a palatal one in the dialects of G., Shb., Mans., the combination *št* subsequently becoming *št̥* exactly as pre-Aryan *št* became Aryan *št̥*. Then this secondary *št̥* had the same history in the separate dialects as Aryan *št̥(h)*, i. e., G. *st̥*, Shb., Mans. *st̥*. Secondary intervocalic *ś* had the same history as original intervocalic *ś*, namely, G. *s*, Shb., Mans. *ś*. In support of this combination I would urge that the special points of contact between these dialects are extremely numerous. See below, and *JAOS.* 30, pp. 87—89.
29. The combination *hv* becomes *h* and the preceding vowel is lengthened: *prajūhitavyam*.
The gerundive is based on the present stem as is common in Middle Indic languages. The stem *juhv-* was abstracted from *juhvati*, whence *jūh*. If the long vowel *ū* could be otherwise accounted for, I should prefer to take *jūh-* as being the abstraction from the present stem. [For the phonology, see Pischel, §§ 65, 332; Konow in *Ak. Afh. til S. Bugge*.]
30. The combination *-ṇiy-*, *-ṇy-* become *-ṇ-* (written *-ṇ-*): *ānaṇṇam* (Skt. *āṇṇyam*), *hiraṇṇa-* (Skt. *hiraṇya-*).
31. The retention of *dh* in *idha* (Skt. *iha*).
32. The *t* of *Ketala-* in *Ketalaputo*.
33. The *g* of *Magā* (Kālsī *Makā*, Shb. *Maka*, Mans. [*Maka*]).
34. The sandhi of *iti*, namely, the first *i* is not lost after immediately preceding vowels or nasals except in the com-

bination *kiṃ ti:paṭivedetha iti*, vi. 5; *tisteya iti*, vi. 13; *sādha* (blunder for *sādhu*) *iti*, ix. 8; *ārādhetu* (-ṃ graphically omitted) *iti*, vi. 9; *dīpayema iti*, xii. 6; *danam* (blunder for *dānam*) *iti*, ix. 7 but always *kiṃ ti* (except once where the *ṃ* of *kiṃ* is graphically omitted).

35. *Etayam* for *eta ayam*.

According to Bühler this is for *eta iyam*. As *iyam* in this text is a 'Māgadhism', I prefer the above.

36. The double treatment of final *ām* becoming *ām̐* and *aṃ*.

The law governing this double correspondence is not clear. I give two explanations for what they are worth without definitely committing myself to either. To judge from the accusative singulars *viḥārayātām̐*, and *samacerām̐* as compared with the genitive plurals *devānam̐* (found repeatedly), *mitasamstutañātīnam̐*, *bāmhaṇasamañānam̐*, (three times), *prāñānam̐* (twice), *brāmhaṇasramañānam̐*, *brāmhaṇasamañānam̐*, *dhammayutānam̐*, *gurūnam̐*, *thairānam̐*, *mitāsastutañātīkānam̐*, *manusānam̐*, *pasumanusānam̐*, *bhūtānam̐*, the law would seem to be: final *ām* with acute syllabic accent becomes *ām̐*; final *ām* with circumflex syllabic accent becomes *aṃ*. The final *ṃ* is graphically omitted in *pūjā*, xii. 8, xii. 2; *dhammasusrusā*, x. 2 as in *vadhi*, iv. 11, *phala*, xii. 9, *ārādhetu*, ix. 9, *kīti*, x. 1, *kiti*, x. 2, *bhūtapruva* (so!) vi. 2, *sava*, vi. 2, *ki ti* (= *kiṃ ti*), xii. 2, *susera*, xii. 7. It is also probable that *mahāthāvahā* at x. 1 is for *-vahām̐* as is shown by Mansehra *mahathravaham̐*, Dhauli *-(ham̐)*: yet this is not certain as it might be a nom. pl. neutre like *vimānadasaṇā*, *hastidasaṇā*.—We then should infer that the middle ending *-tām̐* had the acute syllabic accent (*susratām̐*, x. 2; *anuvidhiyatām̐*, x. 2) and that the locative sing. of *ā*-stems, *-āyām̐*, had the circumflex syllabic accent on the ultima (*gaṇanāyām̐*, iii. 6; *parisāyām̐*, vi. 7). The objection to this explanation is that it is highly speculative, even if we have Vedic genitives in *-aam* to back it up. On another occasion I had a chance to point how groundless a 'law' was in the Middle Indic dialects which was based on a differentiation by acute and circumflex syllabic accent (*AJP.* 30, 296). And I have shown in my *Notes on the Pillar-Edicts of Asoka* (*IF.* 23) that corresponding to Skt. *-vyā-* and *-vyā-* alike we have Pāli *-bb-*, Prākṛit *-vv-*. In *AJP.* 30, p. 292 I have disproved Johansson's explanation of Shb. *etisa* by accentual conditions. And I have shown in *JAOS.* 30, p. 85 how very improbable is his theory that the position of the accent determines the treatment of final *-am* in Shb. So that on general principles I am averse to any explanation involving the accent. Yet I may add that the law that in the dialects of the Radhia, Mathia, Rāmpūrvā redactions of the Pillar-Edicts final *ā* (whether original

or secondary) is shortened to *ā*, except in the case of accented monosyllables, and before postpositives and enclitics, is due to accentual conditions: *dayā* necessarily presupposes the accentuation *dāyā* as opposed to Skt. *dayā*, similarly *kaṭā* the accentuation *kāṭā* as opposed to Skt. *kṛtās*. So there might be something in this theory; but, I repeat, I am very dubious on the point. The alternative explanation I give, and the one in which I have greater confidence is this: final *ām* when preceded by a syllable that contains a long vowel, becomes *aṃ*; otherwise it becomes *ām*. This would account nicely for the difference between *devānaṃ*, &c. and *dharmasusrusā* (i. e., *-ām*). But this would not answer at all for *viḥārayātām*, *samacerām*, and *pūjā* (i. e. *pūjām*). We would have to assume extensive levelling, and rather more than our evidence warrants. Moreover with this explanation we presuppose the accentuation *devānaṃ*. So we are again involved in an accentual condition. Still I should very much prefer to assume that the accent was that of Classical Sanskrit rather than a relic of Vedic accentuation, if for no other reason than that in certain Asokan dialects (see above) the accentual system was identical with or similar to the former. To sum up, the evidence at hand will not permit us to formulate a law governing the correspondence. —Senart at first held that *-aṃ* and *-ā* were interchangeable; later, without giving up the possibility of this, considered that final *m* had been lost after *-ā*. Konow in his treatise on the dialect of the Girnār redaction clung tenaciously to the theory that *-ā* and *-aṃ* were interchangeable. He said that *pūjā* was for *pūjām*, but accepted *viḥārayātām*; but nowhere is any explanation given to account for the double form of the accusative in the same dialect. His appeal to the Pkt. grammarian Caṇḍa is no explanation. I hope now to definitely disprove the mistaken notion that *-aṃ* and *-ā* are interchangeable in the Girnār dialect. I have shown *AJP.* 30, p. 183 ff. that *sāmīpaṃ*, a supposed nom. pl. masc. of an *a*-stem is in reality a nom. sing. neutre of an *a*-stem. In the same paper I have made it clear that if the reading *bhūtaprurvaṃ* be retained, or rather emended to *bhūtapurvaṃ*, so far from being a nom. pl. at all, it is the equivalent of Pāli *bhūtapubbam*, an adverb. Senart once held that *atikātaṃ* was for **atikāṃtaṃ*, later gave this up. The fact that **atikāṃtaṃ* is never written is a guarantee that this was not intended by the spelling *atikātaṃ* (see my discussion on the history of long *ā* before medial *m*). Similarly *chāti[m]* is not for **chāṃtiṃ*. Long ago Bühler made it clear that *nicā* does not correspond to Skt. *nītyam*. The long *i* and the *c* of Dhāuli and Jaugāḍa *nīce* and the *c* of Kālsī *nice* (i. e. *nīce*) show this. Vincent Smith's reversion to the older view is regrettable. Phonetically we would have K., Dh., J. **nītiyaṃ* corresponding to Skt. *nītyam*. I admit that the short *i* of G. *nicā* is hard to explain. Probably the last word has not yet

been said on the group of words. But if the Gīrnār word were the equivalent of Skt. *nityam*, it would be the sole case in which *-ā* and *-am* apparently interchange. For some positive arguments against this interchange we have the following: the acc. sing. masc. of *a*-stems is always *-am*, never *-ā*; the nom. acc. neutre of *a*-stems is always *-am* (barring 'Māgadhisms'), never *-ā*; the nom. pl. of *a*-stems is *-ā*, never *-am*; the genitive pl. always ends in *-am*, never *-ā*. Now if *-ā* and *-am* were interchangeable we surely would have some confusion in these categories. And such is not the case.

37. The final vowels of prefixes are occasionally lengthened in compounds: *asaṃpratīpatī*, *abhīramakānī*.
 38. The dat. sing. of *a*-stems ends in *-āya*: *athāya*, *paribhogāya*, *kammāya*, *tāya*, *etāya*, *imāya*.
 39. The dative sing. *athā*.

According to Senart, Konow, and Pischel this is merely a blunder for *athāya*. I see no reason why it may not be a case of haplogy as the word occurs in the expression *etāya athā*. Bühler, Johansson, and Franke have defended the word on other grounds. See Bühler, *ZDMG.* 46, p. 62; 48, p. 56; Johansson, *Shb.* ii, p. 53, footnote 1, *BB.* 20, p. 85 ff. (especially p. 92); Franke, *Pāli and Sanskrit*, pp. 122, 152; Pischel, *VS.* i, 44, 61; Bartholomae, *BB.* 15, p. 221 ff., *GrIrPhil.* 1, p. 122; Aufrecht, *Festgruss an Böhtlingk*, p. 1 ff.; Brugmann, *Grundriss*², 2. 2. 1 § 159 Anm., and the literature cited in these references.

40. The 'oblique' cases of the *ā*-stems ends in *-āya*: *vividhāya pūjāya*, xii. 1; *mādhūratāya*, xiv. 4 (inst.); *athasaṃtiraṇāya*, vi. 7 (loc.).

This *-āya* is identical with Pāli *-āya*. The explanation of the form is as follows: *-āya* as a dative sing. was taken over analogically from the *ā*-stems just as in certain other Middle Indic dialects the *ā*-stems have analogically taken over *-āye* from *ā*-stems (see *JAOS.* 30, p. 92). After the syncretism of the dative and genitive sing., *-āya* was used in place of older **-āyā* from **-āyās*. Then *-āya* levelled the inst. sing., and eventually came to be used as a locative exactly as in certain Middle Indic dialects *-āye*, properly a dat., came to be used as an inst. and loc. sing. The inst. sing. and gen. sing. of *ī*-stems, **-īyā* and **-īyās* respectively, phonetically fell together in *-īyā*; and this no doubt accounts for the levelling in the case of the inst. sing. Moreover *-īyā* was used as a loc. sing.; so the spread of *-āya* to the locative is also readily accounted for.—It would be possible to account for the loc. sing. otherwise, and consider it an archaism as opposed to Skt. *-āyam* which is obscure in termination. For *-āya* could phonetically

be combined with Gāthā-Avesta *-ayā*, Young-Avesta *-aya*, Old Persian *-āyā* from Aryan **-āya*. It will be remembered that neither the Avestan nor Old Persian are to be considered in determining the vowel-quantity of the final syllable. For original *-ā* and *-ā* graphically appear the same, namely, GAv. *-ā*, YAv. *-a*, OP. *-ā*. It may be added that it is universally admitted that the vocalism of the first syllable in Avestan has been affected by the vocalism of the inst. sing. The fact that Gīrnār, Pāli *tamhi*; &c. point distinctly to a prototype **tasmī*, not **tasmin* (see Johansson, *Shb.* ii, § 88) can be used as an argument in favor of this explanation. For the ending **-smī* is to be found in Avestan *aētahmi*, *ahmi*, *kahmi* (per contra Skt. *etasmīn*, *asmin*, *kasmin*). See Brugmann, *Grundriss*², 2. 2. 1, § 360. Attractive as this is, I think it can scarcely be maintained in view of the comparatively simple explanation offered above.—There is no necessity of assuming with Johansson and Torp a law that final *ā* is shortened if the preceding syllable contains a long vowel to account for *-āya* as a gen. sing. Moreover as the preceding syllable in the case of *tamhā* (Skt. *tasmāt*), *pacchā* (Skt. *paścāt*) contains a vowel long by position, we would expect the final *ā* to be shortened. Only assuming the most complicated chronology can the law be maintained, and allowance made for tremendous levelling. And there is no trouble in the explanation I have given to explain *-āya* as a genitive. Pāli *assa*, Gīrnār *asa* i. e. *assa* is no support for the proposed law of shortening. It does not correspond to Vedic *asat* (subj.) as Kern suggested. But it would be possible to consider it as coming from **asyat*, a cross between *asat* and *syāt*. A good parallel is Dhauli and Jaugaḍa *nikhamāvū* (see Johansson, *Shb.* ii, p. 89, footnote 3). Or it might be due to such forms as G. *tisteya* (**tisttheyat*, created by analogy; *tisttheyam* is to **tisttheyāt* as *atistham* is to *atisthat*). Henry's explanation of *-āya* (see his *Précis*) is improbable.—Formerly I thought that *-āya* on the Pillar-Edicts of Asoka was to be connected with Pāli and Gīrnār *-āya*. This is wrong, as is shown by the fact that in those dialects the dat. sing. of *a*-stems ends in *-āye*, while Pāli and Gīrnār have *-āya*. The ending *-āya* in Radhia, Mathia, and Rāmpūrvā is from **-āyā* in accordance with the law that I have established for these dialects, *IF.* 23, p. 228 ff. Delhi Sivalik *-āya* beside *-āyā* is due to analogy: as in the *a*-stems there existed the doublets *-ena*, *-enā* in the inst. sing., so *-āya* was made to match *-āyā* in the inst. sing. of *ā*-stems. Allahabad *-āya* is due to the same cause. It obtains exclusively exactly as does *-ena*.—Finally it should be mentioned that the genitive sing. *-āya* on the dedicatory inscriptions of Barhut, &c. have to be kept absolutely apart in deciding the origin of *-āya* on other inscriptions and in Pāli. For it is notorious that the dedicatory inscriptions are inaccurate in orthography; and *-āyā* and *-aya*

are found as well as *-āya*. So that it would appear that the true orthography should be *-āyā*, not *-āya*, *-ayā*. If *-āya* was admitted as genuine, *-ayā* would also have to be admitted, and I fancy few would venture to parallel the *ā* with the Avestan.

41. The locative sing. of *ā*-stems ends in *-āyaṃ*: *parisāyaṃ*, *gaṇanāyaṃ*.

42. The nominative plural of *ā*-stems ends in *-āyo*: *mahidāyo*. The ending is taken analogically from the *ī*-stems. For the literature, see Johansson, *Shb.* ii, p. 55.

43. The nominative singular of feminine *i*-stems nearly always ends in *-ī*: *dhaṇṇmalipī*, *asampratīpatī*, *ahīnī*, *sampratīpatī*, *samyapratīpatī*, *dhaṇṇmānusaṣṭī*.

It should be mentioned that in the Dhauli redaction, this termination is also frequent, though not to the same extent as in the Gīrnār version. Hence I list it as characteristic of G. The dialects of the various recensions of the Pillar-Edicts show that the 'Māgadhan' dialect did not possess this ending. It is therefore likely that the termination *-ī* in the Dhauli redaction is a trace of the local dialect (cf. *JAOS.* 30, p. 77). The Kālsī, Shāhlāzgarhī, and Mansehra redactions can give no testimony owing to their deficient alphabets.

44. The nom. pl. of *i*-stems ends in *-iyo*: *aṭaviyo* (*Shb.* and *Mans.* *aṭavi*).

45. Original *ṛ*-stems kept as such: *pitarī*, *mātari*, *bhātrā*.

46. The nom. sing. of *in*-stems ends in *-i*: *Priyadasī* (*Dh.*, *J.* *Piyadasī*).

The *Shb.*, *Mans.*, and *K.* redactions again can shed no light on this point. The Allahabad redaction of the Pillar-Edicts agrees with *Dh.* and *J.*; the Delhi Sivalik, Delhi Mirat, Radhia, Mathia, and Rāmpūrvā redactions agree with *G.*

47. The dual *dvo* (Vedic *duvāu*).

48. The phonetic equivalent of Indic **catvāras* (Skt. *catvāras*) is retained: *catpāro*.

49. The nom. pl. of *tri*- is *trī*.

Trī is a nom. pl. masc. as is shown by the phrase *ete pi trī prāṇā*, i. 12. Johansson, *Shb.* ii, pp. 30, 65 'wrong. *T* for *tr* in *tī* at i. 10 is due the influence of 'Māgadhan' *tiṇṇi*.

50. The phonetic equivalent of Indic **tad*, *ta*, is maintained.

51. The new-formation *ya* (**yad*).

52. *Ayaṃ* as a nom. sing. neutre: *ayaṃ phala*, xii. 9.

53. The nom. sing. neutre *idaṃ*.

It is true that [*id*]*aṃ* is found once in Shb., but it is so common in G. that it must be classed as characteristic of that dialect.

54. The pronouns *tārisa-*, *yārisa-*, *etārisa-* (see Michelson, *Classical Philology*, 5, pp. 219, 220).

55. The pronoun *ne*, *nāni*.

56. The instrumental singular *iminā*.

In *IF*, 23, p. 237 I wrongly assumed that Pāli *aminā* was a contamination of *iminā* and *amunā*. I now hold that *aminā* is an inst. sing. to such forms as *amī*, *amībhis*, and that *iminā* is a compromise between *aminā* and *imena*. The fact that *aminā* became reduced to a mere particle in Pāli points to its originality in formation.

57. Middle termination in verbs: *parākamate*, *karote* (twice: once possibly a third pl., unless a mere error), *maṃṇate*, *susrusatāṃ*, *anuvudhiyatāṃ*.

In Shb. there are two cases, namely, *karotne*, i. e., *karonte*; *dipista*; in Dh. also one, *maṃ[n]at(e)*; note too Kālsī *nikhami[th]ā*.

57. The termination *-tha* in the optative *paṭipajetha*.

59. Personal endings in *r*: *ārabhare*, *ārabhisare*, *sususera*, *anuvatarāṃ*, *anuvatisare*, *sruṇāru*.

According to Bühler *anuvatarāṃ* should be emended to *anuvaterāṃ*, but this is not necessary as the form is explainable as it stands: see Johansson, *Shb.* ii, p. 90. The form *sruṇāru* is difficult. The reading is certain. Various conjectural emendations have been made. With the emendation *sruṇeru*, things are just as bad as ever as *-aṃ* does not become *-u* in the Gīrnār dialect. Personally I think we should try to explain the form as it stands. I would not be surprised if *sruṇāru* were a fusion of a subjunctive **sruṇāre* and an optative **sruṇeyu* (cf. Shb. *śruṇeyu*) somewhat as Dhauli and Jaugaḍa *nikhamārvū*; or a fusion between a subjunctive **sruṇāre* and an imperative **sruṇāntu* somewhat as the Sūtra imperatives in *-ātu* (a fusion of the subjunctive *-āti* and the imperative *-atu*). It will be noticed that we have such an imperative in Kālsī *susuṣātu* as Bühler has pointed out. See also Johansson, *Shb.* ii, p. 89. However for the want of further material the whole matter must be left undecided.

60. The optative *asa*.

61. The optative *bhave*.

62. The participle *karoto* (i. e. *karomto*) as a nom. sing.
63. The participle *karum*, xii. 4, *karu*, xi. 4 (with *m* graphically omitted).
- What Franke says on *karu* at GGn. 1895, p. 535 is unconvincing. The form is certainly a participle. The stem *karu-* seems to be a compromise between *karo-* and *kuru-*.
64. Gerunds in *-tpā*, Skt. *-tvā*: *alocetpā*, *dasayitpā*, *paricajitpā*.
65. The future *likhāpayisaṃ*.
66. The *p*-causative in *sukhāpāyami*.
67. Certain lexical features as *svayaṃ*, *sāmīpaṃ* (*AJP.* 30, pp. 183—187), *mahiḍāyo*, *pasati*, *gaṇanāyaṃ*, *nīrathaṃ*, *nistānāya*, *ghara* (*AJP.* 31, p. 63), *paṃthesū*, *dighāya*, *ānamtaram*, *bhāvasudhitā* (unless an error induced by *kataṃñatā* and *dadhabhatitā* in the same line), *tadātpano* (**tadātvana-*?), *srāvāpakaṃ*, *ilokikā* (from *i* + *lokikā* as Franke first pointed out; formerly wrongly taken to be a contraction of *iha* + *l-*; per contra note *idha* = Skt. *iha*), *pracaṃtesu*, *ekadā*, *mādhūratāya*, *gacheyaṃ*, *aparigodhāya* (see below), *vrachā* (see below), *niyātu*, *ñayāsu*, *ayāya* (see below).

I do not venture to decide if *ilokacasa* is a mere corruption or stands for **lokatya-* as Bühler has suggested.

Lassen long ago (*I. A.* 112, p. 251 = II¹, p. 238) saw a root *gudh* 'enclose' (on which consult the St. Petersburg lexicons) must be assumed to account for *aparigodhāya*: see Johansson, *Shb.* ii, p. 97; Pischel, *GGA.* 1881, p. 1330, following Pott, 1¹, p. 27, considers this *gudh* an older form of Skt. *gūh*; and he endeavors to support this view by the modern Indo-Aryan vernaculars. As I am ignorant of these, I cannot criticise his opinion on that point of view. But the Skt. participle *gūḍha-* and the Avestan *√gaoz* show that the Skt. *√gūh* comes from Aryan **ghūžh*, Indo-European **ghūgh*; see Wackernagel, *Ai. Gr.* i, pp. 247, 251; Brugmann, *Grundriss*², I, p. 558. *Gudh* is for **ghudh* by Grassmann's law, and is simply a parallel form to **ghūgh* as *vedh* (Old Bulgarian *vedq*, Lithuanian *vedū*, Avestan *√vad* 'führen', Old Irish *fedim*) to **vegh* (Old Bulgarian *vezq*, Lithuanian *vezū*, Avestan *√vaz*, Sanskrit *√vah*, Latin *vehō*).

The word *vrachā* is ordinarily taken as being the equivalent of Skt. *vrkṣa-* with *ra* as the development of Indic *r*. As this would be the sole case in which such a development is found in this dialect (per contra note *katā*, *vyāpatā*, *mago*, *vadhā*, &c.)

one would properly regard the form with suspicion. But another factor should be taken into consideration, namely, that strictly the word should be transcribed as *rvachā*, for we transcribe the same symbol as *rv* in *sarvatra*. I regard *rvachā* as a clerical error, being a mixture of **vachā* (Skt. *vrkṣa-*) and **ruchā* (Vedic *rukṣa-*). It may be added that the other versions, save the Shāhbāzgarhi one which differs in the wording, have correspondents to *rukṣa-*. In Prākṛit we have the equivalents of both *vrkṣa-* and *rukṣa-*.

Franke's explanation of *ñayāsu* being due to sandhi is untenable as other examples of such sandhi are not found in the Gīrnār redaction. If *niyātu* is phonetic for **niryāntu*, then Johansson's explanation (*Shb.* ii, p. 87, footnote 1) is correct. But it is possible that we have an analogical extension of *nī* from **niḥ*. Then *ñayāsu* would be for *ny-a-*, from *nī-a-*. The form *ayāya* is an imperfect of the $\sqrt{yā}$ conjugated according to the *ya*-class.

These are all the special characteristics of the Gīrnār dialect that I venture to point out at present. Opinions will probably differ regarding some minor points as to what should have been left out and what should have been included. For examples vowel-quantities are not distinguished in the Kharoṣṭhī alphabet, nor *ĩ* from *ī*, *ũ* from *ū* in the alphabet of the Kālsī recension. Hence I have ignored for the most part the dialects the alphabets of which are deficient in the way indicated, when treating vowel-quantities. Again I have not listed the contraction seen in Gīrnār *morā* (Skt. *mayūra-*) as characteristic of the dialect, because I suspect 'Māgadhan' influence in the Shb., Mans. correspondents (*JAOS.* 30, p. 84). But I have not ventured to list this contraction as a special point of contact between the Shāhbāzgarhi, Mansehra and Gīrnār dialect, for the reason that at present there is no positive evidence for such contraction in the dialects of Shb. and Mans. Similarly regarding Gīrnār *manusacikīchā* (Skt. *cikitsā-*), and a few other cases. In all such cases I have tried to use my best judgement; and I am confident that it will be found that I have listed all leading features of this dialect.

Special points of contact with the dialect of the Shāhbāzgarhi and Mansehra redactions.

I have previously treated these in *JAOS.* 30, pp. 87—89. To them may be added *ayaṃ* as a nom. sing. feminine. If the reading of Shb. [*oṣudh*]ani be correct, the *u* and *dh* are

to be added also; cf. Gīrnār *osadhāni*, 'Māgadhan' *osadhāni*. Mans. *oṣa[ḍhi]ni* is a corruption of some sort, the *a* may be due to 'Māgadhan' influence; but *-ini* is surely unintelligible. The *ḍh* of Gīrnār *osadhāni* is, of course, due to the influence of the preceding (original) lingual *ṣ*. This tends to place the change of *ṣ* to *s* in a late period of the Gīrnār dialect. The *dh* of 'Māgadhan' *osadhāni* points to an early change of *ṣ* to *s* in this dialect. Moreover Gīrnār *sakaṃ* (i. e. *sakkaṃ*), Shāhbāzgarhi *śako* (i. e. *śakko*) should be associated: cf. Jau- gaḍa *sakiye* (Skt. *śakya*-). The *-y-* passive (Māgadhan *-iy-* [JAOS. 30, p. 91]), and the participle *saṃto* (written *sato* in Shb.; Fleet wrong) belong also under this rubric. It is quite clear that the final merging together of Indic *s*, *ś*, *ṣ* into *s* is a late development in the Gīrnār dialect. I have shown above that *ārs* and *ārṣ* are treated differently: this shows that *ś* and *ṣ* must have been kept apart for some time. The fact that original *rś* converts a following intervocalic *n* to *ṇ* presupposes an intermediate stage **rṣ* before the final stage *ss*. Similarly the change of *ś*—*st* to *s*—*st* presupposes that the change of *ś* to *s* was late: see JAOS. 30, p. 89, AJP. 30, p. 291. So that it is highly probable that this retention of Indic *s*, *ś*, *ṣ* as distinct sounds is to be connected with the maintainance of these in the historic period of the dialect of the Shāhbāzgarhi and Mansehra redactions. Furthermore it appears that the assimilation of *r* to certain adjacent consonants in the Gīrnār dialect is also of recent origin. For *ārs* and *ārṣ* are kept apart though they are treated precisely alike in the dialect of the 'Māgadhan' versions. Again *r*, though assimilated to following dental stops, does not convert these to linguals as is the case in the 'Māgadhan' dialect. Hence the assimilation though a parallel development was an entirely separate one. In so far as *r* is not assimilated to certain adjacent consonants, this tends to show that the assimilation to certain consonants is late. (I should add however that to-day I think it quite certain that the assimilation of *r* in the combination *ārṣ[y]* is early, and common to Shb., Mans., and G. Formerly I was doubtful regarding this point.) If then these two suggested rapprochements are true, then the Gīrnār dialect was very much more intimately related to the dialect of the Shāhbāzgarhi and Mansehra redactions than hitherto supposed.

In my essay on the etymology of Sanskrit *punya-*, which is

in *TAPA*. 40, I have collected some evidence that tends to show that *r* was assimilated to an immediately following *ṇ* in the dialect of Shb. and Mans. The evidence, as I stated there, is not wholly satisfactory. Yet it may be urged that at any rate *r* never is found before *ṇ* in the transmitted texts. The assimilation is found in the Gīrnār dialect; and if it took place in the dialect of Shb. and Mans., this would be another special point of contact. In the 'Māgadhan' dialects *ṇ* is lacking; its place is taken by *n*. Now I do not think it all probable that this *n* is an archaism as compared with Sanskrit, Gīrnār, &c. *ṇ*, but that it is rather a secondary change from Indic *ṇ*. If this is so, then *ṇṇ* from *rṇ* would presuppose an intermediate stage *ṇṇ* (i. e. *ṇṇ*); and thus it is possible that the assimilation of *r* to an immediately following *ṇ* is rather a Pan-Middle-Indic trait as is the assimilation of stops of one order to stops of another order. But the fact that the assimilation of *r* to *rṣ* in the 'Māgadhan' dialect must be kept apart from the corresponding assimilation in Gīrnār (see above) is against this belief. It will be recalled that both *ṇ* and *ṣ* are linguals.

Special points of contact with the dialects of the Shāhbāzgarhi, Mansehra, and Kālsī redactions.

I have treated these in *JAOS*. 30, p. 90. To the traits mentioned may be added *asu* as a third pl. optative (G., Shb. *asu*, K., Mans. *a[su]*); and *o* for *uo* in Gīrnār *pasopagāni*, &c.

Special points with the dialect of the Kālsī redaction.

Owing to the fact that in edicts i—ix the dialect of the Kālsī redaction is practically pure 'Māgadhan', and that in the remaining edicts 'Māgadhisms' are not infrequent, it is difficult to point special points of contact with the Gīrnār dialect, even if they existed. As I mentioned before (*AJP*. 30, pp. 297, 417, 421) there is some evidence to show that in the Kālsī dialect *r* though assimilated to following dental stops, does not convert them to linguals; and there is some evidence, though very meagre, to show that in the true native words original *r* does not lingualize adjacent following dental stops. It is possible that these constitute real special points of contact with the Gīrnār dialect. But if the assimilation of *r* in

the case of *rth*, &c. is a late development in the Gīrnār dialect, as I have assumed above, then the assimilation of *r* in such cases may be merely a parallel development, not a special point of contact. And in so far as the Gīrnār and Kālsī dialect do not always agree in having the same vowel developed from Indic *ṛ* (G. *kata-*, K. *kiṭa-*) it is possible that the non-lingualization of dental stops after original *ṛ* in both dialects is a chance-coincidence (the *ṭ* of *kiṭa-* is likely enough due to 'Māgadhan' *kaṭa-*). At present these are the only possible or probable special points of contact between the two dialects that I can point out. If they are not real points of contact, we face the proposition that they are no special points of contact between the Gīrnār and Kālsī dialects. This would lead to an important conclusion, namely, that there are no true special points of contact between the dialects of the Gīrnār, Kālsī, Shāhbāzgarhi, and Mansehra dialects; where apparently such exist we must assume that the special points of contact are between the Gīrnār and Shāhbāzgarhi, Mansehra dialects on the one hand; and between the Kālsī and Shāhbāzgarhi, Mansehra dialects on the other. [Note J. *kaṃ(mane)*, Dh. *(k)aṃ(ma)ne* as opposed to G. *kaṃmāya*, Shb. *kramaye*, K. *kaṃmāye*. Mans. *kramane* is a 'Māgadhism'.]

Special points of contact with the 'Māgadhan' dialects of the Fourteen-Edicts.

It is not always easy to tell what are true points of contact between these dialects. For example *my* is retained in G. as well as the 'Māgadhan' dialects. But Mansehra *my* is without question a 'Māgadhism' as is shown by the Shāhbāzgarhi correspondent *mm*. Now as *y* otherwise is invariably assimilated to a preceding adjacent consonant in the Gīrnār dialect, it would seem likely that *my* in this text was a 'Māgadhism'. As a parallel where a 'Māgadhism' has completely usurped the place of a native product we have Mansehra final *e* for *o*, and *paṭi* for *prati*. Unfortunately we have no means of checking the Gīrnār redaction by another text written in the same dialect as we have in the case of the Mansehra redaction. We must admit our inability to determine the point at issue with absolute certainty. The most we can say is that as there are so many special points of contact between the dialects

of G., Shb., and Mans. that it is highly probable that *mm* for *my* was also such a point of contact.

We encountered the same difficulty in treating the special points of contact between the Mansehra and Shāhbāzgarhi dialect and the 'Māgadhan' dialect (*JAOS.* 30, pp. 91—93). I may perhaps add that to-day I have what I consider conclusive evidence that gerunds in *tu* in Shb. and Mans. are 'Māgadhisms'; see *AJP.* 31, p. 60.

A few apparent special points of contact can easily be shown to be entirely separate though parallel developments. For example there is but one sibilant in both. But I have shown that this is a relatively late development in the Girnār dialect. Again though there is partial agreement in the assimilation of *r* to adjacent consonants in these dialects, the fact that they differ in the treatment of *-ārs(y)-*, G. *-ās-*, 'Māgadhan' *-ass-*, shows that the assimilation of *r* in these combinations is a wholly separate development. Moreover though *r* is assimilated to dental stops in both when they follow immediately, yet in the 'Māgadhan' dialect the dental stops are thereby converted to linguals, whereas in the Girnār dialect the dental stops remain as such (see *AJP.* 30, pp. 296, 297, 416, 417, 419). Consequently the entire process of assimilating *r* to any adjacent consonants whatsoever must be kept absolutely apart in the dialects concerned. They are parallel developments but not special points of contact. Just so in regard to the treatment of original *ɣ*. It becomes *a* for the most part in both dialects. But adjacent following dental stops are not thereby converted into linguals in the Girnār dialect as they are in the 'Māgadhan' dialect. Hence the process though similar in both case is an entirely independent parallel development. The fact that the same vowel is not always developed from *ɣ* (e. g. Girnār *mago*, 'Māgadhan' *mige*, Skt. *mṛgas*) confirms this belief.

What then are true special points of contact between the Girnār and 'Māgadhan' dialects? Indic *sv-* remains, e. g. *svaga-* (i. e. *svagga-*), Skt. *svarga-*; *l* for *d* in the Iranian loan-word *-lipī*; Indic *śc* becomes *cch* (written *ch*), e. g. *pachā*, Skt. *paścā* (see *JAOS.* 30, p. 85); *-aya-* remains (*JAOS.* l. c. p. 91); *kim ti* (Shb., Mans., K. *kiti* (see Johansson, *Shb.* ii, p. 52); intervocalic *-j-* is retained (*JAOS.* 30, p. 83); *-j-* is retained in the correspondents to Skt. *vyañjanatas* (*JAOS.* 30,

p. 83); the gen. sing. of *in*-stems retains the old form, e. g. G. *Priyadasino*, J., Dh. *Piyadasine* (Shb., Mans. *Priyadraśisa*, Kālsī *Piyadasisā*; Mans. *Priyadraśine*, K. *Piyadasine* are 'Māgadhisms'); the infinitive in *-tavz*. These are all the special points of contact that I venture to enumerate at present. Note how few they are as compared with the special points of contact with the Shāhbāzgarhi and Mansehra dialect.

The Babylonian Calendar in the Reigns of Lugalanda and Urkagina.—By GEORGE A. BARTON, Bryn Mawr College, Bryn Mawr, Pa.

WITHIN the past three years a large number of documents¹ from the temple archives of Telloh, dated in the reigns of Lugalanda and Urkagina have been published, and these documents show that the calendar of the period which they represent was in some respects different from the calendar of the time of Sargon, or of the dynasty of Ur, or of Hammurabi, or of the later periods.

For the most part, the names of the months in the time of Lugalanda and Urkagina were taken from agricultural processes and the agricultural festivals connected with them. There is but one exception to this; one month is named from a star. The names of these months had not yet crystallized into one conventional form. The names of several of them are expressed in a great variety of ways. Two or three of these names have survived into later times, as have fragments of several others of them. One who would reconstruct the calendar of this early time must be guided by the following clues. 1. He must adjust the month to the season described in its name. A harvest festival month must come at the time of harvest; a sheep-shearing festival at the time of sheep-shearing, &c. 2. He should

¹ These are the Russian publication of the collection of Nicolas Likhatscheff, St. Petersburg, 1908, (cited below as Ru), Allotte de la Fuye's *Documents présargoniques*, Fasciculus I, 1908, Fasciculus II, Paris, 1909, (cited below as DP), a few of the texts in T. G. Pinches, *Amherst Tablets*, London, 1908, (cited below as A), De Genouillac's *Tablettes sumériennes archaïques*, Paris, 1909, (cited below as TSA). These works contain more than five hundred documents from this period. To these should be added the seventy six tablets comprising series one and two in Thureau Dangin's *Recueil de tablettes chaldéennes*, Paris, 1903, (cited below as RTC). Professor A. T. Clay has kindly permitted me to examine his unpublished copies of the texts of this period which belong to the Library of J. Pierpont Morgan. (They are cited below as Mo.)

study the survival of the month names of this period and their fragments in the later times, and may often gain help in determining the place of a month in the earliest time by the place its name held in later month lists. The use of these lists requires caution, however. They represent not only other times, but other localities, and often the survival of other primitive names. Then several things may have affected them. If these month names originated before 3000 B.C., the precession of the equinoxes has carried the zodiac forward since that time, so that whereas then the vernal equinox occurred in the sign of Gemini, from about 3000 to about 750 it occurred in the sign of Taurus, and then in the sign of Aries. While in this earliest period astronomical considerations played almost no part, it is conceivable that at a later time the months may have been attached to the zodiac sufficiently to be slightly drawn out of position by the precession of the equinoxes. Again, special displacements occurred. King Dungi, of the dynasty of Ur, was deified and was assigned a festival. It can, I think, be shown that when that occurred the feast of the goddess Bau was pushed forward, and held a month later. Possibly in one or two instances the name of a month was through a new interpretation transferred to a different part of the year; but this should not be assumed without proof. The month lists which are of assistance in this study are published as follows: RTC, No. 180; EBH, p. 299; VR, 43; VR 29, 1—13a. This last list is repeated in ASKT, 64, 1ff., AL³, 92 ff., and AL⁴, 114 ff. To these should be added for the time of the dynasty of Ur the comprehensive grain account in CT. 111 (No. 18343) and TCI No. 77, in which the months are all mentioned, in such various combinations that their position in the year can usually be determined.

3. The nature of the transactions in the reigns of Lugal-anda and Urkagina dated in these various months should be taken into account to see what light they throw upon the season of the year. 4. The nature of the transactions in dated documents of the dynasty of Ur, (these published in CT, I, III, V, VII, IX & X, in Reisner's *Tempel-Urkunden*,¹ in RTC, in A, in Barton's HLC,² in Lau's *Temple Records*,

¹ Cited as RU.

² *Haverford Library Collection of Cuneiform Tablets*. Philadelphia 1905—1909.

and Radau's *Early Babylonian History*, cited as EBH), should be studied for light as to the season at which certain things were done. The assumption seems just that similar agricultural work had to be done at the same time of year.

In the following discussion all these sources of information are drawn upon.

There are two reasons why this discussion is undertaken. 1. Genouillac in TSA, p. xvii ff. has made an arrangement of the calendar which starts, I believe, with a wrong premise, and is accordingly wrong in many of its conclusions.¹ 2. The Russian publication referred to above, which contains more than three hundred tablets and much rich material on the calendar, was apparently unknown to Genouillac, and the addition of this material warrants a new discussion.

Genouillac rightly begins his discussion with the month of the Feast of Bau. This month name continued in common use through the time of the dynasty of Ur, and Gudea twice states that the ZAG-MU, or New Year's festival occurred on the feast of Bau (stat. E. v. I—2, stat. G 111. 5). Genouillac assumes accordingly that the month of the Feast of Bau was identical with the month March 15th to April 15th. In this he is, I believe, mistaken. In VR 43, 36 a the month of the Feast of Bau² is said to be one of the names for the month DUL-AZAG. In VR, 29, 7a and ASKT, 64, 7a DUL-AZAG is said to be a name for Tashrit, the seventh month of the year. The occurrence of this name in this position in this list can, I think, be explained only as a survival of the position of the month in a list earlier than the dynasty of Ur. It follows accordingly that down to the time of Gudea the year at Telloh began at or near the autumnal equinox, as the Jewish year did in pre-exilic times, and as the religious year does among the Jews to the present day.³ This fundamental error has made much of Genouillac's outline of the calendar wrong. It is hardly conceivable that an important feast should have been transferred from the spring to the autumn in this way. In a country where the winter is mild and is a season of agricultural work which culminates

¹ Kugler, *Sternkunde und Sterndienst in Babel*. II. Buch. Münster in Westfalen, 1909, p. 176 ff. accepts Genouillac's results.

² The phrase reads ITU [EZIN-]d BA-U.

³ This had been recognized by Radau, EBH, 295.

in a spring harvest, and where the summer is a time of drought, it is more natural to begin the year in the autumn when vegetation is reviving after the summer heat. In Babylonia, too, this corresponds to the beginning of the date harvest¹—a harvest of great importance to the country—when the goddess of plenty begins anew to bestow her gifts. Such a time was most fitting both for a festival to the goddess and the beginning of a new year. The month of the Feast of Bau was, then, September-Oct. Eighteen documents from the reigns of Lugalanda and Urkagina are dated in this month. They are: Ru, Nos. 64, 167, 209, 217, 219, 235, 239, 253, and 261, DP, Nos. 51, 96, and 112, TSA, No. 20, A, No. 14, RTC, Nos. 27 and 39 and Mo. Nos. 1476 and 1494. These documents, however, throw little light on the month itself, as they consist almost altogether of pay rolls and lists of sacrifices—both of which might be written in any month of the year. The predominance of lists of sacrifices is, however, fitting to the new year season.

Later at the time of the dynasty of Ur the month of the Feast of Bau was pushed forward two months. It happened probably in part at the time king Dungi was deified. In honor of the king, perhaps, the feast of the New Year was given to his month, and made the Feast of Dungi, while the Feast of Bau was transferred to the next month. By that time other causes had already pushed the month of Bau forward one month. It still came, however, approximately at the season of dates. So it came about that a pay roll of dates (CT, VII, No. 17765) is dated in the month of the Feast of Bau.²

Thus all the indications that we have point to the autumn, not the spring, for the month of the Feast of Bau, and to a year in ancient Lagash which began in the autumn.

Our next step should be guided by RTC, No. 39 and Mo. 1476—two tablets which, though dated in the month

¹ See Doughty, *Arabia Deserta*, 1st ed. I. 557, 561, Zwemer, *Arabia the Cradle of Islam*, 125, and Barton, *Semitic Origins*, 111.

² It is no disproof of this that an account of quantities of dates sold for money (CT, V, 17765) should run from the month Amarasi (Jan.—Feb.) to Shukul (July—Aug.), but rather a confirmation of it, for these would be the months when dates were sufficiently scarce to be bought for money.

of the Feast of Bau, contain lists of provisions for the month of the DIM-eating feast of Nina. DIM was a kind of grain, the ripening of which was apparently celebrated by a feast. DIM-eating is expressed by the signs DIM-KÙ. Here we are confronted by a difficulty. DIM-KÙ is almost certainly the same as the combination found in the dynasty of Ur texts, usually read by scholars ZIB-KU. The four wedges of DIM, when carelessly written, as they were in the period of Ur, have not until recently been recognized as the equivalent of the earlier sign. On the tablet, RTC, 180 (of the Ur period) DIM-KU is the third month *before* the month of the Feast of Bau, and not the month after it. There were, however, in the Lugalanda period two months which bore the name of this grain—one was the month of the DIM-eating feast of Ningirsu, the other the DIM-eating feast of Nina. In countries like Egypt and Babylonia, in which agriculture is fostered partly by the overflow of the rivers and partly by irrigation, three different harvests may occur. In Egypt today there is the winter crop sown after the subsidence of the inundation, which is raised with almost no irrigation.¹ In Babylonia, where there are winter rains, such crops grew with no irrigation at all. In Epypt the summer crops are sown in April, and are harvested, according to the rapidity with which they ripen, from August to November. Babylonia, too, as will be shown below, had also its summer crops raised by irrigation.² DIM probably included the two grains, sesame, and the grain known today in Babylonia and Palestine as dhurah (دُرَّ). Sesame is harvested I am informed by Dr. John P. Peters and D. Z. Noorian (who was formerly a resident of Babylonia), in July and Aug., while dhurah is harvested late in the summer. If the sign designated two grains which ripened at different periods, or if two crops of the same thing were raised in the same summer, the feast of the first harvest would naturally be dedicated to Ningirsu, and the second, to Nina. At all events, the indications of the tablets are that there were two separate feasts, which celebrated the harvesting of this grain.

¹ See Baedeker's *Egypt*, p. lvi.

² See Rawlinson's *Ancient Monarchies* I, 12, Jastrow's *Religion of Bab. & Assy.*, p. 29, Roger's *History of Bab. & Assy.* I, 273 ff., Barton, *Semitic Origins*, 156.

We conclude then from RTC, No. 39 and Mo. 1476 that the month of the DIM-eating Feast of Nina (EZEN-DIM-KU-^aNINA) followed the month of the feast of Bau (EZEN-^aBA-U), and corresponded to October-November.

The following tablets of the time of Lugalanda and Urkagina are dated in this month: Ru, Nos. 6, 230, 254, 272, 288, DP, Nos. 106, and 109. Their contents present quite a variety, Ru, 6 is a pay roll; Ru, 230, a list of skins of sheep; Ru, 254, quantities of wool, 269 and 272, quantities of fishes which formed an important part of the festival; Ru, 288, quantities of drinks and wood; DP, 106 and 109, both record quantities of dates and some other fruit. All the transactions are appropriate to an autumn month.

Ru, 269 states that fishermen brought quantities of fish for "the grain-eating, the DIM-eating festival of Nina (EZIN ŠE-KÙ EZIN DIM-KÙ-^aNINA). This shows that the DIM-eating festival of Nina was also called sometimes by the more general name of "grain-eating festival of Nina"—a fact which proves that the month name ITU EZIN-ŠE-KÙ-^aNINA, which is found in Ru, 57, 225 and 260 is a variant name for the "Month of the DIM-eating festival of Nina". These tablets are respectively a pay roll, a list of skins, and a list of supplies.

RTC, 30, a tablet of the time of Lugalanda, records the bringing of a quantity of fish for the DIM-eating feast of Nina of the month of the Feast-of-the-going-out-of-the-sea (EZEN-AB-UD-DU). If the DIM-eating feast of Nina was in this month, the name must have been another name for the month Oct.-Nov.¹ Genouillac makes it follow the month of the Feast of Bau, so making it April-May, but is unable to explain the appropriateness of the name. That it belongs in the part of the year in which we have placed it is shown by V, R, 43, 52—57a, where the name spelled AB-BA-UD-DU occurs as the name of the 10th month, Tebet (cf. V, R, 29, 10a), i. e. Dec.-Jan. It has there been pushed along one month further—a thing which probably happened when the month of the Feast of Bau was pushed forward.

¹ The Sumerian is ambiguous. It may be interpreted to mean that EZIN-AB-UD-DU is simply the date of the tablet in which case EZIN-AB-UD-DU would be another name for the month of the Feast of Bau.

This name—month of the Feast of the-going-out-of-the-sea—probably designated the month of low water. The overflow of the Tigris and Euphrates, which begins with the Tigris in March, has ceased on the Euphrates by the end of September. The rains do not begin until December, so that the month Oct.-Nov., after the overflow and before the rains, would be the month of lowest water. This again confirms our placing of the month. What is probably a variant of this name occurs in an unpublished tablet in the Harvard Semitic Museum, a copy of which has been loaned me by Dr. Mary I. Hussey. It reads: ITU GAR-KA-ID-KA, "Month of the food of the river",¹ and is most probably interpreted as a variant name of this feast.

As the next month—November-December—Genouillac places the month SIG-BA, the month of wool, on the ground that as the cool weather approached the people would be employed in making their winter garments. The one document dated in this month known to him (TSA, 27) is a receipt for flails and some wooden pegs from a carpenter. One would expect such objects to be sold nearer the threshing season, which is shown below to have coincided in Babylonia with the time of sheep shearing. There was a month named from the shearing of the sheep, as Genouillac noted and as we shall show below, and the "month of the wool" would be a fitting alternate name for that. It is shown below that these names were applied to the month March-April. Moreover in the time of the dynasty of Ur the wool was distributed to the weavers either in the month of the Feast of Tammuz (HLC, Pl. 51) or the Feast of Bau (HLC Pls. 23, 24), that the garments might be made before cold weather.

Nevertheless I suspect Genouillac is partly right in thinking that Nov.-Dec. had something to do with garments. A new month-name, which may be thus explained, has come to light in the Russian publication. In Ru 241, a list of skins for garments is dated, ITU ŠI-GAR-MA, which may be rendered, "the Month they 'put on' garments" (cf. Br. No. 11978 and No. 6778). As one sees men in the East today clothed in the cold rainy time in sheepskin coats, so this month-name appears to refer to time of putting these on.

¹ It seems reasonable to regard GAR-KA as a variant writing of B. 11997, *ukultu*, rather than to interpret by M. 9232, *egirru*.

As to the name of the month Dec.-Jan. in this early time, I am in doubt. I am, however, tempted to believe that it may have been the month ITU UZ-NE-GU-RA-A-A (Ru, 226), the "Month they call the goats." After the rains begin, grass begins to grow, and it would be a natural time to lead the goats away to pasture again. Possibly a reference to some such process has survived in the month name ITU APIN-GAB-A (V, R, 43, 40—45a), which might be read the "Month the shepherds separate." If that name perpetuates the name of the one before us, and our supposition as to the time of year intended is correct, we must suppose that it was displaced at a later time and put back, for in V, R, 43 APIN-GAB-A stands for Oct.-Nov. The text Ru, 226, is a list of skins, and such lists are dated at all seasons of the year.

This month (Dec.-Jan.) corresponds to the month MU-ŠU-UL the period of the dynasty of Ur. The large transactions of that dynasty dated in that month are payments in wheat (CT, VII, 18395) and flour (CT, X, 12246)—transactions which do not help us in determining the correctness of our guess.

Next, we believe, should come the month called in Ru, 1, ITU AMAR-A-A-SIG-GA and in Ru, 222, ITU AMAR-A-A-SI-DA. AMAR was either young grain, or a variety of grain (cf. HLC, Pt. II, p. 23, i, 9 and p. 24, iii, 10). As AMAR stands for the young of animals also (cf. Reisner, U, No. 2, iii, 6 and *passim*), probably here it stands for young grain. The month-name probably means, the "Month of the filling-out-of-the-young-grain." According to DP, 60 and 69, there was a "Feast of Amaraasi."¹ DP. 60 is a list of sheep and quantities of oil furnished to the wife of Urkagina for that festival, and DP, 69 of food and garlands (in Semitic *Minnu*; cf. M. 3853 and BA, V, 638, 13) furnished to the same lady. There was, then, a kind of a festival of first fruits from which the month was named. We place the month in Jan.-Feb. because in CT, I, No. 77 it is placed just before ŠE-KIN-KUD, and throughout the dynasty of Ur held this position. Genouillac, who apparently gains his conceptions of the Babylonian agricultural seasons from the climate of southern France, makes this month May-June and calls it "the month when the crops begin to whiten." Many grain account tablets from the

¹ This would be a fresh of first fruits similar to the Hebrew feast of unleavened bread.

time of the dynasty of Ur, as will be pointed out below, show that the harvest was over, the grain threshed and ready for distribution by the month April-May, so that it must have been possible for them to have the feast of first fruits in February.¹ Of the two documents from our period dated in this month, one (Ru, 1) is a long pay roll (and pay rolls are dated in all months of the year), and the other (Ru, 222) is a list of skins received. Skins were likewise received in all months. In later times the month Amaraasi seems to have been the time for leasing asses, which were much used in the harvesting operations of the months which followed. Thus RU, 29 is an ass account from Amaraasi of one year to Šukul (July-Aug.) of the next. Flour accounts are dated in Amaraasi (CT, VII, 12932), payment of wages to IM-E-KID-A workmen (CT, X, 14313), payments of wheat (CT, VII, 12940 and 18409),

¹ It is possible that AMAR-A-A-SIG-GA was Feb.-March and that ŠE-KIN-KUD was one of the names for March-April. One would be forced to think this the case, if he reasoned from modern conditions only. Mr. D. Z. Noorian writes me: "In southern Babylonia barley is harvested in the latter part of March, immediately after barley, wheat is harvested, and so is rice rather early in April. Round about and south of Nippur all tender vegetation dies or dries up by the end of March except such as grows along the canals or swamps." Hilprecht, *Babylonian Expedition of the University of Pennsylvania*, Series D, Vol. I, p. 446, states that the workmen left Nuffar at the middle of April to harvest their barley and attend to agricultural affairs. This would imply that, if the climate remains unchanged, AMAR-A-A-SIG-GA and ŠE-KIN-KUD should come a month later than we have placed them. It is, of course, possible that by the period of Ur these months may have been pushed forward one place. It should be remembered, however that the names of both months remained unchanged during the Ur, period, that both were names the meaning of which was well understood, and that, if their season had not really corresponded to the actual time of the harvest at that period, it is highly probable that other names would have supplanted them. As noted above, too, there is abundant evidence in the Ur texts that at the time the grain was threshed and ready for storage by April-May, so that it is probable that in ancient times the harvest came slightly earlier than now. Possible confirmation of some climatic change in the Mesopotamian valley may be found in the fact that as late as 1470 B.C. elephants were still roving in upper Mesopotamia in the general region of Carchemish. Thothmes III. of Egypt hunted 120 of them there in the vicinity of Niy. (See Breasted *Ancient Records, Egypt*, Vol. II, § 588, and *History of Egypt*, p. 304.) This would seem to be evidence that in ancient times the climate was warmer than now.

and an account of the sale of dates for money, brought to a close (CT, V, 17752).

The next month was called ITU ŠE-KIN-KUD-DU, the "Month of cutting-the grain," a name which the month Feb.-March bore at the time of the dynasty of Ur (cf. TCI, No. 77). One document from our period is dated in it, RTC, 55. It is a list of quantities of AŠ-plant foods. From V, R, 43, 1—6 b it would appear that the month Amaraasi later was named from AŠ, perhaps because the AŠ-plant was cut in it. At all events in the times of Urkagina AŠ-plant products were to be had in the month ŠE-KIN-KUD.

Probably a variant name of this month at this early time was ITU-AMA-UDU-TUK, or "Month the sheep become mothers." A tablet of the reign of Lugalanda, (Ru, 184), bears this date. It is the record of articles brought by a shepherd for the wife of Lugalanda. The month of the yearning time in the East is most naturally Feb.-March.

The next month, called in later times ŠE-IL-LA (cf. CT, III, 18343, iii, 31 and passim), was agriculturally a busy one in Babylonia, and was, if I rightly understand the agricultural references, designated by several names in the period of Lugalanda and Urkagina.

To begin with a name in which the name elements which have survived to later times appear, it is called in Ru, 234, ITU UDU-ŠU-ŠE-A-IL-^aNINA, the "Month when the goddess Nina carries grain to the sheep." In three documents, (Ru, 211, Mo. 1474, and TSA, 18), it is written, ITU UDU-ŠE-A-IL-LA, the "Month sheep-grain-carried," which is evidently an abbreviation for the longer form previously quoted. Other forms of the name are as follows: ITU UDU-ŠU-ŠE-A-GU, "Month to the sheep grain they feed," (DP, 47), ITU UDU-ŠU-ŠE-A-^aNINA, "Month to the sheep the grain of Nina," (Ru, 153, 176, 265), ITU UDU-ŠU-ŠE-A-^aNIN-GIR-SU, "Month to the sheep the grain of Ningirsu," (Ru, 196, 208, 274, TSA, 6, Mo. 1503); ITU UDU-ŠU-ŠE-A, "Month to the sheep the grain," (Mo. 1469); ITU ŠE-GAR-UDU, "Month, they feed the sheep," (Ru, 231); and ITU AN-TA-GAR-RA-A, "Month of feeding," (RTC. 20).

Genouillac puts this month in July-Aug. on the ground that forage was short and they then had to feed the sheep. I doubt the correctness of this for two reasons. 1. The part of

the name that has survived (ŠE-IL-LA) was, as every one knows, the name for March-April. 2. There is no one month in the summer when sheep had to be fed more than during some other months. In CT, III fourteen texts published on plates 11—15 record certain amounts of grain which were for certain sheep and cattle, but the texts are dated all the way from Gudranemumu (May-June, No. 13892), to the Feast of Dungi (Sept.-Oct., No. 13882). On the other hand it is probable that the sheep were used in threshing the grain (goats were used in the time of Hammurabi, see Code, xxxviii, 96—98), and that while the threshing was going on they were fed on straw, *tibn*, and perhaps some grain. This would concentrate a feeding on an especial time, and would agree with the survival of the name to later times. I therefore believe we should place this month at March-April where we find it later.

There was another phase of activity, to which the energies of a large portion of the community were directed. The time at which sheep are shorn in Babylonia today, Mr. D. Z. Noorian informs me, is the end of March. So the sheep which had been collected to assist in the threshing were in ancient times probably shorn of their wool before being sent back to pasture again. Accordingly, when we find a month named ITU MAL-UDU-UR, "Month of sheep-shearing" (RTC, 36), we are justified in supposing that it also refers to the month March-April. A shorter form of this name is found in Ru, 228, where it is called ITU MAL-UR, "Month of shearing." Sheep-shearing was an important function and was attended with feasting, as is shown in 1 Sam. 25 and 2 Sam. 13:23, and it is not strange that an agricultural population should have named a month from it.¹ A more popular name at Lagash seems to have been ITU SIG-BA, "Month of wool." This name occurs five times in the documents of our period (Ru, 9, 224, 229, Mo 1456, and TSA, 27). There can, it seems to me, be no doubt that it refers to the same month as the sheep-shearing. Still another variant of the name appears in Ru, 63, where it is written ITU SIG-^aBA-U-E-TA-GAR-RA-A, "Month the goddess Bau bestows the wool."

That these four names which have to do with wool refer to the same month, seems to me most probable. At the time of the dynasty of Ur, wool for clothing was distributed

¹ See Additional Note on p. 271.

from EZIN-^aDUMU-ZI to EZIN-^aBA-U (July to Oct.), see HLC, Nos. 1 and 29. Between the sheep-shearing and these dates there was time for cleansing it.

The texts which we thus place together treat of the following topics all of which are appropriate to the time of year, viz.: DP, 47. is a list of provisions of all sorts presented by Barnamtarra, wife of Lugaland, to various temples; TSA, 18 is a pay roll; TSA, 6, a list of perfumes; Ru, 208, a list of oxen for sacrifice; Ru, 153 and 176, sheep and goats for sacrifice; four tablets contain lists of sheep-skins; two, lists of fishes; two supplies of grain; and one (Ru, 211) is a receipt for a cow.

The next month was named from the storing and accounting for grain.¹ Four tablets (Ru, 16, Mo. 1505 and TSA, 14), bear the date ITU KARU-DUB-BA-A, or "Month of storehouse accounts." Ru, 249 expresses it ITU KARU-DUB-DA. On one text (DP, 119), the month is written ITU KARU-IMI-A-TA. IMI is here a variant of DUB in the sense of *Duppu*, "account" (cf. Br. 8360), so that the name still means "Month of storehouse accounts." On still another document (RTC, 56) it is expressed ITU ŠI-NAM-DUB-NI-BA-DUR-BA-A "Month when accounts are opened" (literally "established," cf. Br. 10528). This refers to the fact, which the great grain account tablet of the dynasty of Ur (CT, III, 18343) establishes, that grain accounts which ran for a year were opened in GAN-MAŠ (April-May, the month was called GAN-MAŠ from the time of Sargon, a name not yet found in the Lugaland documents) and ran to ŠE-IL-LA. See CT, III, 18343, vii 34, 35, viii 46, 47, x 23, 24 and xvi 42, 43. CT, V, 18358 is also wheat account for five years which ran from GAN-MAŠ to ŠE-IL-LA. It was also a favorite time for the beginning of shorter accounts. All the following texts are wheat accounts beginning in GAN-MAŠ: CT, VII, 17761, CT, IX, 13134, 19050, 21348, CT, X, 14308. While wheat accounts exist which were opened in other months, (e. g. ŠE-IL-LA, CT, VII, 18427, GUD-RA-NE-MU-MU, HLC, 61, EZIN-^aNE-ŠU, CT, X, 14316, ŠU-KUL, CT, III, 19740,

¹ That the storage of grain is of very great antiquity at Lagash, is shown by the elaborate storehouse constructed by Ur-Nina, something like a century and a half before the time of our period. Cf. Heuzey, *Une ville royale chaldeenne*, p. 9ff., and L. W. King, *History of Sumer and Akkad*, p. 92ff.

IX, 13657, and CT, X, 14315, DIM-KÙ, CT, X, 21355, EZIN-^dDUMU-ZI, CT, VII, 18422, MU-ŠU-UL, CT, VII, 18395, AMAR-A-A-SI, CT, VII, 18409, ŠE-KIN-KUD, CT, VII, 13166, DIR-ŠE-KIN-KUD, CT, X, 12235), the documents from the dynasty of Ur show that GAN-MAŠ saw the opening of more accounts than any other month. This fact had, no doubt, a natural cause in the fact that the grain was then threshed and ready for market, and confirms us in the belief that the month April-May was the "Month of storehouse accounts," ITU KARU-DUB-BA-A.

I therefore regard it as the early name for that month, which by the time of Sargon was displaced by the name GAN-MAŠ, "Month of the division of the fields,"—a name which probably refers to the repair of the canals for the irrigation which began in the next month.

As the next month we are, I think, compelled by the documents of the period of the dynasty of Ur to place ITU GUD-RA-NE-MA-A¹, "Month the faithful oxen go out"—a month found in DP, 143 and RTC. 32². The documents of the period

¹ Genouillac (p. xix, n. 8) reads the name ITU-ḪAR-RA-NE-ŠAR-A on the basis of a remark of Thureau-Dangin in ZA, XVI, 345, n. 1—a remark based on the writing of the month name in RU, 222, a tablet of the period of Ur. This writing also occurs in the Ur tablet published in HLC, II, pl. 75 although it is not certain in either case that the first sign is to be read ḪAR instead of GUD. A copy of the month name quoted from an unpublished tablet by Thureau-Dangin, *Inventaire des tablettes de Telloh*, p. 9, where the name is spelled GUD-RA-NE-MU-MU, shows that in the Ur period the name was pronounced Gudranemumu. Thureau-Dangin himself has abandoned the reading ḪAR for the first syllable. ŠAR has the value MU when it means "to sing" (B. 4347) and "to shine" (B. 4346), but the value MA when it means "to go out" (B. 4302). That it had the value MA in our period the phonetic complement A shows. The MU of the Ur period arose, I believe, from phonetic deflection.

The value RA attaches to the sign DU when the latter means "go", "walk" (B. 4871) or "be firm", "faithful" (B. 4884). We might accordingly read "the walking oxen" instead of "the faithful oxen".

The value ḪAR for GUD is attested only in III R, 68, 64a—a late syllabary. It may have arisen from the assimilation of *d* to the following *r* in this month name and from the softening of the initial palatal. It is quite uncertain whether GUD was pronounced ḪAR as early as the Ur period.

² In RTC, 32, the name is ITU GUD-RA-NE-MA-A-^dNINA-KA, "Month the faithful (or walking) oxen go out for Nina". It seems

of Ur show conclusively that the month followed GAN-MAŠ. For example HLC, 53 (Pt, II, pl. 72) reads ITU GUD-RA-NE-MU-MU ITU EZIN-^aNE ŠU-RA (Month Gudranemumu to month of the Feast of Neshu), which shows that Gudranemumu preceded Neshu. HLC, 81 (Pt, I, Pl. 33) reads ITU GAN-MAŠ-TA [ITU] EZEN-^aNE-ŠU-KU [ITU] III^{kam}, (from the month Ganmash to the month of the feast of Neshu, three months). Putting the two statements together it follows that for that period Gudranemumu followed Ganmash. HLC, No. 72 (Pt, II, Pl. 81) shows it in another way. We read ITU ŠE-IL-LA-TA ITU GUD-RA-NE-MU-MU-KU... III^{kam}. (from the month Šeilla to the month Gudranemumu... three Months) from which it follows that Gudranemumu was the third month. So far as I can see there is no good reason for supposing that the months were not in the same order in the period of Lugalanda.

The oxen went to the fields to work at the irrigating machines, as is shown for example in the Neo-Babylonian text published in BE, X, 44 and translated by Clay, *Light on the Old Testament from Babel*, 421. The month May-June occurred at the time when the combined flow of the Tigris and Euphrates rivers was at its height, and it strikes one as strange that oxen for irrigating purposes should have been so extensively employed then as to cause a month to be named from the fact. It is this which leads Genouillac to place this month in autumn, Sept.-Oct., when the rivers were subsiding. It seems, however, a violent proceeding to suppose that the month was transferred a third of a year between the two periods. It is quite possible that the name is equally appropriate where it stands.¹ It is quite probable that summer crops and orchards stood beyond the range of the overflow of the rivers and needed the aid of irrigation. It was customary, apparently, to begin such irrigation at this time. In a later list of months (V R, 43), a transformation of this name occurs as the name of the second month (April-May, see ll. 3—8 where the name ITU GUD-SI-DA occurs). Prob-

natural to infer from this that the oxen were laboring on the crop which was harvested for the DIM-eating festival of Nina. This would place the month where we have placed it above.

¹ It is not certain that they went to work at the irrigating machines. They may have gone to plough for the autumn crop.

ably this use of the ox in a month-name, however, had in this list an astronomical import and was connected with the second month to correspond with the Bull sign of the zodiac. It does not indicate that the ox-laboring month of the time of Lugalanda was the second instead of the third.

The one document dated in this month is a list of quantities of grain and fishes.

The next month was called by the same name that it bore at the time of the dynasty of Ur, ITU EZIN-^aNE-ŠU, "Month of the Feast of Neshu." Genouillac makes this the month Oct.-Nov., apparently because many tablets dated in the month designate quantities of seed for various fields. It is clear, however, from the evidence presented above, that the month was the fourth month or June-July in the time of the dynasty of Ur, and it seems gratuitous to suppose that earlier it came at a different time of year. The distribution of seed grains in tablets of the Ur period dated in this month may well have been for the crop which was to be gathered in October, or it may have been customary to have the distribution well out of the way before autumn. Two documents in the Lugalanda period are dated in this month, Ru, 29—a list of supplies—and RTC, 53—a pay roll.

The next month was, we believe, ITU EZIN-DIM-KÙ-^aNIN-GIR-SU, "Month of the DIM-eating Feast of Ningirsu," so called in Ru, 60, 218, DP, 117, TSA, 32, 48, and RTC, 34, but also called in A, 8, and Mo. 1457 and 1480, simply ITU EZIN-DIM-KÙ, "Month of the DIM-eating feast." Our reasons for distinguishing this feast from the DIM-eating feast of Nina have already been given. Our reason for placing it here is that A, 83 has a passage which reads ITU DIM-KÙ-ZI-TA ITU EZIN BA-U-KU ITU 4^{kam}. (from the month DIM-KU to the month Ezin-Bau, four months) which shows that at the time of the dynasty of Ur two months intervened between DIM-KÙ and EZIN-^aBA-U. Now the month list in TCL, 77 begins with ITU-^aDUMU-ZI, then comes ITU EZIN-^aDUN-GI, then, ITU EZIN-^aBA-U. Combining these two passages it follows that at the time of the dominance of Ur the feast of DIM-KÙ came next before the month of the feast of Tammuz. As we shall show below that the Babylonian year at the time of Urkagnia closed with

a month which was in reality the month of the feast of Tammuz, we place the month DIM-KÙ, or the DIM-eating festival of Ningursu, here in July-Aug. It seems fair to assume that, although the two months had been pushed forward a month by the time of Dungi, that they would retain the same order. From the analogy of the names of the month of the DIM-eating feast of Nina already treated, we are led to regard the name ITU EZIN-ŠE-KÙ-^aNIN-GIR-SU, "Month of the grain-eating feast of Ningursu", as a variant name of this month. Ru, 197, 257, and RTC, 67, are dated in it.

The tablets which bear this date treat the following topics:—Ru, 60 is a list of provisions for asses and men, Ru, 218, a list of provisions, DP, 117, a summary pay roll, while TSA, 48 and RTC, 34 are records of quantities of fishes, A, 8 is a receipt for salt. TSA, 32, a list of oxen and cows, Ru, 197, and RTC, 67, lists of supplies, and Ru, 257, quantities of oil. The business which appears here is business which was carried on throughout the year. While not characteristic of any one month, it is not inappropriate to July-Aug. One text, Ru, 2, presents what is, I believe, a variant name for this month, and the only astronomical name which appears in these texts. The tablet—a list of provisions for temple servants—bears the date ITU MUL-BABBAR-SAG-E-TA-ŠUB-A-A, the "Month the star Babbar lays down its head," or "abandons its leadership." BABBAR means "bright," "white," and is the well known ideogram for the sun, but in the later Babylonian astronomy was a name for the planet Jupiter.¹ Babylonian astronomy as such was, however, the accumulation of many centuries of observation, developing, as Kugler² has shown, at a relatively late date. At the early time of which we are speaking BABBAR, "the white star," might have been equally well applied to any other star equally bright. The following considerations lead me to believe that in the month-name before us Sirius, not Jupiter, is intended.

1. Sirius, the brightest of the fixed stars, is about equally bright with Jupiter, and it comes about each year with a regularity with which Jupiter does not. BABBAR would be a very natural name for a primitive folk to apply to it, and in

¹ See Jensen, *Kosmologie*, 125 ff.

² *Sternkunde und Sterndienst in Babel*, Münster in Westfalen, 1907.

naming a month they would be far more likely to name it for a star which they had observed came regularly in that month than for a planet which wanders about from month to month.

2. At the time of the dynasty of Ur there is evidence that a month was sometimes named after Sirius. In RTC, 180, the name ITU LIG, "Month of the dog" occurs, and the tablets, HLC, Pt, II, No. 2 (Pl. 52) RTC, 283 and 286 are dated in it. In II R, 43, 63a we find a star name MUL LIG ^aBABBAR, (or if read Semitic, *Kakkabu Kalbu* ^a*Samaš*, i. e. the star "dog of the sun"). This star is recognized by Kugler and others as a name for Sirius.¹ Now in a text of the period of Ur (RTC, 276), this month is expressed thus: ITU LIG-BA-BAD, the "Month the dog dies" (cf. Br. 1517). This is, I take it, a reference to what astronomers call the "heliac rising" of the dog star. The sun approaches more and more closely to a star until finally it rises so nearly simultaneously with the sun that it cannot be seen. The last time it can be seen is called its "heliac rising." When the star disappeared in the rays of the rising sun it might naturally be described as the "month the dog dies," and an earlier age might as naturally describe it as the "month the bright star abandons its leadership." The two descriptions appear to refer to the same phenomenon. Kugler, (*op. cit.* p. 234), reckons that the heliac rising of Sirius about 700 B. C. was, for the latitude of Nineveh, July 25th. Of course for Lagash it would be slightly earlier. If these names, then, refer to Sirius they would refer to an event about coincident with the beginning of the month July-Aug.

3. Another reason for thinking that Sirius would first attract the attention of the Babylonians is that it attracted the attention of the early Egyptians, and gave them the foundation of their calendar. This calendar was adopted, Meyer² and Breasted³ hold, about 4240 B. C. If the brightest of the fixed stars could thus attract the attention of one early people, it could easily that of another.

If the months DIM-KÙ and LIG (or BABBAR-SAG-E-

¹ See Kugler, *op. cit.*, 230 and 273 also, Brown, *Primitive Constellations*, I, 277 ff.

² Cf. Meyer, *Geschichte des Altertums*, 2te Aufl. p. 101.

³ *Ancient Records*, I, 30, and *History of Egypt*, 14.

TA-ŠUB-A-A) were, as we have supposed, originally the same, they had ceased to be so by the time of the dynasty of Ur, for RTC, 180 has the names on two successive lines as two different months. It must be borne in mind, however, that by that time considerable displacement in month names had taken place. A month ŠU-KUL had been introduced before DIM-KU, Dungi had appropriated a month, and various slight changes had occurred.

The next month in the year was in the Ur period sacred to Tammuz and was called ITU EZIN-^dDUMU-ZI (cf. TCL, 77). Tammuz was closely associated with the goddess Ishtar, and in the list in V R, 43 this month is called ITU KIN-^dININNI, "Month of the mission of Ishtar"—referring, no doubt, to the myth of the descent of the goddess to the lower world. According to the myth she went to the lower world because Tammuz was dead, and the feast of Tammuz was accompanied with wailing for the death of the god. While the name Tammuz (DUMU-ZI) has not yet been found in a month name of the Lugalanda period, it is probable that the month is alluded to under three different names. One of these is ITU EZIN-^dLUGAL-ERIM, "Month of the feast of the god King-of-Erim." Two documents are thus dated: Ru, 202 and RTC, 59. I contended some years ago¹ that Lugal-Erim was a masculinized Ishtar. That he was either that or Tammuz himself is altogether probable, for NA-NA or Ishtar was the goddess of Erim. This month is not, then, to be placed in the winter as Genouillac does, but is to be recognized as the month of the Tammuz festival, Aug.-Sept.

What I regard as a variant name of the same month occurs in Ru, 313, where we read ITU GAL-ŠAG-GA, "Month of the man of favor" (possibly to be rendered "Month of the man of the palm tree"). The primitive Tammuz was associated with the palm tree,² and the closing lines of "Ishtar's Descent" (Rev. 47--49) show that the epithet "man of favor" would not be inappropriate to Tammuz. Probably, therefore, we have here a reference under another epithet to the same god, and through him to the same month. As the tablet records a

¹ *Semitic Origins*, pp. 183, 187.

² See *Semitic Origins*, 86 ff.

payment of money by a man of Elam, the subject matter does not help us in determining the time of year.

Still another variant I would connect, though with less confidence, with the same month. This occurs in Ru, 227 and reads ITU GAL-UNUG^{ki}-GA, "Month of the man of Eridu." The tablet is a list of skins presented by a NU-BANDA, officer of E-NAM-DUMU, or the "Temple of Sonship." Is it fanciful to see in DUMU here the same element as the DUMU in ^dDUMU-ZI? If it is not, this tablet is connected with a temple of Tammuz.

The writer showed some years ago that the religion of at least one of the cities of which Lagash was composed was connected with Eridu,¹ and that there was a sacred palm tree at Eridu.² Combining these facts with the previous epithet, we gain some probability that we have here another reference to the month of Tammuz.

We have now completed the circuit of twelve months, but we have in the tablets of our period one intercalary month. It is the month in which DP, 99 is dated, and is expressed ITU GAL-LA-A, "Appointed month" (cf. Br. 2253). GAL is the ideogram by which the appointment of an intercalary month was expressed in the period of the kings of Ur, see CT, III, 18343, iii, 45, vii, 40, ix, 12, 49, and xvi, 45. There can be no doubt, therefore, of its meaning here. The tablet records a list of cows and oxen under a NU-BANDA officer.

While the above arrangement of the months is necessarily in part tentative, we have endeavored to utilize all available information, cuneiform, agricultural, geographical, religious and astronomical, in making it. It does not, as does that of Genouillac, presuppose the transfer of month names half way around the year before the time of the dynasty of Ur. Such changes of the position of month names by a month or two before that period as we have pre-supposed are made credible in part by the introduction of new month names, in part by the imperfection of the year, which had to be adjusted by intercalary months, and in part by the loss of the original significance of certain names as they became abbreviated.

We may tabulate our results as follows:

¹ *Semitic Origins*, 196.

² *Ibid*, 197.

First month, Sept.-Oct.	ITU EZIN- ^a BA-U
Second month, Oct.-Nov.	{ ITU EZIN-DIM-KÙ- ^a NINA
	{ ITU EZIN-ŠE-KÙ- ^a NINA
	{ ITU EZIN-AB-UD-DU
	{ ITU GAR-KA-ID-KA
Third month, Nov.-Dec. (?)	ITU ŠI-GAR-MA
Fourth month, Dec.-Jan. (?)	ITU UZ-NE-GU-RA-A
Fifth month, Jan.-Feb.	{ ITU AMAR-A-A-SIG-GA
	{ ITU AMAR-A-A-SI-DA
Sixth month, Feb.-March,	{ ITU ŠE-KIN-KUD
	{ ITU AMA-UDU-TUK
	{ ITU UDU-ŠU-ŠE-A-IL- ^a NINA
	{ ITU UDU-ŠE-A-IL-LA
	{ ITU UDU-ŠU-ŠE-A-KÙ
	{ ITU UDU-ŠU-ŠE-A- ^a NINA
	{ ITU UDU-ŠU-ŠE-A- ^a NIN-
	{ GIR-SU
	{ ITU ŠE-GAR-UDU
Seventh month, March-April,	{ ITU AN-TA-GAR-RA-A
	{ ITU MAL-UDU-UR
	{ ITU MAL-UR
	{ ITU SIG-BA
	{ ITU SIG- ^a BA-U-E-TA-GAR-
	{ RA-A
	{ ITU KARU-DUB-BA-A
	{ ITU KARU-IMI-A-TA
	{ ITU ŠI-NAM-DUB-NI-BA-
	{ DUR-BA-A
Eighth month, April-May,	{ ITU GUD-RA-NE-MA-A
	{ ITU GUD-RA-NE-MA-A-
	{ ^a NINA
Ninth month, May-June,	{ ITU GUD-RA-NE-MA-A-
Tenth month, June-July,	{ ^a NINA
	{ ITU EZIN- ^a NE-ŠU
	{ ITU EZIN-DIM-KÙ- ^a NIN-
Eleventh month, July-Aug.,	{ GIR-SU
	{ ITU EZIN-ŠE-KÙ- ^a NIN-GIR-
	{ SU
	{ ITU EZIN-DIM-KÙ
	{ ITU MUL-BABBAR-SAG-E-
	{ TA-ŠUB-A-A

Twelfth month, Aug.-Sept., (?)	{	ITU EZIN- ^d LUGAL-ERIM
	{	ITU GAL-ŠAG-GA
	{	ITU GAL-UNUG ^{k1} -GA
Intercalary month,		ITU GÀL-LA-A ¹

¹ A study of the month names in this, the earliest list of Babylonian months known to us, impresses one as a strong argument against the astral theory, which the pan-Babylonians make the basis of their work. Of thirty six month-names, but one is astral. One is the name of the intercalary month; one has to do with the sea or the rivers; while all the rest have to do with agricultural occupations or agricultural festivals. The predominant influence of the heavens, which the pan-Babylonians postulate, is entirely lacking.

Additional Note.

In connection with the remarks about the importance of sheep-shearing in ancient Lagash made above on p. 261, it should be noted that Ur-kagina in Cone B (Sarzec, *Découvertes*, p. LI) bears witness to the importance of this operation. In col. ii, 4—6 he says MAL-URU-UR URU-AZAG-GA-KA-NI MU-NA-RU, "The sheep-shearing house of Uruazagga he built." This implies that sheep-shearing was a kind of public event, and would account for the naming of a month from it.

Some Early Amulets from Palestine.—By JAMES A. MONTGOMERY, Assistant Professor in the University of Pennsylvania.

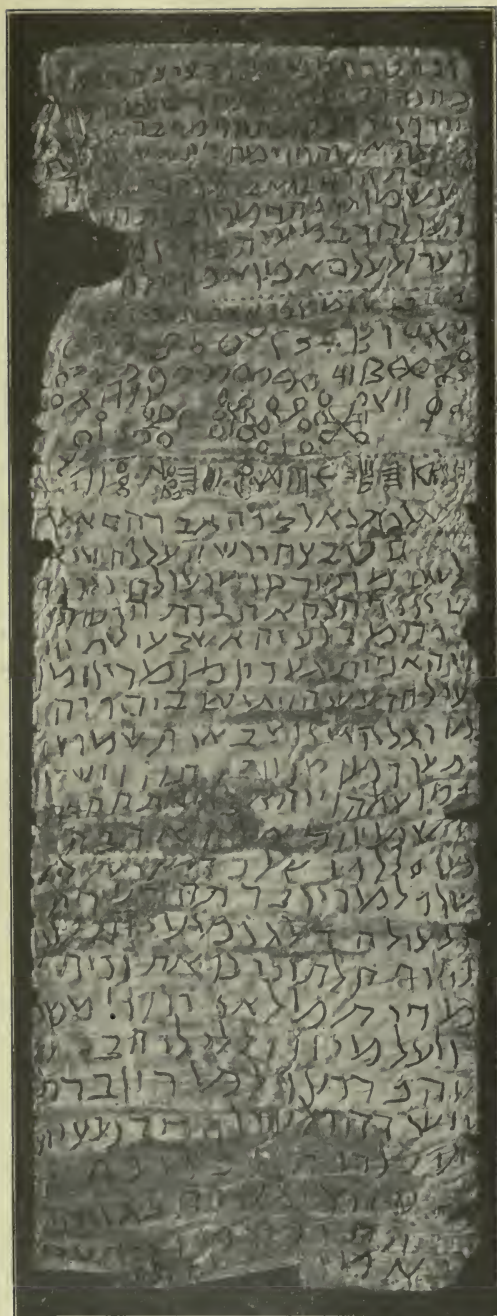
THE following inscriptions are in the possession of Mrs. Henry Draper of New York and the New York Public Library. Dr. Billings, Librarian of the latter institution, placed some of the photographs in the hands of Prof. W. Max Müller, who generously handed them over to me; and subsequently Dr. Billings and Mrs. Draper allowed me most liberally full access to the originals, along with permission to publish them. But the original inscriptions are so minute that any study of them has been made on the photographic reproductions, which fortunately magnified and rendered more distinct the fine and worn characters of the originals.

The originals were once all in the possession of Mrs. Draper, who gave most of them to the New York Public Library. The following account of them is given in the *Bulletin* of that Library, vol. XII (1908), p. 5, as follows: "Three Hebrew amulets of silver and two of gold, in silver and glass frames, one of the gold amulets having attached the gold cylinder case in which it was worn, all having been found at Irbid [in the Hauran in 1853] and belonging in date to about the second to the fifth Centuries, A. D."

The discoverer of the inscriptions is a dealer in oriental antiquities in New York City, and from him I obtained the following information:

"The amulets Dr. Billings sent you to translate were found in tombs excavated under my personal supervision at Irbid in the Hauran, Syria. Some of them were found last summer [1909] and some two and three years ago.¹ They were worn

¹ This is discrepant with the date given in the *Bulletin*. The writer then alludes to a long inscription of similar character, (but evidently late) now in possession of Messrs. Tiffany & Co., New York, which has been partly translated by Dr. William Hayes Ward.





in cases of gold (Mrs. Draper has three or four of the gold cases), sometimes in bone cases."

Irbid lies east of the southern end of the Lake of Galilee, just west of the Haj route, and is now an important town.¹ As indicated above, the inscriptions are written on small pieces of metal foil, the largest of them being less than $4 \times 1\frac{1}{2}$ inches in size, and were folded in gold or bone capsules. The minuteness of the script appears upon observing that one of the inscriptions (A) contains 32 lines, and another which is still smaller, 42 lines.

A.

Inscription of 32 lines on silver foil, in possession of the New York Public Library; $3\frac{3}{4} \times 1\frac{3}{8}$ inches. After line 9 follow several rows of conventional round figures, with some characters which recall the Greek alphabet; then a line of larger figures mostly rectilinear. One figure is a cross with a small circle at each end. The circles probably indicate the magician's seal; compare the use of the circle in the incantation bowls.

Text.

1 ובחטרה דמשה ובציצה דאהרן
2 כהנה רבה ובעזקתה דשלמה וב[מג]
3 נה דדויד ובקופתה דמרכה אפ[ר]שת
4 לקלה אני יהוה ומחדתא ע...
5 .. תהום בגאבת שהפר שמ[י]ה
6 [מ]ן שמנת ובה דמרין בריתה ד[שהפר]
7 ועולה דבמעיה מן יומי עלם
8 ועד ולעלם אמן אמן סלה
9 ... מ. נ. א. צח... מ. א.

10 אלו תנאל ביה אברהם אבן
11 [בחת]ם טבעהי ושמע ללחשי.
12 לשם מתין דקומו עולם ועד נה
13 שיה דתפק את גרת הו ש...
14 [ו]ית מבלעיה אשבעתיה וה
15 שה אבי תגערון מן מרין ומן
16 עולה דבמעיה... ביהויה

¹ See Baedeker, *Palästina u. Syrien* ⁵ p. 185; Merrill, *East of the Jordan*, p. 293. Extensive ruins exist here and the place has been identified with Arbela.

- 17 מן דגלה יהו צבאות שמים
 18 אמן ומן מרין ברתה דש דה
 19 ומן עולה דיהא בי שתה הרה
 20 בשמים דאלהא רבא [א]
 21 מן הללויה לעד אמן סל[ת]
 22 שלם למרין ברתה דש דה
 23 ולעולה דלגו מעיה מן
 24 לילית קלתה דבנאת ... ש
 25 מריה מלאך יהו ישמר
 26 ה לעלמין הללו ליה בג[בת]
 27 שהפר דין ולמרין ברת
 28 ה ש דה ולעולה דבמעיה
 29
 30 [ולעולה] דבמעיה בגויתה
 31 .. תה ומן מרין ברת שהפ
 32 [ר] אמן [הללויה] סלה

Translation.

1. And now with the wand of Moses and the shining-plate of Aaron
2. the high priest, and with the seal of Solomon, and with [the shield]
3. of David, and with the mitre of the chief priest, have I pronounced (?)
4. [the word: I am YHWH, and repeatedly [have I exer-
5. cised them on behalf of Šahpur, his name,
6. of (?) ŠMNT, and for Marian his daughter
7. and the unborn-child in her bowels, from the days [of ever]
8. and aye and forever. Amen, Amen, Selah.
9. ? ? ?
10. Oh, intercede in behalf of him, Abraham our father.
11. With a seal (?) stamp him. And hear my prayer
12. on account of the dead: "Rise ye forever and ever," (?) that his so-
13. ul thou bring forth. Do thou drive out that ... ?)
14. and his devourer I have exorcised. And n-
15. ow, my father, scold them away from Marian and from
16. the unborn-child in her bowels, by Yahweh (?),
17. who has been (so) revealed—Yahû Sebaoth is his name,
18. Amen; and from this Marian daughter of Š.,
19. and from the unborn-child which shall be this year.

20. In the name of the great God, A-
21. men, Halleluia, Forever, Amen, Selah.
22. Peace to this Marian daughter of Š.
23. and to the unborn-child which is in her bowels, from
24. the lilith of her canopy. . . . She-
25. mariah [(?)] angel of Yahû protect (?)
26. her for ages. Hallelu le-Yah, on behalf of
27. this Šahpur and for this Marian daughter
28. of Š. and for the unborn-child in her bowels
29. ? ? ?
30. [and for the unborn-child] in her bowels in her body
31. . . . and from Marian daughter of Šahp-
32. ur. Amen, [Halleluia], Selah.

Notes.

Line 1. The sorcerer claims to be armed with the full magical equipment of the magicians of yore.¹ **המר** is the Targumic translation of the biblical **מטה** of Moses (e. g. *Targ. Onk.* to Ex. 42). The **ציצה** is the biblical **ציץ**, the plate of gold on the high priest's mitre, e. g. Lev. 89.

Line 2. David's magical perquisite was his shield, and so I restore at the end of this and the beginning of the following line, **מגנה**. This is probably the earliest literary reference to that magical element; see *JQR.* XIV, p. 111, for an early (3d century?) representation of it.

Line 3. The term indicating the priest's property I conjectured to be the mitre, and following a suggestion of Professor Jastrow, comparing the Biblical **קובע**, **קובע**,² "helmet," I suppose that **קופתה** refers to a high head-dress. The theme KB, KP, &c. appears in various forms, in the sense, "heap up, be gibbous," &c. Compare also the root **גבע**, with its derivative **מגבעות**, "turban" of the ordinary priest, and the Syriac **קפא**, "heap up." The latter root illustrates the **פ** in our word.

The **מרכה** is the high priest of the second temple (**מְרִיכָה**), when no anointing was practised, so called because of his

¹ Cf. the Greek magical papyri, e. g. Wessely, *Griechische Zauberpapyrus*, *Wiener Denkschriften* XXXVI, 2, p. 129, l. 109ff: "I am Moses thy prophet to whom thou gavest thy mysteries."

² The *Oxford Lexicon* lists these words alphabetically; but they should appear under **כבע** and **בע**.

many garments.¹ The last word in the line I conjecturally restore to אפרשת, Afel; in the sense "pronounce" the word is generally used in the Pael, but the Afel appears as variant in the ancient Bamberger Codex of *Targum Onkelos* to Lev. 272, Num. 62.²

Line 4. אני is fairly certain. מהרתא I take to be the fem. of the Pael ppl. used adverbially. Verbs may be supposed at the end of the line and the beginning of the next (the latter with the pronominal suffix הום), which would express the operation of the magical apparatus.

Line 5. בנאכת (with pleonastic א) is parallel to the Jewish Aramaic אַנְכּ, "on account of," with feminine pl. ending instead of the masculine.³ It is resumed with ב in the next line, and is probably to be read in l. 26, being resumed there with ל. שהפר is a unique and early spelling of the famous Persian name Šahpuhre, appearing in the Semitic dialects as Šabor. The first great king of this name flourished in the third century, but the name was an old one in Persia.⁴

Line 6. שׁן שמנת: the missing latter may be ב or מ. We should expect the parent's, especially the mother's name to be mentioned; but the Aramaic would require בר, unless we may suppose that the Hebrew בן has persisted. שמנת would be a good feminine name, i. e. "fat," or possibly שְׁמֶנֶת, "Octavia." If מן be read, שׁ is the name of a place. מרין is the Hebrew מרים, the נ is unique. It may be a local dialectic form; cf. עמרן and עמרם. A similar prayer for the unborn child, לעולא, appears in one of the (unpublished) Mandaic incantation bowls in the University of Pennsylvania Museum.

Line 10. אלו = if the first character is correctly read, the biblical לו and Targumic אַלְוֵי. The following verb is the biblical and Rabbinic גאל; the accompanying preposition ב is peculiar, but is not out of place with a verb of touch. This prayer to Father Abraham is unique, although the atoning and intercessory power of the Fathers is a prevailing Jewish doctrine.⁵ The form of the prayer recalls the supplication of the rich man in hell to Father Abraham in the parable in

¹ See Yoma 73 a, and Levy, *Neuhebr. u. chald. Wörterbuch*, IV, p. 413.

² See Berliner, *Targ. Onk. ad loc.*

³ For the feminine form cf. the Syriac קודמת = קרם, מטול = מטולת.

⁴ See Justi, *Iran. Namenbuch*, p. 284.

⁵ Weber, *Jüdische Theologie*, pp. 292 ff, 326 ff.

Lu. 16. אבן is the probable reading at end of the line, but אבי appears in l. 15.

Line 11. מבעה is sure, and I restore the preceding word to חתם at a venture. In magical language Abraham is asked to stamp the dead man as his own. Compare the sealing of the redeemed in Rev. 7⁴, and the comments, upon Ezek. 9⁴ in *Shabbath* 55 a: "The Holy One said to Gabriel: Go and mark with ink a Taw upon the forehead of the righteous that the angels of destruction, מלאכי חבלה, may have no power over them," &c.; and further on: "Taw is the last latter of the Holy One, for R. Hanina said. The seal of the Holy One is אמת (truth)." The suffixal form הי... is characteristic of Onkelos in the imperative. לחש is a common biblical and Rabbinic word for a spell. There is room for a missing character at the end of this line and at the beginning of the next.

Line 12. The particle ד introduces the following imperative quotation, as in Syriac. עולם ועד is without ל as in Ps. 21⁵. Some incantation of magical import is here quoted; cf. the fragment of an early Christian hymn in Eph. 5¹⁴: "Awake thou that sleepest, and arise from the dead, and the Christ shall give thee light."

Line 13. My restoration נפשיה דתפק is possible so far as the remains of the characters are concerned, but the interpretation of the whole passage is not satisfactory. את may be the pronoun, while גרת may be the Hebrew and Rabbinic גרש, supposing an original stem *grt*. The final word would then represent some evil spirit; but it may possibly be שהפר, which would alter the interpretation of גרת.

Line 14. מבלעה: cf. the legend in *Sifre* of the מלאכים רעים who await the death of the wicked to tear out his soul,¹ and n. b. Satan's part in disputing over the body of Moses, Jude 9.

Line 15. תנעורן: n. b. the jussive without the parengogic ג. This verb often appears in the bowl incantations in the quotation of Zech. 3².

Lines 16f. At the end יהויה is most likely to be read; this would be then the expression of the pronunciation of the Tetragrammaton, as preserved in Samaritan tradition,² and

¹ Weber, *op. cit.* p. 339.

² See Montgomery, *JBL* XXV (1906), p. 49.

corresponding to the modern pronunciation Yahwe. This is a unique spelling in Hebrew.¹ In the next line גלה is evident, and doubtless refers to the revelation contained in יהויה; it is probably the passive particle (cf. Biblical Aramaic), and practically equivalent to שם המפורש,² יהויה being actually the שם המפורש. The letters preceding גלה are uncertain. There follows יהו צבאות, cf. יהו in l. 25. This is exceptional in the magical forms of the Tetragrammaton, and archaic; cf. Assouan Papyri.

Line 18. דש לז: the restoration is made from l. 28.

Line 19. יהא and בי both Targumic; for the latter cf. Targ. Yerush. Num. 22 28. Here the pronoun הרא and in ll. 18, 28 דא, and the masc. דין, l. 27.

Line 24. קלתה or קלתה = canopied-couch, see Jastrow, *Dict. of the Talmud*. Evil spirits lurked especially in roofs, trees, and all kinds of coverings, and were most noxious in proximity of a bed. The latter part of the line is obscure. The last letter in the line may be ש, to make שמריאל = שמריאל, a favorite angel of charms.³ את may be the pronoun of address to the angel.

Line 26. הללו ליה: various perversion of this magical word are found, e. g. in the Greek magical papyri.

Line 28. We expect the particle ד before ש, but there is no room for it (ה is almost certain). I have found cases in the Mandaic bowls from Nippur where after the pronominal suffix ד is omitted, the suffix appearing sufficient to establish the genitive relation. So also in the Assouan papyri; we find the relative particle omitted in the construction "year x of such a king," e. g. Sachau's *Papyrus A*, l. 19, שנת XIII דריהוש. For the abbreviation ש for שהפר, cf. Sayce and Cowley, *Assouan Papyri*, E 17, ברי = בר ידניה; also the Talmudic abbreviations.

Line 30. גויתה, the Targumic גויתא, Jastrow, *op. cit.* p. 221 a; also found in Ben Sira 41 11.

The charm is made out for the repose of soul of a certain שהפר and for the health of his daughter מרין, who is pregnant. In the latter part, the scribe has not very much to add and monotonously repeats the subjects of his charm. But the first

¹ Perhaps the same pronunciation is also intended in the magical term יהויה, found in the text published by Stübe, *Jüdisch-babylonische Zaubertexte*, l. 15.—P.S. The same form I also find in texts at Pennsylvania.

² See Arnold's discussion in *JBL* XXIV (1905), p. 157 ff.

³ See Schwab, *Vocabulaire de l'angélologie*, s. v.

part of the charm is fresh and original in comparison with the usual stereotyped forms of incantation.

The orthography is marked by absence of vowel letters, e. g. such words as עוקתה, שלמה, שהפר, עלם; yet דויד, עולם, עולה. Final ה appears instead of א, as in early Aramaic, and as in the Samaritan usage; the one exception is אלהא, where א is used after ה. The masculine suffix is written יה, to distinguish it from the feminine.

The forms of pronoun, verb, &c., can all be exemplified from the early Palestinian Targums, and the vocabulary is of like character. The noun קופתה and the prepositional בנאבת are new. שהפר is an early and unique spelling.

The script is of the fully formed square type, but certainly early, as reference to Euting's tables in Chwolson, *Corpus inscriptionum hebraicarum* will show. I may specify the long left leg of ה, the single form for נ—a long perpendicular stroke, the lack of distinction between ד and ר, and the archaic פ. Taking into consideration the language and the spelling, I would assign the inscription to the second or third century after Christ. There may be also noticed the archaic use of continuing words over the line. The inscription would then be the oldest amulet of any length which we possess.

The charm largely consists in conventional Jewish phrases and repetitions. It contains however some novel features. The elaborate introduction, with the self-assertion of the conjurer, is of interest, and so is the union in the one charm of prayers for the dead and the living, and also for the unborn. Unique is the prayer to Abraham. The divine Name is spelled not only יהוה, but also, archaically, יהו, and יהויה, doubtless the phonetic representation of the pronunciation of the Ineffable Name.

B.

Inscription of 40 lines on silver foil, in possession of Mrs. Henry Draper of New York; $3\frac{1}{4} \times 1\frac{3}{8}$ inches. The charm is so obliterated that despite the use of a bromide enlargement I have been able to obtain but little consecutive sense from the inscription, and hence have not thought it worth while to give a reproduction. It appears to be of the same age as A, though the vocalization is very fully carried out, but differs from that in consisting largely of magical formulas. I give the little that is legible.

1. [מן בלה
2. גו]פיה דמ. חיה ומן בלה גופה ד. . .
4. פגעין . . .
5. אמן אמן
7. קדוש קדוש קדוש קדוש
9. הגן עלי זגה א. . .
10. לכל בשר . . .
11. מלכות יה
15. קדישה יאקירה . . .
16. אהוש אהוש הפיכה הפיכה . . .
17. הוש הוש
18. אהיה אשר אהיה
19. יהיה יהוה יה יהוה הוה . . .
20. יהיה אתבש תון
21. שדי גיבור . . .
24. רופיאל יה יהיה . . .
25. הקדוש הנגלה למשה מחיר . . .
26. יהוה ושמו מבורך אהיה אשר] אהיה]
33. פנואל יהוה

Line 9: "Protect this . . ."; n. b. זגה for דגה.

Line 16. אהוש = אחוש, "quickly," and הפיכה "avaunt," terms found in the incantation bowls.

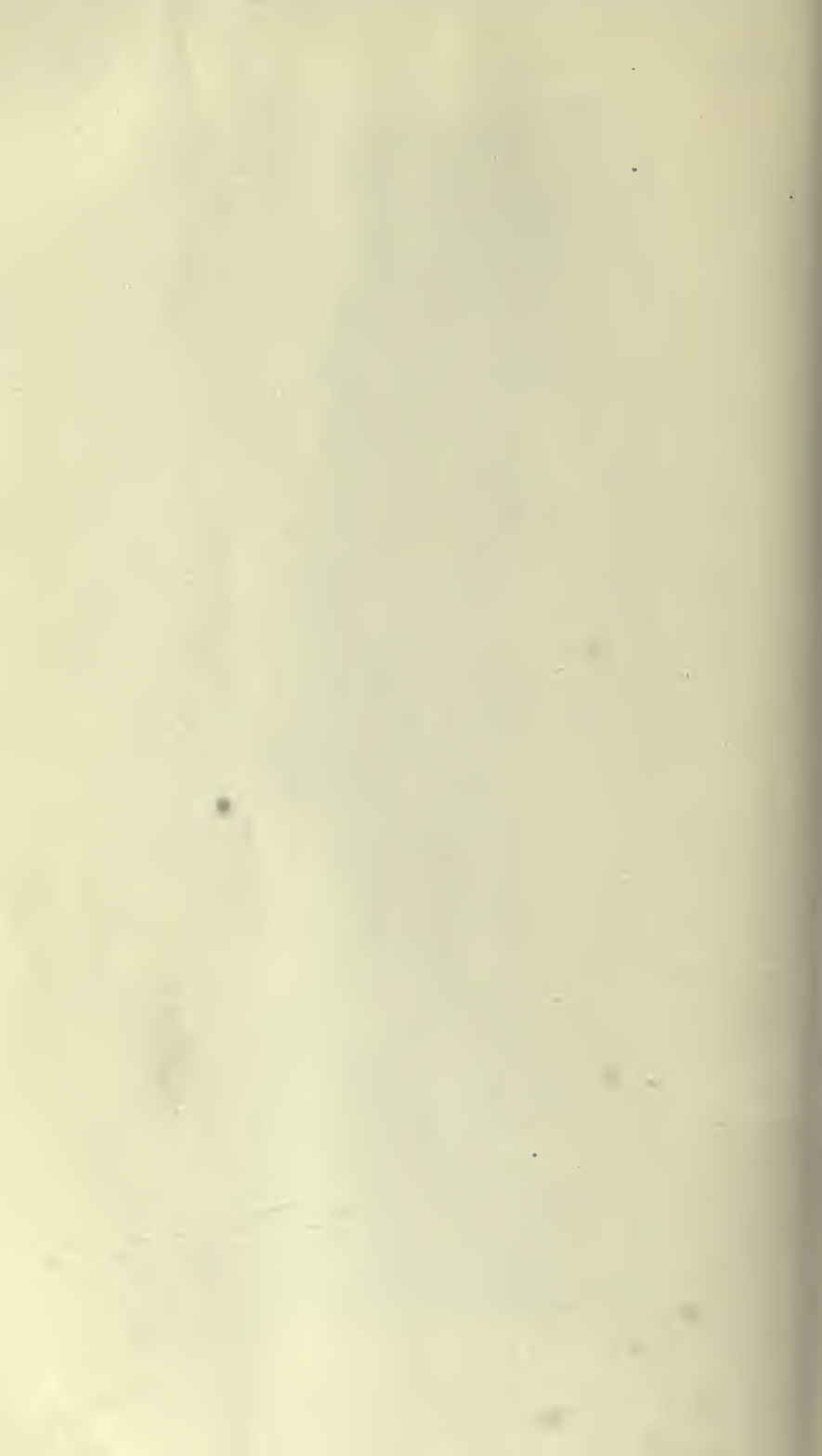
Line 20. NB. אתבש used as a magical formula.

Line 24. רופיאל, a form of רפאל, found in Pognon's, *Coupees de Khouabir*, and in a Syriac bowl in the University of Pennsylvania, as also in Enoch. It stands for Rafael, with the Hebrew ppl. for the first component.

C.

A talisman on bronze foil (size unknown to me as I have not seen the original), in the New York Free Library. The remains of nine lines are visible. The first two lines are almost illegible. To the left are some magical signs, the only discernible one being a cross, whose arms terminate in a circle—the same figure is found in A. The charm is addressed against the evil eye and certain named calamities and demons, and was probably intended to be worn on the person. In my interpretation I have had the assistance in part of a translation made by Mr. S. A. Binion of New York. The charm is of a character that still survives in Palestine among the Jews; for examples see Hanauer, *Folk-Lore of the Holy Land* (London, n. d.) p. 318ff.





Text.

3. וגופה דג'ורג'יס ברה דפנאטיס מן כל ביש ומן עין [דאבוהי]
4. [ומן עין דאימ'ה ומן עין דנשין ומן עין דגברין ומן עין דבתול[אתא]
5. [יהוה] צבאות עימנו מיסגב לנו אלוהי יעקוב סלה אמן אמן סלה אמן
6. [יהוה] צבאות אמן . . אל ותדרו ס . . . ת לזמא עריה יהוש
7. . . . ומהוש וצער ורוח ושיד אמן אמן סלה אמן אמן אמן
8. . . . אל ותדרו . . . יהוה שמרית . . . ה יהוש . . .
9. אמן אמן אמן סלה אמן

Translation.

[Protect the . . .]

3. and the body of Georgios son of Pagatios from all evil, from the eye of [his father]
4. and from the eye of his mother and from the eye of women and from the eye of men and from the eye of virgins
5. [YHWH] Sebaoth is with us, the god of Jacob is our refuge. Selah, Amen, Amen, Selah, Amen.
6. [YHWH] Sebaoth, Amen . . .
7. . . . ailment and shame and spirit and demon. Amen, Amen, Selah, Amen, Amen, Amen, . . .
8. ? . . . ?
9. . . . Amen, Amen, Selah, Amen.

Notes.

Lines 6 and 8 have evidently some identical words, but both are almost entirely obscure. The last word in each may be יהושע, i. e. a name of salvation. Line 5 is a quotation of Ps. 46 8, 12.

In line 7 מהוש is for מחוש (מיחוש), with equivalence of ה and ח as in the Babylonian incantation bowls. The vocalization is very fully expressed, e. g. in the scriptural quotation, which is written by ear and not from knowledge of the text. Both script and spelling refer this charm to a much later date than A. Georgios is a common name in late Greek and Syriac; Pagatios, or Pagatis, I have not found elsewhere.¹

¹ Professor Gottheil has given a brief account of these amulets in the *Journal asiatique*, X. ix (1907), p. 150.

Graphic Analysis of the Tone-accents of the Siamese Language.—By CORNELIUS BEACH BRADLEY, Professor in the University of California, Berkeley, Cal.

THE so-called “tones” of certain oriental languages of the Chinese type have been not merely stumbling-blocks in the way of the practical learner, but puzzles to the scientific student as well, because of a lingering uncertainty as to the precise quality and definition of each separate tone, and because of the irrational or even misleading nomenclature often applied to them. As to their general nature, indeed, there is substantial agreement: They are pitch-variations corresponding to such inflections of voice as in most languages regularly accompany sentence-stress, and serve to distinguish different kinds of sentences; as, for example, “He has còme” (with falling tone indicating simple statement), “He has cóme?” (with rising tone indicating question), “He has côme” (with compound tone indicating incredulity), and so on.¹ In tonal (pitch-accenting) languages, however, these pitch-variations are not used to distinguish between sentences of similar form, but between individual words in other respects similar. In such languages “tones” are elements as inseparable from the enunciation of words as are the vowels and consonants which make up their articulation. Each word in the language, therefore, has its own fixed and inherent “tone,” subject only to such variation as may be brought about by varying conditions of emphasis or speed or nervous excitement. The “tones,” in short, are pitch-distinctions inherent in words, and necessary to the right apprehension of their content or meaning, rather than applied to words adventitiously and occasionally, as tokens of the modal aspect of sentences in which they occur.² So far

¹ Sweet, *A New English Grammar*, Oxford, 1898, Part II, §§ 1925 ff., pp. 37 ff.

² Wershoven: pp. 8—9; Frankfurter: p. 18; Bastian: p. 360.

all¹ are agreed; and beyond this there is, of course, substantial agreement in the actual practice of all who have really mastered the native speech and accent. But in the various accounts which such persons give of the several "tones," we have all the uncertainty and discrepancy which inevitably attend the attempt to determine phonological matters by reference to the ear and the subjective consciousness alone. The native scholar is here even more helpless than the foreign;—his processes of utterance are wholly instinctive, and therefore more difficult of analysis. As for nomenclature, when the native tells us that a certain tone is "high" or "level," we doubtless have some inkling—though a very inadequate one—of what he means. But when he tells us that this an "entering" and that a "retiring" tone, we are hopelessly at sea. These are terms of pure subjective fancy, and have no directive force whatever for one who does not already know what they are intended to mean. As for the foreign scholar, his "expectant" and "anxious" tones are quite as impossible as any invented by the native.²

In thinking this matter over with reference to the Siamese language, which is one of the tonal group, it occurred to me

¹ The following are some of the more important references on the subject of Siamese tone-accents: John Taylor Jones, *Brief Grammatical Notices of the Siamese Language, with appendices*, Bangkok, 1842; Caswell, *Treatise on the Tones of the Siamese Language* (the manuscript was composed about 1847, finally printed in the *Siam Repository*, vol. II, Bangkok, 1870); D. J. B. Pallegoix, *Grammatica Linguae Thai*, Bangkok, 1850 (this work has been frequently quoted and followed by later writers; a special feature is Pallegoix' attempt to represent the "tones" by musical notation); D. B. Bradley, *Elementary Tables and Lessons in the Siamese Language*, Bangkok, 1875 (this is the date of my copy which is the eighth edition; the book is printed in Siamese throughout); A. Bastian, *Über die siamesischen Laut- und Tonaccente*, in *Monatsberichte der Akademie der Wissenschaften*, Berlin, 1867, pp. 357—386 (in his account of the "tones", the writer, for the most part, follows Caswell); F. J. Wershoven, *Lehrbuch der siamesischen Sprache etc.*, Leipzig, 1891; Samuel J. Smith, *The Principles of Siamese Grammar, Comprising the Substance of Previous Grammars of the Language*, Bangkok, 1889; O. Frankfurter, *Elements of Siamese Grammar, with appendices*, Bangkok, 1900; for an interesting discussion of the origin and nature of pitch-accents see A. Conrady, *Eine Indochinesische Causativ-Denominativ Bildung und ihr Zusammenhang mit den Tonaccenten etc.*, Leipzig, 1896.

² Of course, not all the designations here cited have found their way into authoritative print; nor are all from the Siamese field. For illustration

that since the essential element in all these "tones" is undoubtedly pitch, and since the permanent records of speech made possible by modern mechanism register pitch as wave-length. in the tracing, it should be possible to make sure of the facts by actual measurement, and so to end the controversy. Some years ago, therefore, while busy with other points of Siamese phonetics, and making records with Abbé Rousselot's apparatus, for other purposes, I made a series of records of the "tones" as well. I never found time, however, for their proper study and analysis until this last year, when I took them in hand and worked them out, with results which I have plotted on the accompanying chart. The actual operation, however, was by no means as simple as it might seem; and calls, perhaps, for some little explanation, that there may be no misapprehension as to the nature or value of the results. In the first place, since the instrument records *all* sorts of air-pulses caught in its receiver:—the shocks of contact and release, the physical impact of breath, the intricate pattern of resonance-waves peculiar to each different vowel, the varying intensity of utterance shown in the amplitude or swing of the waves, and the harmonic overtones of the particular voice—all these as well as the fundamental pitch of the vibrating chords; and moreover since these are not analyzed out and separately recorded, but are superimposed the one upon the other in a single intricate pattern, precisely as they are in our hearing of them; it becomes important to the success of our investigation that everything else save fundamental pitch should be either eliminated or minimized. It was comparatively easy to exclude some of the disturbing elements by choosing for the experiment

of the wide divergence between standard authorities both in their apprehension and in their designation of the Siamese "tones," the reader may be interested to consult the following list:

<i>Named in the Chart</i>	<i>Rising</i>	<i>Falling</i>	<i>Circumflex</i>	<i>Middle</i>	<i>Depressed</i>
Pallegoix {	Altus	Demissus	Gravis (<i>sic</i>)	Rectus	{ Circum-
Frankfurter {	Steigend	Fallend	Eingehend(<i>sic</i>)	Gleich	Tief
Wershoven {	Ansteigend	Fallend	Rückkehrend	Eben	Niederge-
Bastian {					drückt
Siamese Writers	High	Low	Second Accent	Middle	First Accent

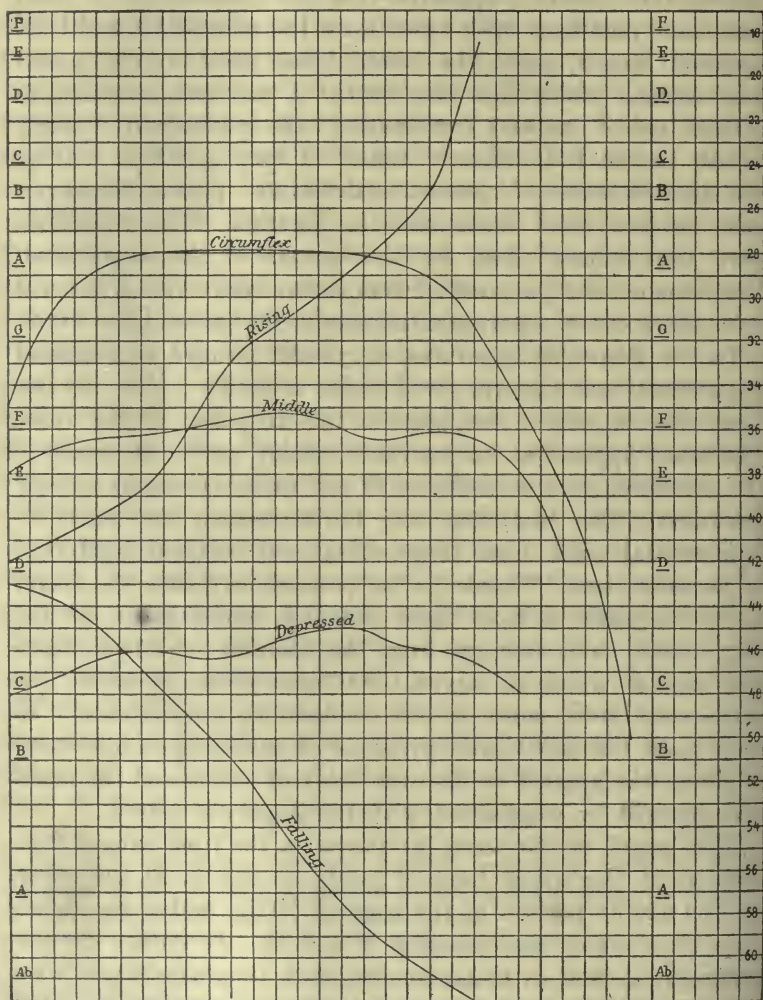
syllables in which they do not appear. But pure vowels alone would not do either, since the conditions of *bona fide* speech must be observed;—that is, genuine words must be used. After various experiments it appeared that the combination of nasal consonant *plus* long open vowel gave the most stable and least confused record; since the nasal, being itself vocalic, passes over without shock into the vowel. I was fortunate also to bethink me of one such combination—the syllable *nā*—actually in use in the five different “tones” of long syllables, making five distinct words of identical articulation—perfect homonyms save for the tonal distinctions in question. The conditions were thus almost ideal for the success of the experiment. Furthermore, for purposes of comparison and control, records were taken of two separate utterances of the series of five words.

In the Rousselot apparatus, a cylinder covered with smoked paper revolves at uniform speed under a needle which vibrates from side to side in response to the air-pulses of the voice. The trace appears as an intricate, crinkly curve, the result of the interference or coincidence of the various elements already described. The first step was to distinguish the waves of fundamental pitch from those extraneous elements, and then to measure them. Thanks to the precautions taken, the longer waves of pitch in most cases emerged unmistakably, as the long ocean swell emerges from the complex of minor waves and ripples which it carries. At some points, however, the wave-crests were more or less confused by interference. In such cases the well-known principle of continuity in movement of pitch was applied to discover the true crest, and the result was checked by comparison with the duplicate record.

The length of the waves as shown in the trace ranged from .035 in. at the upper limit of pitch to .125 in. at the lower. In the middle portion of the register .01 in. makes the difference of a whole tone between F and G. To ensure greater accuracy, as well as to economize effort, the wave-lengths were not measured singly, but in groups of five. Using the quantities so obtained as vertical ordinates of pitch, and arbitrarily assuming equal horizontal spaces of convenient length as ordinates of time,¹ the curve of each of the tones was separately

¹ It was not possible, of course, to give all the syllables precisely equal time in utterance. As shown in the measurements, the time actually varied from about $\frac{1}{2}$ to $\frac{2}{3}$ of a second. In order that difference of

Chart of the Five Tones of Long Syllables in Siamese.



plotted on the chart. I feel sure that the curves as plotted are accurate translations to the eye of those pitch-sequences which the ear recognizes as the five tones of Siamese speech.¹

One striking feature of the result, and one which concerns not Siamese speech alone, is the almost entire absence of straight lines in these figures. This feature seems constant in all speech so far examined. It means, of course, that the speaking voice does not hold the same pitch true even for a very short interval of time. That which the ear recognizes as a monotone, is in fact a sinuous curve oscillating about an average level. The glides also vary in steepness of slope in different portions of their course. All of them show a double or triple curvature. Uniform pitch is by no means practically impossible, as the case of the singer shows; but incessant variation of pitch is doubtless one chief difference between the speaking and the singing voice.

The five "tones" whose pitch-curves have thus been analyzed, are the only ones hitherto recognized in Siamese speech by writers who have dealt with the subject. The list of five, however, is not quite the complete list, as I hope presently to show. But, taking it as it stands, the five "tones" fall obviously into two groups:—a) three sweeps or glides, of large movement and definite figure, designated on the chart as rising, falling, and circumflex; and b) two tones of small variation and indeterminate figure, the middle and the depressed. I think it has never been pointed out that these two groups stand in entirely different relation to vowel-quantity. The long sweeps and glides require appreciable time not only for their proper

dimension might not stand in the way of proper visual comparison of the figures, the horizontal ordinates in two cases were slightly increased.

¹ In order to give a clearer idea of the scope and relations of these "tones," I have plotted our musical scale on the margins of the chart. It will be observed that the figures group themselves about the line of medium pitch, which in the experiment was approximately F. But this medium pitch, it must be remembered, is no fixed datum. It varies not merely as between individual voices; but in the same voice it rises and falls with every shifting flood or ebb of psychological excitement; and in its movement it carries along with it the whole scheme of tones related to it as their center. Under excitement moreover, and under sentence-stress, the sweep of these curves is far greater than it is in quiet talk or in the unemphatic parts of the sentence. No two records of the same tone are precisely alike in pitch, though the pattern of the curves and their general relation to each other are remarkably constant.

execution by the voice, but also for their proper recognition by the ear. For this, the time of a long vowel or of a diphthong seems absolutely necessary;—a short vowel is ordinarily quite insufficient. But there is one very interesting exception. The nasal sounds *m*, *n*, and *ng* are sonorous, and are capable of rendering pitch as truly as are the vowels. For tonal purposes, therefore, a nasal consonant operates as an extension of the time of a preceding short vowel in the same syllable, precisely as does the final element of a diphthong. The three tonal sweeps, therefore, are heard only in syllables with a long vowel or a diphthong, or else with a short vowel *plus* a nasal consonant.

To all ordinary apprehension the two remaining “tones” on the chart are monotones. Very few students have noticed, or are ready to admit even when it is pointed out, the pronounced final drop in that middle tone. The other is not only lower in pitch but has, besides a peculiar element or color, which I believe to be nasal resonance, though I have not yet had opportunity to verify the matter by instrumental test. Since these two are effectively monotones, there is apparently no reason why they should not be found indifferently in syllables either short or long. As a matter of fact they are found in both, though in short-syllables native scholarship recognizes only the depressed “tone.” The other, at the medium pitch of voice, and reached with least effort, we should expect to find most common. But no short Siamese monosyllable, if spoken by itself with conscious attention, ever takes this tone. It is heard only in continuous speech, that is, in the atonic elements of quasi-compounds and phrases, and is doubtless the result of weakening before stress. Thus it is that it has escaped notice altogether.

There is yet one other “tone,” found only in short syllables, which has similarly escaped notice, apparently because it has been carelessly identified either with the rising glide or with the circumflex. The oversight here has escaped detection largely because of the fact that the Siamese scribes have not thought necessary to provide any device to mark this “tone.” This third “tone” found with short vowels is a short high note pitched at about the level of the crest of the circumflex, but lacking both the introductory rise of the circumflex and the long deep drop of its vanish. It does not appear on the chart

for the same reason that the other "tones" of short vowels do not appear:—these facts had not yet been reached when the records were made. When subjected to instrumental analysis—which I hope ere long to be able to give them—the three "tones" of short vowels should appear as short horizontal lines nearly straight, occupying rather less than half the space of the long "tones," and in general position coincident respectively with the crest of the circumflex, with the middle monotone, and with the low monotone. Between the long and short varieties of the last mentioned "tones" there is no need to distinguish, since there is practically no difference in pitch or in quality. But the short high "tone" is so manifestly distinct from any other long or short, that it should be added to the traditional list of five to make the series complete. There would be then six "tones";—three with long vowels only, or with their equivalents; two with vowels either long or short; and one with short vowels only.

It is my expectation soon to apply this same method of instrumental analysis to the "tones" of Chinese speech also. If the method should turn out to be really conclusive as to the nature and the figure of the "tones"—and I see no reason why it should not be so,—it ought to lead to a more rational nomenclature of them in both languages. The names affixed to the curves on the chart, and used in the course of this discussion, are, in the main, those suggested long ago by Rev. Mr. Caswell, and adopted in German form by Dr. Bastian. For the newly discovered sixth "tone," I offer with hesitation the name "elevated," chosen principally because it balances its mate the "depressed." It could not well be called "high" because there are already two other tones which might claim the same designation. But Mr. Caswell's names receive surprising justification from the results of this analysis;—they are really descriptive, as all such names should be. If, as the confusion and the uncertainty which have gathered about this matter are cleared up, Mr. Caswell's nomenclature should once more take its deserved place in general use, it would be only one more testimony to the keenness and accuracy of the now almost forgotten scholar who contributed so much toward the training and equipment of the Prince who afterwards became King Mahā Mongkut, and whose reign ushered in the modern era for Siam.

The "Field of Abram" in the Geographical List of Sheshonk I.—By JAMES HENRY BREASTED. The University of Chicago.

IN a recent fascicle of this journal Professor M. G. Kyle has discussed the above geographical name in the great list accompanying the large historical relief of Sheshonk I at Karnak. Professor Kyle concludes that the identification of the second portion of the name as Abram "scarcely comes within the bounds of possibility." It is important for Old Testament scholars to know whether this conclusion is well grounded or not.

In the first place Professor Kyle is in doubt as to the accuracy of the text which I used in making the identification. He refers to my discussion of the matter in my *Ancient Records of Egypt* (IV, pp. 352—353), where I have clearly indicated that I had photographs of the text (*ibid.*, p. 348, note a). It seems not to be known to Professor Kyle that I first published this identification in 1904 in the *American Journal of Semitic Languages* in an article entitled "The Earliest Occurrence of the Name of Abram" (*AJSL*, Vol. xxi, pp. 22—36).¹ I there (p. 35) included a perfectly clear photograph of the name, in which not a doubtful sign occurs. Moreover the same photograph was later inserted in my *History of Egypt* (p. 530) in connection with a mention of the identification, and this passage, mentioning the identification and referring to the photograph, is particularly referred to by Professor Kyle with page




¹ Even if I attached any consequence to questions of priority in such matters, I would not raise the question with my good friend Spiegelberg who published the same identification the same year. We did so in entire independence. Moreover as I stated (in *AJSL*, xxi, p. 36, n. 24). Erman's papers show that he had noticed it in 1888, but did not publish it, and my friend Schaefer had also noticed it independently. It is of importance to remember in this discussion, that *four scholars have made this identification independently.*

reference. I do not understand how it could have been read without noticing the reference to the photograph in the text, and also to the earlier article in the *American Journal of Semitic Languages* appended in a footnote. In any case there is no reason for uncertainty as to the text which I used, nor the slightest basis for calling it in question.

This term "The Field of Abram" contains three words and although the second and third are Asiatic words foreign to the Egyptian scribe, he has prefixed the Egyptian article "P". To this Professor Kyle objects that it is impossible that the Egyptian scribe should have translated the foreign article into Egyptian, even granting that it was prefixed to a geographical name. I quite agree with him. This unsatisfactory assumption is however not necessary.¹ The first noun in this compound is, as is now commonly recognized the Semitic word *ḥql* "field", which occurs eight times in this geographical list, showing that it was a current element in the geographical names of Palestine at this time. Nothing is commoner throughout the foreign world at the present day than for some such native geographical term to be used without translation. In the East we constantly say "the tell of A," "the wadi of B," "the ghor of C," and when we were in the cataracts of Nubia we frequently spoke of "the bab of so and so," meaning one of the natural gates in the rock barriers of the cataracts which the natives call a "bab." In the same way *ḥql* "field" was a current geographical designation in Palestine, but not itself a proper name. The Egyptian took it up and spoke of "the ḥekel of this" and "the ḥekel of that," using the Egyptian article before it. This continued into New Testament times in Palestine. Compare *Ἀκελδαμάχ* "Field of Blood" or "Field of Sleep." That this is the case is shown conclusively by the parallel use of the well-known Semitic word *ḥm* "valley," which also occurs in this list with the Egyptian article "P" before it. Just as *we* say "the Wadi Tumilât," prefixing the English article to the Arabic word "wadi," so the Egyptian said "P^e-ḥekel of —," and "P^e-ḥemek of —," meaning "the field of —" and "the valley of —".

¹ I accepted it formerly (*AJSL*. xxi, p. 32, n. 11), but I have had more experience in the East since then, and the above explanation seems to me conclusive.

Professor Kyle also objects to the interpretation of חקל as forming a compound with the following word. The existence of such compounds in the list is proven by the example in which עמק is the first member, or compounds with שבלת "stream" and נגב "south country," examples so conclusive that it is fruitless to discuss the question. Moreover Professor Kyle's own proposed explanation (for which, by the way, no demonstration is offered), viz. that this first member means "vicinity," "neighborhood" or "community" demands connection with a second identifying word as much as does the word "field"; or are we to suppose that the Egyptian scribe eight times recorded the name "community" in this list, as the name of eight different towns in Palestine!

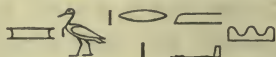
As to the transliteration of the word Kyle is mistaken in stating that I "change the final vowel to u," with the implication that this is done in violation of the text. In writing foreign words, and later also in writing words for which he had inherited no current or generally prevalent orthography, the Egyptian scribe usually employed for each consonant a syllabic sign containing two consonants, of which however he read only the first, the second being a very weak consonant, corresponding to Semitic *ʾ*, *ṯ* or *ṣ*. Many if not all of the letters of his alphabet had grown up in this way. Thus  the old writing for *tʿ*, "a loaf of bread," became the letter "*tʿ*";  the slope leading to the high desert plateau, as its archaic forms show, the writing for *kʿ* "high," is the letter "*kʿ*";  = *rʿ* "mouth" is the letter "*rʿ*".¹ There was nothing new to the scribe therefore in this acrophonetic system which he employed for writing foreign names. We call it "syllabic writing," but it has been widely misunderstood and various futile efforts have been made to interpret the weak second consonant of each sign as a vowel. In view of what Sethe has brought out in his "*Verbum*" and Burchardt's recent study of the foreign words (see below), it is safe to say that such modern efforts have been conclusively shown to be unsuccessful. The Egyptian scribe wrote our word *hkl* thus:







¹ See Sethe, *Das ägyptische Verbum*, I, §§ 73—76, 138—141, 195—201 for a full treatment of such phenomena.








We may slavishly transliterate this: *P^h-hw-k-rw-*, but (disregarding *p'*, the Egyptian article), the reading intended by the Egyptian scribe was *h-k-r*(= *l*). The weak *w* in *rw*, which is the correct reading of the lion is the occasion of Kyle's remark that I have "changed the vowel," though of course there are no vowels in the text.¹














Turning now to the more important final word of the group, which three others beside myself have independently identified as "Abram," we find it written as follows:




This is to be transliterated thus *'-b'-r'-m* and read *'brm* = אַבְרָם. Kyle first objects to the reading of the first sign , as *'* or *ṣ*, because in the writing of ordinary, that is non-foreign words this sign has the value *mr*. Against the reading *ṣ* he quotes Brugsch who once read it *mr*, though noting that Brugsch also read it *ṣ*. For these two different readings by Brugsch there is of course a reason, for it was Brugsch himself who discovered and demonstrated the reading *ṣ* for  in the "syllabic writing." The reading *mr* which Kyle finds in Brugsch's *Geographische Inschriften* belongs to 1857—1880, when this work of Brugsch appeared. Years later he discovered the proper reading of the sign and published it in the *Zeitschrift für Aegyptische Sprache* in 1874 (pp. 142—143). He clearly proves the new reading *ṣ*, and refers to the old reading *mr* as an "Irrtum den sämtliche Aegyptologen mich selbst nicht ausgeschlossen, begangen haben in Bezug auf die Lesung des Zeichens  in bestimmten Wörterverbindungen." Egyptology is among the sciences which are making rapid progress and Brugsch's old reading of over fifty years ago was one which he himself consigned to the populous limbo of incorrect and obsolete readings. Kyle also quotes the English edition of Erman's *Aegyptische Grammatik* as throwing doubt on the reading of  as *ṣ*. That edition represents a state of knowledge nearly twenty years old; it is entirely out of date and although I translated it myself, I have reason to hope that it will ere long be superseded by an English edition based on the *third* German edition, now in press. But even in the

¹ On the weak *i'* by which the scribe writes *'* at the end, see my note, *Records*, vol. iv, pp. 352—353, note f.

second German edition of 1903 the reading of  as *iw* (= *ṣ*) in "syllabic writing," is inserted without question (p. 217). Moreover, as I know from my notes of Erman's lectures twenty years ago he never questioned Brugsch's reading *ṣ* for  in "syllabic writing." His interrogation point in the first edition of his grammar has nothing to do with its use as *ṣ*, but refers to something quite different. The value *ṣ* which the sign  has in a large number of foreign words, is due to the fact that there arose a confusion in the usage of the Egyptian scribe between the sign  (*iw*) and  (*mr*), which in the lapidary style are very much alike.  and  in "syllabic writing" strictly equal *iw*, or disregarding the weak second consonant it is used for *i*, and this constantly corresponds both in genuine Egyptian words and in the writing of Palestinian words to the Semitic *ṣ*. All the numerous examples will now be found collected in Burchardt's recent and careful compilation of foreign words transliterated in Egyptian hieroglyphics¹ and it would be superfluous to repeat any of them here.

Not only was the reading *ṣ* demonstrated by Brugsch thirty six years ago, but we may go further and show that the reading *mr* in our word is impossible. In the "syllabic writing" the consonants *m* + *r* cannot be indicated by *one sign*! If the scribe finds the consonants *m* + *r* in a foreign word which he is transliterating, he renders them *invariably* by a syllabic sign or signs for each consonant, thus: for *m*:  *m*,  *my*,  *mr*,  *mw*,  *me* (or  *e*),  *m*,  *my*; for *r*:  *r*,  *yr* (?), or  *rw* (rarely ). Anyone at all incredulous on this point can satisfy himself of the fact in Burchardt's convenient list,² though the fact has been common property among Egyptologists for twenty years. The reading *mr* for  in our word is absolutely impossible.




Finally Professor Kyle objects to the reading of  as *m* and affirms that the second sign, the arm, is entirely ignored in the transliteration "Abram," and further that "the arm is

¹ *Die altkanaanäischen Fremdworte und Eigennamen im Aegyptischen* von Max Burchardt, Leipzig 1909—1910.

² See especially §§ 56—60 and 77—83.

a strong vowel letter which ought not without special reasons to be ignored in the transliteration." As a matter of fact



or  with the  is the usual writing for *m* in the "syllabic writing"; and even in Erman's grammar of twenty years ago, in the treatment of the alphabet (§ 35), the meaningless  with initial *m* in *Egyptian* words is duly noted. Its frequent use throughout the "syllabic writing" in the initial, medial or final position is a commonplace of modern knowledge.

It will be seen that none of the objections offered by Prof. Kyle cause any difficulty. I may refer to another interpretation of the name which has occurred to me since first publishing it in 1904. The consonants אברם might be the plural of אביר, and "The Field of Stallions" or "Bulls" would give excellent sense. It lacks however the preciseness which we expect in such a defining genitive, a preciseness which is only obtained by the use of a proper name after such a common word as "field." This is one of the objections also to the interpretation suggested by Maspero years ago, viz. that "brm" is אֲבָלִים* "meadows." To this we may also object that in Hebrew אֲבָל occurs only in compounds with a following noun in the genitive, and that *the plural is never found*. I am therefore still inclined to see in the word the earliest occurrence of the name Abram.

The K-Suffixes of Indo-Iranian. Part I: The K-Suffixes in the Veda and Avesta.—By FRANKLIN EDGERTON.

Chapter V.

Other Ka Suffixes.

The Suffix ika. § 92—94.

92. a) *Without Vriddhi.*

1) With meaning “having, possessing” (= 3 *ka*)—(2 words).
tūṇḍika (AV.), having a tusk or tooth, < *tūṇḍa*.

paryāyikā (AV.), having (i. e. composed in) strophes, < *paryāyā*.

2) With meaning “of,” “belonging to” &c. (= 2 *ka*). Adjectival, primarily. (13 words.)

khāṇḍika (B.S.) < *khaṇḍa*.

-*yūthika* (S.) < *yūthā*.

godānika (S.) < *godāna* (cf.

lalāṭika (S.) < *lalāṭa*.

gāud-, § 94).

-*vyomnika* (U.) < *vyōman*.

gonānika < *gonāmā*.

çāṇḍika (RV.) < *çāṇḍa*, patronymic.

jyotiṣṭomika (S.) < *jyōtiṣṭoma*.

ṣoḍaṣika (B.) < *ṣoḍaṣā*; *ṣoḍa-*

deçika (U.) < *deçā*.

çika = “connected with the 16-partite Stotra.”

pitṛmedhika (U.) < *pitṛmedha*.

mahāvratika (S.) < *mahāvratā*.

yamika (SV.B.) < *yamā*!

Three other words, which may have either the suffix *ika* or its equivalent 2 *ka*; see § 52.

93. b) *With Vriddhi.* Meaning always = 2 *ka*, “of,” “connected with” &c. Especially common in the Sūtras; infrequent before them. Not one case in RV.—Only two in AV. (*vārṣika*, *vāsantika*).—In all the Sāṃhitās and Brāhmaṇas only 16 cases (nearly all in Br.), against 64 found for the first time in Sūtras. The Upaniṣads add 11 which are not found in the other early literature; occurrences are much less common than in the Sūtras.

Double Vriddhi,—i. e. vriddhi of the principal vowels of both parts of a compound primitive—appears in the Veda only three times, to my knowledge: *dārçapāurnamāsika* (Çāṅkh.Çr. 5. 18. 7) < *darçapūrnamāsā*; *sārvavāidika* (Kāuṣ. 67) < *sarva-veda*; and *ṣāṭhkāuṣika* (Kāuṣ.) *ṣaṣ-koṣa*. Other instances in later language.

94. Word-list. Suffix *ika* with Vridhhi (*āgnika* = of or pertaining to Agni, and so forth). (105 words.)

āgnika (S.) < *agní*.

āgniṣṭomika (B.) < *agnīṣṭomá*.

āgnyādheyika (S.) < *agnyādhéya*.

ājāvika (S.) < *ajāví*.

ādhikārika (S.) < *adhikāra*.

ādhyātmika (U.) < *adhyātmá*.

ādhyāyika (U.) < *adhyāya*.

ādhvarika (B.S.) < *adhvará*.

ānumānika (S.) < *anumāna*.

ānuyājika (S.) < *anuyājá*.

āparāhnikā (S.) < *aparāhnná*.

ābhicaraanika (S.) < *abhicaraṇa*.

ābhicārika (S.) < *abhicārá*.

ābhiplavika (S.) < *abhiplavá*.

ābhyudayika (S.) < *abhyudaya*.

āvadānika (S.) < *avadāna*.

āvika (S.U.) < *áví*.

āçvamedhika (B.S.) < *açva-medhá*.

āikāhika (B.S.) < *ekāhá*.

āiṣṭika (S.U.) < *iṣṭi*.

āuttaravedika (B.) < *uttaravedí*.

āupavasathika (S.) < *upava-sathá*.

kṣāumika (S.) < *kṣumā*.

gāudānika (S.) < *godāna*.

cāturthāhnikā (S.) < *caturthāhan*.

cāturthika (S.) < *caturtha*.

cāturdhākāranika (S.) < *caturdhākāraṇa*.

cāturviṅçika (S.) < *caturviṅçá*.

chāndomika (S.) < *chandomá*.

jyāiṣṭhasāmika (S.) < *jyeṣṭhasāman*.

tādarthika (S.) < *tadārtha*.

trāivarṣika (S.) < *tri-varṣa*.

dākṣiṇāgnika (S.) < *dakṣiṇāgní*.

dārçapāurnamāsika (S.) < *dar-*

çapūrnamāsá (Double Vridhhi).

dāçarātrika (B.S.) < *daçarātrá*.

dhārmika (U.) < *dhárma*.

nāstika (S.U.) < *na-asti* (cf. *ās-tika*, Cl.).

nāimittika (S.) < *nimitta*.

nāiyamika (S.) < *niyama*.

nāiçcārika (S.) < *niçcāra*.

nāiṣṭhika (U.) < *niṣṭhā*.

pāñcamāhnikā (S.) < *pañcamāhan*.

pāramārthika (U.) < *paramārtha*.

[*pārṣṭhika* (S.) < *prṣṭhyà*- Suffix 2 *ka*—see § 29 a.]

pāunarādheyika (S.) < *punarārdhēya*.

pāūruṣamedhika (B.) < *puruṣamedhá*.

pāurvāhnikā (S.) < *pūrvāhná*.

prākaraṇika (S.) < *prakaraṇa*.

prāgāthika (S.) < *pragātha*.

prātinidhika (S.) < *pratinidhi*.

prādeçika (S.) < *pradeça*.

prāyaçcittika (S.) < *prāyaçcitta*.

brāhmāudānika (S.) *brahmāudānā*.

bhāktika (S.) *bhaktí*.

mādhuparkika (S.) < *madhuparká*.

yājñikā (S.U.) < *yajñá*.

yādrcchika (U.) < *yadrcchā*.

rājasūyika (S.) < *rājasūya*.

lāghavika (S.) < *lāghava*.

lāukika (S.) < *loká*.

vāyovidyikā (B.) < *vayovidyā*.

vārunapraghāsika (S.) < *varuṇapraghāsá*.

vārṣaṣatikā (S.) < *varṣaṣata*.
vārṣika (AV. +) < *varṣā*.
vāsantika (AV. +) < *vasantā*.
vāikalpika (S.) < *vikalpa*.
vāitānika (S.) < *vitāna*.
vāidika (U.) < *vēda*.
vāiṣeṣika (S.) < *viṣeṣa*.
vāiṣvadevika (S.) < *vāiṣvadevā*.
vrātika (S.) < *vratā*.
ṣākunika (S.) < *ṣakunā*.
ṣācivatika (S.) < *ṣācivant*.
ṣātkāuṣika (S.) < *ṣaṣ-koṣa*.
 (Double Vriddhi.)
ṣāḍahika (S.) < *ṣaḍahā*.
sāṁvatsarika (B.) < *sāṁvatsarā*.
sāṁṣaṁsika (B.) < *sāṁṣaṁsā*.
sāṁṣayika (S.) < *sāṁṣaya*.
sāṁsiddhika (U.) < *sāṁsiddhi*.
sāṁgrāmika (S.) < *sāṁgrāma*.
sāṁghātika (S.) < *sāṁghātā*.
sāttrika (B.S.) < *sattrā*.
sāttvika (U.) < *sattvā*.
sāṁnipātika (S.) < *sāṁnipāta*.
sāptamika (S.) < *saptamī*.
sāptarātrika (B.) < *saptarātrā*.

sāmayācārika (S.) < *samayācāra*.
sāṁavāyika (S.) < *samavāya*.
sāmika (S.) < *sāman*. (See § 38.)
sāṁpātika (S.) < *sāṁpāti*.
sāṁpradāyika (U.) < *sāṁpra-*
dāya.
sārvakāmika (S.) < *sarvakāma*
 (as n.).
sārvakālika (S.) < *sarvakāla*.
sārvayajñika (S.) < *sarvayajña*.
sārvavarṇika (S.) < *sarvavarṇa*.
sārvavāidika (S.) < *sarvaveda*.
 (Double Vriddhi.)
sāvika (S.) < *savā*.
sāugandhika (B.) < *sugandha*.
sāūtrāmaṇika (B.) < *sāūtrā-*
maṇī.
sāumika (S.) < *sōma*.
stāubhika (S.) < *stobha*.
svābhāvika (S.U.) < *svabhāva*.
svārasāmika (S.) < *svārasāman*.
hāviryajñika (S.) < *haviryajñā*.
hāimantika (VS.TS. +) < *he-*
mantā.
hāutrika (S.) < *hotrā* (or *hōtr*).

The Suffix aka. 95—97.

95. For 1 *aka*, see § 16, where the examples are quoted. (2 words.)

2 *aka*.—Nouns of action from verb stems. Usually neuter; one or two fem. See § 17. (8 words.)

abhiméthikā (ÇBr.), ribald talking, < *abhi-Vmīth*.

-ācaka in *ānācaka* (ÇBr.), not eating, fasting (as noun), < *Vaṇ*.

codaka (KātyÇr.), invitation, direction, < *Vcud*.

jīvikā (U.), manner of life, < *Vjīv*? But cf. *jīvā*, life. Perhaps secondary.

pātaka (S.U.), sin, fall, < *Vpat*? But cf. *pāta*; very likely secondary.

pūraka (U.), "filling" of the lungs, inspiration, < *Vpr*.

prakṣepaka (U.), throwing (noun), < *pra-Vkṣip*.

recaka (U.), expiration, < *Vric* (cf. *pūraka*).

Cf. also *pravalhikā* < *pravalha*, n., or from *pra-Vvalh*; § 91.

The noun *kumbhaka*, "inflation" (of the breath-passages, i. e. keeping them full of air, a religious exercise) Amṛt.Up. 9 *et alibi*, gets its *-ka* by levelling from the nouns *pūṛaka* and *recaka* (see above), which are found in close juxtaposition to it (they being also religious exercises). *Kumbhaka* is of course formed from the noun *kumbhā* (because the appearance of a person performing the exercise suggested a pot), while the other two are formed by the suffix *aka* from roots.

96. 3 *aka*.—Participial adjectives and nouns of agent. At first only the latter use is found. All the Vedic cases outside the Upaniṣads, except two in the Sūtras, are exclusively used as nouns (of agent), not as adjectives. In the Upaniṣads the two uses are found mingled about as in later Skt.—The only words which appear before the Upaniṣads are:

AV.:—{ *pīyaka*, n. of a class of demons; "abuser"? *Vpīy*.
 { *kṛttikā*, pl. the Pleiades (as a sword); *Vkṛt*. See § 20.

VS.:—{ *abhikrōṣaka*, reviler, *abhi-Vkruṣ*.
 { *vilāyaka*, soother, *vi-Vlī*.

Br.:—{ *īkṣakā* (CBr.), spectator, *Vīkṣ*.
 { *pariprechaka* (GopBr.), inquirer, *pari-Vprech*.

and four words quoted in Whitney's Verb-forms as primary derivatives from the Brāhmaṇas, which may belong here; I have not been able to find where they occur. They are:

dhuvaka-Vdhū.

pāṭaka-Vpat.

lambhaka-Vlambh.

sāraka-Vsṛ.

Sūtras:—{ *avabhedaka*, "splitter," epithet of headache, *ava-Vbhīd*.
 { *upāsaka*, servant, *upa-Vās*.
 { *khādaka*, eater, *Vkhād*.
 { *prekṣaka*, spectator; as adj. deliberating on, *pra-Vīkṣ*.
 { *vināyaka*, n. of demons, *vi-Vnī*.
 { *saṁjīvaka*, animating, *sam-Vjīv*.

The remaining words are all Upaniṣadic, and a majority of them are adjectival (participial) in meaning. There are signs of a tendency for these words to take the meaning of the *causative* of the verb-root from which they are derived; so, e. g., *tāraka* „one who takes across or saves;" *pravartaka* „one who sets in motion." In the Classical language this tendency became very prominent, and the number of such causative words in *-aka* is large, as will be shown in Part II of this book.

97. In this list, which includes all Vedic words in 3 *aka*, the *roots* are listed alphabetically; roots compounded with prepositions are placed under the simple roots. The accent was on the root-syllable regularly. (45 words: 40 different roots.)

<i>añj + vi</i>	<i>vyañjaka.</i>	<i>nī + vi</i>	<i>vināyaka.</i>
<i>aṭ</i>	<i>āṭikī</i> (? n. pr.).	<i>paṭ</i>	<i>pāṭaka</i> (?).
<i>asūy</i>	<i>asūyaka.</i>	<i>pad + ud</i>	<i>utpādaka.</i>
<i>āp + vi</i>	<i>vyāpaka.</i>	<i>pīy</i>	<i>pīyaka.</i>
<i>ās + upa</i>	<i>upāsaka.</i>	<i>prcch + pari</i>	<i>pariprcchaka.</i>
<i>īkṣ</i>	<i>īkṣaka.</i>	<i>bhās + ud</i>	<i>udbhāsaka.</i>
<i>+ pra</i>	<i>prekṣaka.</i>	<i>bhid + ava</i>	<i>avabhedaka.</i>
<i>kṛ</i>	<i>kāraaka.</i>	<i>muc</i>	<i>mocaka.</i>
<i>kṛt</i>	<i>kṛttikā</i> (see above,	<i>yac</i>	<i>yācaka.</i>
and also § 20).		<i>yaj</i>	<i>yājaka.</i>
<i>klp + sam</i>	<i>saṁkalpaka.</i>	<i>rudh + ni</i>	<i>nirodhaka.</i>
<i>kruç + abhi</i>	<i>abhikrōçaka.</i>	<i>lambh</i>	<i>lambhaka</i> (?).
<i>khād</i>	<i>khādaka.</i>	<i>lī + vi</i>	<i>vilāyaka.</i>
<i>gras + ud</i>	<i>udgrāsaka.</i>	<i>vac</i>	<i>vācaka.</i>
<i>cint</i>	<i>cintaka.</i>	<i>vṛ</i>	<i>vāraka.</i>
<i>jap</i>	<i>jāpaka.</i>	<i>vṛt + ni</i>	<i>nivartaka.</i>
<i>jīv + sam</i>	<i>sañjīvaka.</i>	<i>+ pra</i>	<i>pravartaka.</i>
<i>tr</i>	<i>tāraaka.</i>	<i>+ sam</i>	<i>saṁvartaka.</i>
<i>dā</i>	<i>dāyaka.</i>	<i>vraj + pari</i>	<i>parivrajaka.</i>
<i>+ pra</i>	<i>pradāyaka.</i>	<i>sādh</i>	<i>sādhaka.</i>
<i>dīp + pari</i>	<i>paridīpaka.</i>	<i>sṛ</i>	<i>sāraka</i> (?).
<i>dhu</i>	<i>dhuvaka</i> (?).	<i>sev</i>	<i>sevaka.</i>
<i>nī</i>	<i>nāyaka.</i>	<i>hīns</i>	<i>hīnsaka.</i>

The Suffix *uka*. §§ 98—99.

98. (For Secondary *uka*, see § 21, where supposed examples are quoted.) *Primary*. Words of present-participle meaning (besides *ā-lambhukā*, see § 24, with gerundival meaning) from verbal roots. Practically limited to the Brāhmaṇa language (see §§ 22—24). Of 71 Vedic words all but four are found in the Brāhmaṇas. These four are:

<i>sānukā</i> (RV.), $\sqrt{\text{san}}$.	<i>vīkasuka</i> (AV.), $\text{vi-}\sqrt{\text{kas}}$.
<i>rdhnuka</i> (S.), $\sqrt{\text{rdh}}$.	<i>lambhuka</i> (U.), $\sqrt{\text{lambh}}$.

The AV. has furthermore three words which are also found in the Brāhmaṇas, viz: *ghātuka* ($\sqrt{\text{han}}$), *a-pramāyuka* ($\text{pra-}\sqrt{\text{mā}}$), *sāṁkasuka* ($\text{sam-}\sqrt{\text{kas}}$). This makes five pre-Brāhmaṇic in-

stances; for the YV. Samhitās proper do not contain a single instance, so far as recorded. Following are the 71 Vedic words I have noted, arranged alphabetically under the 57 roots. On the forms of the roots, see § 24. The accent is on the root-syllable, whether the root is simple or compound,—unless *a*-privativ is prefixed, in which case it has the accent. The only exceptions are *sānuká* (RV.), *vi-* and *sām-kasuka* (AV.), which date from the formative period of the suffix; *sānuká* was not felt as *Vsan* + suffix *-uka*, but as an *u*-base from *Vsan* (*sanoti*) + suffix *-ka*.

99. <i>açanāya</i>	<i>açanāyuka.</i>	<i>naç</i>	<i>nañçuka.</i>
<i>i + abhi</i>	<i>abhyāyuka.</i>	<i>pat + parā</i>	<i>parāpātuka.</i>
<i>+ vi</i>	<i>vyāyuka.</i>	<i>pad + pra</i>	<i>prapāduka.</i>
<i>r</i>	<i>āruka.</i>	<i>pis</i>	<i>pēsuka.</i>
<i>rt</i>	<i>ārtuka.</i>	<i>pus</i>	<i>poşuka.</i>
<i>rdh</i>	<i>ārdhuka</i>	<i>bandh + ud</i>	<i>udbāndhuka.</i>
	<i>rdhnuka.</i>	<i>bhid + vi</i>	<i>vibhinduka.</i>
<i>+ sam</i>	<i>samārdhuka.</i>	<i>bhū</i>	<i>bhāvuka.</i>
<i>+ ā</i>	<i>ārdhuka.</i>	<i>+ parā</i>	<i>parābhāvuka.</i>
<i>+ vi</i>	<i>vyārdhuka.</i>	<i>bhrañç + pra-</i>	<i>prabhrāñçuka.</i>
<i>kam</i>	<i>kāmuka.</i>	<i>mad + ud</i>	<i>unmāduka.</i>
<i>kas + vi</i>	<i>vīkasuka.</i>	<i>man + abhi</i>	<i>abhimānuka.</i>
<i>+ sam</i>	<i>sāmkasuka.</i>	<i>mī + pra</i>	<i>pramāyuka.</i>
<i>kṛ</i>	<i>kāruka.</i>	<i>muh</i>	<i>mōhuka.</i>
<i>kṛ + prā</i>	<i>prākāruka.</i>	<i>mṛ</i>	<i>māruka.</i>
<i>kram + apa</i>	<i>apakrāmuka.</i>	<i>mṛj + nis</i>	<i>nirmārguka.</i>
<i>+ upa</i>	<i>upakrāmuka.</i>	<i>mrit + nis</i>	<i>nirmretuka.</i>
<i>kṣudh</i>	<i>kṣódhuka.</i>	<i>yaj</i>	<i>yājuka.</i>
<i>gam + ā</i>	<i>āgāmuka.</i>	<i>ruc</i>	<i>rócuka.</i>
<i>grah</i>	<i>grāhuka.</i>	<i>rudh + apa</i>	<i>aparódhuka.</i>
<i>car + abhy -ava -abhyavacār-</i>		<i>ruh + abhy-ā</i>	<i>abhyāróhuka.</i>
<i>uka in ān-a.</i>		<i>lambh</i>	<i>lambhuka.</i>
<i>cyu + pra</i>	<i>pracyāvuka.</i>	<i>vad + abhi</i>	<i>(an)abhivāduka.</i>
<i>jan</i>	<i>jānukā.</i>	<i>vid (1)</i>	<i>véduka.</i>
<i>ji</i>	<i>jāyuka.</i>	<i>vid (2)</i>	<i>véduka.</i>
<i>dañç</i>	<i>dāñçuka.</i>	<i>vṛ</i>	<i>vāruka.</i>
<i>das + upa</i>	<i>upadāsuka.</i>	<i>vṛş</i>	<i>vārşuka.</i>
<i>dah</i>	<i>dāhuka.</i>	<i>veşṭ</i>	<i>vēşṭuka.</i>
<i>+ nis</i>	<i>-nirdāhuka in ā-n.</i>	<i>çuş + ud</i>	<i>ucchōşuka.</i>
<i>nam + upa</i>	<i>upanāmuka.</i>	<i>çṛ + sam</i>	<i>samñçāruka.</i>
<i>naç</i>	<i>nāçukṛp</i>	<i>sad + apa-ni</i>	<i>apaniśāduka.</i>

<i>san</i>	<i>sānukā.</i>	<i>han</i>	<i>ghātuka.</i>
<i>sthā</i>	<i>sthāyuka.</i>	<i>hṛ</i>	<i>hāruka.</i>
+ <i>upa</i>	<i>upasthāyuka.</i>	+ <i>pra</i>	<i>prahāruka</i>
+ <i>prati</i>	<i>pratisthāyuka</i>	<i>hlād</i>	<i>hlāduka</i>
	in <i>ā-p.</i>	<i>hvr + vi</i>	<i>vihvāruka.</i>
+ <i>praty-ud</i>	<i>pratyutthā-</i>		
	<i>yuka</i> in <i>a-p.</i>		

The Suffix *ūka*—see § 25, where all quotable examples are given. (3 words.)

The Suffix *īka*. See § 26. (20 words.)

100. a) *Verbal adjectives* or *nouns of agent* from Verbal bases. (*ācarīka*, AV., tearing pains; < *āVçr̄* in dissyllabic form *çarī*; primary *ka*.)

-rjīka, RV., AV., gleaming; *Vr̄j* (in *árjuna*, *rjrá*, *rjīti*).

In *āvīr-*, *bhā-*, *gó-rjīka*. That the word ever means “mingled with,” except in a purely secondary way, I do not believe. *gó-rjīka* is commonly rendered “mixed with milk,” but more accurately it means “milk-shining,” „gleaming with milk” (of the soma-mixture).

dūṣīka, AV. n. of demons, “spoilers;” *Vdus̄* (*dūṣ*).

dr̄çīkú, TS., beholder, *Vdr̄ç*.

dṛbhīka, RV., n. of a demon, *Vdr̄bh-* weave, tie.

[*parpharīka*?—RV. 10. 106. 6.—BR. merely quote Sāy.—

“Zerreisser oder Erfüller;” other comm. have various guesses; nothing certain. The whole hymn is late, and purposely mystical and obscure. With reference to *turphārī*, which is closely connected with it, I should suppose that *parpharīka* is a secondary formation to **parpharī*; but it might be primary, from the root of *parpharati* (next verse). Ludwig “zerstreuend,” Grassmann “Gaben ausstreuend.”]

(*viçarīka*, AV., a disease; primary *ka*—see *āçarīka*. But cf. *viçarā*.)

vrdhīkā, RV., n. of Indra, “increaser;” *Vvrdh̄*.

101. *Other Uses.*

b) Gerundive Adjectives from Verbal bases:

iṣīkā (AV. +), “to be shot,” an arrow, *Vīṣ̄*.

dr̄çīka (RV.) “to be seen,” splendid, *Vdr̄ç*.

c) Abstract Nouns from Verbal bases:

dr̄çīka, and (once) *-ā* (RV.), appearance, *Vdr̄ç̄*.

mṛḍīkā, and (deriv.) *mārḍīkā* (RV.), favor, mercy, *Vmṛḍ̄*.

d) Secondary nouns from nouns, with mg. of 1 *ka*.
ṛkṣīkā (AV.), n. of an evil spirit; "bear-like?" < *ṛkṣa*?
kaçīkā (RV.), weasel; < *kāça*, the same or a like animal.
kumbhīka (AV.), a sort of demon; perhaps cf. *kumbhá*.

e) Wholly uncertain are the following words (see General Index for what little can be said about them):

<i>ūtika</i>	<i>çarṣīkā</i>
<i>kulīkā</i> (<i>pulīkā</i>)	<i>sātika</i>
<i>cupunīkā</i>	<i>sārṇīka</i>
<i>parārīkā</i>	<i>suṣilīka</i> (for <i>çuçulūka</i> ?)

The Adverbial Suffix k—see § 27, where all quotable examples are given.

The Primary Suffix ka. See § 28.

102. Nothing remains after what has been said (§ 28) but to give an alphabetical list of those words which have most the appearance of primary derivatives. Any attempt to assign definite meanings to the suffix, except in a general way as has been done in § 28, would be fruitless. How many of the words here listed are really formed from true "roots" or bases with the suffix *ka*, not from lost adjectives or nouns, is a question that is very difficult to answer.—It will be noted that the words are nearly all ancient, most of them appearing in the RV.—In the case of some it is very doubtful whether the suffix *ka* is really contained in them. When this is the case it will be indicated.

103. *Word list.—Primary ka.* (About 30 words.)

ātka (RV.), a garment, Av. *aḍka*.

āçarīka (AV.), a disease, "tearing pains," < \bar{a} - $\sqrt{çr}$, in dissyllabic form *çarī*. Cf. *viçarīka*.

āsuka (ĀrṣBr.), n. of a *sāman*, < \bar{a} - \sqrt{su} ? Comm. < *asuka*, an alleged n. pr.

ēka (RV. +), one. IE. base *oi-*.

karkā (AV.), white. ?

kṣvīnkā (RV.) a cert. bird. Prob. onomatopoetic.

jāhakā (TS., VS.), hedgehog. $\sqrt{hā}$.

nāka (RV.), heaven. Suggested \sqrt{nam} ; IE. *n̄m* + *ka*. Quite uncertain.

nika (ĀrṣBr.), n. of a *sāman*.—Cf. *ni*?

niṣkā (RV.), a neck ornament. ? Cf. OHG. *nusca*, OIr. *nasc*.

nihākā (RV.), storm. ?

pāka (RV.), very young; simple &c. Prob. $\sqrt{pā} + ka$, "suckling."
pikā (VS.), a bird. Uhlenbeck compares *pīcus*; very doubtful.
baka (KS.), n. pr. (in Class. Skt., a crane). Prob. non-suffixal *k-beṣka*, *bāṣka*, *beṣka*, *meṣka*, *veṣkā*, *vleṣka* (YV. +), a snare.

Perhaps from \sqrt{ve} , *vay-weave*. But Brugm. has a different etymology, assuming *vleṣka* as the orig. form.

bheka (Māitr.Up.), frog. Prob. onomatopoetic.

mūka or *mūkā* (VS.), dumb. Cf. *mūrā*, $\mu\acute{o}-\omega$, Lt. *mūtus*.

-mēkā in *sumēka* (RV.), well-established. $\sqrt{mē}$.

yaska (S.), n. pr. ? (*yāskā*, patron.).

rākā (RV.), full-moon. Cf. *rā(i)*?

lēka (TS.), n. of an Āditya. $\sqrt{lē}$, stick, lie,—?

valkā (TS.), tree-bark. Perhaps cf. \sqrt{vr} , cover.

vika (Ārṣ.Br.), n. of a sāman. Cf. *vi*?—Compare *nika*.

viçarika (AV.), a disease, cf. *āçarika*; < *vi-√çr̥*, in dissyllabic form *çarī-*. But cf. *viçarā*!

vṛkkā (RV.), kidney, for *vṛtka*, as Av. *varədko* shows. Further etym.?

çulkā (RV.), price. Uncertain.

çuṣka (RV.), dried up. $\sqrt{çuṣ}$. Av. *huṣka*.

glōka (RV.), sound &c. $\sqrt{çru}$

çva-kiṣkīn (AV.), of uncertain meaning and etymology.

saṃpuṣka (S.), unground. Mistake for *saṃ-çuṣka*?

(*sṛkā* (RV.), arrow = Av. *harəko*, $\sqrt{harəc}$; non-suffixal *k*).

(*stuka*), child (TĀr.), text probably corrupt.

(*stūkā*, hair-tuft, called by Wh. primary, but see § 42.)

stokā (RV.), drop, \sqrt{stu} , as in *ghṛta-stāvas* (better than the derivation from $\sqrt{çcut}$ by metathesis).

sphaṭika (U.), crystal. $\sqrt{sphaṭ}$, burst, only Dhātup; Uhlenbeck compares *spalten*.

-sphākā (AV.) in *pīvaḥ-sphākā*, swelling with fat. $\sqrt{sphā(i)}$.

Chapter VI.

The Suffix in Av., compared with RV.; the Prehistoric Suffix.

Based on list of Av. words in Bartholomae's Wbch.

104. In striking contrast to the fullness and richness shown in the development of the *ka* suffixes in Skt. stands the meager use of them in the most closely related language, Avestan. Not only are the Av. instances very few in number (barely over

50 in Bartholomae), but semantically the conditions are primitive compared with those existing even at quite an early date in the sister language of India. However, if we examine separately the *ka* suffixes found in the RV. alone, we shall find a striking resemblance between them and those of the Av. And from a combination of the two it will be possible with a fair degree of confidence to deduce the values which the suffix had in the common Ind.-Iran. period. We shall find, it may be added, that these values were surprisingly restricted, in comparison with the extent to which the suffix developed in later Skt. It will be seen at once that this fact may have an important bearing on the question of the origin of the suffix in the still more remote IE. period.—Probably it will appear that too much weight has been placed on the great frequency of the suffix in some historic languages, notably Skt. and Gk. But there is no evidence that it was at all common in the parent language; rather, there is evidence to the contrary.

105. Let us first take up briefly the state of the suffix in the RV. The only common use of it is our first category, 1 *ka* (§ 9), to which (with its subdivision, the diminutive *ka*) belong over half the *ka* words whose derivation is determinable. Inside this division the dim. and pej. words again largely predominate, with about 40 words as against 11 cases of 1 *ka* in its non-dim. use as a suffix of characteristic. Over half of the 40 diminutives are pejoratives of one sort or another.—The adjectival suffix 2 *ka* (§ 11) is unknown except for 7 pronominal adjectives (*māmakā* &c.) and the n. pr. *kuçikā* (§ 52) which is more or less uncertain, though it has been clast here. Only the faint beginnings of the Possessiv and Bahuvrihi suffix 3 *ka* appear, with three cases of a transitional character, which might be considered cases of 1 *ka* (characterizing adjectives). Interesting are the two RV. cases of 4 *ka*, giving activ value (§§ 13, 19).—None of the derived suffixes *ika*, *aka*, *uka*, *ūka*, are found, if we except *çāṇḍika* (said to be a patronymic < *çāṇḍa* on no other authority than Sāyana), *sāyaka* and *sulābhikā* (uncertain and in any case not belonging in meaning to the later suffix *aka*), *sānukā* (really a case of primary *ka* from the verb-stem *sanu-*, like *viçarika* (§ 103) from *çarī-Vçr̥*); and the curiously anachronistic word *jāgarūka* (§ 25). The little group of *ika* words (§§ 100, 101) is not very clear and may be neglected. The five RV.-adverbs in *-ka*

are also not clear, but are most likely developed from forms of 1 *ka*. There remain only the dozen or more primary *ka* derivatives.

106. Practically, then, in the RV. the suffix is used (1) as a primary suffix, most often giving active verbal force (which also appears in two secondary adjectives); (2) as a secondary suffix, forming nouns and adjectives of likeness and characteristic; (3) as a dim. and pej. suffix (developed out of the preceding); (4) as a secondary suffix forming adjectives of appurtenance and relationship (almost restricted to pronominal bases).

107. These same conditions are approximately reproduced in the Av., though not in the same numerical ratio; the proportion of diminutives is very much smaller, and the pejorative category is much less clear-cut and certain than in the RV., so that its existence might even be doubted from the standpoint of the Av. language alone. The investigation of such fine shades of meaning is extremely difficult in the Av. because of the limited material. A number of words which evidently contain suffixal *ka* cannot be classified with certainty as to semantics because the primitives from which they were derived do not chance to occur, so that we cannot be certain as to just the touch which the suffix added. Following is an attempt to classify the *ka* words of Av. along the same general lines already applied to the Vedic words.

108. *Suffix 1 ka* (§ 9). 12 words. a) noun < noun; mg. "like, similar to" (§ 40).

mašyāka, man (homo; perhaps orig. adj., humanus?) < *mašya*.

The *ā* is probably a textual mistake.

b) adj. or subst. < noun, mg. "characterized by (a quality or thing)."

apakhraosaka, reviling (i. e. having a nature giving to reviling, characterized by reviling, not the same as a verbal adj.); as Barth. rightly says, from **apakhraosa* (*apa-khrus*) = Skt. *apakroṣa*, n.—The accidental resemblance of this and one or two other words to the late Skt. development of primary *aka* (see § 96) should mislead no one. Cf. *nipaśnaka*, with analogous meaning, but proving by its suffixal *-na* that it is a nominal derivative.

apaskaraka, scornful, < **apaskara* (hypothetical), "scorn." Cf. *apakhraosaka*. Barth. cannot explain the etymology. Could it not be from *apa-(s)kar*? In Skt. *apa-kr* means "injure, insult."

daitika, wild beast, presumably from *dat*; "characterized by, remarkable for teeth." The *i* is probably euphonic; cf. Vedic *iyat-t-ikā*, *mīt-t-ikā*, § 36.—Cf. AV. 4. 3. 4 *vyāghrām dat-vātam prathamām*.

paitika, quarrelsome, < *paiti* = Skt. *prāti*. Barth. derives < *pait-yañc*, which seems inferior. Cf. Ved. *ādhika*, *āmuka*, *antikā* (§ 47).

nipaśnaka, envious (i. e. characterized by envy). < **nipaśna* (hypothetical), envy, < *ni-paśna* ($\sqrt{paś}$ = Skt. *paç*).

pūitika, "having the character of **pūiti* = Skt. *pūti*, cleansing"; i. e. cleansing (adj.).—This partakes of the character of 4 *ka*, by its active force.

bandaka, subject, vassal, < *banda*, fetter. Contrast Skt. *bandhaka*, captor (-*aka*).

nivayaka, terrifying, < **nivaya*, terror (*ni* + *vay*, *bay*, = Skt. *bhī*). Cf. *apakhraosaka*.

vazarka, great; cf. *vazārət*, mighty. Perh. cf. Skt. *ojas* &c. If so, it would mean "characterized by, having, strength." In this word and in *daitika* we have formations leaning in the direction of the possessiv suffix (3 *ka*), which however remain abortiv in Av.

spaka, dog-like, dog- (adj., applied to serpents). Cf. Hdt. 1. 110 *σπάκα τὴν κύνα καλέουσι οἱ Μῆδοι*.

c) subst. < adj. (§ 46), *syāmaka*, n. of a Mt., < **syāma* = Skt. *śyāmā*, dark, black. Cf. Av. *syāva-* (in comp.), id.

109. *Simple Diminutives*. (11 words.)

apərənāyuka, minor, child (usually adj.), < *a-pərənāyu*, id. ("not having full age").

araeka, a sort of ant. Etym. unknown. Dim.? Cf. Skt. *pipīlaka*, Lat. *formica*, &c.

kainikā, girl; Dim. of *kainī*, *kainyā* = Skt. *kanyā*.

kanukā, n. of a pious damsel. Cf. *kainyā*? Dim.? Perh. a misreading.

kasvikā, very tiny < *kasu*, tiny, (cpv. *kasyah*, sup. *kasiṣṭha*; the *i*-(*ka*) seems to have been carried over from these forms).

kutaka, small, cf. NP. *koda*, child. Presumably Dim.

carāitikā, young woman, < *carāiti*, id. Dim.; of Endearment?

jahikā, wife (of demon. beings); common, wicked woman. *jahī* has the same meanings. Dim. (orig. of endearment? or Pej.?)

pasuka, domestic animal, from and = *pasu*. Dim.? cf. Skt. *paçukā*.

nāirikā, woman, wife, chief wife (ahuric; opp. to *jahikā*).

< *nāirī*, woman, wife = Skt. *nārī*. Dim., prob. of endearment.

nemadka, brushwood, small kindlings, = *nemata*. Perhaps dim.

For the dropping of -a cf. Ved. *ṣālka* < *ṣalā*, § 29 b.

110. *Pejorativ Diminutivs.*

The extensiv development of the contemptuous and imprecatory meanings of the suffix *ka* which characterize the Veda is markedly lacking in the Av. In fact, on the basis of the Av. language alone it would scarcely occur to any one to set up this department of the suffix.—Nevertheless, there is a group of evil words in *ka*, mostly names and epithets of demoniacal personages, which seems to me too numerous to be quite accidental. Cf. the Ved. use of the suffix with names of demons, § 78.—It cannot be claimed to be absolutely certain that the suffix in these Av. words was felt in this way, but it is at least quite probable. Besides *jahikā* above (which may have been originally endearing) the following are the words in question. Their etymologies are largely uncertain. (10 words.)
dahaka, n. of demons (also epithet of Vayu).—Cf. Skt. *dāsā*, *dāsyu*, Av. *dahyu*.

dahāka, n. of a fabulous demon-king. Cf. *dahaka*.

(*dužaka*); opprobrious epithet of the hedgehog.—Barth. takes it [as a Bah. < *duž* + *aka*; otherwise it might be a pej. formation.

(*druka*), n. of a disease, sin, or the like. Etym.? If suffixal at all, the *ka* is probably imprecatory.

pairikā, enchantress. Barth. in BB. 15. 8 < Skt. *para*-; very improbable, phonetically as he admits in his Lex., and also semantically. No etym. of value has been suggested. Prob. imprec.

mūraka, n. of devilish beings. Etym. and Mg. unc.; prob. < *mūra* = Skt. *mūrā*, dull, stupid. Pejorativ.

vawžaka, n. of a demoniacal animal; acc. to Barth. < **vawža* = bal. *gvabz*, bee, wasp, cf. Skt. *ūrṇa-vābhi*, spider.—Imprec.?
a-vərəzikā, not working, lazy (demonic word). < *vərəzi*, working (comp.). Pej.

rapaka, supporting, siding with (only with *daevanam*). < **rapa* *Vrap*; Imprec.?

zairimyāka, n. of the tortoise, a demonic beast; acc. to Barth. "abbreviation" of *zairimyanura*, with dim. (i. e. imprec.) suffix.

111. *The Suffix 2 ka* (§ 11). (5 words.) As in the RV., the clearest examples are pronominal adjectives: *ahmāka* = *asmāka*, *yušmāka* = *yušmāka*. Furthermore: *anāmaka*, n. of a month, lit. "of, belonging to, the Nameless (the Supreme Deity)," acc. to Barth., < **anāman*. If this is correct, the suffix is *2 ka*.—*arika*, hostile, is better derived from **ari* = Skt. *arí*, enemy. Barth.'s labored derivation seems inferior.—Here seems also to belong: *pacika* < **paca* (*Vpac*) in the adj. *yāmō-pacika*, with *khumba*, "a vessel intended for burning glass." In this sole instance we have what looks like the Skt. suffix *ika* (§ 92). The lack of parallels in RV. and Av. is against this, however. Probably the *i* was really the result of some analogy, now indiscernible,—if it is not a corruption of the text.—That *vākhədrikā*, n. of a Mt., is a Vriddhi formation from an imaginary **vakhədra* is a quite arbitrary assumption on the part of Barth. There is no Av. instance of vriddhi with a *ka* suffix. Neither does the RV. know this phenomenon, which only comes in with the development of the suffixes *2 ka* and *ika*.

112. *Primary ka* (§ 103). (7 words.) *zinaka*, destroying, a true verbal adj. < *zīnā-*, present base of *Vzī-*.—*adka*, garment, = Skt. *atka*.—*varədka*, kidney, = Skt. *vrkkā*.—*huška*, dry, = Skt. *śuška*.—*marždika* or *mərəzdika*, mercy, = Skt. *mṛḍikā*. The appearance of *i* (Skt. *ī*) in derivatives from this root is as perplexing as it is persistent.—*araska*, (supposed to mean) envy, cf. *arəsyant*, Skt. *īrśyati*. Abstract noun from root; cf. Ved. *ḷōka* < *ḷru*, and the following.—*saokā* n. or f. advantage(?); < *Vsu*—to be of advantage to. Abstract noun < root, cf. *araska*. (Or, possibly, < *Vsuc* = Skt. *śuc*?)

113. *Unclassified*. (10 words.)

The following Av. words mostly must have suffixal *ka*, but are not clear etymologically.

kuganakā, n. of a city.—*tudadkā*, n. of a Mt.; has the appearance of being derived from a pres. part. stem, cf. Skt. *ejatkā*, *brhatka*.—*druvika*, howling, groaning (imprecatory *ka*?).—*pəraskā*, price; see Barth. Wbch. and references there quoted. If from the base IE. *pret-* (as generally assumed), the suffix must be *-skā*, for **prtkā* could not give Av. *pəraskā*.—*frašumaka*, buttocks.—*nyākā*, grand-father, -mother.—*yaska*, disease, perhaps for **yaks-ka*, cf. Skt. *yākṣma*.—*vākhədrikā*, n. of a Mt.—*vāidimīdka*, in *urunyō-v*, n. of a Mt. Uncertain; Barth. conjectures

-*midka* < **mit* = Skt. *mit*, pillar.—*sanaka*, mouth (of the Tigris). Etym. unknown.

114. *The Prehistoric Suffix ka.*

What, then, on the basis of these results, appears to have been the state of the suffix in primitive Aryan? Although argument from negation has its dangers, it is hardly likely that uses of any frequently occurring suffix which are found in later Skt., but not in the RV., nor in the Av., could have belonged to the prehistoric Ind.-Iran. On that hypothesis, we must rule out the derived suffixes *ika*, *aka* (Verbal), *uka* and *ūka*, all of which are practically lacking in RV. and Av.¹ We therefore cannot accept Brugmann's statement (Gr. II²: 1 p. 488) that the adjectival suffix *-igo-* (= Skt. *ika*) is found "throughout the entire IE. territory." In the oldest strata of Aryan it cannot be proved to have existed, unless by one or two sporadic and doubtful examples; and its extensiv growth in Skt. is certainly a late development.—The use of *ka* as a possessiv suffix (3 *ka*) shows only the barest beginnings in RV., and as a conscious suffixal category is also post-Aryan.—The suffix 2 *ka* evidently existed in Aryan, but its use was principally restricted to pronominal stems. The adverbial *-k* is not demonstrably Aryan, no instance occurring in Av.—We have left, then, as the demonstrable uses of the *ka*-suffix in Ind.-Iran.: 1) the formation of nouns of likeness or adjectives of characteristic; 2) the diminutive and (perhaps) pejorative formations, 3) occasional formations with 2 *ka*, mainly pronominal adjectives,¹ and 4) the primary formations from verbal bases, apparently inclining towards the meaning of verbal adjectives or nouns of agent (with which meaning also a few secondary formations are created). This primary use of the suffix was proportionately much more frequent, it seems, in the prehistoric language than in the literature we have, where it has died out as an active formant, overwhelmed by the flood of secondary *ka* formations. In its

¹ Neglecting *jāgarūka*, the alleged patronymic *cāṇḍika*, and the isolated Av. *-pacika*. As has been said (§ 108) the *i* of Av. *daitika* is probably merely euphonic, cf. Ved. *mṛttikā*; and in any case its meaning does not fit with the ordinary meaning of the suffix *ika* (= 2 *ka*). *-kasvika*, which Brugm. quotes as an example of Av. *ika*, is still less apt, for it is obviously a diminutive formation, and in Aryan they always take simple *ka*. As has been indicated (§ 109) its *i* is probably analogical, from *kasyah*, *kasiṣṭha*,

place sprang up the various derivativ *ka*-suffixes of Skt. which have this active value exclusively.

115. If these conclusions be accepted, it will be seen at once that the suffix *ka* was much more restricted in early times than is often assumed. It may be that in the same way the extensiv use of *-kos* suffixes in Gk. and other languages will prove to be secondary. At any rate, from the Aryan point of view the range of the IE. *kos* or *qos* appears to have been quite limited.

116. We cannot conclude this brief allusion to the IE. suffix *ka* (which will probably at some future time receive more fitting consideration) without mentioning Leskien's interesting chapter on the related *k*-suffixes of Lithuanian¹, especially as it seems to bear out in general our position as to the comparatively restricted use of *ka* in IE. In Lith., according to Leskien, *ka* appears principally in the derivativ suffixes *ika*, *oka*, *uka*,—all evidently of secondary origin and not dating back to the Ursprache. They preserve (in a confused and rather hit-or-miss way) practically the same meanings which we arrived at as the values of the suffix in Aryan, to wit: 1) primary formations, verbal adjectivs and nouns of agent; 2) secondary formations of characteristic (*1 ka*), especially making substantivs out of adjectivs (cf. § 46); 3) diminutivs; 4) secondary adjectivs and patronymics (our *2 ka*); the secondary adjectivs are principally words in *-oka* (= Skt. Av. *-āka*) from pronominal stems,—so that the correspondence is almost marvellously close. I should be very loath to believe that this is entirely accidental; I think that we have here the kernel of the suffix *-kos* (*qos*) in IE.

117. To show that the derived suffix *-ika* in Lith. does not really support the hypothesis that such a suffix existed in IE. we need only mention that its principal values are 1) formation of nouns of agent from roots, 2) formation of diminutivs from nouns. Neither of these meanings for *-ika* is found at all in Skt. literature,—least of all in the Veda.—An interesting parallel to Skt. formations in *-aka* (masc. neut.), *-ikā* (fem.) is the Lith. combination of masc. *-uka* with fem. *-ike*. Whether this is enough to establish an IE. fem. suffix *-ikā*, corresponding to masculins in *-o-ko*, is doubtful; but such a phenomenon would

¹ Bildung der Nomina im Littauischen, p. 504 ff.

be quite conceivable, and is contradicted by nothing of which the writer is aware. To be sure the masculine *-aka* (IE. *-oko-*) is replaced in Lithuanian by a different form of the suffix.

Statistics of Vedic k-Words.

118. Detailed statistics are hard to give. Some of the words are used in different senses and hence counted twice; others are classified under more than one head because they might belong to any one of them. The following figures are approximately correct:

1 <i>ka</i> (circ. 110 + Dim., circ. 180)	circ.	290
2 <i>ka</i>		53
3 <i>ka</i> (21 + Bah., 96)		117
4 <i>ka</i>		5
Unclassified Secondary <i>ka</i>		87
<hr/>		
Total Secondary <i>ka</i>	circ.	550
Suffix <i>ika</i> (with Vriddhi 105; without 15)		120
<i>aka</i> (1 <i>aka</i> 2; 2 <i>aka</i> 8; 3 <i>aka</i> 45)		55
<i>uka</i> (Participial 71; others 5)		76
<i>ūka</i>		3
<i>īka</i>	circ.	20
<i>k</i>		6
Primary <i>ka</i>	circ.	30
<hr/>		
Total	circ.	860

General Index and List of Vedic k-Words.

	See §
- <i>aṅṇaka</i> = <i>āṅṇa</i> , ifc. Bah.—Māitr. Up.	55
- <i>akṣaka</i> = <i>akṣán</i> , ifc. Bah.—KSA. 5. 3. Cf. <i>-akṣika</i> and	54 a, 55
<i>akṣamālikā</i> , "little rosary," n. of an Up.. Mukṭ Up.	62
- <i>akṣikā</i> , ifc. Bah. = <i>ākṣi</i> , TS. 7. 5. 12. 1, cf. <i>-akṣaka</i> and	54 a, 55
<i>agnika</i> , ifc. Bah., = <i>agní</i> . Gop. Br.	55
<i>agnihotraka</i> , n. of an Up., Mukṭ. Up.	51
- <i>aṅṇaka</i> , ifc. Bah., = <i>āṅṇa</i> , KSA. 5. 3	54 a, 55
<i>ajāvikā</i> , see s. v. <i>avikā</i>	44
<i>añjalikā</i> (or <i>nyañjalikā</i> ?), ?Comm. <i>hastāgravarttinam añja-</i> <i>lim</i> .—The passage (TĀr. 1. 6. 1) reads: <i>tvaṁ</i> [sc. <i>çiçirah</i>] <i>karoṣi ny añjalikām</i> <i>tvaṁ karoṣi ni jānukām</i> <i>ni jānukā</i>	

- me ny añjalikā* | *amī vācam upāsataṃ iti* |.—The accents are hopelessly confused.—The whole passage is very dark and uncertain. The comm. takes *ni* with *karoṣi* in the first clause, and in the third supplies *bhavatu*. His laborious explanation is about as follows: “The winter causes people to make an *añjalikā* (see above) downwards (towards the fire, for warmth).—It causes them to bend the knees (see s. v. *jānukā*) downward (to warm the body at the fire).—Let there be of me a bending of the knees, an *añjalikā*!”—These (wise people) cherish this saying (during the winter)” 58
- añyaskā*, more tiny, AV.¹ < *āñyas*, smaller 63
- anuka* = *ānu*, ifc. Bah. Māitr. Up. 55
- ātka*, armor, garment, RV. &c. 103
- , n. of an Asura, RV.
- ādhi*, additional, < *ādhi*; Kāty. Cr. 47
- anantaka*, n. of a Nāga, Gāruḍ. Up. 78
- (*ānika*, face.) *-ka* not suffixal, but an *a*-extension of a formation in *-(y)añc*, *-īc*; cf. *prātika*, *abhīka* &c. The base is compared with Gk. *ἐν*. For the *i* cf. *ἐν*,—or otherwise it may be merely analogical to *prātika* &c., as is undoubtedly the case with *samīkā* (q. v.), from *saṃyāñc* —
- ānuka*, subordinate, < *ānu*. QB. 47
- āntaka* < *ānta*, ending, ender, AV. &c.; as npr. Death, 56, 19 AV., VS. &c.; (*antakā*) border, QB. 40
- antikā* < *ānti* in adv. forms *-am*, *-at*, *-e*; near. RV., AV. . 47
- anyakā*, other (contempt.—imprec.), < *ānya*. Only RV. 74, 82
- apakrāmuka*, retiring, TS. &c. 99
- apaniṣāduka*, lying down apart, MS. 99
- aparódhuka*, detaining, MS. 99
- abhikrōṣaka*, reviler, VS. (so Sāy.—“*nindaka*”; so also BR.; Griffith—“watchman”) 96, 97
- abhiniviṣṭaka*, stale (food)—? Mān. Gr. 2. 13. 5. See Knauer’s note 46
- abhimādyatkā*, somewhat drunk, QB. 65
- abhimānuka*, insidious, QB. Āit.B., &c. 99
- abhimēthikā*, insulting speech, QB. 95
- abhivāduka* in *an-a.*, not greeting, Gop.B. Vāit. 99
- abhyavacāruka* in *ān-a.*, not attacking, MS. 99
- abhyāyuka*, coming to, Kap. S. 99
- abhyārōhuka*, ascending, MS. 99

- āmaṇikā*,—? AV. 20. 130. 9 (Mss. *āmaṇako mānachakāh*;
 RWh. *āmaṇikā maṇichādaḥ*; RVKh. 5. 15. 7 *āmanako mānasthakah*, q. v. 58
 (*amōtaka*, corrupt Ms. reading AV. 20. 127. 5. RWh. *amota gā*.) —
-ambaka, ifc. Bah., as *try -ā*., having 3 mothers? n. of
 Rudra RV. 55
ambālikā, dear little mother, VS. (voc., *āmbālike*) 67
ambikā (voc.), dear little mother, VS. &c. (Also n. of sister
 of Rudra) VS. &c. 67
arāṭakī, n. of a plant, AV. The Comm. do not attempt
 to explain the word. Cf. *mrga-rāṭikā* (Lexx. only), a
 medicinal plant and pot-herb; *rāṭi*, war (Lexx.), *Vrat*
 shriek. 58
ariṣṭaka, having the disease *āriṣṭa*, Kāuṣ. (acc. to MW.
 Addendum) 53
ārtuka, quarrelsome, ḠB. 99
 (*ardhaka-ghātīn*)—? AV.¹ Prob. the Ppp. *adhvaga-ghātīn*
 is the true reading. "Slayer of travellers" means Rudra,
 who is besought to spare the speaker. The verse is in
 a charm for safe travel. See notes of Bloomfield and
 Henry for discussion —
ārdhuka, prospering, ḠB. 99
arbhakā, small (dim. and contempt.) RV. &c.. . . . 63, 72
armakā, heap of ruins, RV. 79
 (in Kāuṣ 26 appears to be an adj. "ruined").
ālakam, in vain (contempt.) RV. 76, 37
alābuka, the fruit of the gourd, AV., RVKh. 62
(ālīka) < **ali-añc*, cf. *ānīka*; **ali-* cf. ἄλλος, alius &c.. . . —
alpakā, *ikā*, small (dim. obs.) AV., ḠB. 63, 86
āvakā (once, MS. 3. 15. 1, *-ka*), a plant; AV., VS. &c. 47
avaghaṭarikā, n. of a musical instrument, Ḡāṅkh. Ḡr. 62
avacatnuka, Āit. Br.—Sāy—"n. of a country." Obscure 58
avacarantikā, AV. contempt. < *avacarantī* 73
avatakā (Mss. and RWh. *avatkā*), little spring, AV. 62
avadhūtaka = *āvadhūta*, n. of Upaniṣad, Mukta. Up. 44
avabhedaka, "piercer," headache, Pār. Ḡr. 96, 97
(āvāḱka), ḠBr. 9.1. 2. 22, artificial word, as if *avāḱ* [*avañc*] + *ka*,
 invented to explain *āvakā*, q. v.) —
avikā (or *avīkā*), ewe-sheep, lamb, RV., AV. 62
ajāvīkā, goats and sheep, = (dvandva) *ajāvī*, ḠBr. 44

<i>açanāyuka</i> , hungry, ÇBr.	99
<i>-açitika</i> , ifc. Bah., as <i>sāçitika</i> , with (i. e. plus) eighty, Garbh. Up.	55
<i>açvakā</i> , horse (imprec.), VS., TS. &c.	79
<i>āṣṭaka</i> , consisting of 8, ÇBr.; n. pr. Āit. Br. < <i>aṣṭá</i> ; <i>-kā</i> , the day of the moon's quarter, AV.	53
<i>asakāú</i> , = <i>asāú</i> (obs.), VS. &c.	86, 37
<i>asūyaka</i> , envious, Māitr. Up.	97
<i>āstaka</i> , home, AV. < <i>āsta</i> .—ifc. Bah. in <i>svastakā</i> —AV. 41, 55 (<i>astamīkā</i> , adv. <i>-īké</i> , at home, < <i>āstam</i> , id., by analogy with <i>-īka</i> formations like <i>prātika</i> &c., cf. <i>ānīka</i> , <i>ālīka</i> , <i>samīkā</i>) —	
<i>-asthaka</i> (KSA. 5. 3) and <i>-asthika</i> (TS. 7. 5. 12. 2) ifc. Bah. = <i>asthān</i> (<i>āsthi</i>)	54 a, 55
<i>asmāka</i> , our, RV. &c.	51, 30 a Note
<i>āhallika</i> , prattler?, ÇBr. (BrĀrUp.)	71
<i>-ākhyaka</i> , ifc. Bah. in <i>ādharākhyaka</i> . Rāmap. Up. (= <i>ākhyā</i>)	55
<i>āgantuka</i> , accidental, adventitious, Āçv. Çr.	45
<i>āgāmuka</i> , coming to, MS.	99
<i>āgnika</i> , of Agni, or the sacrificial fire, Kāty Çr. &c.	94
<i>āgniṣṭomika</i> , of the <i>agniṣṭomá</i> , ÇBr.	94
<i>āgnyādhēyika</i> , of the <i>agnyādhēya</i> , Kāty Çr.	94
<i>ājāvika</i> , made of goat's and sheep's hair, Kāuç	94
<i>ātīkī</i> , n. pr. of the wife of a Rishi, Chā.Up.— <i>Vatī</i> ; cf. <i>ātaka</i> (only Lexx.), <i>ātīka</i> , n. of a YV. school; <i>āṭa</i> , n. of Nāga	97
<i>ādihaka</i> , a measure of grain, Garbh. Up. Obscure	58
(<i>ādihārikā</i> , see <i>dhārikā</i>).	
<i>āndīka</i> , "egg (i. e. bulb-) bearing," the lotus, AV. Kāuç	53
<i>ātmaka</i> , of the nature (self, <i>ātmān</i>), Chā. Up., Çvet. Up.	50
<i>ātmabodhaka</i> = <i>-dha</i> , n. of an Upaniṣad, Mukta. Up.	44
<i>-ādika</i> , ifc. Bah. = <i>-ādi</i> , Rāmap. Up.	55
<i>ādhikārika</i> , of the <i>adhikāras</i> (individual sections), Çāñkh Çr.	94
<i>ādhyātmika</i> , of the <i>adhyātmā</i> , Gāuḍap.	94
<i>ādhyāyika</i> , occupied in reading (<i>adhyāya</i>), Tāit. Up.	94
<i>ādihvarika</i> , of the <i>adhvará</i> , ÇBr., Kāty Çr.	94
<i>ānumānika</i> , inferential, Āp., Kāty Çr.	94
<i>ānuyājika</i> , of the after-sacrifice, Mān. Çr.	94
<i>ānuṣūká</i> , shot after? TS. 2. 3. 4. 2. Uncertain word.	58
<i>āparāhnikā</i> , of the afternoon, Āçv. Çr., Kāty Çr.	94
<i>āpartuka</i> , unseasonable, Kāuç	49
<i>ābhicarānika</i> , maledictory, Kāty Çr.	94
<i>ābhicārika</i> , incantation, Kāuç	94

- abhiplavika*, of the Abhiplava, Āçv. Çr. 94
- ābhyudayika* (concerning the rise of anything; as n.), a kind of *çrāddha*. Āçv. Çr. 94
- ābhūka*, powerless, AV. 72, 33
- (*āmanaka*, see *āmanika*.)
- āmalaka*, a tree and its fruit, Chā. Up. and Class. < *amala* spotless? 49
- āmivatkā*, pressing, pushing? TS. 4. 5. 9. 2.—See *vikṣiṇatkā* and *vicinvatkā*. These three are among a list of honorific epithets of certain gods, found in the Çatarudriya. No dim. force of any kind is discernible 42
- ārakāt*, far, from a distance (Imprec.), ÇBr. 83, 37
- āraṇyaka*, a class of Vedic works, Aruṇ. Up. 49
- āruka*, hurting TĀr. 99
- ārunaketuka*, of the *aruna-ketus* (spirits), TĀr. 49
- (*ārksāka*, see *ṛkṣ-*.)
- ārcatkā*, n. of Çara, RV. A Patronymic, ultimately (and perhaps directly, cf. § 11, 49) < **rcat*, *Vārc*, cf. infin. *ṛcase* (RV.) 58
- (*ārjīkā*) RV., a n. pr., deriv. of *ṛjika*, q. v. —
- ārdhuka*, beneficial, Çāṅkh B. 99
- ālambhukā* in *an-ā*, not to be touched, TBr., Kāth. 24
- āvadānika*, offered after being cut up in pieces, Vāit. 94
- āvapantikā*, scattering (grains, of the bride in the wedding-rite) AV.; Pār. Gr. &c. Suffix obviously cannot be pejorative; some related texts have *āvāpanti*; may be merely metrical, and the Sūtra passages then due to reminiscence of the older (metrical) version 45
- āvika*, of sheep; woolen, ÇB.; Kāty Çr. 94
- āçaka* in *ān-ā*.—not eating, a fast, ÇB. 95
- āçarika*, rheumatism, AV. 103
- āçirka*, ifc. Bah. = *āçis*, TS. 55, 36 (s.) a.
- āçvamedhika*, of the *açvamedhá*, ÇBr.; Kāty Çr. &c. 94
- āsandika* in *sās-*, ifc. Bah., Kāty Çr. 55
- āsuka*, n. of a Sāman Ārṣ Br. 103
- (*āsmākā*, our, RV.—see *asmāka*) —
- ikṣvāku* (or *ikṣvākú*), n. pr. RV., AV.—< *ikṣú* sugar-cane? 33 c
- indragopaka*, little firefly Amṛt. Up. 62
- invakā*, n. of a Sāman SV.; of a constellation TBr. < *inva* 46
- iyattakā*, -*ikā*, so tiny, RV. 74, 36
- iṣīkā* (once -*ā*, Kāuç 11), arrow, reed, AV., ÇB. &c. 101

<i>iṣukā</i> , arrow = <i>iṣu</i> , AV. ¹	41
<i>iṣṭakā</i> , brick, cf. Av. <i>iṣtya</i> , VS.; TS. &c.	46
<i>īkṣaka</i> , spectator, ÇBr.; Āçv. Gr.	96, 97
<i>iṣīkā</i> , arrow, MS. The variant from <i>iṣīkā</i> is doubtless meaningless, probably a mistake	—
<i>-ukthaka</i> in <i>sōkthaka</i> , having an <i>ukthá</i> , ÇB.	55
<i>ucchōsuka</i> , drying up, Gop. Br.; ÇBr.	99
<i>utpāṭikā</i> , outer bark of a tree, Brh. Ār. Up. Cf. <i>útpaṭa</i>	58
<i>utpādaka</i> , producing, Nṛsut. Up. (in <i>-ka-tva</i> , noun)	97
<i>udaká</i> , water, RV. &c.	42
<i>udgrāsaka</i> , devouring, Nṛsut. Up. (in <i>-ka-tva</i> , noun)	97
<i>uddālaka</i> , n. of a teacher, ÇBr. &c.; cf. <i>uddāla</i> , a plant.	58
<i>udbāndhuka</i> , one who hangs up, TS.	99
<i>udbhāsaka</i> , shining, Nṛsut. Up. (in <i>-ka-tva</i> , noun)	97
<i>udbhrāntaka</i> , roaming, Nṛsut. Up. (in <i>-ka-tva</i> , noun) 44 ad fin.—Note	
<i>unmantaka</i> , insane, Āçram. Up.	68
<i>unmāduka</i> , fond of drink, MS.; TS.	99
<i>upakráṃuka</i> , approaching; acc. to Wh. Gram., in Brāhmaṇas	99
<i>upajīhvikā</i> , <i>upajīkā</i> , <i>upadīkā</i> , ant; RV. &c.	62
<i>upadāsuka</i> , failing, TS.	99
<i>upanāmuka</i> , bending towards, ÇBr.	99
<i>-upaniṣatka</i> , in <i>uktópan</i> .—having heard the Upaniṣads, ÇB. (Brh. Ār. Up.)	55
<i>upapātaka</i> , minor sin, Nār. Up. &c.	66
<i>-upasatka</i> in <i>try -u</i> ., ifc. Bah., Āp. Çr.	55
<i>upasthāyuka</i> , approaching, Kāṭh.	99
<i>-upānatka</i> in <i>an-up</i> ., without sandals (<i>upānāh</i>), Kāty Çr.	55, 36
<i>upānasyaka</i> , n. of Indra, Āp. Çr. Cf. <i>upānasá</i> , adj., being in a carriage, RV.; n.—the space in a carriage, AV.	58
<i>upāsaka</i> , servant, Kāuç &c.	96, 97
(<i>urūka</i> , owl, = <i>úluka</i> , Āit. Br.)	—
<i>urvāruká</i> , gourd, RV., AV. A late and interpolated verse	44
<i>úluka</i> , owl, RV. &c.	79
<i>ulūkhalaka</i> , mortar (Dim. End.) RV. ¹ (as voc.)	67
(<i>ulká</i> , firebrand; <i>ka</i> prob. not suffixal, cf. <i>varcas</i> , Volcanus)	—
<i>úlmuka</i> , firebrand, Āit. Br.; ÇB. &c. Unc. etym.	58
<i>usriká</i> , bullock (contempt.) RV. ¹	71, 29 a, Note
<i>ūtika</i> , n. of a plant, subst. for Soma, Kāṭh. &c. Probably mistake for <i>pūtika</i> , q. v.; or else the two words have in- fluenced each other	101

<i>ūnaka</i> , defective, lacking, Čāṅkh Gr.	80
<i>ūrdhvaka</i> , raised, Sāṃny. Up.	45
<i>ṛkṣāka</i> (or, as Wh. conj., <i>ārka-</i>) AV. ¹ Sāy "inhabited by bears," which is mere etymological guesswork. The whole passage is obscure, and this word is prob. corrupt.	58
<i>ṛkṣīkā</i> , n. of an evil spirit, AV.; VS.; ČBr. Cf. <i>ṛkṣa</i> ?	101
<i>-ṛjīka</i> , beaming, gleaming (in cpds.); RV. &c. (as <i>āvīr-ṛj.</i>)	100
<i>ṛdhak</i> (or <i>rdhāk</i>), separately, RV. &c.	27
<i>rdhnuka</i> , causing increase, Āçv. Gr.	99
<i>-ṛṣika</i> in <i>sarṣika</i> , ifc. Bah., Āç. Gr.	55
<i>ēka</i> , one, RV. +	103
<i>ēkakā</i> ¹ , singly, RV.; just one, AV. ¹	47, 66
<i>ekākīn</i> , alone, AV., VS. &c. Formation problematic. Pāṇ.	
5. 3. 52 notes it as a solitary form, without explanation or parallel. BR. suggest an <i>añc</i> formation	47, 29 c
<i>ekatrīṇçaka</i> , consisting of 31, Gāuḍap.	53
<i>ejatkā</i> , kind of insect, AV. ¹	81
<i>elāpatraka</i> , n. of a Nāga, Gāruḍ Up.	78
<i>āikāhika</i> , of the one-day offering, Āit Br.; ČBr. &c.	94
<i>āidakā</i> , of the <i>eḍa</i> (sheep), ČBr. &c.	49, 79
—n. a vicious ram (should be <i>eḍaka</i> ?), ČBr.	
<i>āitareyaka</i> , the Āit. Br.; see I. St. 1—106, 7	50
(<i>āinvaka</i> , n. of two Sāmāns, < <i>invaka</i> ; Ārṣ. Br.)	—
<i>āiṣṭika</i> , of the <i>iṣṭi</i> —sacrifice, Āçv. Gr.; Kāuṣ Up.	94
<i>orimikā</i> , n. of a section of the Kāth. S.; see I. St. 1. 69, 70.—	
Uncertain	58
<i>āūttaravedika</i> , of the northern altar, ČBr.	94
<i>āupavasathika</i> , of the <i>upavasathā</i> —rite, Āçv. Gr.	94
<i>kakāṭikā</i> ?—? part of the head (Wh. hindhead), AV. Obscure	58
(Prob. for <i>kṛkāṭikā</i> , neck-joint, = <i>kṛkāṭa</i> id., AV.)	
<i>kātuka</i> , sharp, bad, RV., AV.	80
<i>-kaṇikā</i> , a minute part of any thing, in <i>vaṭa-k.</i> , Sarvop.	62
<i>kāṇṭaka</i> , thorn, AV. 14. 2. 68 (?); ČBr. &c.— <i>kaṇṭa</i> only in cpds.—Uhlenbeck holds it to be prakr. for <i>*kṛṇṭaka</i> , <i>√kṛt.</i> —Unc.	44
<i>-kaṇṭhaka</i> , <i>ikā</i> , in <i>sahā-k.</i> , with the throat, AV.	55
<i>-kadruka</i> in <i>trī-k.</i> , having three vessels, RV., AV.	55
<i>kānaka</i> , golden, Adbh. Br.; Sāmh. Up.—No <i>*kana</i> occurs.	
Uhlenbeck cf. <i>κνηκός</i> and <i>Honig</i>	58

¹ Either accent.

<i>kanáknaka</i> , sort of poison, AV. ¹ (?)	79
<i>kanānakā</i> , mistake for <i>kanīnakā</i> , pupil of the eye, only TS. ¹	62
<i>kuniṣṭhakā</i> , <i>ikā</i> , smallest, only AV. ¹ ; <i>kanīṣṭhikā</i> little finger ÇBr. &c.	63

<i>kanīnakā</i> , -ā, <i>kanīnakā</i> , -ikā, pupil of the eye, RV. &c.	62
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The words never, in the passages which occur, have the primitive meaning of "boy" or "girl" (*kanīna*, -ā).

<i>kanyākā</i> , pupil of the eye, Āit. Ār.	62
<i>kāplaka</i> ? v. l. <i>kālpaka</i> . TBr.—Mg. unknown	58
<i>kambūka</i> , husk of rice, AV.	40, 33
<i>karkā</i> , white, AV. The <i>ka</i> is perhaps not suffixal. Unc.	103
<i>karkataka</i> , crab, Brahm. Up.	44
<i>karkandhukā</i> , RV. Kh. 5. 22. 3 = (<i>kārkandhūkā</i>) AV. 20.	

136. 3—jujube-berry. (< <i>karkāndhu</i>) (Dim.).	62
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<i>karkarikā</i> , kind of lute, AV.	62
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<i>karkoṭaka</i> , n. of a Nāga, Gāruḍ. Up.	78
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<i>kārṇaka</i> , "earlet," tendril, ÇBr.; handle (also -kā), TS., MS.; of the two legs extended, AV. ¹ ; (- <i>kārṇakā</i>) ifc. Bah.	
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= <i>kārṇa</i> , TS.	62, 86, 55
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<i>kārṇaveṣṭaka</i> , earring, = - <i>ṭa</i> , Pār. Gr.	44
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<i>kalaṇka</i> , spot, in <i>nīs-k.</i> , Nār. Up.—Uncertain	58
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- <i>kālpaka</i> in <i>a-k.</i> , irregular, Gāuḍap. (see also <i>kāplaka</i>)	55
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<i>kalmalīkīn</i> , RV.—glorious? Epithet of Rudra. Sāy. says from * <i>kalmalika</i> (not found) = <i>tejas</i> . Cf. <i>kalmalī</i> —(AV.) "glory"? Grassmann "funkelnd."—Ludwig "pfeilträger," which according to his note is "offenbar" the meaning; I confess I am unable to follow him.—The word <i>kalmalī</i> (see above) is itself very doubtful and might mean any- thing, so that Sāyaṇa's interpretation, which Roth, Grassmann and Delbrück follow, is dubious	58, 31
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<i>kaçikā</i> , weasel?, RV.	101
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<i>kaçóka</i> , n. of hostile demons, RV.; AV. Cf. <i>kāça</i> ?	58
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<i>kārukā</i> , ? RV. See § 21	21
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(<i>kāṇṭaka</i> , thorny, < <i>kāṇṭaka</i>)	—
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<i>kāmikā</i> , n. of certain letters in a mystic alfabet; Rāmāp.	
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Up. Presumably < <i>kāma</i>	58
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<i>kāmuka</i> , desiring; a lover. TS.	99
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<i>kāraka</i> , maker &c. Garbh. Up.	97
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<i>kāruka</i> , artisan, artificer (?) acc. to Wh. Vbl. roots, in	
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Brāhmaṇas. I find no instance before Epic times	99
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<i>kālakā</i> , unidentified bird, VS.; "Blackish"	64
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	See §
<i>kālīka</i> , n. of a Nāga, Gāruḍ. Up.	78
<i>kāverakā</i> , n. pr., patronymic < <i>kúvera</i> , AV.	49
<i>kāsikā</i> , cough, AV.	79
<i>-kiṃçukā</i> (in <i>su-k.</i>), a plant or flower; RV. AV.	58
<i>kiñjalka</i> , plant-stalk, Āçv. Çr.	44, 29 b
<i>kirikā</i> or <i>girikā</i> , epithet of gods in Çatarudriya, meaning unknown, various guesses (sparkling, Eggeling; sprinkling, Griffith) VS. &c.	58
(- <i>kiṣka</i> see <i>çvakiṣkīn</i> .)	
<i>kīlaka</i> , the middle syllables of a mantra—Hams. Up. (as being the stake or post, <i>kīla</i> , to which the extremes are attached)	40
<i>-kuṭhārikā</i> in <i>pāda-k.</i> , ÇGr.; a position of the feet	91
<i>kuṇika</i> , n. of a teacher, Āp.	46
<i>kuṇḍikā</i> , little pot, Saṃny. Up.; also title of an Up.	62
<i>kumārakā</i> (or <i>kumār-</i>), <i>ikā</i> , boy, girl, (< <i>kumārā</i>) RV.; AV. &c.	62, 79
<i>kumbhaka</i> , retention of the breath, as relig. exercise; Amṛt. Up. &c.	40, 95
<i>kumbhīka</i> , kind of demon, AV. Cf. <i>kumbhā</i>	101
<i>kulika</i> , n. of a Nāga, Gāruḍ. Up.	78
<i>kulīkā</i> , a bird, VS. (MS. has <i>pulīkā</i>).—Uncertain; cf. <i>kulīpāya</i> , an animal (VS.); Uhlenbeck cf. russ. <i>kulik</i> , snipe &c.	101
<i>kūçavartaka</i> , AV.—corrupt and uncertain. RV. Kh. reads <i>āhalakuç çavartakāh</i> , which Scheft. thinks is the true reading	58
<i>kuçikā</i> , n. pr., RV.; pl. his descendants, RV. &c. Prob. < <i>kuçī</i> , pin used as mark in recitation from texts	52
<i>kuṣītaka</i> , n. of a bird, TS.; of a man—Tāṇḍya Br.—Uncertain	58
<i>kuṣumbhakā</i> , RV., venom-bag of an insect (< <i>kuṣūmbha</i>)	71, 79
<i>kūṣṭhikā</i> , dew-claw, spur, AV., Āit. Br.	40, 90
<i>kustuka</i> , n. of a teacher, Vaiṣṇ. Br.—Entirely obscure	58
<i>kuhaka</i> , rogue, cheat; Māitr. Up.; Āp.	79
(<i>kṛka</i> —said to mean “throat” or “navel”; Prob. onomato- poetic, cf. <i>kṛkara</i> , <i>kṛkana</i> —partridge.—In <i>kṛka-dāçū</i> , a demon; - <i>vāku</i> , cock; - <i>lāsā</i> , lizard)	—
<i>kṛtaka</i> , false, artificial, Gāuḍap.	80
<i>kṛttikā</i> , the Pleiades (as a sword), AV. &c.; cf. <i>karttikā</i> , dagger (Cl.). The noun <i>kṛtti</i> seems to mean only “hide, skin.” Prob. Primary - <i>aka</i>	20, 96, 97
<i>kṛtsnaka</i> , all, Çāṅkh. Çr. 16. 29. 8 (Lexx. wrongly 9) = <i>kṛtsnā</i>	45

See §

<i>kṛmuká</i> , kind of tree, = <i>kramuka</i> , q. v.; ÇBr., Kāuṣ.	44
<i>kṛṣṇaka</i> , "blackish," n. of a plant, Kāuṣ.	64
<i>-keçaká</i> in <i>sarva-k.</i> , having all the hair, AV. (Bah.)	55
<i>kāirātiká</i> , of the <i>kirātas</i> (contempt.), AV. < <i>kāirāta</i>	72
<i>koçātaka</i> , a plant and its fruit, Çāṅkh. Gr.; presumably < <i>kôça</i>	58
(<i>kāulīká</i> , a bird, < and = <i>kulīkā</i> , q. v.; VS.; MS.)	—
(<i>kāuṣiká</i> , < <i>kuçiká</i> , son of <i>kuçiká</i> , or friend of <i>kuçiká</i> [Indra])	—
(<i>kāuṣītaka</i> , - <i>ki</i> , patron. < <i>kuṣītaka</i> , and n. of a Brāhmaṇa)	—
<i>kyāku</i> , fungus, Āp. Dh.; Gāut.—Obscure	58, 29 d
<i>kramuká</i> , the betelnut tree, Śaḍv. Br. = <i>kramu</i> (only Lexx.), <i>kṛmuka</i>	44
(<i>krumuká</i> , piece of kindling-wood, TS. &c., < <i>kramuka</i> by assimilation)	—
<i>klītaka</i> , dough, paste, Āçv. Gr. &c. Obscure	58
<i>kṣitikā</i> , a part of a lute, Kāuṣ. ? Cf. <i>kṣitī</i> ?	58
<i>ksullaká</i> , small (dim.); AV., TS. &c. < <i>ksudrá</i>	63, 68, 72
<i>kṣurikā</i> , "little razor," n. of an Up., Kṣur. Up.	62
<i>kṣódhuka</i> , hungry, TS., ÇB.	99
<i>kṣāumika</i> , made of linen, Kāuṣ.	94
<i>kṣvīṅkā</i> , an evil bird, RV., AV. &c. Prob. onomatopoetic	103
<i>khāṇḍika</i> , pupil, Kalpas.; n. of a man, ÇB. (cf. <i>śāṇḍika</i>)	92
<i>khanātaka</i> , little shovel, Āp. Çr. 17, 26 (NBD. "dug up.")	62
<i>khārvaka</i> , mutilated (imprec.) AV. < <i>kharvá</i>	80
<i>khāṇḍika</i> - ? Gobh. 3. 3. 8.—Comm. <i>çiṣyasamūha</i> ; but see Oldenberg's note	58
<i>khādaka</i> , eater, Gobh. Gr. ap. Prayaçc. in Ç. K. Dr.	96, 97
<i>gānaka</i> , astrologer, < <i>gaṇa</i> ; VS. &c.	51
<i>gavīdhuka</i> or <i>gavé-</i> , coix barbata, TS. = <i>gavīdhu</i> (not Vedic)	44
<i>gavīnikā</i> , groins (?), AV.—metr. for <i>gavīnī</i>	41
(<i>gāvīdhuká</i> , <i>gāve-</i> , deriv. < <i>gavīdhuka</i>)	—
(<i>giriká</i> , MS., for <i>kiriká</i> , q. v.)	—
<i>godānika</i> , of the <i>godāna</i> -rite, Gobh. 3. 1. 28 (cf. <i>gāud-</i>)	92
<i>gonāmika</i> , n. of MS. 4. 2, called after <i>gonāmā</i> formulas	92
<i>gopikā</i> , protectress, Gop. Up.	44
<i>golaka</i> , ball (dim.), Gobh. Gr. &c.	62
<i>golattikā</i> , kind of animal, VS., TS.; cf. <i>lattikā</i> (Up.) lizard	58
<i>gāudānika</i> , of the <i>godāna</i> -rite, Āçv. Gr. &c. (cf. <i>god-</i>)	94
<i>grāhuka</i> , seizing, TS. (cf. <i>grhú-</i> RV.)	99
<i>ghātaka</i> , kind of wood, Āçv.Çr.; = <i>ghāta</i> and <i>vādhaka</i>	46
<i>ghātuka</i> , slaying, AV., TB., ÇB. &c.	99
<i>cakraka</i> , wheel, Māitr. Up.	44

- <i>calakṣuṣka</i> in <i>a-c.</i> , without eyes, Brh. Ār. Up.	55
<i>cāṇḍātaka</i> , short petticoat, ÇBr., Kāty Çr. Obscure derivation	62
<i>caturthaka</i> , fourth, Nād. Up.	45
<i>catuṣka</i> , consisting of 4; Lāty, Vasu Up.	53
<i>candrikā</i> , moon, Rāmap. Up.	91
<i>cāraka</i> , wanderer, mendicant, ÇBr. (also n. of a YV. school).	46
- <i>carmāka</i> in <i>a-c.</i> , without skin, TS.	55
<i>cāturthāhnika</i> , of the 4th Day, Çāṅkh. Çr.	94
<i>cāturthika</i> , of the 4th Day, Lāty	94
<i>cāturdhākāraṇika</i> , of a division into 4 parts, Āp. Çr.	94
<i>cāturviṇṣika</i> , of the 24th day, Çāṅkh. Çr.	94
<i>cāturhotṛkā</i> , of the <i>cāturhotṛ</i> service, MS.	49
- <i>cārika</i> in <i>utpatha-c.</i> , having byways for a course, Nṛsut. Up. (in <i>-ka-tva</i> , noun)	54, 55
<i>cikitsakā</i> , physician, ÇBr. &c.	51
<i>ciccikā</i> , kind of bird, RV., TBr. Obscure	58
- <i>citika</i> in <i>śat-c.</i> , ifc. Bah., ÇB.	55
- <i>cintaka</i> in <i>kāla-cintaka</i> , considering; Gāuḍap.	97
<i>cupunīkā</i> , one of the Pleiades, TS. Obscure	101
<i>cūlaka</i> , top of a column, Cūl. Up.	40
<i>cēlaka</i> , n. of a man, ÇB.	46
<i>codaka</i> , direction, invitation, Kāty Çr.	95
<i>chattrāka</i> , mushroom, Adbh. Br. (= <i>chattraka</i> , Class., < <i>chattra</i> , parasol.)	40, 29c.
<i>chāṇḍomika</i> , of the <i>chāṇḍomās</i> , Çāṅkh. Çr., Kāty Çr.	94
<i>chāyaka</i> , n. of a demon, AV.	78
<i>chūbuka</i> , chin (Class. Skt. <i>cibuka</i>), RV., ÇBr. &c. Obscure.	58
<i>janakā</i> , n. of a king, ÇBr. (Brh. Ār. Up.), cf. <i>jāna</i>	53
<i>jāmbhaka</i> , "crusher," n. of a demon, VS.	78
<i>jayantaka</i> , n. pr., Rāmap. Up. < <i>jayanta</i> , victorious	46
<i>jarāyuka</i> , after-birth, Sāmav. Br. = <i>jarāyu</i> . No reason is apparent for the use of the form in <i>-ka</i> in this passage.	44
<i>jalāyukā</i> , leech, in <i>trṇa-j.</i> , caterpillar, Brh. Ār. Up. Thought to contain <i>jala-āyu</i> = <i>āyus</i> (Bah.), but cf. <i>jalāuka</i> and other forms. Popular etymology has operated here.	
Origin uncertain	58
<i>jāhakā</i> , hedge-hog, VS., TS. Supposed to be from <i>Vhā</i>	103
<i>jāgarūka</i> , wakeful, RV.	25
<i>jātaka</i> , newborn child, Kāuṣ.	62
(<i>jānaka</i> , <i>-ki</i> , patron, from <i>janakā</i>)	
<i>jānukā</i> , bearing, MS., Āp. Çr. Cf. <i>janū</i> , AV.	99

See §

<i>jānukā</i> -? TĀr. 1. 6. 1; Comm. <i>jānupradeṣa</i> . See s. v.	
<i>añjalikā</i>	58
<i>jāpaka</i> , muttering, Nrp. Up.	97
<i>jāyuka</i> , conquering, MS. Cf. <i>jāyú</i> , RV.	99
<i>jālaká</i> , little net, web, Brh. Ār. Up.	62
(-jihvikā see <i>upā-j</i> .) - <i>jihvaka</i> ifc. Bah. = <i>jihvā</i>	54a, 55
<i>jīvikā</i> , epithet of water (end. dim.), MS. &c., Āçv. Çr.; life, Kaṭhop.	44, 95, 67 q. v.
<i>jumbaká</i> , n. of a Varuṇa, VS., ÇBr. Obscure	58
<i>jyāká</i> , bowstring (pej.), RV., AV.	79
<i>jyāiṣṭhasāmika</i> , adj. < <i>jyeṣṭhasāman</i> , Gobh. 3. 1. 28	94
<i>jyotāyamānaká</i> (MSS. - <i>maka</i>), n. of demons, AV.	81
<i>jyotiṣṭomika</i> , of the <i>jyotiṣṭoma</i> , sacrifice, Kāty Çr.	92
<i>derikā</i> , muskrat, Āp. 1. 25. 13. Obscure	58
<i>dhārikā</i> and <i>ādhārikā</i> , centipede, Āp. Gr. Obscure	58
<i>taká</i> , that (contempt.), RV., AV., Kāty Çr.	75
<i>takṣaká</i> , n. of a Nāga, AV., Kāuç. (= - <i>ṣa</i>)	78
<i>tatāka</i> , pool, = <i>tatā</i> . Ṣaḍv. Br., Adbh. Br.	46, 29c.
- <i>tantrika</i> , ifc. Bah. = <i>tāntrī</i> , thread, Pañcav Br.	55
- <i>tapaska</i> , ifc. Bah. = <i>tāpas</i> , Māitr. Up.	55
- <i>tamaska</i> , ifc. Bah. = <i>tāmas</i> , Chā. Up.	55
<i>tarūṇaka</i> , sprout, AV.	62
<i>tādarthika</i> , intended for that, Kāuç.	94
<i>tādātmake</i> , <i>ikā</i> , denoting the unity of nature, Rāmat. Up.	49
<i>tāraka</i> , carrying across, saving, Māitr. Up.	97
(<i>tāraká</i> , adj. of stars; < <i>tārakā</i>)	—
<i>tārakā</i> (< <i>tārā</i>), star, AV., TBr., ÇBr. &c.	44
<i>tāluka</i> , du. n. the two arteries supplying the palate, Tāit. Up.	50
<i>tāvaká</i> , thine, RV. (only 1 Vedic occurrence reported) (< <i>tāva</i>)	49
<i>tiraçcikā</i> , a horizontal region? So BR.—Āçv. Çr.	46
<i>tīlvaka</i> , a plant of evil name, ÇBr., Āçv. Gr. &c.	79
<i>tūṇḍika</i> , having a snout or trunk (<i>tūṇḍa</i>), AV.	92
- <i>tūlaka</i> , <i>ikā</i> , ifc. Bah. = <i>tūla</i> , mattress, Rāmat. Up.	55
<i>tūṣṇika</i> , silent, in Veda only adv. - <i>kam</i> , silently, Mān. Çr.	45
<i>tūṣṇīm</i> , id. RV.—The text is dubious, and Knauer calls this word suspicious.	
<i>tr̥tīyaka</i> (< <i>tr̥tīya</i>), recurring the 3 d day, AV.	51
(<i>tr̥ṣṭaka</i>) - <i>ikā</i> , rough (creature), AV.	80
- <i>tejāśka</i> , ifc. Bah. = <i>tējas</i> , Brh. Ār. Up.	55
<i>tāittirīyaka</i> , of the Tāit. school, Mukta. Up.	50
<i>tāuvilikā</i> , (voc.) n. of a female demon, AV. ¹ Obscure	78

	See §
<i>triká</i> , in threes, RV., Lāṭy &c.	47
<i>trāivarsika</i> , a triennial performance, Āṣv. Gr.	94
<i>trāividyaka</i> , practised by <i>trāividya</i> s, Āp.	50
—n., their doctrine, Mān. Gr.	
- <i>tvákka</i> , ifc. Bah. = <i>tvác</i> , skin, TS. in <i>a-t.</i>	55
- <i>tsaruka</i> , ifc. Bah., Tāṇḍ. B. (in M. W. Addendum) . . .	55
<i>dāṇṣuka</i> , biting, TBr., TS., Kāth.	99
<i>daṇḍaka</i> , a class of meters, Chandaḥs., Han. Rām. Up. .	46
- <i>datka</i> , ifc. Bah. = <i>dānt</i> , Chā. Up.	55
- <i>dantāka</i> , ifc. Bah. = <i>dānta</i> , TS., ÇBr.	55
<i>dandaṣṭika</i> , biting, malignant, VS., TS., ÇBr.	25
<i>daṣaka</i> , consisting of 10, Chandaḥs.	53
<i>daharaka</i> , short, Kāuṣ. Br.	63
<i>dākṣiṇāgnika</i> , performed in the southern fire, Mān. Gr. .	94
<i>dāyaka</i> , giving (in Veda only ifc.), Mukṭ. Up.	97
<i>dāyaka</i> , heir, < <i>dāyá</i> , Gr. S.	53
<i>dārçapāurnamāsika</i> , of the New- and Full-moon sacrifice,	
Çāṅkh. Gr.	94
<i>dāçarātri</i> ka, celebrated like the <i>daçarātrá</i> , ÇBr. &c. . .	94
<i>dāhuka</i> , burning, TBr., Āp. Gr.	99
- <i>dikka</i> in <i>a-d.</i> , having no part of the heaven, ÇBr. . . .	55
<i>dūtaka</i> , n. of Agni, Gr. S. Cf. <i>Vdū</i> , <i>du</i>	58
<i>dūraká</i> , far (pej.), RV., AV.	80
<i>dūṣikā</i> (<i>dūṣikā</i> Māitr. Up. 1. 3), rheum of the eyes, VS.,	
Kāth., ÇBr.	32, 79
<i>dūṣika</i> , n. of demons, AV., Primary, <i>Vdūṣ</i> , and not to be	
confused with the foregoing, which is secondary, from	
the n. <i>dūṣī</i>	100
<i>dṛbhika</i> , n. of a demon, RV.	100
<i>dṛṣika</i> , worthy to be seen, splendid, RV.	101 b, c.
—n. appearance, RV. &c.— <i>ká</i> , id, RV.	
<i>dṛṣikū</i> , beholder, TS., Āp. Gr.	100
<i>dévaka</i> , god (contempt.), RV., adj. divine, Kṛṣ. Up. (< <i>devá</i>). 71, 51	
- <i>ikā</i> , an inferior class of goddesses, Āit. Br., ÇBr. . . .	66
<i>deçika</i> , teacher, Rāmap. Up., Mukṭ. Up.	92
<i>dyumnika</i> , n. pr., supposed author of RV. 8. 76. < <i>dyumnín</i> ,	
glorious	46, 36.
<i>dvaká</i> , by twos, RV.	47
<i>dvāarakā</i> , "City of Gates," Vāsu Up.	53
<i>dhanuṣka</i> , small, poor bow. Lāṭy	71
<i>dhayantikā</i> , sucking (contempt.), AV. Ppp. folio 115 b, line 1	73

<i>dhāṇīkā</i> (prakr. form of <i>dhān-</i>), vagina, AV., TS. &c.	86
<i>-dhātuka</i> , ifc. Bah. = <i>dhātu</i> , Garbh. Up.	55
<i>dhāṇīkā</i> , vagina, RV. Kh. 5. 22. 8.	86
<i>dhāarakā</i> , vagina, VS., ÇBr.	86
<i>dhārmika</i> , righteous, Chā. Up.	94
<i>dhārmuka</i> , righteous, Mān. Çr.	21
<i>-dhāvanaka</i> in <i>danta-dh.</i> , n. of a tree, Kāuṣ., prob. < <i>dhāvana</i> , cleaning (a tree "for teeth-cleaning")	50
<i>dhuvaka</i> , acc. to Wh. Vb. forms from <i>Vdhu</i> , in Jāim. Br. 96, 97	
<i>-dhūmaka</i> in <i>a-dh.</i> , without 'smoke, Kāth. Up., Māitr. Up.	55
<i>dhēnukā</i> , female, <i>Weibchen</i> ; AV., Pañcav. Br. &c.	89
<i>nañcuka</i> , perishing, Kāth.	99
(<i>nāgnaka</i>) <i>-ikā</i> , naked, wanton (imprec.), AV. (< <i>nagnā</i>).	80
<i>naḍaka</i> , hollow of a bone, Kāty Çr.	40
<i>napātka</i> , concerning a grandson, n. of a cert. sacrificial fire, Kāth.	51
<i>nāpuṇsaka</i> , eunuch (contempt.), ÇBr., Kāty Çr. &c.	71
<i>nabhāka</i> , n. pr., Āit. Br.—Cf. <i>nabha</i> , <i>nābhas</i> ?	58, 29c
<i>narāka</i> , hell, TĀr. Uhlenbeck cf. <i>ἐνερ-θεν</i> &c. Not clear.	58
<i>-navaka</i> , ifc. Bah. = <i>nāva</i> , Garbh. Up.	55
<i>nāka</i> , heaven, RV., AV., VS. &c.	103
<i>nāḍīkā</i> , throat, AV. (< <i>nāḍī</i>)	40
(<i>nābhākā</i> , adj. or patron < <i>nabhāka</i> , RV.)	—
<i>nābhikā</i> , navel-like cavity, ÇBr.	40
<i>-nāmaka</i> , <i>ikā</i> ifc. = <i>nāmar</i> , Bah., Çiras. Up.	55
in <i>ānāmikā</i> , ring-finger (for semantics see BR.), ÇBr. &c.	
<i>nāyaka</i> , leader, chief, Gāuḍap.	97
(<i>nāraka</i> , hellish, < <i>narāka</i> , AV. &c.; VS. <i>nārakā</i>).	—
<i>nāçuka</i> , perishing, TS.	99
<i>nāsikā</i> , nostril, du. nose, RV., AV. &c.	62
<i>nāstika</i> , atheist; Āp.; Mukl. Up. (cf. <i>āstika</i> , Cl., < <i>asti</i>)	94
<i>nika</i> , n. of a Sāman, Ārṣ. Br.	103
<i>nikhārvaka</i> , one billion, Pañcav Br.	44
<i>nīkhātaka</i> , cut into a little, AV.	65
(<i>nijānukā</i> ? see <i>jānukā</i> , TĀr. 1. 6. 1.)	
<i>nīṇīk</i> , secretly, RV.	27, 29a
<i>nimuṣṭika</i> , of the size of a fist, Āit. Ār. 5. 1. 3. 6 (p. 405. 6).	53
<i>nimuṣṭi</i> , a measure of that size.	
<i>nīrodaka</i> , read <i>nīrodhaka</i> (Deussen), hindering, Brahm. Up.	97
<i>-nīrdāhuka</i> in <i>ā-n.</i> , not burning down, MS.	99
<i>nirmārguka</i> , withdrawing from, TS.	99, 24

<i>nirmitaka</i> , conjured up, illusory, Gāuḍap.	80
<i>nirmretuka</i> , withering, Pañcav Br.	99
<i>-nivartaka</i> in <i>a-n.</i> , not flying or flinching, Māitr. Up.	97
<i>-nivitka</i> ifc. Bah. = <i>nivīd</i> , Āit. Ār.	55
<i>niṣkā</i> , a neck-ornament, RV., AV. &c.	103
Uncertain. Uhlenbeck compares OHG. <i>nusca</i> , Ir. <i>nasc</i> , ring.	
<i>nihākā</i> , storm, whirlwind, RV., TS. Obscure	103
<i>nāimittika</i> , occasional, accidental, Kāty Cr. &c.	94
<i>nāiyamika</i> , settled, prescribed, Āp.	94
<i>-nāiṣṭhika</i> , in <i>a-n.</i> , not distracting, Āp.	94
<i>nāiṣṭhika</i> , final, perfect, Āgram. Up.	94
(<i>nyañjalikā</i> ? See s. v. <i>añjalikā</i> . TĀr. 1. 6. 1.)	
<i>nyastikā</i> , n. of a plant, AV. ¹	46, 91
<i>nyūñkhamānaka</i> , see <i>-mānaka</i> .	
<i>pakvakā</i> ? AV., RVKh. Prob. corrupt. The Lexx. do not render the word. Grif. "that knoweth." May be either "ripe, mature," or "gray, hoary," < <i>pakvā</i> . Uncertain.	58
<i>-pañcaka</i> , consisting of 5; a group of 5, Gopī. Up.	53
<i>pañcaviñcaka</i> , consisting of 25, Gāuḍap, Mahā. Up.	53
<i>pāṇḍaka</i> , eunuch, weakling, Kāth. &c. (contempt).	71
<i>patantaka</i> , kind of rite, Lāty. Cf. <i>patat</i> ?	58
<i>patayīṣṇukā</i> , flying off, unsteady (imprec.), AV.	80
<i>patākā</i> , flag, Adbh. Br. 10, 3. Primary <i>ka</i> ? No noun <i>patā</i> exists. <i>Vpat</i> ; formation dubious	58, 29c
<i>-patnīka</i> , ifc. Bah. = <i>pātnī</i> , wife, Āit. Br., Kāty Cr.	55
<i>padmaka</i> , n. of a serpent-prince or demon, Gāruḍ. Up.	78
<i>parāpātuka</i> , abortive, TS.	95
<i>parābhāvuka</i> , perishing, transient, Kāth.	99
<i>parārīkā</i> , leek, Āp.—Obscure; v. l. <i>palārīka</i>	58
<i>paridīpaka</i> , lighting up, Gāuḍap.	97
<i>pariprechaka</i> , inquirer, Gop. Br.	97
<i>parivrājaka</i> , wandering (mendicant), Aruṇ. Up.; Āgram Up.	97
<i>-pariṣṛitka</i> , ifc. Bah., = <i>pariṣṛit</i> , Kāty Cr.	55
<i>-pariṣatka</i> , ifc. Bah., = <i>pariśād</i> , Gobh.	55
<i>parisāraka</i> , n. of a place, Āit. Br., <i>pari-Vsr</i> ; formation uncertain	58
<i>parisāra</i> as n. reported by Wils. only—"wandering about."	
<i>parutka</i> , having knots or joints, Āp. Cr.	53, 36 (s)—b
<i>parūṣaka</i> , a tree (= <i>parūṣa</i>) and its fruit, Čāṅkh Cr.	44
<i>partikā</i> , RV. Kh. 5. 15. 8, v. l. <i>patikā</i> ; corrupt and uninterpretable	58

<i>parpharīka</i> , ? RV. ¹	100
<i>paryāyikā</i> , strophic, AV.	92
<i>palījaka</i> , n. of a demon, AV. ¹ . Obscure	78
<i>-paçuka</i> , ifc. Bah., = <i>pācu</i> (or <i>paçū</i>), Āçv. Çr.	55
<i>pāka</i> , very young, Çāṅkh Gr. 3. 2.—simple, RV., AV. &c.	103
<i>pājaka</i> , a kitchen implement, Āp. Çr. Etym.?	58
<i>pāñcamāhnika</i> , of the 5 th Day, Çāṅkh Çr.	94
<i>pātaka</i> , acc. to Wh. Vb. roots in the Brāhmaṇas. \sqrt{pat}	96, 97
<i>pātaka</i> , fall, downpour, Saṁny. Up. 2; sin, Cāṅkh Çr. &c.	95
<i>pādakā</i> , little foot (End. Dim.), RV. ¹ (< <i>pāda</i>)	67
<i>pādukā</i> , slipper, Āçram. Up.	62
<i>pāpaka</i> , evil, ÇBr. &c. (< <i>pāpa</i> or <i>pāpā</i>)	80
<i>pāramārthika</i> , real, actual, Mukh. Up.	94
<i>(pārivrājaka</i> —adj. < <i>parivrājaka</i> , Kāuç.)	
<i>pārṣṭhika</i> , after the manner of the <i>Prṣṭhyā</i> , Lāty &c.	49, 29 a
<i>pāvakā</i> , clear, bright, RV. &c.; n. of Agni, TS. &c.; fire, in general, Muṇḍ Up. 2. 1. 1	18 Note†; 58
An ancient word; from $\sqrt{pū}$, but exact formation uncertain. Early appearance and accent forbid taking it as primary <i>-aka</i> , which Sāy. does (" <i>cobhaka</i> ").	
<i>pāçuka</i> , concerning cattle, Kāty Çr.; Çāṅkh Çr.	49
<i>pāçubandhaka</i> , of the <i>paçubandhā</i> , Āçv. Çr.; Çāṅkh Çr.	49
<i>pikā</i> , Indian cuckoo, VS. (Uhlenbeck cf. <i>picus</i> ; very doubt- ful)	103
<i>piṅgalakā</i> , <i>ikā</i> , yellow, tawny, AV. (< <i>-lā</i>)	64, 72
<i>piṇyāka</i> , oil-cake, Āp. (no reference given). Obscure	58
<i>-pitryka</i> , ifc. Bah. = <i>pitry</i> , Kāty Çr.; Āçv. Gr.	55
<i>pitṛmedhika</i> , of the <i>pitṛmedha</i> , Saṁny. Up.	92
<i>(pīdāku</i> —for <i>prīdāku</i> q. v. MS.)	
<i>pīnāka</i> , staff, bow, AV.; VS.; TS.	58
Uhlenbeck cf. <i>πίναξ</i> and OSlav. <i>pini</i> , tree-trunk.	
<i>pipīlaka</i> (< <i>-lā</i>), ant, Chā. Up.— <i>ika</i> , ant, only Adbh. Br. (Prob. to be emended to <i>-aka</i> or <i>ikā</i>)	62
<i>-ikā</i> , small ant, AV.; ÇBr.; Pañc. Br. &c.	
<i>pīppakā</i> , a sort of bird, VS. (cf. <i>pīppika</i> , Class., a bird or beast)	58
<i>pīyaka</i> , n. of a class of demons, "abuser," AV.	96, 97
<i>pīyūṣaka</i> , biestings, RV. Kh. 5. 15. 14.—The parallel AV. text has <i>pīyūṣa</i> , but the meter needs an extra syllable,— which the later compiler evidently added	41
<i>pūklaka</i> or <i>pūlkaka</i> , n. of a despised tribe, MS. Not certain	71

punḍārīka, lotus blossom, RV.; AV. 58

Prob. connected with *punḍari-srajā* (TBr.),—but the meaning of this *punḍari* is uncertain; cf. *punḍarin*, another flower (Lexx.).

putrakā, little son, RV.; AV. (< *trá*) 62, 67

-*puro'nuvākyāka*, ifc. Bah. = *puro'nuvākyā*, ÇBr. in *a-p.* . . . 55

-*purorūkka*, ifc. Bah. = *purorūc*, ÇBr. in *a-p.* 55

(*pulīkā*—MS.—variant for *kulīkā*, q. v.) 101

(*pūlkaka*, see *pūklaka*.)

pūtīka (once *-ika*, Āçv. Çr. 6. 8), a plant, (< *pūti*), substitute for soma, TS.; Kāth.; ÇBr. &c. 46, 31

pūraka, filling (noun), Amṛt Up.; Dhyan. Up. 95

-*pūrvaka* in *nyāya-p.*—having reason as precedent—Gāuḍap. . . 55

-*prṇākā* in *harīṇa-p.*, female young of an animal, Āp. Çr. . . 62

pṛthak, isolated, scattered (adv.), RV., AV. &c. 27

pṛthuka, rice or grain flattened and ground, TBr. < *prthú* . . . 46

pṛdāku, serpent, RV.; AV.; TS. Cf. *πάρδος*, acc. to Uhlenbeck loanword from Ind.-Iran. **parda-* 58, 29 c

prṣātaka, a mixture of ghee, milk &c. (cf. *prṣat*), AV.;

Pār. Gr. 58, 15

-*kī*, a disease, or the she-demon causing it, AV.

perukā, n. pr. RV. 46

pésuka, spreading out, ÇBr. 99

poṣuka, thriving, Śaḍv. Br. 99

pāunarādheyika, of the *punarādhéya*-rite, Āçv. Çr. &c. . . . 94

pāuruṣamedhika, of a human-sacrifice, ÇBr.; Kāty Çr. . . . 94

pāurvāhnika, of the forenoon, Kāty Çr. 94

prakṣepaka, throwing (n. act.), Māitr. Up. 95

pracalāka, chameleon, Āp. *pracalākā*—cloudburst(?) TS.—

Cf. *pracalaka*, Class., reptile; *pracala*, creeping &c. . . 46, 29 c

pracitaka, n. of a meter, Chandaḥs. 44

pracyāvuka, transitory, fragile, Çāṅkh Br. 99

-*prajāpatika* in *sa-p.*, ifc. Bah.—Āit. B. 55

pratiçrūtka, echo, VS.; Kāuṣ. Up. 42

-*pratisthāyuka* in *á-p.*, not standing firm, MS. 99

praticikā, AV., < *praticī*, f. of *pratyāñc*; mg. uncertain; "offense" ? 80

-*pratyutthāyuka* in *a-p.*, not rising respectfully, Gop. Br. . . 99

pradātrikā, (female) giver, MS. 91, 35 a

pradāyaka, bestowing, Garbh. Up. 97

pradrānaka, very poor, Chā. Up. (*pra*—intens; *-ka*—Pity.) . . 68

- prapāthaka*, section, n. of divisions of cert. works, as TS.,
 ÇBr., Chā. Up. 62
- prapāduka*, falling prematurely (fetus), TS.; Kāth. 99
- prabāhuk*, on an even line, Āit. Br.; TBr.; TS. &c. 27
- prabhrāṇçuka*, falling off, vanishing, ÇBr.; TBr. 99
- pramāyuka*, perishing, AV.; TS.; TBr. &c. 99, 23
- pravartaka*, one who sets in motion, Çvet. Up. 97
- pravartamānaká*, slinking down, RV.¹ 73
- pravalhikā*, riddle, challenge, Āit. Br.; Çāṅkh Çr. 91, 95
- prasarpaka*, assistant or spectator at sacrifice, Āçv. Çr.; Lāty 46
- prahastaka*, n. of RV. 8. 86. 13—15.—Kāuṣ. Ār.; Çāṅkh Çr.;
 < *prahasta*, extended hand. Application not clear to me.
 —Lex. gives Çāṅkh Br., wrongly 58
- prahūruka*, carrying off, Kap. S. 99
- prākaraṇika*, of the *prakaraṇa*, Mān. Gr. 94
- prākāruka*, ? perhaps scattering about? Kap. S., Kāth. 99
- pragāthika*, of or derived from the Pragātha (i. e. RV. 8),
 Lāty &c. 94
- prāṇaka* ifc. Bah. = *prāṇá*, KSA. 5. 3 *aprāṇakāya svāhā*,
 cf. TS. 7. 5. 12. 1 *aprāṇāya svāhā* 54 a, 55
- prātinidhika*, substitute, Kāty Çr. 94
- prātiçrutká*, existing in the echo, Bṛh.Ār.Up. 49
- prādeçika*, chief of a district (*pradeça*), Kāuṣ. 94
- prāyaçcittika*, expiatory, Āçv. Çr. 94
- praçātika*, a leguminous plant, Āp. Çr. Cf. *praçātika*, -*sātika*,
 various grains (Class.) 58
- priyaṅgukā*, panic seed (dim.), Sāmavidh Br. 62
- prekṣaka*, deliberating on, Mān. Gr.; as n. spectator 96, 97
- plāçuka*, rapidly growing up, ÇBr.; Kāty Çr. 45, Note
- baka* (a crane, only Class.), n. of a demon, Mān. Gr.; of a
 seer, Kāth. &c. 103
- baṭaraka*, m. pl., lines of light appearing before closed eyes,
 Āit. Ār. ? 58
- bāddhaka*, captive, AV. < *baddhá* 79
- babhruká*, brownish (clearly dim.), CB.; (*bá-*) ichneumon,
 VS. &c. (< *babhrú*) 64
- balākā*, crane, VS., &c. Obscure 58
- bālḥika*, n. of a man, ÇB.; of a people, AV. 52
- bādhaka*, a cert. tree, Gobh.; also as adj., of the *bādhaka*-
 tree. Uncertain; cf. *bādhá* (?), obstacle, trouble, &c. 50
- bālaka*, young; child, Kṛṣ. Up. &c. 63

(*bālāki*, metronymic from *balākā* as n. p.)

- <i>bāhuka</i> , ifc. Bah. = <i>bāhū</i> , Āç. Gr. (in <i>ud-b.</i>)	55
- <i>binduka</i> , ifc. Bah. = <i>bindū</i> . Nrp. Up.	55
<i>br̥būka</i> ,—? RV. ¹ —Entirely uncertain. Grassmann, "dick, dicht."—Ludwig "murmelndes Wasser."—BR. ?	58
- <i>brhatika</i> , ifc. Bah., Çāṅkh Gr. (in <i>tato-b.</i>)	55
<i>brhatka</i> , n. of a Sāman, Pañcav. B.	42
(- <i>bodhaka</i> in <i>ātma-b.</i> , q. v.)	
- <i>brahmaka</i> , ifc. Bah. = <i>brahmān</i> , Āçv. Gr.	55
<i>brāhmāudanika</i> , (fire) on which the <i>brahmāudanā</i> (the priest's rice) is boiled; Kāuç. (with or sc. <i>agnī</i>)	94
<i>bleṣka</i> , noose, snare, Kāth.	103
- <i>bhasmaka</i> , ifc. Bah., Gop. B. (in <i>sa-bh.</i>)	55
- <i>bhāktika</i> , retainer, Āp. (in <i>nitya-bh.</i>)	94
<i>bhāradvājākī</i> , skylark, = - <i>jī</i> . Sāmav. B.	44
<i>bhāvuka</i> , being, becoming, TS., Kāth &c.	99
<i>bhāṣika</i> , general rule, Çāṅkh Gr. &c.	40, 29 a
<i>bhikṣuka</i> , mendicant, Pār. Gr.	44
<i>bhinnaka</i> , broken (contempt.), Mantra B.	72
<i>bhūmipāçakā</i> , a plant, = - <i>ça</i> (m.), Sāmav. B. 2. 6. 10	91
<i>bheka</i> , frog, Māitr. Up. Prob. onomat.	103
<i>bhāumaka</i> , terrestrial animal or being, Adbh. Br.	49
<i>mākaka</i> , kind of demon, AV.	79
<i>mākṣikā</i> , fly RV.; AV. &c.	62
<i>maṅgalikā</i> , of good omen, AV.	67, 29 a
- <i>majjāka</i> , ifc. Bah. = <i>majjān</i> , TS.	55
<i>maḍūṣikā</i> (v. l. <i>maṭ-</i> , <i>maṇḍ-</i> , <i>madh-</i> , <i>mandh-</i>) a dwarfish girl, unfit for marriage, Āp. Gr.	58
<i>maṇika</i> , water-jar, Āçv. Gr.; Gobh. &c.—Āit. Br. 7. 1—acc. to Sāy., a fleshy excrescence on an animal's shoulder	40
<i>maṇipūṛaka</i> , a mystic circle on the navel, Hams. Up. 1	44
<i>maṇḍūka</i> , frog, RV. &c. Uncertain origin	58
<i>maṇḍūrikā</i> (edd.; MSS.— <i>riti</i>), vile, filthy woman, AV. ¹ (voc.)	86
<i>mādhuka</i> , n. pr., ÇBr. (<i>mādhu</i>)	53
<i>madhūka</i> , a bee, Çāṅkh. Gr.; a tree and its fruit, ib.	51
<i>madhūlaka</i> , sweetness, honey, AV.	48
<i>madhyamikā</i> , the middle finger, Prāṇ. Up.	46, 91
<i>madhvaka</i> , bee, Adbh. Br.	51, 33 b
<i>manaskā</i> , mind (impr.), AV.; ifc. Bah. = <i>mānas</i> , Kāth Up. &c.	79, 55, 54 a

<i>mānasthaka</i> , RVKh. 5. 15. 7,—“freundlich gesinnt” (Scheft.), see s. v. <i>āmaṇikā</i>	58
<i>manānāk</i> , RV. Obscure word, see	27
<i>mantrikā</i> , n. of an Up., Mukt. Up.	51
<i>māmaka</i> , my, only RV.	51
<i>markataka</i> , kind of grain, Āp. Cr.	51
<i>maryakā</i> , male, Männchen. RV ¹	88
<i>maçāka</i> , gnat, AV., VS., ÇBr. &c. (w. r. <i>masāka</i>)	62
<i>mastaka</i> , head, Mahānār. Up., and <i>mastiṣka</i> , brain, RV., AV. &c. Cf. <i>mastu-luṅga</i> , brain. The base seems to have been <i>mast-a</i> , <i>i</i> or <i>u</i> . Uncertain	58
<i>mahānāmnika</i> , of the Mahānāmnī, Gobh.	52
<i>mahāvratika</i> , of the Mahāvratā Sāman, Çāṅkh Cr.	92
<i>mahīlukā</i> , female, AV. ¹	89
<i>-māṇsāka</i> ifc. Bah., = <i>māṇsā</i> , TS.	55
<i>mākī</i> , du., RV. ¹ This word has been variously rendered. Ludwig makes it an adj. to <i>naptiā</i> , either “brüllend” (<i>Vmak</i> ; application?), or (and this I believe to be right) from base <i>mā-</i> of the 1st. pers. pronoun; see § 30 a, Note. The phrase then means “my daughters he has helped ... to marriage (<i>janitvanāya</i>).” This interpretation seems to me secured by comparing <i>mākīna</i> , which L. apparently did not notice, but which is obviously a derivative from the stem <i>mākī</i> 50, 30 a Note	
<i>mākīna</i> , mine, RV. < <i>mākī</i> , q. v. 50, 30 a Note	
(<i>mākṣika</i> , spider, Brahm. Up., prob. deriv. < <i>mākṣikā</i> .)	
<i>mātṛika</i> , “das Mutterwesen,” (Deussen) n. abstr. < <i>mātṛ</i> , Māitr. Up.	48
<i>mādānaka</i> , kind of wood, Kāuṣ.—Uncertain; cf. <i>mādana</i> (adj.)	58
<i>mādhuparkika</i> , of the <i>mādhuparkā</i> rite, Çāṅkh Gr.	94
<i>-mānaka</i> in <i>nyūṅkha-mānaka</i> , having a desire to insert the <i>nyūṅkha</i> , Çāṅkh Br. 25, 13; 30. 8 (Bah. from <i>māna</i>).— BR. regard it as a participle; but there is no verb <i>nyūṅkhati</i> , only <i>nyūṅkhayati</i> . The sentence is: <i>tasmān nyūṅkhayati</i> <i>nyūṅkhamānaka iva vāi prathamam cicariṣuḥ carati</i> . From this the following semantic proportion is evident— <i>nyūṅkhamānaka</i> : <i>nyūṅkhayati</i> = <i>cicariṣu</i> : <i>carati</i> . Ergo, <i>ny.</i> = “desiring to perform the act <i>nyūṅkhaya</i> , i. e. to insert the <i>nyūṅkha</i> .”—The noun <i>māna</i> = “desire”	55
<i>mānuṣyaka</i> , human, ÇBr. (< <i>manuṣyā</i>)	49

<i>māmakā</i> , mine, RV. &c. (< <i>māma</i>)	49
<i>māruka</i> , dying, TS.; Mān. Gr. Cf. <i>maru-</i>	99
(<i>mārḍikā</i> , deriv. of <i>mṛḍikā</i> , RV. &c.)	101
<i>muktikā</i> , "string of pearls," n. of an Up., Mukt. Up., < <i>muktā</i>	53
<i>mukharikā</i> , bit of a bridle, Kāty Gr. 16. 2. 5 (Lexx. wrongly 4)	62
<i>muṇḍaka</i> , n. of an Up., Mukt. Up.	46
<i>muškā</i> , testicle, RV. &c.; female organ (in du.), AV. &c.	86
<i>muṣṭika</i> , n. of a fighter, Kṛṣ. Up.	53
<i>muhukā</i> , moment, RV.	62
<i>mūka</i> or <i>mūkā</i> , dumb, VS., ÇBr.	103
<i>mūtakā</i> , little basket, ÇBr.	62
<i>mūṣaka</i> , rat or mouse (Dim.), Gārud. Up.; - <i>ikā</i> , id, VS.	62
<i>mṛdayāku</i> , merciful, RV.	45, 29 d
<i>mṛḍikā</i> , favor, only RV., AV.	101
<i>mṛttikā</i> , earth, clay, VS.; Āit. Br. &c.	44, 36
- <i>mēka</i> in <i>sumēka</i> , well-established, RV. Most often of heaven and earth	103
- <i>medāska</i> , ifc. Bah. = <i>mēdas</i> , TS., in <i>a-m</i>	55
<i>menakā</i> , n. of a daughter of Ménā, Śadv. Br. (metron.)	51
(<i>meṣka</i> for <i>bleṣka</i> &c., only <i>m-hata</i> , Āp. Çr.)	
<i>māinākā</i> , n. of a Mt., TĀr.—Metronymic < <i>ménā</i>	49
- <i>mocaka</i> , releasing, Mukt. Up.	97
<i>mōhuka</i> , falling into confusion, TS.	99
<i>yakā</i> , which (contemp.-obs.), RV. &c.	75, 86
- <i>yajūška</i> ifc. Bah. = <i>yājus</i> , ÇBr., in <i>a-y</i>	55
- <i>yantryka</i> ifc. Bah. = <i>yantṛ</i> , Kāty Çr.	55
<i>yantraka</i> , <i>ikā</i> , tamer, subduer, Pañcav Br. < <i>yantrā</i> , fetter	51
<i>yamika</i> , du, n. of 2 Sāmans ("Twins"), Ārṣ. Br.; SV.	92
<i>yaṣṭikā</i> , club, Kṛṣ. Up.	44
<i>yaska</i> , n. pr., Āçv. Çr. &c.; pl. his pupils or descendants	103
- <i>yācaka</i> , beggar, in <i>pura-y</i> , Māitr. Up.	97
- <i>yācanaka</i> , beggar, in <i>nitya-y</i> , Māitr. Up. < <i>yācana</i> , request	56
<i>yājaka</i> , sacrificing, Māitr. Up.	97
<i>yājuka</i> , sacrificing, ÇB.	99
<i>yājñikā</i> , sacrificial, Çāṅkh Çr.; Kāuç.	94
—, a sacrificer, ÇBr.; Pār. Gr. 2. 6.	
<i>yādṛcchika</i> , relating to or depending on chance (<i>yādṛcchā</i>), Param. Up.	94
<i>yāmaḥi</i> , I go basely, Çāṅkh Br. < <i>yāmi</i>	84, 37
<i>yāyajūka</i> , constantly sacrificing, ÇBr.	25

(*yāškā*) patron < *yaska*.

yavāku, adj. of you two, RV. < *yuvā-* . . . 51, 30a Note

yuṣmāka, your, RV. < *yuṣmā-* . . . 51, 30a Note

-yūthika, in *a-y.*, not in the herd, < *yūthā*. Kāth Gr. 44a

= Mān. Gr. 2. 17 92

-yūṣka, in *vi-y.*, ifc. Bah., Hir. P. 55

-yonika, in *a-y.*, Bah., not containing the phrase *eṣā te yónih*,

Kāty Gr. 55

-rajaska, ifc. Bah. = *rājas*, Nṛsut. Up. 55

-raçmika, ifc. Bah. = *raçmī*, Āçv. Gr. 55

rākā, full moon, RV. &c. Cf. *rā(i)*? 103

rājakā, king (contempt.), RV.¹ < *rājan* 71

rājasūyika, of the *rājasūya*-sacrifice, Çr. S. 94

rāsnākā, little girdle, Kāth 62

rūpakā, evil shape, AV.; (*-ka*) species, Māitr Up.; image,

Āit. Br. (= *rūpā*) 79, 44

recaka, expiration, Amṛt. Up., Dhyān. Up. 95

-retāška, ifc. Bah. = *rétas*, ÇBr. 55

rāivataka, n. of an ascetic, prob. patron. < *revata*, Jābāl Up. 49

rócuka, causing pleasure, MS. 99

rodākā,—? Vāit. 58, 30 a

ropanākā, a certain yellow bird, thrush? RV., AV., TBr.

Origin obscure 58, 30 a

rohītaka, n. of a tree, MS.; Kāty Gr. Prob. < adj. *róhita* 46

(*rāuhītaka*, made from the *rohītaka* tree, Kāty Gr.)

lambhaka, acc. to Wh. Vb. roots, found in Brāhmaṇas 96, 97

lambhuka, accustomed to receive. Chā. Up. (cf. *ālambhukā*) 99

lalāṭika, being on the forehead, Āp. Gr. 92

lāghavika, adj. < *laghava*, n.—Kāty Gr. 94

-lābhikā, in *su-l.*, easily won, RV.¹ (voc.) 16

lēka, n. of an Āditya, TS. Obscure 103

-lepaka, ifc. Bah. = *lepa*, Muk. Up. 55

lokapālaka, earth-protector, Mahānār. Up. 44

-lómaka or *lomāka*, ifc. Bah. = *lóman*, TS.; ÇBr. &c. . . 55

lohītaka, red, reddish, Āp. 64

lohinīkā, red glow, Āp. Gr. < *lōhinī*, f. of *lōhita* 48

lāukika, worldly, usual, Kāty Gr.; Kāuç &c. 94

vajrasūcikā, n. of an Up. (also called *vajrasūcī*), "little

sharp needle," Muk. Up. 62

vādhaka, sort of reed or rush, = *ghātaka*; AV.; ÇBr. &c. 46

vadhā- deadly weapon, destroyer &c.; cf. *ghāta-ka*.

- vapāka*, ifc. Bah. = *vapā*, ÇBr.; Kāty Çr. 55
 (*vābhruka*, v. l. for *bābhruka*, MS. 3. 14. 7.)
- vamrakā*, "Antman," n. pr., RV., < *vamrá* 46
- vayākīn*, RV.¹ (of the soma plant): prob. "having little tendrils," (*vayāka*, dim. of *vayā*; so Sāy. and Ludwig) 62
- varaka*, suitor, Çāṅkh Gr. 46
- varāhaka*, n. of an Up., Mukṭ. Up. 44
- varṇaka*, ifc. Bah. = *vārṇa*, Gopī. Up. 55
- vārtikā*, quail (ṣṛvṣ), RV. &c. (only RV. and Classical) (suffixal formation uncertain) 58
- varṣika*, ifc. Bah. = *varṣā* (cf. *varṣin*), Āçv. Çr. 54, 55
- varṣika*, kind of meter, Nidānas. 46, 36
- vārṣuka*, raining, rainy, TS.; TBr.; ÇBr. &c. 99
- valīka*, projecting thatch, Gāut.; reed, Kāuç. &c. < *vali* or *valī* 40
- valūka*, red or black, Pañc. Br.; Lāty &c. Obscure 58
- valkā*, tree-bark, TS.; TBr. *Vvr*? 103
- valmīka*, ant-hill, VS.; TS.; ÇBr. &c. 62
- vasukā*, having or bestowing weal (*vāsu*), TS. &c.; in formula *vasukó'si vēṣaçrīr asi* &c.—Comm. *vāsayitr*, as if *Vvās* and *uka*, which is highly improbable 58
- vastuka*, ifc. Bah. = *vāstu*, Gāudap. 55
- vasnikā*, prize, reward, Pañc Br. (*vasnikām jayāya*). Comm. *vasnisanijñām vasusambandham dhanasamūham* 53
- vahyaka*, draft-animal, Kāty Çr. 14. 231 (not 331 as BR.) Āçv. Çr. has in same passage *vahya* 44
- vākkā*, ifc. Bah. = *vāc*, ÇBr. 55
- vācaka*, expressing, declaring, Rāmap. Up. 97
- vājasaneyaka*, of or by Vājasaneyā, Kāty Çr. &c. 50
- vāmanaka*, dwarf, Garbh. Up. 62
- vāyovīdyikā*, fowler, ÇBr. 94
- vāraka*, keeping, guarding, Nṛsut. Up. 97
- vāruka*, choosing, MS. 99
- vāruṇapraghāsika*, adj., of *varuṇapraghāsā*, Āp. Çr. 94
- vārddhuṣika*, usurer, Āp. 44
- vārṣaṇatika*, bestowing life for 100 years, Kāuç. 94
- vārṣika*, of the rainy season, or year, AV.; VS.; ÇBr. &c. 94
- vālūkā*, sand, Çvet Up. Obscure 58
- vāsantika*, vernal, AV.; VS.; Āit. Br. &c. 94
- vāsuki*, (prob. patron.), n. of a Nāga, Gāruḍ. Up.; Gobh.; Kāuç &c. 78
- viḥkrndhikā*, croaking, acc. to Sch., Māitr. Up. Obscure 58

<i>vika</i> , n. of a Sāman, Ārs. Br.	103
<i>vikalpaka</i> , hesitation, Tej. Up.	44
<i>vikasuka</i> , "bursting", n. of Agni, AV.	99, 24
(vikusuka, corruption of <i>vikasuka</i> , n. of Agni, Āp. Cr.)	
{ <i>vikṣiṇatkā</i> , VS., ÇBr. } (cf. <i>āmīvatkā</i> -) destroying,	
{(inferior) <i>vikṣiṇakā</i> , TS., Kāth } epithet of gods in Çata-	
rudriya; cf. following word, and see Weber, I St. II—43	42
<i>vicinvatkā</i> (in same passages as foregoing), discriminating	
see <i>vikṣiṇatkā</i>	42
<i>vināyaka</i> , n. of evil demons, Mān. Gr. < <i>vi-Vnī</i> . Cf.	
<i>vāināyaka</i>	96, 97
- <i>vibhaktika</i> , ifc. Bah. = <i>vibhakti</i> , declension, Tāṇḍ. Br. . . .	55
<i>vibhinduka</i> , "tearing," n. of an Asura, Pañcav Br. . . .	99
<i>vibhītaka</i> , a tree, ÇBr.; Kāty Cr.; its nut, used for dice,	
RV.	62, 79
<i>vimanyuka</i> , allaying wrath, AV.	56, 23
<i>vilāyaka</i> , soother, VS.—" <i>mānaso' si vilāyakah</i> "	96, 97
<i>viçarika</i> , a certain disease, AV.	103
<i>viçvaka</i> , all-pervading, Rāmat. Up.; n. pr. (<i>viç</i> -) RV. &c.	47
<i>viṣadhānaka</i> , poison-receptacle (imprec.), Mantra Br. . . .	79
<i>viṣānakā</i> , "little horn," n. of a plant, AV. (< <i>viṣāna</i>) . .	62
<i>viṣātakī</i> , a plant, AV.	79
<i>viṣunāk</i> , RV., in various directions	27
- <i>viṣuvatka</i> in <i>a-v.</i> , ifc. Bah., Lāṭy	55
<i>viṣūcikā</i> , a certain disease, VS.; TBr. < fem. of <i>viṣvañc</i> . .	79
<i>viṣphuliṅgakā</i> , little spark ?, RV.	71
<i>visālyaka</i> , Wh. <i>visālpaka</i> , a disease (= <i>visalyā</i>), AV. . . .	79
<i>visrānsikā</i> ,—(of unknown mg.), <i>visrānsikāyāḥ kāṇḍābhyah</i> ,	
Kāth; MS.; Āp. Cr.—In later times, n. of a plant	58
<i>vihvāruka</i> , tumbling, MS.	99
- <i>vīṇākā</i> , flute, in <i>godhā-vīṇ</i> -, Kāty Cr.	44
<i>vīrakā</i> , male, Männchen, RV. (< <i>vīrā</i>)	88
<i>vīrkā</i> , kidney, RV.; AV.; VS.; ÇB. &c.	103
- <i>vṛttika</i> , ifc. Bah. = <i>vṛtti</i> , disposition, Mukta. Up.	55
<i>vṛthak</i> , easily, lightly, RV., cf. <i>vṛthā</i>	27
<i>vṛdhikā</i> , increaser, RV. (epithet of Indra. The context,	
and the correlation of this word with <i>suṣā</i> and <i>sudās</i> ,	
uphold Sāy.'s interpretation)	100
<i>vṛndāraka</i> , best of its kind, Brh. Ār. Up. Prob. conn. w.	
<i>vṛndā</i> - mass, crowd. Formation obscure	58
<i>vṛçcika</i> , scorpion, RV.; AV.	71, 79

	See ¶
<i>vr̥ṣaka</i> , n. of several Sāmans, SV.; Ārṣ. Br.	46
<i>véduka</i> , knowing, TS.; Kāth	99
<i>véduka</i> , obtaining, TBr.	99
<i>veṣkā</i> , noose, ÇBr.; Kāty Çr. See <i>bleṣka</i> &c.	103
<i>veṣṭuka</i> , adhering, MS.	99
<i>vāikalpika</i> , optional, Āçv. Çr.	94
<i>vāitānika</i> , of the 3 sacred fires, Āçv. Gr.; Āçv. Çr.	94
<i>vāidika</i> , vedic, Māitr. Up. &c.	94
<i>vāināyaka</i> , of <i>Vināyaka</i> (a n. of Ganeṣa, as such first found Yajñ.), Sāmav Br.	—
<i>vāibhītaka</i> , made from the <i>vibhīta</i> -tree, Kāth &c. (also- <i>daka</i>)	49
<i>vāilasthānakā</i> , abyss, pit (imprec.), RV. ¹	79
<i>vāiçeṣika</i> , special, peculiar, Āp.	94
<i>vāiçvadevika</i> , of the Vāiçvadevā Pārvan, Mān. Çr.; Çānkh. Çr.	94
<i>vyañjaka</i> , indicating, Nṛsut. Up.	97
<i>vyārdhuka</i> , being deprived of, Kāth; MS. &c.	99
<i>vyādhaka</i> , hunter, Kāuç	97
<i>vyāpaka</i> , Kāth. Up. &c., pervading, permeating	97
<i>vyāyuka</i> , running away, MS.; Kap. S.; Kāth	99
<i>-vyomnika</i> in <i>parama-vy.</i> , an inhabitant of highest heaven, Nrp. Up.	92
<i>vrātika</i> ; adj. < <i>vratā</i> , Gobh.	94
<i>vleṣka</i> , see <i>veṣkā</i> &c. Brugm. thinks this is the original form	103
<i>çakuntakā</i> , <i>ikā</i> , birdlet (dim.-contemp.-obs.), (< <i>çakūnta</i>), RV. &c.	71, 86
<i>çāñkhapulika</i> , n. of a Nāga, Gārud. Up.	78
<i>çāṇḍika</i> , n. of a family or tribe, RV.—Sāy. says “descendant of Çāṇḍa” (an Asura priest, VS., MS.).— <i>çāṇḍa</i> as common n. “curds,” only Lexx.	92
<i>çanakāis</i> , very gently (dim.), RV.; Kāth; Māitr. Up.	65, 37
<i>çāphaka</i> , “little hoof,” n. of a plant, AV.; Āp. Çr. (< <i>çaphā</i>)	62
<i>çamakā</i> , a plant, Kāuç.	46
<i>çayāṇḍaka</i> , lizard, TS.—? <i>çayāṇḍa</i> acc. to Lexx.—“sleepy”	58
<i>çayāṇḍaka</i> , kind of bird, VS. Cf. foregoing. Perh. cpd.; - <i>āṇḍa</i> (<i>ka</i>)?	58
<i>çarṣikā</i> , kind of meter, Nidānas. Cf. <i>sarsikā</i> , a kind of meter, R. Prāt; etymologies of both words unknown	101
<i>çalākā</i> (- <i>ka</i> only Kāth 26. 1), small stake, twig, TS., ÇB. &c.	62, 29 c
<i>çalākakā</i> , twig (contempt.), AV. ¹	71

- çálka*, splinter, TBr.; Āit. Br.; TS., cf. *çalá* 62, 29 b
- çályaka*, porcupine, VS.; Āit. Br.; Āp. 53
- (*çavartaká*, see *kúçarvataka*.)
- çaçaka*, hare (dim.), Adbh. B. 62
- çākunika*, bird-catcher, Māitr. Up. 94
- çātyāyanaka*, the Br. of Čātyāyana, Āçv. Çr.; Lāty 50
- (*çāmāka*—wrong reading for *çyā*-, Kāuç.)
- çāriçākā*, AV.1, unexplained word. It may be a cpd., in which case the *-kā* would presumably be not suffixal . . . 58
- çārīraka*, n. of an Up., Mukh. Up. 49
- çālūka*, a plant, said to be “an esculent lotus root,” AV.; Kāuç.—Doubtless conn. w. *çālu* (class.), a fruit (unidentified) 58
- çāçvatika*, eternal, Āp. 94
- (**çikhaṇḍaka*—mistake in NBD. for *çikhaṇḍá*—TS. 5.7.15.1)
- çipavitnuká*, kind of worm, AV. Etymology unknown . . . 79
- çipiviṣṭaká*, smooth? TBr. < *çipiviṣṭá*, bald-headed . . . 58
- çilaka*, n. pr., Chā. Up. 58
- çiçuká*, young (animal), AV. 63
- çītikā*, cooling, RV., AV. (voc.) 56, 19
- çīrṣáka*, ifc. Bah. = *çīrṣán*, TS. 55
- çīlika*, ifc. Bah. = *çīla*, cf. *çīlin*, Gop. Br. 54, 55
- çulká*, price, RV. Obscure. Primary? 103
- (*çuçulūkā*, a bird, RV.); Say. “owlet”; prob. for *çiçu-ulūka* —
- çuṣka*, dried up, RV., AV., ÇBr. &c. 103
- çrñkhāṇikā* (*çrñgh*-, *siñgh*-), mucus of nose, Āp. Uncertain.
- A word *çīnghāṇa* or *siñghāṇa*, of like meaning, is quoted in Lexx. 58
- çerabhaka*, n. of demons, AV.1 (voc.) 78
- çevrdhaka*, n. of demons, AV.1 (voc.) 78
- çāúnaka*, n. of a Rishi, ÇBr. &c.—Supposed to be patron.
- < *çunaka*, and this < *çvān* 58
- çyāmāka*, millet, TS.; VS.; ÇBr. &c. 44, 30 a Note
- çyāvaka*, n. pr., RV. 64
- (*çlaksṇaka*), *-ikā*, slippery (obscene), AV. 86
- çlōka*, sound &c., RV. &c. 103
- çvakiskēn*, applied to demons, AV.1 Text and meaning uncertain; “having dogs’ tails”?—The word **kīṣka* is hopeless 103
- ṣatka*, consisting of 6, Lāty; ifc. Bah. = *ṣaṣ*, as *navasatka*, having nine sixes or hexads, Āçv. Çr. 53, 55

- ṣaḍvinṇaṇṇa*, consisting of 26, Cūl. Up. 53
(ṣāṇḍika) n. pr., for *khāṇḍika* q. v., MS. —
ṣātkāuṣika, six-sheathed, Kāuṣ (reference not given; MW. Add.) 94
ṣāḍahika, of the *ṣaḍahā*-festival, Lāṭy 94
ṣodaṣika, of the 16-partite Stotra, Pañc Br. &c. 92
saṁvartaka, "destroyer," the great world-ending fire, Nṛp. Up. 97
saṁvitka, ifc. Bah. = *saṁvid*, Nṛsut. Up. 55
-saṁcāruka in *a-s.*, not breaking down, Kap. S. 99
sāmsamaka, united together, AV. 47
(sakā, see takā) 75
saṁkalpaka, determining, purposing, Amṛt. Up. 97
sāṁkasuka, n. of an Agni, AV.; Kāuṣ 99, 24
—adj.—splitting off, ÇBr.
{-saṁkhyaka, ifc. Bah. = *saṁkhyā*, Mukt. Up. 55, 30 b
{-saṁkhyāka, ifc. Bah. = *saṁkhyā*, Mukt. Up.; Cūl. Up. 55, 30 a
saṁjīvaka, animating, Āc. Gr.; Āp. Gr. 97
-saṁjñaka, *ikā*, ifc. Bah. = *saṁjñā*, Rām. Up.; Māitr. Up. 55
sātika, TS. 4. 4. 6. 2.—Unknown mg. P. p. *sa-tika*. Comm. "water." Cf. *sārṇika*, with which this is closely connected in the text. Both words are obscure and perhaps artificial in formation 101
sanakā, old (imprec.), RV. 80
saṁtanika, n. of a Sāman, Ārṣ. Br. (v. l. *saṁtānika*) 44
-saṁnyāsika, ifc. Bah. = *saṁnyāsa*, cf. *saṁnyāsin*, Ācram. Up. 54, 55
(samanīkā, battle, RV. < sāmana, with -ika by analogy with samīkā, q. v. Not real suffixal ka. Cf. also astamīkā.) —
samārdhuka, prospering, TS. 99
-samitka, ifc. Bah. = *samīdh*, Kāuṣ 55
(samīkā, battle, RV.; from wk. stem of saṁyāñc, cf. prā-tika &c.) —
samūhaka, little broom, Āp. Gr. (NBD. "heap") 62
sampātika, n. of certain demons, Gobh. (MW.; no reference quoted) 46
sampuṣka, unground, Āp. Gr.—Comm. *akṣata*. Uncertain 103
sarabhaka, kind of grain-devouring insect, Adbh. Br. 79
(sararūka, see salalūka.)
sārṇika, TS. 4. 4. 6. 2.—? Comm. "water;" see *sātika*. Perhaps *Vśr*—? (BR. quote the reference as ÇBr. by mistake.) 101

sarvakā, all (imprec.), AV. (< *sārva*) 82
salalūka, RV.¹—? Sch. "aimless wandering," as if from *Vsr*,
 intens. + *-ūka* (§ 25). So Grassmann. Nir. even makes
 up the word *sararūka* to explain it; but the true intens.
 stem of *Vsr* is *sarsr-*. Grif. "wavering;" Ludw. "club."

The word is at present quite uninterpretable 58
sāmvatsarika, yearly, Āit. Br.; Çāṅkh Br. &c. 94
sāmṇaṁsika, recited together, Gop. Br.; Vāit. 94
sāmṇayika, doubtful, Āp. 94
sāmsiddhika, natural, Gāudap. 94
sāmsparṇaka, contact, Mān. Gr., Kāṭh Gr. 49
 (*sākām*, together, RV.; *Vsac*, cf. *sácā*, *sáci*)
-sākṣika, ifc. Bah. = *sākṣin*, Māitr. Up. 55
sāmgrāmika, warlike, Kāuṣ. 94
sāmgātika, of a group, Çāṅkh Gr. 94
sāttrika, sacrificial, Kāuṣ.; Çāṅkh Br. 94
sāttvika, true, good, Māitr. Up. 94
sādhaka, accomplisher, Gāudap. 97
sānukā, eager for prey, RV.¹, cf. *sano-ti* 99
sānnāhuka, able to bear arms, Āit. Br.; mistake for *-ika*
 (Class.) ? 21

sānnāha, n., armor; the girding on of armor.

sānnipātika, complicated, coalescing, Lāṭy; Gobh. &c. 94
sāptamika, of the seventh day, Lāṭy 94
sāptarātrika, lasting 7 nights or days, Sāmavidh. Br. 94
sāmavāyika, inherent, concomitant, Kāty Gr. 94
sāmayācārika, of usage or custom, Gāut.; Āp. 94
sāmika, adj., < *sāman*, Lāṭy 94
-sāmidhenika, ifc. Bah. = *sāmidhenī*, Çāṅkh Br.; Kāty Gr. 55
sānpātika, of contiguous hymns, Āçv. Gr. 94
sānpṛadāyika, traditional, Rāmat. Up. 94
sāyaka, to be sent, RV.; n. arrow, RV. 16
sāraka, acc. to Wh. Vbl. roots found in Brāhmaṇas 96, 97
sārvakāmika, fulfilling every wish, Āçv. Gr.; Çāṅkh Gr. 94
sārvakālika, of all time, Āp. 94
sārvayajñika, of all sorts of sacrifice, Çāṅkh Gr. 94
sārvavarṇika, of every kind, Āp. Gr. 94
sārvavāidika, of all the Vedas, Kāuṣ. 94
sāvika, adj. < *savā*, Vāit. 94
-sāvitrika, ifc. Bah. = *sāvitṛī*, Āçv. Gr.; Pār. Gr. 55
 (*siṅghānikā*, v. l. for *çṛṅkh-* q. v., Āp.)

- sidhraka*, made of the wood of the *sidhra*-tree, Kāty Gr. 47
silika- in *śīlikamadhyama*, RV.¹ Obscure word, commonly
 rendered "united, tied together" ($\sqrt{śi}$?) 58
 (*sūka*, parrot, AV.; should be *śūka*. Non-suffixal *k*.)
 (*sutūka*, RV., running swiftly? Ludw. strong. Prob. non-
 suffixal *ka*. Uhlenbeck derives from \sqrt{tuk} in *toka*.)
sūbhadrīkā, courtesan, VS., < *sūbhadrā*, pleasant &c. 79, 67
sumēka, see *-mēka*.
 (*susīlīkā*) kind of bird, VS., cf. MS. 3. 14. 17, same verse,
 which reads *çuṣulūkā*. Is this a later lectio facilior for
susīlīkā, or is it the true reading, corrupted in VS.?
 Other parallel texts have not the word 101
sūcīka, epithet of a stinging insect, RV. 62
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 (*sṛkā*, arrow, RV.) Non-suffixal *k*. Cf. Av. *harako*, < *harec* 103
sevaka, worshipper, Rām. Up. 97
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sāūrāki, a patronymic, MS.; Kāth.—From **sura* or **suraka*,
 presumably. Exact formation not certain 58
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 and corrupt, and *-ka* probably not suffixal.)
stūkā, tuft of hair, RV. &c. 42, cf. 103
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svaka, own, Māitr. Up.; Muk. Up. 45
 (*svapāka*? epithet of Agni, RV.¹—BR., following Sāy., say
 < *su-apás*, "Gutes bewirkend," "Kunstreich." Improbable.
 Others—< *su-ápāñc*. The word is very doubtful; on the
 whole perhaps Ludwig's suggestion is best, *sva-pāka* (\sqrt{pac})
 = "self-ready". Non-suffixal *ka* in any case, probably.) —

	See §
<i>svālpikā</i> , very tiny (obs.), AV. Cf. <i>alpakā</i>	86
<i>svastika</i> , a mode of sitting (in the shape of a <i>svastika</i> , which is by origin adjectival, = "lucky, bringing luck"), Amṛt.Up.	51
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<i>hātaka</i> , gold, Param. Up.—Uhlenbeck: < IE. <i>ghol-</i> (<i>hari</i> &c.) + <i>to-</i> (cf. OSl. <i>zlato</i> , Gth. <i>guld</i> , gold) + <i>ka</i> .—* <i>hātu</i> is not found	58
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- <i>hetuka</i> , ifc. Bah. = <i>hetū</i> , Gāuḍap.	55
<i>hāimantika</i> , wintry, VS. &c., < <i>hemantā</i>	94
<i>hōtrka</i> , assistant <i>hōtr</i> , QB., Lāṭy	66
<i>hotraka</i> , a priest at the sacrifice, Āit. B.	51
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The Mayūrāṣṭaka, an unedited Sanskrit poem by Mayūra.

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WHAT little knowledge we have of the poet Mayūra rests largely on legend and tradition, but it is now generally accepted that he flourished in the seventh century of our era, was one of the *habitués* at the court of the emperor Harṣavardhana, and was the rival, in the field of literature, of Bāṇa, author of the *Kādambarī* and of the *Harṣacarita*.

In an old legend, preserved principally in Jaina tradition, and existing in several versions,¹ we are told that Mayūra, on one occasion, wrote a licentious description of the charms of his own daughter, Bāṇa's wife. That lady, enraged, cursed her father, who, in consequence of the curse, became a leper, and was banished from court. Nothing daunted, however, he set to work to regain his health and his lost position, and composed the *Sūryaśataka*², consisting of a hundred stanzas in praise of Sūrya, the sun-god. At the recitation of the sixth stanza, the sun appeared in bodily form, and cured the poet of his leprosy. Bāṇa, jealous of Mayūra's triumph, and seeking

¹ The principal versions of this legend are found in two anonymous commentaries on the Jaina poet Mānatuṅga's *Bhaktāmarastotra*, in Madhusūdana's commentary on Mayūra's *Sūryaśataka*, and in the *Prabandhacintāmaṇi* of Merutuṅga, who was a Jaina. For the anonymous commentaries on the *Bhaktāmarastotra*, see F. E. Hall, *Subandhu's Vā-savadattā*, Calcutta, 1859, intro. pp. 7, 8, 49, and Rājendralāla Mitra, *Catalogue of Sanskrit Manuscripts in the Library of His Highness, the Mahārāja of Bikaner*, Calcutta, 1880, p. 671, no. 1463, and Bühler, *On the Caṇḍikāśataka of Bāṇabhaṭṭa*, *Indian Antiquary*, vol. 1 (1872), pp. 111—115; for the commentary of Madhusūdana, see Bühler, *On the Authorship of the Ratnāvalī*, *Indian Antiquary*, vol. 2 (1873), pp. 127—128; and for the *Prabandhacintāmaṇi*, see the translation of that work by C. H. Tawney, Calcutta, 1901, pp. 64—66.

² This is Mayūra's best-known work. The most accessible edition is that in *Kāvya-mālā* Series, no. 19, Bombay (2nd ed.), 1900.

to emulate his example, had his own hands and feet cut off, and then composed the *Caṇḍīśataka*¹, in honor of Caṇḍī, the wife of Śiva. But in the recitation of his poem, he did not have to proceed any further than the sixth syllable of the first stanza before the goddess appeared and restored his limbs to their former condition. Now it happened that a Jaina, Mānatuṅga, was present, and wishing to show that the Jainas were not lacking in miracle-working powers, he ordered himself to be loaded with forty-two chains², and to be locked up in a room. He then began to compose the *Bhaktāmarastotra*³, which consists of forty-four stanzas. At the conclusion of each stanza, one of the forty-two chains dropped off, and when the whole forty-four stanzas had been recited, the locked doors flew open of their own accord, and he was free. The king, Harṣa (or Bhoja, as some accounts call him), had witnessed all three miracles, but deciding that Mānatuṅga's was the greatest, he became a convert to Jainism.

In one version of the legend, that, namely, given by the first anonymous commentator on the *Bhaktāmarastotra*, the name of the obnoxious poem that so displeased Mayūra's daughter, and that brought upon Mayūra the curse of leprosy, is said to be the *Mayūrāṣṭaka*. While recently working up the life and writings of Mayūra for a forthcoming volume of the Columbia University Indo-Iranian Series, I noted that a poem of this name was recorded in Professor Garbe's catalogue⁴ of the Sanskrit manuscripts at Tübingen University. Through the kindness of Professor Garbe and of Dr. Geiger, the librarian at Tübingen, the manuscript containing the *Mayūrāṣṭaka* was forwarded to Professor Jackson for my use. The material is birch-bark, folded in book form, each leaf being $7\frac{5}{8}$ by $6\frac{3}{8}$ inches, with 16 lines of writing to a full page. The writing is in the *śāradā* script,

¹ Ed. with commentary, in *Kāvya-mālā* Series, Part 4, Bombay (2nd ed.), 1899.

² Other accounts say 34 or 48 chains; cf. Hall, op. cit. pp. 8, 49.

³ Edited (transliteration and translation) by Jacobi, *Indische Studien*, vol. 14, Leipzig, 1876, pp. 359—376, with forty-four stanzas. Ettinghausen, *Harṣa Vardhana, Empereur et Poète*, Louvain, 1906, p. 127, n. 2, mentions several editions, one containing 48 stanzas.

⁴ Richard Garbe, *Verzeichniss der indischen Handschriften der königlichen Universitäts-Bibliothek*, Tübingen, 1899, no. 182, F.

and the date should probably be placed in the seventeenth century.¹

The *Mayūrāṣṭaka*, which covers one full leaf, and parts of two other leaves, consists, as its name implies, of eight stanzas. Of these, the first and the sixth are incomplete, owing to a tear in the manuscript. Stanzas 1, 2, and 4 are in the *sragdharā* meter, the others in *śūrdulavikrīḍita*. The dedication is to Hari and Hara (Viṣṇu and Śiva), and at the end is the colophon *iti śrīmayūrāṣṭakam samāptam*. After the colophon comes a kind of diagram, which may be something astrological, though I have been unable to decipher anything from it except the words *saṃvat 2*.

The theme of the poem is the description of a girl or young woman, and at times, especially through the *double entendres* and puns, the sentiment is decidedly erotic, and might very well have given offence to the person portrayed. In a general way the style is not unlike the style of other compositions ascribed to Mayūra. For example, the puns and *double entendres*, already referred to, besides other Kāvya elements,

¹ The ms. in Garbe's *Verzeichniss* (see note preceding) 182 F was one of those purchased in 1894 by Marc Aurel Stein at Śrīnagar in Kāśmīr (*Verzeichniss*, p. 3), and the date is according to the Saptarṣi era (*ibid.*, p. 5, n. 1; personal letter from Prof. Garbe, April 4th, 1911). "At the end of the *Durgāṣṭaka* [one of the pieces in the collection contained in the manuscript in question] the copyist gives the date (*lāukika*) *saṃvat 87, grāvati 5, ṣanāu*" (Stein in Garbe, *Verzeichniss*, p. 78), and, as Prof. Garbe writes me, "die Ähnlichkeit der äußeren Beschaffenheit aber zeigt, daß die beiden darauf folgenden Stücke [*Vetālastotra, Mayūrāṣṭaka*] in annähernd derselben Zeit geschrieben sein müssen".

The Saptarṣi era began B. C. 3076 (Bühler, in Weber, *Indische Studien*, vol. 14, Leipzig, 1876, pp. 407—408). During the centuries which, in consideration of the average age of birch-bark manuscripts (see Bühler, *Indische Palaeographie*, Straßburg, 1896, p. 88), can alone be here taken into account, the fifth of Śrāvana fell on Saturday in the year 87 of any century of this Saptarṣi era only in 4687 and 4487 — Saturday, Śrāvana 5, 4687 corresponding to Aug. 13, 1611 (Gregorian calendar), and Saturday, Śrāvana 5, 4487 to July 25, 1411, of the Julian calendar (as reckoned according to Robert Schram, *Kalendariographische und chronologische Tafeln*, Leipzig, 1908). Since of these two dates the former is the more likely, we may ascribe the completion of our manuscript to Aug. 13, 1611. (On the Saptarṣi era, see Sewell and Dikshit, *The Indian Calendar*, London, 1896, p. 41; Ginzel, *Handbuch der mathematischen und technischen Chronologie*, Leipzig, 1906, vol. 1, pp. 382—384; A. Cunningham, *Book of Indian Eras*, Calcutta, 1883, pp. 6—17.)

are common to it and to the *Sūryaśataka*, and that Mayūra did not disdain the erotic sentiment elsewhere is shown by a perusal of the descriptive verse on two asses, which is found under his name in the *Subhāṣitāvali* of Vallabhadeva, and also in the *Śārṅgadharapaddhati*.¹ It may count for something, too, that the meter of three of the stanzas is the *sragdharā*, the same as that in which the *Sūryaśataka* is composed, as well as most of the anthology stanzas attributed to Mayūra.

In view of all the facts and circumstances as set forth, it seems not unreasonable to believe that the poem *Mayūrāṣṭaka*, contained in the Tübingen manuscript, is a creation of the poet Mayūra, although it must be acknowledged that the evidence is not especially strong. It may be argued, for example, that the name *Mayūrāṣṭaka* may mean "the *aṣṭaka* on the peacock", or that the commentator on the *Bhaktāmara* ascribed it to Mayūra merely because of its name, or that it is the composition of another Mayūra, not the seventh-century poet of that name.

But on the other hand stand the facts that the name *śrī-mayūrāṣṭakam* is found in the colophon of the manuscript, that the subject-matter of the manuscript poem harmonizes with the content of the *Mayūrāṣṭaka* described by the commentator, that there is not the faintest allusion to a peacock in any of the stanzas, and that there is a general similarity in point of style between the manuscript poem and the known writings of Mayūra. The *pros* are, on the whole, stronger than the *cons*, and it can at least be said that there is no direct evidence to show that Mayūra did not write the *Mayūrāṣṭaka* contained in the Tübingen manuscript. Until such evidence is adduced, I am inclined to accept it as his work.

It gives me pleasure to express my thanks to Professor Jackson and to Dr. Gray for many valuable suggestions, and also to Professor Barret, who was good enough to verify my transliteration of the *śāradā* script.

¹ Peter Peterson, *The Subhāṣitāvali of Vallabhadeva*, Bombay, 1886, no. 2422; Peterson, *The Paddhati of Śārṅgadharā*, Bombay, 1888, no. 585. See also the modern anthology, *Subhāṣitaratnabhāṇḍāgāra*, compiled by K. P. Parab, Bombay (3rd ed.), 1891, p. 327, v. 17.

MAYŪRĀṢṬAKA.

Verse 1.

om namaḥ śrīharīharābhyām

eṣā¹ kā prastutām²gī pracalitanayanā hamsalīlā³vrajanti
 dvāu hastāu kuṅkumārdrāu kanakaviracita⁴... ū
 ..⁵um[gām]gegatā sā bahukusumayutā baddhavīṇā hasanti
 tāmbūlaṃ⁶ vāmahaste⁷ madanavaśagatā gūhya⁸ śālāṃ praviṣṭā⁹

¹ The meter is *sragdharā*.

² In the matter of transliterating the nasals, I have faithfully followed the manuscript, which is inconsistent, sometimes writing *anusvāra* instead of the appropriate nasal consonant. Compare, for example, *lagnāṃga* (2a), *prīyāṃga* (3d), and *gaganāṃganā* (8d), with *bhrūbhaṅgam* and *anaṅga* (7b). Note also *aṃtaḥ* for *antaḥ* (3c), *caṇpaka* with lingual nasal, instead of *campaka* (8b), and *sampakva* for *sampakva* (5b). In the use of the nasal before *k*, there appear to be no irregularities except *śaṃkayantī* for *śaṅkayantī* (2b); cf. *kuṅkuma* (1b), and *paṅka* (7c).

³ The word *līlā* is one of the stock terms used to define the natural graces of the heroine; cf. *Daśarūpa, a Treatise on Hindu Dramaturgy*, tr. Haas, New York, 1911, 2.60, "Sportiveness (*līlā*) is the imitation of a lover in the actions of a fair-limbed maiden."

⁴ One, possibly two consonants must come between the *a* and the *ū*; the syllable containing the *a* must be heavy, and six syllables must be supplied after the *ū*.

⁵ One syllable is missing.

⁶ Betel was as much an adjunct of love-making among the ancient Hindus as candy and confections are to-day. Usually it was brought by the man to the girl, but here the girl appears to be carrying it as a gift to her lover; cf. Schmidt, *Beiträge zur indischen Erotik*, Leipzig, 1902, p. 728.

⁷ Was the left hand the erotic one, as implied, for example, in the epithet "left-handed", when used to denote the obscene form in the Tantra cult?

⁸ I take *gūhya* to be a gerund (cf. Whitney, *Skt. Grammar*, 992 c), but the author doubtless intended that it should be read also, though with short *u*, as first member of a compound with *śālāṃ—guhyaśālāṃ*, "private chamber"; cf. *guhyadeśān* (4 d).

⁹ In *śāradā*, the same ligature represents both *ṣṭa* and *ṣṭha*. Prof. Barret, who has transliterated part of the Pāippalāda Manuscript of the Atharvaveda, which is in *śāradā* (cf. JAOS. vol. 26, 2nd part, pp. 197—295), writes me: "about *ṣṭa* and *ṣṭha*; as far as I have seen, there is no difference made, the same sign serving for both."

Translation.

Om. Reverence to the illustrious Hari and Hara.

Who is this (maiden), with beautiful limbs and wandering glance, approaching with the gait of a *haṃsa*?

Her two hands are moist with saffron, her..... composed of gold.

.....
She has.....on her [body]; she is decked with many flowers, girt with a lute, and is smiling.

Concealing betel in her left hand, and having yielded to the power of love, she enters the [private] chamber.

Verse 2.

eṣā¹ kā bhuktamuktā pracalitanayanā sveda²lagnāṃgavastrā
pratyūṣe yāti bālā³ mṛga iva cakitā sarvataś śaṃkayantī
kenedam vaktrapadmaṃ sphuradadhararasam śaṭpad⁴enāiva
pītaṃ
svargah⁵ kenādyā bhukto haranayanahato manmathah⁵ kasya
tuṣṭaḥ

Translation.

Who is this maiden that, not partaking of food and with wandering glance, and with garments clinging to her limbs with perspiration,

¹ The meter is *sragdharā*.

² For perspiration as a mark of love, see Sappho, frag. 2, v. 4, ἀ δὲ μ' ὄρωσ κακχέεται.

³ In erotics, *bālā* means a young girl under sixteen, who wishes to be loved in darkness, and delights in betel (Schmidt, pp. 243—246; especially the citation (p. 244) from *Anaṅgarāṅga*, fol. 5 b). She is also a *mṛgī*, "gazelle" (cf. *mṛga* 2 b, and *hariṇī* in 3 b and 8 c), so eats little (cf. *bhuktamuktā* in 2 a), and has high-set (*unnata*) breasts, cf. Schmidt, pp. 212—213.

⁴ *Śaṭpada* suggests *bhramara*, which means both "bee" and "lover".

⁵ In the ligature here transliterated by *hk*, I have taken the first element to be the sign for *jīhvāmūṭiya*, the surd guttural spirant, cf. Whitney, *Skt. Grammar*, 69, 170 d, 171 c. Prof. Barret, however, in his transliteration of the Pāippalāda Manuscript of the Atharvaveda, adopted *ṣk* as the transcription of the character; compare, for example, JAOS. vol. 26, 2nd part, New Haven, 1906, p. 218 foot, v. 18, *vaṣ kāmā*, and p. 224 foot, v. 25, *jātaṣ kasyapo*, with the Pāippalāda facsimiles, folios 6 a, line 3, and 7 b, line 12, respectively. But he has since written me: "The signs which I transliterated *ṣka* and *ṣpa* are not exactly representatives of lingual *ṣ*, but that seemed the best rendering."

At dawn goes here and there, timid [and] distrustful, like a gazelle?

How is this? Has this lotus face with its lower lip's welling nectar, been sipped by a bee?

By whom has heaven been enjoyed to-day? With whom has Kāma, [once] slain by Śiva's eye, been pleased?

Verse 3.

eṣā¹ kā stanapīnabhārakāthinā² madhye daridrāvati³
vibhrāntā hariṇī⁴ vilolanayanā samtrasta⁵yūthodgatā
amtaḥsv(e⁶)dagajendragandagalitā⁷ samlīlayā⁸ gacchati⁹

¹ The meter is *śārdūlavikrīḍita*.

² Perhaps, "stiff with the burden of her swelling breasts"; i. e. she must walk very upright, or the weight of her breasts would make her stoop-shouldered.

³ There may be an obscene pun in *madhye daridrāvati*; for the passionateness of the *mrgī*, see Schmidt as cited p. 348, note 3. For *dridrāvati*, not found in the lexicons, cf. Whitney, *Skt. Grammar*, 1233 d.

⁴ For *hariṇī*, "gazelle", see *mrgī*, p. 348, note 3.

⁵ The reading of the manuscript is *samtrastha*.

⁶ The manuscript is broken above the *sv* ligature, but the restoration of the *e* is unquestionably correct.

⁷ According to folk-belief, even in modern India (cf. W. Crooke, *The Popular Religion and Folk-Lore of Northern India*, 2nd ed., Westminster, 1896, vol. 2, p. 240), there is, in the forehead of an elephant, a magic jewel, the *gajamukta*, which grants to him who possesses it his every wish. The author seems here to be comparing his heroine to this magic jewel.

⁸ I have rendered *samlīlayā* as "like"; cf. St. Petersburg Wörterbuch, unabridged ed., s. v. *līlā*, 3. The compound of *līlā* and *saṃ* is not found in the lexicons, but occurs twice in this poem; cf. 8c.

⁹ The whole of line 3 may be read with a second rendering, containing an obscene pun: "She goes, possessed, through her wanton sport with [her lover], of that which falls from the temple of the rutting lord of elephants," i. e., possessed of the *mada*, which also means *semen virile* and *aphrodisiac vortis*; this latter, in the case of the *mrgī*, has the odor of flowers (Schmidt, p. 213), and would therefore attract bees (or lovers; cf. p. 348, n. 4), just as the *mada* of a must-elephant does. [Prof. Jackson takes this second rendering to be the correct interpretation, as opposed to that presented in the text and in notes 7 and 8.]

dr̥ṣṭvā rūpam idam priyāṃgagahanam¹ vṛddho² (')pi kāmāyate³

Translation.

Who is this timid gazelle, with a burden of firm, swelling breasts,
With roving glance, and slender of waist, gone forth from the frightened herd?
She goes like as she were fallen from the temple of a rutting lord of elephants.
Seeing this form, with its adornment of beautiful limbs, even an old man becomes a Kāma.

Verse 4.

vāmenāveṣṭayanti⁴ praviralakusumam keśabhāram kareṇa prabhraṣṭam cottariyam ratipatitagunām mekhalām dakṣiṇena tāmbūlam codvahanti vikasitavadanā⁵ muktakeśā narāgā⁶ niṣkrāntā guhyadeśān madanavaśagatā mārutam prārthayanti

Translation.

With her left hand doing up her heavy hair, on which few flowers [now remain],
And with her right holding up her upper garment, her girdle, whose cord had slipped down

¹ The compound *priyāṃgagahanam* may be read in two ways. In the first way, take *gahanam* as from *gahanā*, "adornment", and the second reading, which is obscene, may be found by taking *gahanam* as "place of concealment", and *priyāṃga* as a *tatpuruṣa* compound, *priya* denoting the lover.

² Is *vṛddho* a reference to Bāṇa, the husband of Mayūra's daughter? Bāṇa may have been of the same age as Mayūra, and so considerably older than his wife.

³ The regular causative of the root *kam* is *kāmāyate*. I therefore take *kāmāyate* to be a denominative from *Kāma*; cf. Whitney, *Skt. Grammar*, 1059c, and Brugmann, *Vgl. Gram. der idg. Sprachen*, Straßburg, 1892, 2. 769 (p. 1107). The meter requires that the second syllable of *kāmāyate* should be long.

⁴ The meter is *sragdharā*.

⁵ "With blooming face", or, punningly, "with open mouth", "yawning".

⁶ The word *narāgā* is not found in the lexicons, but on the analogy of *naroga*, "not ill", I have taken it to mean "not passionate", i. e., "with passion sated".

During love, and her betel; with blooming face, with disheveled hair, with passion sated,
Coming forth from the private chamber, having yielded to the power of love, she longs for the breeze.

Verse 5.

eṣā¹ kā navayāuvanā śaśimukhī kāntāpathī² gacchati
nidrāvyaikulitā vighūrṇanayanā sampakvabimbādhara
keśair vyākulitā nakhair vidalitā³ dantāis ca khaṇḍikṛtā⁴
kenedam ratirākṣasena ramitā śārdūlavikṛitā

Translation.

Who is this lovely one advancing along the path, moon-faced,
in the bloom of youth,
Bewildered with sleep, her eye rolling, her lower lip like a
ripe *bimba* fruit,
Bewildered by her [disordered] locks, scratched by finger-nails,
and torn to pieces by teeth?
How is this? By a demon in love has she, imitating tiger-sport, been beloved!

¹ The meter is *śārdūlavikṛitā*. Note the pun possibly implied in *śārdūlavikṛitā*, line 4.

² I resolve as *kāntā āpathī*. Compare the Vedic *āpathī* (RV. 1. 64. 11), which evidently means, as Geldner (*Der Rig-Veda in Auswahl*, Stuttgart, 1909, vol. 2, p. 11) says, "auf der Straße fahrend" (cf. also Bezzenberger, in *Pépas*, *Abhandlungen zur idg. Sprachgeschichte* Aug. Fick *gewidmet*, Göttingen, 1903, pp. 175—176), a connotation which is also supported by Sāyaṇa's commentary *ad loc.* Or, perhaps we should read *kāntā pathī*, with *pathī* as fem. nom. sing. of **patha* (**pathi*), with which compare the epithets of the Maruts—*āpathi*, *vipathi*, *antaspatha*, *anupatha*, RV. 5. 52. 10; yet note *tripathā*.

³ The manuscript reads *vimdalitā*.

⁴ References to scratching and biting, as concomitants of indulgence in *ratī*, are found throughout Sanskrit erotic literature. For *nakhacchedya* (scratching with the nails), see Schmidt, pp. 478—496, and for *daśanacchedya* (biting with the teeth), *ibid.* pp. 496—508. Is there not also in *khaṇḍikṛtā* a possible punning allusion to the *khaṇḍābhṛaka* ("broken-cloud") bite on the breast, in form of a circle, with uneven indentures from the varying size of the teeth (Schmidt, p. 504)? The reference to his daughter's disheveled appearance, as being due to the scratches and lacerations, may have been responsible for that lady's anger and her consequent curse of Mayūra (see intro.). And in this connection it may be added that the obscene puns in verse 3 would probably not tend to lessen her displeasure.

Verse 6.

eṣā¹ kā paripūrṇacandravadanā gāurimṛgā² kṣobhini³
 līlāmatagajendrahaṃsagamanā⁴ e...
 n(i⁶)hṣvāsādharaḡandhaṣīṭalamukhī vācā mṛdūllāsini
 sa ślāghyaḥ puruṣas sa jīvati⁷ varo yasya priyā hīdṛśi

Translation.

Who is this frantic tigress, with a face like the full moon,
 With the gait of the *haṃsa*, or of the lordly rutting elephant
 in wantonness
 With her face cooled by the perfume of her sighing lower lip,
 and gently mirthful in her speech?
 That man is to be envied, that lucky one lives, who has truly
 such a one as his beloved.

Verse 7.

eṣā⁸ kā jaghanasthalī sulalitā⁹ prṇmattakāmādhikā

¹ The meter is *śārdūlavikrīḍita*.

² I take *gāurimṛgā* to mean "beast of Gāurī" (with a pun on *mṛgā* [cf. note on *mṛgī*, p. 348, n. 3] as the sort of girl the heroine is), and the beast of Gāurī (in her incarnation as Durgā) is the tiger. As Pārvatī also, Gāurī's vehicle is the tiger; cf. Moor, *Hindu Pantheon*, London, 1810, plates 20, 21, 24. My interpretation as "tigress" seems also to be strengthened by the allusion to "tiger-sport" in the last line of the preceding stanza.

³ The word *kṣobhinī* is not recorded in the lexicons except with lingual nasal as the name *kṣobhinī*, of a certain *śruti* in *Samgītasāra-saṃgraha*, 23 (cf. St. Petersburg Wörterbuch, abridged ed., s. v. *kṣobhinī*); it is here probably best regarded as the feminine of *kṣobhana* or of **kṣobhin*.

⁴ In Manu, 3. 10 (*haṃsavāraṇagāminīm*), the gaits of the *haṃsa* and of the elephant are mentioned as among the desirable graces of women.

⁵ Seven syllables are needed to fill out the line.

⁶ The manuscript is broken here, but part of a vertical stroke can be seen, and the restoration of an *i* seems certain.

⁷ The manuscript reads *jīvatiḥ*. For the sentiment expressed in *jīvati* compare the well-known line of Catullus (5.1), *Vivāmus, mea Lesbia, atque amemus*.

⁸ The meter is *śārdūlavikrīḍita*.

⁹ *Lalita* is one of the stock terms used to define the graces of the heroine; cf. *Daśarūpa*, tr. Haas, 2.68, "Lolling (*lalita*) is a graceful pose of one of fair form."

bhrūbhaṅgam kuṭilam tv anaṅgadhanuṣaḥ¹ prakhyam prabhā-
candravat²

rākācandrakapolapaṅkajamukhī kṣāmodarī sundarī
vīṇādaṇḍam³ idaṁ vibhāti tulitam⁴ veladbhujam⁵ gacchati

Translation.

Who is this lovely one that goes, with rounded hips, with
an excess of ecstatic love—

Her curving frown like the bow of the Bodiless (Kāma), and
like the moon in splendor—

With lotus face like the cheek of the full moon, and she
[herself] slender-waisted and beautiful?

This neck of her lute seems like a raised quivering arm.

¹ In the ligature here transliterated by *hp*, I have taken the first element to be the sign for the *upadhmānīya*, or surd labial spirant; cf. Whitney, *Skt. Grammar*, 69, 170 d, 171 c. In Prof. Barret's transliteration of the Pāippalāda Manuscript, this same ligature is transcribed by *ṣp* (cf. JAOS. vol. 26, 2nd part, New Haven, 1906, p. 213 foot, *devāṣ pitaro*, and *raṣ pari-*, with the Pāippalāda facsimiles, folio 4b, lines 11 and 12), though Prof. Barret says (see above, p. 348, n. 5) that it does not exactly represent *ṣp*. If the word *dhanuṣaḥ prakhyam* be regarded as a compound, we should naturally expect the dental sibilant before initial *p*, as is the case, for example, in such a word as *vācaspati* (cf. Whitney, *Skt. Gram.* loc. cit.), yet, in favor perhaps, of its being so regarded, it may be noted that above (stanza 6d) we have *ślāghyaḥ puruṣas*, which cannot be a compound, with *visarga* before initial *p*. However, it should be remarked that the Pāippalāda Manuscript, before initial *p*, seems to use, indifferently, either *visarga* or the ligature under discussion; cf. the instances given above with folio 6a, line 7, *devāḥ pradiśā*, and folio 7a, line 5, *nirṛtyāḥ pāsebhyo*.

² The accusatives in line 2 are hard to explain, unless they may possibly comprise an extension of the simple adverbial accusative, on which see Carl Gaedicke, *Der Accusativ im Veda*, Breslau, 1880, pp. 171—175, 215—233. Or perhaps *bhrūbhaṅgam* is to be regarded as neuter (cf. note on *bhuja* below), though it is not found as neuter elsewhere. If it is neuter, it probably becomes the subject of an *asti* understood.

³ The form *vīṇādaṇḍa* is not given in the lexicons; the regular spelling is *vīṇādaṇḍa*, though the word is given only by the lexicographers, and is not found in the literature.

⁴ In *tulitam*, the manuscript shows only the upper part of the *i*, the vertical stroke being missing.

⁵ *Bhuja* is not found as neuter elsewhere, but for neuters of this class of compounds (including *vīṇādaṇḍam*), see Wackernagel, *Altindische Grammatik*, Göttingen, 1905, II. 1. 15 b (p. 39); and on the interchange of masculine and neuter (cf. *daṇḍaḥ* and *daṇḍam*), see Delbrück, *Vgl. Synt. der idg. Sprachen*, Straßburg, 1893, 1. 37 (p. 130).

Verse 8.

eṣā¹ kā ratihāvabhāva²vilasaccandrānanam bibhrati
 gātram caṇṇapakadāmagāurasadrśam³ pīnastanālabhitā
 padbhyām saṃcarati pragalbha⁴harīṇī saṃlīlayā sveccayā
 kiṃ cāiṣā gaganāṃganā bhuvitale saṃpādītā brahmaṇā
 iti śrīmayūrāṣṭakam saṃāptam

Translation.

Who is this with a face like the shining moon through her
 <incitement to> and her <state of> amorousness,
 Drooping from [the weight of] her full-rounded breasts, with
 a body like the yellowness of a garland of cham-
 paka flowers,
 A wanton "gazelle", going on two feet, in dalliance as she
 feels?
 Surely this is a celestial nymph, produced on earth by Brahmā.
 Here ends the illustrious *Mayūrāṣṭaka*.

¹ The meter is *śārdūlavikrīḍita*.

² I have rendered *bhāva* in two ways, "incitement to" and "state of".

³ The manuscript reads *māurasadrśam*, which is unintelligible. I have emended to *gāurasadrśam*, at the suggestion of my friend, Dr. C.J. Ogden, who referred me to the compounds *kanakacampakadāmagāurīm* (Bilhana's *Cāurapañcāśikā*, v. 1), and *caṇṇapakadāmagāurī* (Mahābhārata 15. 25, 13).

⁴ *Pragalbhā* is another of the stock terms (cf. *līlā*, 1a, and *lalita*, 7a) defined in Hindu rhetorical treatises; it is translated "experienced" by Haas, in his translation of the *Daśarūpa*, 2. 29. For *pragalbhā*, as a type of heroine, cf. Schmidt, pp. 264—266.

On the Etymology of Ishtar.—By GEORGE A. BARTON,
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IN the Journal of this Society, XXVIII, 112—119, Professor Haupt published a theory of the etymology of Ishtar. The article is packed with the wealth of philological material that we have learned to expect from the pen of this distinguished Semitist. There was one crucial point, vital to the whole case, in which the argument rested on one single example—an example, too, which did not prove the conclusion drawn from it. The present writer was, accordingly, never convinced that the etymology offered was correct. As the subject is a difficult one, no dissent was immediately expressed. Since it now appears that Dhorme has been misled by it,¹ it is not out of place to discuss the point a little further.

Haupt derives the name Ishtar, עֶשְׁתֶּרֶת, &c. from the stem אִשַּׁר, from which אִשְׁרָה comes, by the infixing of a ת after the second radical. This ת Haupt regards as perhaps the feminine ending ת moved backward, although he recognizes that it may be the reflexive ת. Now it so happens that אִשַּׁר begins with א, and עֶשְׁתֶּרֶת with ע. The name is found in Hebrew, Phoenician, Moabitish, Aramaic, South Arabic, and Ethiopic, in all of which languages the ע appears. That the same consonant stood at the beginning of the word in Semitic Babylonian, is shown by the fact that the name begins with I. This I, as is well known, is often found in Babylonian and Assyrian where an ע was originally the accompanying consonant. To derive the name of this deity, once universally worshipped by the Semites, from אִשַּׁר, one must prove that in primitive Semitic א could be changed to ע. In proof of this Haupt offers but one example. The Hebrew עֶשְׁתִּי, Assyrian *ištin*, he derives from the Sumerian *aštan*.

This derivation from AŠ = 1 and TA-A-AN = "amount" is, however, hardly tenable. Haupt refers for proof only to

¹ La Religion Assyrio-Babylonienne, Paris 1910, pp. 85 and 116.

the work of Schorr, *Altbabylonische Rechtsurkunden*, p. 163 n. ^a and p. 208. All that these references prove is that TA-A-AN can mean "amount". They have no bearing on the compound AŠ-TAN. Moreover Prince has pointed out, (*Sumerian Lexicon*, p. 195), that *ištin* cannot well be derived from AŠTAN, because as early as the time of Hammurabi (Laws, xi, 6), it made a feminine *ištiat*. The Sumerian origin of the one example on which the whole case rests is, accordingly, very questionable. If *ištin* were really derived from AŠTAN, the initial *ʿ* would be paralleled in modern Syriac in which Ireland appears as ܝܪܠܢܕ, and oxygen as ܝܟܨܝܢ (cf. Nöldeke, *Grammatik der neusyrischen Sprache*, p. 60). As noted below, this phenomenon is accompanied in modern Syriac by an interchange of *l* and *s*; this is paralleled in Babylonian and Assyrian by the confusion of all the gutturals except *ḡ*. That outlying dialects of Semitic in which distinctions between the gutturals were passing away could exhibit such phenomena, is not strange, but it is quite another thing to ask us to believe that such interchange occurred in uncontaminated primitive Semitic. *Ištin* appears in Hebrew in the Babylonian period of Hebrew history as עשתי. It occurs in Jeremiah, but not in the text of the Book; only in the editorial title (1:3) and an exilic supplement (52:5). Its earliest occurrence is really in Ezekiel (40:49). Whether of Semitic or foreign origin, it does not appear in the Semitic dialects generally.

עשתר, on the other hand, is a primitive Semitic word. It is found in all the great divisions of the Semitic speech. To prove that it is derived from the stem אשר, it is necessary to show that in primitive Semitic *s* and *ʿ* were interchangeable. Proof for this is altogether lacking.

It is perfectly true that in widely scattered Semitic dialects *s* sometimes stood for *ʿ*, but, as Haupt admits, this was all in comparatively late time. It came about when in many parts of the Semitic world *ʿ* was losing its original quality.

Thus in Hebrew, אסתר (Esther) is probably a spelling of Ishtar taken over from the Babylonian after the quality of the *ʿ* had disappeared. Similarly, in the Targum Yeruśalmi and the Palestinian Talmud לעה occurs for לאה, "to weary ones self" and תבעש for תבאש "it is unfavorable". In the Talmud עורדנא is sometimes spelled אירדנא (cf. Dalman, *Aramäische*

Grammatik, 97, 39). Such examples prove the same confusion of these sounds in Jewish Aramaic. In late Punic, too, the distinction between ש and ע was lost. In CIS, I, 373⁴ שמע "hear" occurs instead of the ordinary שמע (cf. 371⁶), while in 387² עש is written for the relative pronoun ordinarily spelled שש (cf. 385²). In Palmyrene Aramaic we have עתקב for אתקב (cf. Lidzbarski, *Ephemeris*, I, 198).

In Mandaean, though there are numerous cases in which ש has replaced ע (cf. Nöldeke, *Mandäische Grammatik*, 69 ff.), there seem to be few if any cases in which ע stands for ש, though it sometimes stands for י, thus יהב becomes עהאב (cf. *ibid.* 60 ff.). In modern Syriac ל is not distinguished from לו, thus למל stands for and beside חמל in the sense of "narrow", לו beside לו, "between" (cf. Nöldeke, *Grammatik der neu-syrischen Sprache*, 60).

This confusion is also found in late dialects of South Semitic. Thus in Tigré, Tigrīna, and Amharic, 'and' are hopelessly confused (cf. Brockelmann, *Vergleichende Grammatik der semitischen Sprachen*, pp. 124, 125). In the Mehri dialect of South Arabia the ع has entirely disappeared and is replaced sometimes by ل, sometimes by ه and sometimes by ح (see Jahn, *Grammatik der Mehri-Sprache* pp. 2 and 9).

Apart from such confusion, which arose from a weakening of the pronunciation of ע as the language decayed, the only change of which there seems to be any trace is the change of ע to ש in certain cases. Thus in Syriac and Palmyrene ע before another ע was dissimilated to ש. In Syr. حح, "rib", became שח: In West Syriac, ע before ה became ש; 'uhdānā, "contract", became 'uhdānā (cf. Brockelmann, *op. cit.* 241 ff., and Nöldeke, *Syriac Grammar*, p. 25). In Syriac, ע before ק is sometimes dissimilated to ש, 'qlānā, "bracelet" becoming 'shlānā (Brockelmann, p. 242). Of the opposite change of ש to ע the older dialects afford no example.

Not only is this true, but the stem אשר appears in South Semitic as well as North Semitic, where, as in North Semitic, it is spelled with ש. In a South Arabic inscription 𐩨𐩣𐩪 is a goddess, parallel in name as in functions to אשרה (cf. Hommel, *Aufsätze und Abhandlungen*, II, 206). The occurrence of this name in the south as well as in the north, proves that these two names, אשרה and עשתרת, were from primitive times philologically and orthographically distinct.

The etymology of Ishtar must accordingly be sought in a stem beginning with γ . The present writer has twice suggested such an etymology (*Hebraica* X, 69—71, and *Semitic Origins* 102 ff.), deriving the name from the stem عثر . In the work last referred to it was suggested that, as عشور means an “irrigating ditch” and عثر “that which is watered by rain alone”, the name meant “she who waters”, or “is watered”. I should have added as an alternative meaning “the self-waterer”. A writer in the *Nation* (vol. LXXV, p. 15), who withheld his name, but whose identity it is not difficult to divine, criticised this view because the Arabic lexicographers assert that the term عثر was applied to the palm tree because it “stumbled upon the water necessary to it and did not need to be irrigated”. Such a statement is, however, not decisive. It is doubtful whether an Arabian lexicographer’s guess as to the origin of a custom or an etymology is superior to that of a modern scholar, especially as the lexicographer bears witness in the same context (*Lisan*, VI, 215), that the term was applied to “whatever seed is watered by the water of stream or rain” ($\text{وقيل هو من الزرع ما سقى بماء السيل والمطر}$). This is a statement of general usage, concerning which the lexicographer’s testimony is valuable. It is of much more weight than his guess as to the reason of the usage. If the root عثر was applied to whatever seed was watered by natural processes, it certainly had something to do with water, or watering. Paton (*Hastings Encyclopedia of Religion and Ethics*, II, 116 ff.) has accepted this etymology, suggesting that it was applied to the numen of a spring and meant the self-waterer. He points out that all over the Semitic world springs were supposed to be the dwellings of numina. This is a very probable suggestion, superior, I believe, to the application of the etymology made by me.

In whatever way the meaning is to be explained, the evidence, philological and religious, points to an etymology from the root عثر as a term connected with irrigation. The ت is most plausibly explained with Paton as the infixed ت of a reflexive, infixed as in the viiith stem of Arabic, afterward undergoing metathesis with the following radical after the analogy of ن before a sibilant in North Semitic. Parallel forms from both North and South Semitic were cited by me in *Hebraica*, loc. cit.

The Etymology of Syriac dastabirā.—By ROLAND G. KENT, Assistant Professor in the University of Pennsylvania, Philadelphia, Pa.

ON two Aramaic, or rather Syriac, incantation bowls, listed as CBM¹ 16086 and CBM 16019, in the Archaeological Museum of the University of Pennsylvania, there occurs the word דסתבירא, which is here found for the first time. On CBM 16086 the word occurs four times, in the following phrases:

"This דסתבירא against all the demons and satans and devils and Liliths", etc.

"He wrote against them a דסתבירא, which is for all time by the virtue of" certain magical syllables.

"I have dismissed you" (the devils) "by the דסתבירא".

"Charmed and sealed and countersealed is this דסתבירא by the virtue of" certain cabalistic syllables.

On CBM 16019 the word occurs for times likewise, in phrases that are practical duplications of those on CBM 16086.

Prof. J. A. Montgomery, who is preparing these bowls for publication, asked the writer to investigate the etymology of the word, which is manifestly non-Semitic.

דסתבירא may be read *dastabîrâ* or *dastabêrâ*. Certain features are plain: 1. The final -â is the "emphatic Aleph"; and is therefore to be disregarded from the etymological standpoint, as a Semitic addition to the original word. 2. The word, from its context, must denote either the bowl, or the writing on the bowl, or the charm that the bowl effects, or some similar idea. 3. The first part is evidently the Pahlavi *dast* 'hand', = old Persian *dasta-*, Avestan *zasta-*, Skt. *hasta-*. This as an element of a compound lends itself well to the idea necessary: "handwriting" occurs at once as a natural meaning. 4. Since דסת is from the Persian, the word is a borrowing

¹ CBM = Catalogue of the Babylonian Museum.
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from the Persian — more narrowly speaking, from the Pahlavi or middle Persian, as the bowls are of about the sixth century A.D.

What now is the element *-bîr-* or *-bêr-*? Unfortunately neither this word nor any word resembling it is to be found in the Pahlavi glossaries¹; and recourse must be had to the consideration of the possibilities from the phonetic standpoint:

In Pahlavi initial *b* represents older Iranian *b*; thus Pahlavi *brāð* 'brother' = old Persian and Avestan *brātar-*, Sanskrit *bhrātar-*². This Iranian *b* represents Indo-European *b* and *bh*³, appearing in Sanskrit as *b* and *bh* respectively. Perhaps older *dv* initial appears as *b* in Pahlavi, though this is uncertain⁴. Iranian *p* after vowels becomes Pahlavi *b*⁵; but as this בִּיר is the second element of a compound, such an origin for *b* is here unlikely.

Pahlavi *î* represents older *î*⁶; or *ĩ* with compensatory lengthening as in *tîr* = Avestan *tiyri-* 'arrow'⁷; or *ya iya*⁸. If on the other hand בִּיר be read *-bêr-*, Pahlavi *ē* may represent the earlier diphthong *ai*, appearing in old Persian as *ai* and in Avestan as *aē* and *ōi*⁹, or *ǎ* changed to *ē* by the influence of a *y* in the next syllable, as in *ērān* = Avestan *aīryana*-¹⁰; or *ǎ* contracting with immediately following *y* that developed from (Avestan) *γ*, as in *anērān* = Avestan *anayrānam*¹¹; it develops also from *aya ahyā aδy*¹².

Pahlavi *r* may represent earlier *r*¹³; less often *γr*¹⁴, *θr*¹⁵, *hr*¹⁶, *rn*¹⁷, possibly *rd* (old Persian *rd*, Avestan *rz*)¹⁸.

The modern Persian بَیْر *bîr* may be first disposed of. This

¹ Hoshanji and Haug, *An old Zand-Pahlavi Glossary*, ed. 2, 1870; West, *Mainyo-i-Khard*, with glossary, 1871; West and Haug, *Glossary and Index of the Pahlavi-Texts Arda Viraf*, &c., 1874; de Harlez, *Manuel du Pehlevi*, 1880.

² Salemann, *Mittelpersisch*, §20 a, in Geiger and Kuhn's *Grundriss der iranischen Philologie*, vol. I, part 3.

³ Bartholomae, *Vorgeschichte der iranischen Sprachen*, §3.2, 3, in Geiger and Kuhn, *op. cit.*, vol. I, part 1.

⁴ Salemann, *op. cit.* §33 N. 2.

⁵ *ib.*, §15, §18.

⁶ *ib.*, §36.

⁷ *ib.*, §39 l, §21 d.

⁸ *ib.* §39.

⁹ *ib.*, §36.

¹⁰ *ib.*, §41.

¹¹ *ib.*, §21 d.

¹² *ib.*, §41.

¹³ *ib.*, §30.

¹⁴ *ib.*, §21 d.

¹⁵ *ib.*, §22 b.

¹⁶ *ib.*, §24.

¹⁷ *ib.*, §30.

¹⁸ *ib.*, §30.

As *rd* may become Pahlavi *l* with loss of the *d*, it would appear likely that as *r* ordinarily remains *r*, this group might develop also into Pahlavi *r*.

has the meanings 'lightning; a well; a couch, bedcover; flood; to memorize; brother, hero, brave'; none of these would in the compound yield a suitable meaning. Apart from that consideration, *בִּיר* is in some meanings derived from Hebrew and in the others from Arabic, so that it is out of the question here.

To turn now to the Avestan words¹, several fit fairly well the phonetic requirements²:

ba'rya-, neut. subst., 'carrying, receipt'.

ba'rya-(graphic for *barvya*-), adj. 'to be chewed, solid', in reference to food.

bərta-, ptc., 'carried'.

dvar-, masc. subst., 'door, gate'³.

Of these none seems semantically possible.

Sanskrit yields a few words suitable for consideration:

bhadrá-, adj., 'bright, happy'; as neut. subst., 'fortune'.

bhāryā-, adj., 'to be supported or maintained'; as masc. subst., 'soldier, servant'; as fem. subst., 'wife'.

bhīra-, adj., 'frightening, terrifying'.

bhīrú-, adj., 'timid'.

dvārya-, adj., 'belonging to or being at a door'³.

Here, at last, we find in *bhīra*- a likely source for *בִּיר*: *דַּסְתַּבִּירָא* may well be the Syriac representation of a hypothetical old Persian **dasta-bīra*-, Avestan **zasta-bīra*-, Sanskrit **hasta-bhīra*-, 'a thing terrifying by the hand(writing)', that is, a 'written deterrent' as opposed to a 'spoken deterrent' against the demons.

This implies, of course, that *dasta*- depends upon *-bīr*- in an instrumental relation; but in such compounds the first element may stand in any case relation to the second: cf. Sanskrit *hasta-kamala-m* 'a lotus held in or by the hand', *hasta-dīpa-s* 'a lantern carried in or by the hand', *hasta-sajñā* 'a

¹ Bartholomae, *Altiranisches Wörterbuch*.

² Should initial *p* be considered a possibility for the *b* of *בִּיר*, then we must take the following words also into account; *parəna*-, neut. subst., 'feather, wing'; *pa'vva*-, adj., 'former'; *pa'rya*-(graphic for *parvya*-), adj., 'first'; *pātar*- *pāθr*-, masc. subst., 'protector'. Of these, the last, in a *-ya*- derivative, would yield a good meaning, but the phonetic development seems to the writer highly improbable.

³ The bowls were placed at the corners of the house, not at the door, so that derivation from this word is precluded.

sign made with the hand', *hastābharāṇa-m* 'an ornament for the hand', *hastālabha-s* 'support for the hand, refuge, hope'; Greek *χειρ-αγωγήμα* 'a leading by the hand', *χειρό-γραφος* 'written by the hand', *χειρό-μαντις* 'diviner by palmistry'; Latin *mān-suētus* 'accustomed to the hand, tame'; Gothic *handu-waúrhts* 'made with the hand'; English *handbill* 'a printed sheet to be distributed by hand', *handbook* 'book of reference suitable for carrying in the hand or for keeping at hand', *handcuff*, *handpress*, *handshake*, *handiwork*, *manufacture*.

As for the meaning of *dasta-* = 'handwriting', this is a meaning found in English *hand*, German *Hand*, French *main*, Italian *mano*, as well as in Greek *χείρ* and in Latin *manus*:

Hyperides ap. Poll. II. 153 *τὴν αὐτοῦ χεῖρα ἀρνεῖσθαι* 'to deny his own hand'.

I Epistle to the Corinthians xvi 21 *ὁ ἀσπασμὸς τῇ ἐμῇ χειρὶ Παύλου* 'the salutation of me Paul with mine own hand'.

Cicero in Catil. 3. 5. 12 *manum suam cognovit* 'he admitted his own hand'.

Cicero ad Att. 8. 13. 1 *lippitudinis meae signum tibi sit librarii manus* 'let the scribe's handwriting be evidence to you of my eye-trouble'.

Cicero ad Att. 7. 2. 3 *Alexidis manum amabam, quod tam prope accedebat ad similitudinem tuae litterae* 'I liked Alexis' hand, because it was so like your writing'.

דַּסְתָּכִיָּא seems now to mean a 'handwritten deterrent' in distinction from a 'spoken deterrent'. 'Hand' is indeed not infrequently used in opposition to 'word', but in the sense of 'force'; so Iliad I. 77 *ἔπειν καὶ χερσὶν ἀρήξειν* 'that you will defend me by word and by deed'¹; but in the case of a charm the meaning 'force' is impossible. The alternatives are a 'written charm' and a 'spoken charm'; and the word 'hand' is readily available to distinguish the former from the latter. An interesting parallel to 'spoken deterrent' is found in Sanskrit: *vāc-*, fem., 'voice' and *kṣatā-* 'hurt, wounded, destroyed, violated', when compounded, form a neut. subst. *vāk-kṣatā-* 'offense by words', as opposed to physical assault: and *vāc-* with *daṇḍa-*, masc., 'stick', makes *vāg-daṇḍa-* 'speech assault, reproof, reprimand, verbal injury'.

¹) Cf. Iliad I. 395 *ἢ ἔπει... ἢ καὶ ἔργῳ*, and the common idiom *λόγῳ καὶ ἔργῳ*.

Phonetically and semantically, therefore, there is no objection to this etymology for דַּסְתַּבִּירָא; but there are two other possibilities in the Avestan, that should not be overlooked:

1. *bōiwra-*, neut. subst., 'fight, strife', for earlier **baibra-*¹, would become Pehlevi **bēwr*, and if borrowed with omission of the weak sound *w* would give Syriac *-bēr-*, with an excellent sense: 'strife or fight by means of handwriting'. The omission of the *w* is however a serious objection.

2. Avestan *var²zya-* 'activity, work', a substantivized neuter adjective, = 'faciendum'. In old Persian this would appear as **v(a)rdya-* (written **v(a)rdiya-*). Now in the change from old Persian or Avestan to Pahlavi the group *r* + consonant + *y*, or consonant + *r* + *y*, loses the consonant and the *y* palatalizes an *a* in the preceding syllable to *ē*: Pehlevi *dēr* = Avestan **daryya-*; modern Persian *tērah* = Avestan *tqθrya-*, *šēr* 'lion' = Avestan *xšaθrya-* 'royal'². Hence old Persian **vardya-*, Avestan *var²zya-* would become Pehlevi **vēr*. Were this borrowed with a hardening of *v* to *b*, דַּסְתַּבִּירָא with בִּיר from this source would mean 'handiwork, handwriting'. This etymology is however rendered questionable by the uncertainty of the treatment of Pahlavi *v* and by the question whether the change of *a* to *ē* in the manner described would be complete and definite enough to cause the resultant *ē* to be represented by Semitic '.

To return then to Sanskrit **hasta-bhīra-*, Avestan **zasta-bīra-*, old Persian **dasta-bīra-*: that we should find on a Syriac bowl a word which was borrowed from Pahlavi, although we have no trace of it in Persian of any date, is not so remarkable as it might at first sight seem. The sacred literature of the Parsis, as now extant, is but a small portion of the original writings. Even a casual glance at Bartholomae's *Altiranisches Wörterbuch* reveals that many words occur but once in the extant texts; whence it is evident that many

¹) Sanskrit *bhāra-*, masc., 'fight' shows the root in 'simpler guise; Avestan *bōiwra-* has intensive reduplication, **bhāi-bhra-*; cf. Bartholomae, *Indogermanische Forschungen* X. 100. This intensive reduplication is seen in Greek *δαδαλος* 'cunningly wrought', *παιπάλη* 'fine flour', *παιφάσσω* 'I dart quickly'; cf. Brugmann, *Griechische Grammatik*³ § 299. 1.

²) Salemann, *op. cit.* § 41.

words used in the lost portions perished with them¹. There is therefore no inherent improbability in assuming the former presence of Avestan and old Persian **bîra*-, Pahlavi **bîr*, surviving in Syriac *dasta-bîr-â*.

¹ Yet it is possible that the aorist of the denominative verb to the stem Avestan **bîra*- is concealed within the corrupt form *bîraošať*, occurring Pursišnihā 18: *tanu.mazō ašayāiti yō tanu.mazō bîraošať*, translated by Bartholomae "ein Ašawerk im Pfandwert des Leibes muß verrichten, wer ein *Drugwerk* in Pfandwert des Leibes verbrochen hat". Cf. Bartholomae, *op. cit.*, p. IX. 3; col. 965 s. v. *bîraošať*; col. 637 s. v. *tanu.mazāh*-. If we have here a denominative to **bîra*-, it must have progressed from the meaning 'terrify' to 'commit a terrifying, frightful act', a quite natural semantic change.

The Washington MS. of Joshua.—By MAX L. MARGOLIS,
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Prof. Sanders, the editor of the Washington MS. of Deuteronomy and Joshua belonging to the Freer Collection, discusses the textual problem presented by the new uncial at length. Its aspects are shown to differ in the two books. In Joshua "Θ (= Washington MS.) and A (= codex Alexandrinus) stand closer together than in Deuteronomy, but still represent fairly independent traditions, as is shown by the 253 agreements between Θ and B (= codex Vaticanus)". In the forms of names "Θ agrees with A nine times as often as it does with B".

In view of this close relationship it is to be regretted that the editor chose to base his collation on B rather than on A. I have therefore made a fresh collation. I found that Prof. Sander's work, if some three or four inaccuracies are excepted, is most perfect. The same cannot, however, be said of Swete's work. In round 50 places Swete's collation is inaccurate so far as the readings of A are concerned.

On the basis of my fresh collation, the relationship of Θ and A as members of one and the same group is unmistakable. Certain omissions in Θ are intelligible, i. e. explainable as having arisen through homoioteleuton, only when the text of A is compared. Comp. 7, 17; 11, 5; 17, 8; and for the converse process, 19, 31. In some of these cases, it is true, another manuscript steps in in the place of A as the basis of the mutilated text underlying Θ, so N. Which goes to show that we are dealing here with a group consisting of Θ, A, N, possibly M, and a number of cursives.

The disagreements between Θ and A in the proper names are, generally speaking, of a nature to substantiate rather than to invalidate the affinity of the two uncials, the divergence between them being trifling, when their common devia-

tion from B is compared. Comp. e. g. ααλακ Θ αλακ A / αχελ [read αχελκ, και follows, = קֶלֶךְ] B. There are, of course, instances in which it would seem that either Θ or A has moved nearer to B. But their proportionate number is in the first place too small to be taken into account; and secondly, in nearly all of them we have to do with readings on which the two forms of the text as represented by B and A have never divided to an appreciable extent. This holds good even where the Hebrew is at variance. For, if A be but a text adjusted to the Caesarean standard codex, it can be shown that Origen was conservative in his treatment of the κοινή, introducing tacit emendations only where the common reading seemed at least to him to be hopelessly corrupt. Then the different hands of the two codices must be taken into account. When furthermore the remaining group-members are consulted, the reading of Θ or A reveals itself as singular or sub-singular.

As for the remainder of the text not covered by proper names, my own count yields 208 cases in which Θ goes with B against A. In 23 of them the various hands of the three uncials have come into play. Of the large remainder of 185 instances in which Θ coincides with B against A, more than one half (95) show A in isolation which is absolute in by far the greater number (55). Of these absolutely singular readings, 29 are clear errors; 4 are decidedly inferior; of the remaining 22, two may perhaps represent corrections to minimize the dissonance with the Hebrew, while the bulk are of a trifling character. As for the 40 relatively singular readings, 10 may be pronounced to be errors and 6 inferior; in 4 there is a more or less certain adjustment to the Hebrew, while in one instance the omission of a redundant pronoun eases the Greek; the remaining 19 instances concern trifles.

So far I am able to furnish accurate statistics. But my tabulation still remains to be finished. In a summary way I can see now that codex 121 is a close relation of A, sharing together errors and singular readings; also that some readings of A go back to the κοινή in some other form than the one which is revealed in B.

Where A has moved nearer to B, it is frequently a case of omitting asterisked passages. Both Θ and A are excerpts from the Septuagint column in Origen's work which have been adjusted to a κοινή text. Following the well-known prescription

of Jerome, obelized passages were on the whole retained, while asterisked passages were omitted. Yet the redactors of the two texts in question did not always coincide in the amount excised.

As to the relative merit of Θ and A, Θ is the more accurate text. But inferior readings are found even in Θ . The two check each other's errors admirably.

An accurate estimate of the place of Θ and A in the narrower group to which they belong is impossible without a fresh collation of its constituent codices, both uncial and cursive. In view of the inaccuracies in Swete's apparatus, as pointed out above, an edition of the complete text of Θ with the variants from A is deemed desirable by the present writer, to serve as a basis for a collation of the other group-members, like M and N and the rest. On our steep road to the earliest form of the Septuagint, we need resting places, points of vantage; such are the groups, narrower and wider, into which the extant texts may be divided. The proper names in the Book of Joshua are the milestones which guide the investigator in finding his way to texts held together by group affinity. Thus, in the Book of Joshua, there are all told six groups, of which three show traces of Origen's Palestinian text. Among these is the group to which both Θ and A belong.

A Letter from the Mahdi Muhammad Ahmad to General C. G. Gordon. — By GEORGE SVERDRUP JR., Professor in Augsburg Seminary, Minneapolis, Minn.

This letter from the Mahdi to General Gordon is found in a manuscript belonging to the collection of Arabic manuscripts made by Count Landberg, and presented to the Yale University Library in the year 1900 by Mr. Morris K. Jesup. The manuscript in question is a collection of letters, or rather copies of letters, written by the Mahdi on various occasions. It is a companion volume to one which is in the possession of the Egyptian Intelligence Office in Cairo. Some of the letters found in the Yale manuscript are also found in the Cairo manuscript. It differs from the Cairo manuscript in this, that it contains no letters of other dignitaries as the Cairo one does. The Cairo manuscript was captured in the battle of Toski, August 3, 1889. Just where or how Count Landberg obtained possession of this manuscript the writer has been unable to discover.

The Yale manuscript is paged continuously up to page 503, of which the last nine lines are blank. Pages 251—352 are missing, i. e. five quinion gatherings. There are in all 21 gatherings; four quaternions, and the rest quinions. The pages have 20 lines. The dimensions of the manuscript are nine and one eighth by six and three eighths inches; the written surface seven and one eighth by four and five-eighths inches. At the bottom of every odd-numbered page there is a catch-word. Count Landberg has added a table of contents.

In the manuscript there are 148 letters and proclamations each beginning with the phrase: "In the name of God the Merciful" &c. The الحمد لله and the beginning word of quotations from the Koran are written with red ink. No chronological order is followed in the arrangement of the documents. The dates are missing from many of the letters, among which is also the Gordon letter. In his appended "Régistre" Count

Landberg says: "fort à regretter est cette omission surtout dans la lettre intéressante, adressée à Gordon pacha". This omission can be supplied, at least for the date on which Gordon received the letter, as will be shown. The Gordon letter is found on pages 470—475 of the manuscript.

The bibliography for the history of the Sudan for the period 1880 – 1900 is large, especially in periodical literature. Attention here is called only to the very important sources. First of all are the British Government "Blue Books". The most important then are: *The Journals of General C. G. Gordon, C. B., at Khartoum*, printed from the original manuscript with an Introduction and Notes by A. Egmont Hake, Boston 1885; *Letters of General C. G. Gordon to his sister M. A. Gordon*, London, 1888; *Fire and Sword in the Sudan, 1879—1895*, by Rudolf C. Slatin, C. B., translated by F. R. Wingate, London 1896; *A Prisoner of the Khaleefa* (Twelve Years Captivity at Omdurman), by Charles Neufeld, London, 1899; *Ten Years Captivity in the Mahdi's Camp*, by Father Joseph Ohrwalder; *The Life of Gordon*, by Demetrius C. Bulger, two vol. s, London, 1896; *Mahdiism and the Egyptian Sudan*, by Major F. R. Wingate, D. S. O., R. A., 1891; and *Modern Egypt*, by the Earl of Cromer, two vol. s, New York, 1908. Lord Cromer's appreciation of General Gordon is far from impartial; but his book throws much light upon the many misunderstandings between these two men. In Arabic there is the important تاريخ السودان by Na'oum Bey Shoucair, Chef de Bureau in the Agent-General's Office in Cairo, printed in Cairo, 1904. Na'oum Bey Shoucair undoubtedly had much to do with gathering the material for Wingate's book. At any rate the two are very similar in plan and contents.

The Text of the Letter (Arab. ms. Yale 543).

470¹⁷ بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ الْحَمْدُ لِلَّهِ الْوَالِي الْكَرِيمِ وَالصَّلَاةُ
 عَلَى سَيِّدِنَا مُحَمَّدٍ وَآلِهِ مَعَ التَّسْلِيمِ¹⁸ وَبَعْدَ فَمِنْ الْعَبْدِ الْمُفْتَقِرِ
 لِمَوْلَاهُ مُحَمَّدٍ الْمُهْدِيِّ بْنِ السَّيِّدِ عَبْدِ اللَّهِ إِلَى¹⁹ بَرِيطَانِيَةِ الْخَدِيوِيَّةِ
 غَرْدُونَ بِأَسْمَا نَعْلَمُكَ أَنَّ اللَّهَ سُبْحَانَهُ وَتَعَالَى مَعَ حِلْمِهِ وَكَرَمِهِ يَمْهَلُ
 وَلَا يُجْهَلُ وَلَا يَرُدُّ بِأُ²⁰سْهُ عَنْ الْقَوْمِ الْمُجْرِمِينَ وَهُوَ وَلِيُّ الْمُؤْمِنِينَ
 قَالَ تَعَالَى (*) اللَّهُ وَلِيُّ الَّذِينَ آمَنُوا يُخْرِجُهُمْ⁴⁷¹ مِنَ الظُّلُمَاتِ
 إِلَى النُّورِ وَالَّذِينَ كَفَرُوا أُولَئِكَ هُمُ الظَّالِمُونَ يُخْرِجُونَهُمْ مِنَ النُّورِ
 إِلَى الظُّلُمَاتِ² أُولَئِكَ أَصْحَابُ النَّارِ هُمْ فِيهَا خَالِدُونَ³ وَقَدْ نَوَّهَ فِي
 الْقُرْآنِ الْمَجِيدِ وَغَيْرِهِ مِنْ كُتُبِهِ الْقَدِيمَةِ³ وَعَلَى لِسَانِ كُلِّ رَسُولٍ
 وَنَبِيِّ وَآمِينَ فِي دِينِهِ يَذَمُّ الدُّنْيَا وَحَذَّرَ مِنْهَا الْعُقَلَاءَ وَدَعَاهُمْ⁴ إِلَى
 الْآخِرَةِ وَرَغَّبَهُمْ فِيهَا لِأَنَّهَا دَارُ الْبَقَاءِ وَالْعِزِّ وَالشَّرَفِ وَالْجَاهِ الْوَاسِعِ
 وَالْمَقَامِ الرَّفِيعِ⁵ وَالْمَنْزِلِ الشَّامِخِ وَالْعَيْشِ الصَّنِيِّ كَمَا يَشْعُرُ بِهَذِهِ
 كُلِّهَا قَوْلُهُ تَعَالَى * اَعْلَمُوا أَنَّهَا الْحَيَاةُ الدُّنْيَا⁶ لَعِبٌ وَلَهْوٌ وَزِينَةٌ وَتَفَاخُرٌ
 بَيْنَكُمْ وَتَكَاثُرٌ فِي الْأَمْوَالِ وَالْأَوْلَادِ كَمَثَلِ غَيْثٍ أُنْجَبَ الْكُفَّارُ⁷ نَبَاتُهُ
 ثُمَّ يَهْبِطُ فَيَذَرُهَا مُصْفَرًّا ثُمَّ يَكُونُ حُطَامًا وَفِي الْآخِرَةِ عَذَابٌ شَدِيدٌ
 وَسَعْفَةٌ⁸ مِنَ اللَّهِ وَرِضْوَانٌ وَمَا الْحَيَاةُ الدُّنْيَا إِلَّا مَتَاعٌ الْعُرُورُ سَابِقُوا
 إِلَى مَغْفِرَةٍ مِنْ رَبِّكُمْ وَجَنَّةٍ عَرْضُهَا⁹ كَعَرْضِ السَّمَاءِ وَالْأَرْضِ أُعِدَّتْ
 لِلَّذِينَ آمَنُوا بِاللَّهِ وَرُسُلِهِ ذَلِكَ فَضْلُ اللَّهِ يُؤْتِيهِ مَنْ يَشَاءُ وَاللَّهُ
 ذُو الْفَضْلِ الْعَظِيمِ¹⁰ فَمَدْلُولُ الْآيَاتِ يَفْهَمُ أَنَّ الْمُدْرَى¹¹ عَلَى صِدْقِ
 الْإِيمَانِ بِاللَّهِ وَرَسُولِهِ أَنَّهُ الْمُقَرَّبُ إِلَى اللَّهِ زُلْفَى وَالْمَوْجِبُ لِرِضَائِهِ
 وَالسَّبَبُ لِعَطَائِهِ وَنَيْلِ¹² مَا تَهْوَاهُ الْأَنْفُسُ وَتَلَذُّ الْأَعْيُنُ وَأَنَّهُ لَا يَنْجُوا
 أَحَدٌ مِنْ بَلَائِهِ وَشَفَائِهِ وَمَنْ كُلِّ الرَّدَى¹³ دُنْيَا وَآخِرَى إِلَّا بِهِ مَعَ
 الْخَوْفِ الشَّدِيدِ مِنْ غَضَبِهِ وَزُهْدِهِ هَذِهِ¹⁴ الدُّنْيَا وَحَيَاتُهَا¹⁴ وَعُدْمُ الْوُثُوقِ

^a Supply والى؟

57 19-21.

^b Sura 2 258-259.^e ms. المدرا.^c كله. ms.^d Sura^f ms. هذا.

بها اذ هي زائلة خسيصة ساحرة خداعة ليس فيها راحة ولا نعيم
¹⁵بالتسببة الى ما عند الله من الخير الجسيم في دار النعيم بل من
احبها وأثرها على الآخرة أكبه الله في أجل النار بدليل قوله تعالى
*فَأَمَّا مَنْ طَغَى وَآثَرَ الْحَيَاةَ الدُّنْيَا فَإِنَّ¹⁷الْجَحِيمَ هِيَ الْمَأْوَى^a
ومعلوم أنه لا طایل تحت جاه الدنيا وحياتها ومتاعها وأمور¹⁸الها
الا الحسرة الطويلة في الآخرة ولذلك جاء من سيدنا عيسى بن مريم
على نبينا وعليه¹⁹صلاة الله وسلامه انه قال يَمَعْشَرُ الْخَوَارِثِينَ^b
أَعْبَرُوا الدُّنْيَا وَلَا تَعْمُرُوهَا إِيَّايَ لَمْ أَجِدْ لَكُمْ²⁰فِيهَا مَسْكَنًا وَأَتَّخِذُوا
مَسَاجِدَ اللَّهِ يَوْمَنَا وَأَتَّخِذُوا بُيُوتَكُمْ مَسَاجِدًا وَكُلْ تَامِرَ وَمُرْتَحَلِ
¹472 وعنه عليه السلام يَمَعْشَرُ الْخَوَارِثِينَ^d كلوا خُبْزَ الشَّعِيرِ بِالْمِلْحِ^e
الْجَرِيشِ وَلَا تَأْكُلُوا²الا على شَهْوَةِ الْبَسْوَةِ عَلَى مَنْسُوجِ الشَّعْرِ وَأَخْرِجُوا
مِنَ الدُّنْيَا سَالِمِينَ بِحَقِّ أَقُولُ لَكُمْ³أَنَّ حَلَاوَةَ الدُّنْيَا مَرَارَةٌ فِي الْآخِرَةِ
وَأَنَّ عِبَادَ اللَّهِ لَيْسُوا بِالْمُتَنَعِّمِينَ وَعَنْ رَسُولِ اللَّهِ⁴صَلَّى اللَّهُ عَلَيْهِ
وَسَلَّمَ أَنَّهُ قَالَ مَا ذِئْبَانِ جَايعَانِ أُرْسِلَ فِي زُرْبِيَّةٍ^f غَنَمٍ بِأَفْسَدِ لَهَا
مِنْ⁵جَرِيصِ الْمَرْءِ عَلَى الْحَالِ وَالشَّرَفِ لِدِينِهِ وَرَوَى أَنَّهُ صَلَّى اللَّهُ
عَلَيْهِ وَسَلَّمَ مَرَّ مَعَ نَفَرٍ مِنْ أَصْحَابِهِ⁶بِزُقَاقٍ^g مِنْ أَرْقَةِ^h الْمَدِينَةِ فَذَا
فِيهَا عَنَاقُ مَيْتَةٍ مُلَقَاتٍ فَقَالَ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ وَاللَّهِ⁷لِلدُّنْيَا
أَهْوَنُ عَلَى اللَّهِ مِنْ هَذِهِ الْعَنَاقِ عَلَى أَهْلِهَا حَتَّى أَلْقَوْهَا وَلِكُونِهَا
أَحْسَى فِي⁸هَوَانِهَا مِنْ الْجِيْفَةِ عَهْدَ رَسُولِ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ
إِلَى ضَحَابَتِهِ وَسَايِرِ أُمَّتِهِ بِقَوْلِهِ⁹لَيَكُنْ بِلَاغِ أَحَدِكُمْ مِنَ الدُّنْيَا كَزَادِ
الرَّاكِبِ وَقَالَ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ مُنْقَرًا عَنْهَا إِنَّمَا مِثْلِيهِ وَمِثْلُ
¹⁰الدُّنْيَا كَرَائِبِ تَحْتَ ظِلِّ الشَّجَرِ ثُمَّ رَاحَ وَتَرَكَهَا انْتَحَى وَلَاⁱهَادِيَ
إِلَّا اللَّهُ عَلَى أَنَّهُ تَعَالَى قَالَ¹¹*فَمَنْ أَهْتَدَى فَإِنَّمَا يَهْتَدِي لِنَفْسِهِ
وَمَنْ ضَلَّ فَإِنَّمَا يَضِلُّ^kالآيَةِ وَحَيْثُ كَانَ كَذَلِكَ فَيَكُنْ¹²مَعْلُومًا أَنِّي

^a Koran 7937-39.^b ms. الخواريين.^c ms. تعمرواها.^d ms.

الخواريين.

^e ms. الشعيري لملح.^f ms. زربية.^g ms.

بزقاق.

^h ms. ارفة.ⁱ ms. ولاد.^k Koran 10108.

داع الى الله وخليفة رسول الله صلى الله عليه وسلم وأتى المهدي المنتظر¹³ ولا فخر وقد أظهرني الله رحمة لمن طاعه وأتبع سكة نبيه محمد صلى الله عليه وسلم ونقمة¹⁴ على من عصاه وخالفه وأتبع شيطانه ونفسه وهواه واخذ الى دنياه وقد خا¹⁵ طبتك قبل هذا بإيضاح أمرى مفصلاً ودعوتك الى السلام والايمان وكان الواجب¹⁶ عليك أن تجيب بالسمع والطاعة قبل أن ترى ما قد رأيت مع أن الذي أبشرت به اليك¹⁷ سابقاً ليس فيه إلا رشدك وصلاحك وفرورة عينك في حالك ومالك إن عقلت وعلمت¹⁸ صدق مقاتلي كما هو حسن ظني فيك وأبى ما زلت أدارجك^b وأرغب لك الخير رجاء¹⁹ أن يشرح الله صدرك للاسلام فتقي الى أمر الله المالك والعلام وتكون ممن أذعن²⁰ وآنفاد لرب العباد وخشى يوم التنادي * يوم لا يغني مؤل عن مؤل شيئاً ولا جاء⁴⁷³¹ ولا مال ولا أهل ولا عيال ولا حال من الاموال بل يصدق الوعد ويحقق الوعيد كما قال جل شأنه وعز سلطانه * فأما من أوتى كتابه يمينه فيقول هاؤم أقرؤا كتابيه إني ظننت³ أنني ملق حساييه فهو في عيشة راضية في جنة عالية فطوفها دانية⁴ كلوا واشربوا هنيئاً بما أسلفتم في الأيام الخالية وأما من أوتى كتابه بشماله فيقول يا ليتني لم أوت كتابيه ولم أدر ما حساييه يا ليتها كانت الفاضية ما أغنى عني ماليه هلك⁵ عني سلطانيه خذوه فغلوه ثم الجحيم صلوه ثم في سلسلة ذرعتها سبعون ذراعاً⁷ فاسلکوه إنه كان لا يؤمن بالله العظيم وقد بلغني أن لك أفعلاً خيرية في الظاهر مع اهل الاسلام لأنه قال الله تعالى * والذين كفروا أعمالهم كسراب بقيعة يحسبه⁹ الظمان ماء حتى إذا جاءه لم يجده شيئاً ووجد الله عنده فوفاه^f حسابه والله¹⁰ سريع الحساب أو ظلمات في بحر لحي يغشاه^g سوج من فوقه موج من فوقه سحاب¹¹ ظلمات بعضها فوق بعض

a ms. لا.

b III stem of درج not in lexicons.

c ms. التناد.

d Koran 44⁴¹.e Koran 69¹⁹⁻³³.

f ms. فوفيد.

g ms. يغشيه.

إِذَا أَخْرَجَ يَدَهُ لَمْ يَكِدْ يَرَاهَا^a وَمَنْ لَمْ يَجْعَلِ اللَّهُ لَهُ نُورًا¹² فَمَا لَهُ مِنْ نُورٍ^b فزَيَّنْ عَمَلَكِ بِالْإِيمَانِ وَطَهَّرْهُ مِنْ دَنَسِ الْكُفْرِ إِذْ تَكُونُ عَظِيمِ الشَّانِ¹³ وَتَكُونُ أَعْمَالُكَ خَيْرِيَّةَ ظَاهِرًا وَبَاطِنًا وَتُنْتِجُ لَكَ ثَمَرَتَهَا وَقَدْ تَطَلَّعْتَ لِأَخْبَارِنَا سَا¹⁴ بَقَا بِحَيْثُ أَنَّكَ خَاطَبْتَنَا وَارْسَلْتَ إِلَيْنَا رَسُولًا وَطَلَبْتَ رَدَّ الْإِفَادَةِ فَكَانَ ذَلِكَ عِنْدِي¹⁵ دَلِيلًا عَلَى أَنَّكَ أَغْقَلُ أَهْلَ دَوْلَتِكَ إِذْ لَمْ يَخَاطَبُونِي مِثْلَكَ مَعَ آدَاءِهِمْ^c الْإِسْلَامَ¹⁶ دُونَكَ وَقَدْ كُشِفَ إِلَى عِيْبِهِمْ أَنَّهُمْ أَشَدُّ النَّاسِ كُفْرًا وَأَنَّهُمْ سَيِّئُ الْمَكُونِ عَلَى يَدِنَا ثَلَاثَةٌ بَعْدَ¹⁷ ثَلَاثَةٍ وَقَصْدِي لَكَ النِّجَاحُ مِنْ ذَلِكَ كَيْ تَقُوزَ مَعَ الْفَائِزِينَ وَتَكُونَ مَعَ الْكَامِلِينَ الَّذِينَ¹⁸ تَفَكَّرُوا* فِي خَلْقِ السَّمَوَاتِ وَالْأَرْضِ^d وَعَلِمُوا بِفِرَاسَتِهِمْ قُدْرَةَ اللَّهِ وَقَالُوا* رَبَّنَا مَا¹⁹ خَلَقْتَ هَذَا بَاطِلًا سُبْحَانَكَ فَقِنَا عَذَابَ النَّارِ رَبَّنَا إِنَّكَ مَنْ تَدْخِلِ النَّارَ فَقَدْ أَخْرَجْتَهُ²⁰ وَمَا لِلظَّالِمِينَ مِنْ أَنْصَارٍ رَبَّنَا إِنَّنَا سَمِعْنَا مُنَادِيًا يُنَادِي لِلْإِيمَانِ أَنْ آمِنُوا بِرَبِّكُمْ⁴¹ 474 رَبَّنَا فَافْعَلْ لَنَا ذُنُوبَنَا وَكَفِّرْ عَنَّا سَيِّئَاتِنَا وَتَوَقَّنَا مَعَ الْأَبْرَارِ رَبَّنَا وَآتِنَا مَا وَعَدْتَنَا² عَلَى رُسُلِكَ وَلَا تُخْزِنَا يَوْمَ الْقِيَامَةِ إِنَّكَ لَا تُخْلِفُ الْمِيعَادَ³ أَنْظِرُوا أَحْسَنَ اللَّهُ لَهُمُ الْجَابَةَ يَقُولُهُ³* آتَى لَا أَضِيحُ عَمَلٍ عَامِلٍ مِنْكُمْ مِنْ ذَكَرٍ أَوْ أُنْثَى بَعْضُكُمْ مِنْ بَعْضٍ فَالَّذِينَ هَاجَرُوا وَأُخْرِجُوا⁴ مِنْ دِيَارِهِمْ وَأُودُوا فِي سَبِيلِي وَقَاتَلُوا وَقُتِلُوا لَا تَكْفُرَنَّ عَنْهُمْ سَيِّئَاتِهِمْ وَلَا تَدْخُلْنَهُمْ جَنَّاتٍ⁵ تَجْرِي مِنْ تَحْتِهَا الْأَنْهَارُ ثَوَابًا مِنْ عِنْدِ اللَّهِ وَاللَّهُ عِنْدَهُ حُسْنُ الثَّوَابِ لَا يَغْرَتَكَ تَقَلُّبُ⁶ الَّذِينَ كَفَرُوا فِي الْبِلَادِ مَتَاعٌ قَلِيلٌ ثُمَّ مَاؤُهُمْ⁷ جَهَنَّمَ وَيُئْسُ الْمُهَادُ لَكِنَّ الَّذِينَ اتَّقَوْا رَبَّهُمْ لَهُمْ⁷ جَنَّاتٌ تَجْرِي مِنْ تَحْتِهَا الْأَنْهَارُ خَالِدِينَ فِيهَا نُزُلًا مِنْ عِنْدِ اللَّهِ وَمَا عِنْدَ اللَّهِ خَيْرٌ لِلْأَبْرَارِ⁸ الْآيَةُ⁸ وَإِنَّ أَجْوِبَتَكَ الَّتِي حَرَرْتَهَا لِلْفُقَرَاءِ الْمُحَاصِرِينَ وَصَلَتْ إِلَى⁹ وَالَّذِي ذَكَرْتُمُوهُ مُشْعِرًا بِأَنَّكَ أَرَدْتَ⁹ الْأَذْعَانِ وَلَكِنْ مَنَعَكَ تَوْفَقُ الْعُلَمَاءِ

^a ms. يراها.^b Koran 24³⁹⁻⁴⁰.^c ms. ادعياهم.^d Koran

3188.

^e ms. ماء.^f Koran 3188-192.^g ms. ماويهم.^h Koran

3193-197.

الذين معك وبهذا زادت شَفَقَتِي عليك ¹⁰ وعليهم وعلى الضعفاء
 الْمُحْصُورِينَ عَنَّا وَرَغِبْتُ لَهُمُ الْهِدَايَةَ جَمِيعًا وَهَمُمْتُ بِأَمْرِكُمْ
¹¹ قِيَامًا بِالْوَاجِبِ طَوْقَنِيَّةً لِي^a وَحَرَرْتُ لَكُمْ هَذَا وَهُوَ مَرْسُولُ لَكُمْ
 صُحْبَةً أَرْبَعَةَ فُقَرَاءَ مِنْ ¹² أَنْصَارِنَا الَّذِينَ بِأَدْلِينَ أَرْوَاحِهِمْ لِلَّهِ طَلَبًا
 لِمَا عِنْدَهُ مِنَ الرِّضَا عَظِيمِ الْجَزَاءِ فَجَزَاهُمْ اللَّهُ خَيْرًا وَهُمْ ¹³ مُحَمَّدٌ
 أَحْمَدُ وَبَشِيرُ الَّذِي بَعَثْنَاهُمَا لَكُمْ أَوَّلًا مَعَ رَدِّ جَوَابِكُمْ وَمَعَهُمَا
 مُسْلِمَانِيَانِ وَهُمَا ¹⁴ مُحَمَّدٌ يَوْسُفُ وَكَيْلُكُمْ وَجَابِرُ كُنَيْتَهُمَا فَإِنْ كَانَ لَكُمْ
 سَعَادَةٌ وَأَرَدْتُمْ فَوْزَكُمْ فِي الدَّارَيْنِ يَوْ¹⁵ صُولُ جَوَابِنَا إِلَيْكُمْ وَلِلْمَذْكُورِينَ
 بَارِدُوا إِلَى اجَابَتِنَا وَأَسْلِمُوا^b قَبْلَ حُضُورِنَا وَكُونُوا مَعَهُمْ ¹⁶ حَالَهُ
 وَاحِدَةً حَتَّى نَأْتِيَكُمْ فِي هَذَيْنِ الْيَوْمَيْنِ عَلَى الْفُورِ إِنْ شَاءَ اللَّهُ
 تَعَالَى وَهِيَ هِيَ ¹⁷ جَارِيَّةٌ قِيَامُنَا بِنَفْسِنَا عَلَى أَثَرِهِمْ فَعِنْدَ حُضُورِنَا
 إِذَا وَجَدْنَاكُمْ مُسْلِمِينَ فِيهَا وَالْأَيُّ¹⁸ *فَيَقْصِي اللَّهُ أَمْرًا كَانَ مَفْعُولًا^d
 *وَسَيَعْلَمُ الَّذِينَ ظَلَمُوا أَيَّ مُنْقَلَبٍ يَنْقَلِبُونَ^e ¹⁹ وَأَعْلِمُ أَنَّكَ إِذَا
 أَسْلَمْتَ^f كَمَا أَشَرْنَا لَكَ قَبْلَ حُضُورِنَا فَتَكُنْ أَمْنًا عَلَى نَفْسِكَ وَمَالِكَ
 وَعَا²⁰ يَلْتَكِ وَكُلُّ مَنْ مَلَكَتْ يَدَاكَ مِنْ قَلِيلٍ وَكَثِيرٍ مَا عَدَا حَقَّ
 الْمِيرَى الْمَخْصُوصِ بِهِ فَهُوَ غَنِيمَةٌ ⁴⁷⁵¹ وَكُلُّ مَنْ يُسَلِّمُ مَعَكَ مِنَ
 الْمَسِيحِيِّينَ^g كَذَلِكَ أَمْنٌ عَلَى هَذَا الشَّرْطِ الَّذِي حَرَّرْنَا^h آتِنَا وَقَدْ
 آمَنَّاكُمْ عَلَى ذَلِكَ جَمِيعَكُمْ بِأَمَانِ اللَّهِ وَرَسُولِهِ وَأَمَانِ الْعَبْدِ لِلَّهِ
 فَاحْقِنُوا دِمَاءَكُمْ³ وَصُونُوا أَعْرَاضَكُمْ وَأَمْوَالَكُمْ وَلَا تَغُرَّنَّكُمْ كَثْرَةُ الْعَدَدِ
 وَالْمَدَدِ وَالْخَيْلِⁱ الَّتِي هِيَ مُعْوَلُكُمْ⁴ وَمُعْوَلُنَا اللَّهُ الَّذِي لَا إِلَهَ إِلَّا هُوَ لَا
 تُقَادَرُ قُدْرَتُهُ وَلَا يَنْهَضُهُ جُنْدُهُ كَيْفَ * وَهُوَ الْحَكِيمُ⁵ الْخَبِيرُ⁶ وَأَنَّمَا يَلْزَمُنَا
 الْوَفَاءُ بِالْعَهْدِ إِذْ عَلَّمْتُمْ بِمُقْتَضَى جَوَابِنَا وَالْأَفْلَا وَقَدْ تَحَرَّرَ مِنَّا⁶ إِلَى
 عَامِلِنَا مُحَمَّدٍ عَثْمَانَ أَبِي¹ قَرْجَةَ بِالتَّوَصِيَةِ عَلَيْكُمْ وَأَكَّدْنَا عَلَيْهِ بَأْنَ
 يُعَامِلُكُمْ حَسَبَ أَمَانِنَا⁷ فَإِنْ قَدَفَ اللَّهُ فِي قُلُوبِكُمْ نَارَ الْإِيمَانِ وَاطْمَآنَنْتُمْ

^a ms. sic الله?^b ms. وسلموا.^c ms. جاري.^d Koran

843, 46.

^e Koran 26²⁸⁸.^f ms. سلمت.^g ms. المسيحين.^h ms. حر.ⁱ ms. الخيل.^k Koran 618, 73; 341.

ms. أبو.

بالرحمن فَأَخْرَجُوا لِلْمَذْكُورِ وَقَاهُ⁸ بِدَوَاهٍ بِوَاسِطَةِ الْفُقَرَاءِ الْمُرْسُولِينَ
وَلَا تُسَوِّفُوا كَمَا سَابِقًا⁹ بِاتِّبَاعِ الْمُضِلِّينَ خُصُوصًا⁹ عُلَمَاءَ الشَّوْءِ فَقَدْ
وَرَدَ إِذَا رَأَيْتُمُ الْعَالَمَ يُحِبُّ الدُّنْيَا فَاتَّبِعُوا عَلَى دِينِكُمْ فَلَا تَسْمَعُوا لَهُ¹⁰
نَصِيحَةً مَا دَامَ إِلَهُكُمْ يُحِبُّونَ الدُّنْيَا فَمَا هُمْ إِلَّا كِلَابٌ وَلَقَوْلُهُ صَلَّى
اللَّهُ عَلَيْهِ وَسَلَّمَ الدُّنْيَا¹¹ جِيغَةٌ وَطُلَّابُهَا كِلَابٌ وَإِنْ رَضُوا¹² أَوْ لَا فَأَمْرُ
اللَّهُ تَعَالَى نَافِدٌ عَلَى رَغْمِ أَنْوْفِهِمْ فَأُولَى¹² لَهُمْ طَاعَةٌ وَقَوْلُ مَعْرُوفٍ
وَلَوْ صَدَّقُوا اللَّهَ لَكَانَ خَيْرًا لَهُمْ وَلَوْ لَا أَتَى عَلَى نُورِ اللَّهِ¹³ وَتَأْيِيدٍ مِنْ
رَسُولِهِ¹⁴ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ كَمَا دَعَوْتُ أَحَدًا¹⁵ وَلَا سَاغَ لِي أَنْ أَحْكِيَ
شَيْئًا وَلَا¹⁶ اِشْتَغَلْتُ بِهَذَا الْأَمْرِ الَّذِي أَنَا بَعِنْدَهُ سَاعَةٌ مَا وَهَذَا اِئْتِزَارُ
لَكُمْ فَاسْمَعُوا وَانْيَبُوا¹⁷ إِلَى رَبِّكُمْ وَاسْلَمُوا لَهُ مِنْ قَبْلِ أَنْ يَأْتِيَكُمْ
الْعَذَابُ ثُمَّ لَا تُنْصَرُونَ إِنَّ اللَّهَ لَا يُظِلُّ النَّاسَ شَيْئًا¹⁸ وَلَكِنَّ النَّاسَ
أَنْفُسَهُمْ يُظِلُّونَ فِي أَنْفُسِهِمْ أَنْ تَكُونُوا ظَالِمِينَ فَتَنْدَمُوا مِنْ حَيْثُ لَا
يَنْفَعُكُمْ¹⁹ النَّدَمُ وَالسَّعِيدُ مَنْ آتَعَظَ بِغَيْرِهِ وَبَادَرَ إِلَى خَيْرِهِ فَهِيَاهِيَّا
إِلَى النِّجَاحِ قَبْلَ قَضِ²⁰ الْجَنَاحِ وَالسَّلَامَ عَلَى مَنْ اتَّبَعَ الْهُدَى وَالسَّلَامَ.

Translation

470¹⁸ In the name of God, the Merciful, the Compassionate! Praise belongs to God, the Generous Patron, and prayer with peace upon our Lord Muhammad and his family.

¹⁹ From the Servant, humble in the eyes of his Lord, Muhammad al Mahdi ibn as Sayyid Abdullah to the representative of Britain and of the Khedive ²⁰ Gordon Pasha.

We hereby inform you that God (Praise belongs to him the Most High) in his patience and generosity is long suffering, but he does not neglect and he does not turn aside ²¹ his wrath from the guilty people, and he is the patron of the believers. The Most High said: God is the patron of those who believe; he leads them out 471¹ of darkness into light; but they who do not believe, their patrons are demons who lead them from light into darkness;

^a ms. سبق.

^b ms. لهم.

^c ms. رضيو.

^d ms. رسول.

^e ms. احد.

^f ms. تكوا.

²they are fellows of the fire, in which they shall remain for ever.”^a

He has pointed out [the true way of life] in the glorious Koran and others of his ancient books and ³by the tongue of every apostle, prophet, and faithful devotee, censuring this world and making the wise wary of it. He has called them ⁴to the hereafter and incited them to it, for it is the house of continuance, strength, glory, great honor, the exalted place, ⁵the sublime abode, and the pleasant life. Just as the word of the Most High points out in regard to all this: “Know that this present life is only ⁶a toy, a plaything, a vain amusement, a source of rivalry among you, and a striving for increase of property and children. It is like a rain-growth whose vegetation pleases the unbelievers, ⁷then it withers away and you may see it turn yellow and finally it becomes dry stubble. But in the hereafter [there will be] a severe punishment [for those who seek the glory of this world]; and pardon from ⁸God, and favor [for those who renounce it]. The life of this world is only a deceitful provision. Hasten with emulation after pardon from your Lord, and Paradise, the extent of which ⁹equals the extent of heaven and earth, prepared for those who believe in God and his apostles. This is the bounty of God which he will give ¹⁰to whom he pleases and God is endowed with great bounty.”^b

One who is guided aright as to the signs knowns that he who acknowledges the truth of the ¹¹belief in God and his Apostle is very near to God, he must attain his desire, he will get his reward and be given ¹²what souls like and eyes delight in. Verily no one can escape his punishment and penalty and every evil ¹³of this world and the next except through him [God] together with great fear of his [God’s] wrath and renunciation of this world and its life ¹⁴and of any reliance upon it. It is transitory, base, deceitful, treacherous. There is no peace in it, and no pleasure ¹⁵in comparison with the great good which is with God in the abode of joy. But whoever loves this world and cherishes it above the ¹⁶next. God will cast him headlong into everlasting hell, as the word of the Most High says: “And he who has transgressed and

^a Koran 2²⁵⁸⁻²⁵⁹.

^b Koran 57¹⁹⁻²¹.

has chosen this present life; ¹⁷ verily hell shall be his abode." ^a So it is plain that there is no profit in the honor of this world and in its life, wealth and ¹⁸ property, but only prolonged regret in the hereafter. To this effect there has come down from Jesus, son of Mary (upon our prophet and upon Him ¹⁹ be the blessing of God and his peace) the saying: "Oh company of disciples! Pass through this world, but make not your abode in it. Verily I have not found for you ²⁰ in it an abiding place. Take the temples of God as [your] house and take your houses as temples, every one of you also the traveler." 471¹ And from Him (upon whom be peace) [is the following]: "Oh company of disciples! Eat barley-bread with coarse salt, but do not eat except when hungry. Put on garments made of woven hair-cloth and go out from this world saved. Verily I tell you ³ the sweets of this world are bitter in the next and the servants of God are not those who live in worldly pleasure."

And from the Apostle of God ⁴ (God bless him and give him peace): "Two hungry wolves let into a sheep-cote would not do more damage to it than ⁵ the desire of man for condition and high station does to his religion."

It is told that he (God bless him and give him peace) was walking along with a number of his companions ⁶ in one of the streets of Medina when they came upon a dead goat cast aside in it. So he said (God bless him and give him peace) "By Allah, ⁷ Surely this world is more despised by God than this goat by its owners to cast it aside." And because it is more ⁸ despised than a carcass, the Apostle of God (God bless him and give him peace) enjoined upon his companions and the rest of his people his word: ⁹ "Let that of this world which satisfies any one of you be like the provisions of a traveller." And he said (God bless him and give him peace) in giving warning against it: "It may be likened to two things. [The second is that] ¹⁰ this world is like the condition of a traveller under the shade of a tree, then he goes away and leaves it."

There is no guide except God, as also the Most High said: ¹¹ "He therefore who is directed, will be directed to the advantage of his own soul, but he who errs, he will err." ^b

^a Koran 7937-39.

^b Koran 10¹⁰⁸.

Since this is so, then it is ¹² plain that I am the one who invites to God, and the Khalifa of the Apostle of God (God bless him and give him peace) and that I am the Mahdi, the expected one, ¹³ and this is no boast.

God has authorized me to proclaim mercy upon whosoever obeys him and follows the direction of his prophet Muhammad (God bless him and give him peace), and vengeance ¹⁴ upon whosoever rebels against him and disobeys him and follows his devil, his own inclination and desire, and cleaves to this world. I have ad¹⁵dressed you before this explaining my condition in detail and have invited you to Islam and the faith. You should ¹⁶ have answered with submission and obedience before you had seen what you have seen. And, what is more, that which I told you ¹⁷ before was only to guide you aright, and for the sake of your peace and happiness in your condition and your property, if you had known and understood ¹⁸ the truth of what I said. How good my intention towards you was! And I have not ceased trying to promote your welfare and wishing you good in the hope ¹⁹ that God might open your breast to Islam and that you might turn to the command of God, the king, the all knowing, and that you might be one of those who submit themselves ²⁰ and yield to the Lord of servants and who fear the day of judgement, "a day whereon the master and the servant will be of no avail to one another,"^a nor rank, ⁴⁷³ nor property, nor household, nor family, nor condition of wealth. But the promise is true and the threat reliable as ² he who is great in rank and strong in power said: "And he into whose right hand his book shall be given, will say: 'Take, read my book; verily I thought ³ that I should be brought to my account.' His shall be a pleasant life in a lofty garden whose fruits shall be near at hand. ⁴ Eat and drink with enjoyment, because of what you have sent before you in the days which are passed. But he into whose left hand his book shall be given, will say ⁵ Would that I had not received this book and that I had not known what my account is! Would that I had died! My riches do not profit me and my power is gone ⁶ from me.' Take him and bind him and cast him into the fire to be burned, then put him into a chain

^a Koran 4441.

of the length of seventy cubits ⁷ because he believed not in the Great God.”^a

And it has been reported to me that your deeds are good externally ⁸ with the people of Islam. But God the Most High said: “But the unbelievers, their works are like the mirage in a plain, which the thirsty [traveller] thinks ⁹ is water, until, when he comes to it, he finds it nothing; but he finds God with him and he will fully pay him his account, ¹⁰ and God is swift in taking account; or, as the darkness in a deep sea, covered by waves on waves, above which are clouds, ¹¹ being darkness one above the other, when one stretches forth his hand, he can scarcely see it. And unto whomsoever God does not grant light, ¹² he enjoys no light at all.”^b

So adorn your work with faith and cleanse it from the pollution of unbelief, since you will then become high in position ¹³ and your works will become good externally and internally, and the fruits thereof will be yours.

You have gone to the pains of making inquiry in regard to us ¹⁴ formerly in that you addressed us and sent us a messenger and asked return of the embassy;^c and this is to me ¹⁵ evidence that you are the wisest of the people of your government since they have not addressed me as you have with their profession of Islam. ¹⁶ You alone are excepted. But their wickedness has been revealed to me, that they are the worst of men in unbelief; and they shall perish at my hand company after ¹⁷ company. But my desire for you is escape from this so that you may be safe with those who are safe and that you may be of the perfect who ¹⁸ ponder “upon the creation of heaven and earth”^d and who understand in their sagacity the power of God and they say: “Oh Lord, By no means ¹⁹ have you created this in vain, Praise be to thee, deliver us from the torment of hell, Oh Lord! Verily, whom you cast into hell, him you cover with shame, ²⁰ and assuredly the evil-doers have no helpers. Lord, we have heard a crier summoning to the faith, saying, Believe in your Lord! 474¹ We believe, Oh Lord, so pardon us our faults and wipe away from us our evils and receive us among the pious, Oh Lord, and give us what you have promised us ² by your apostles and do not cover us

^a Koran 69¹⁹⁻³³.

^b Koran 24³⁹⁻⁴⁰.

^c See Remark 2.

^d Koran 3¹⁸⁸.

with shame on the day of resurrection. Verily, you do not abandon the promises.”^a

See how gracious is the answer of God to them in his word: ³“I will not permit the work of him among you who works to be lost, whether it be male or female; the one of you is from the other. They therefore who have left their country and have been turned out ⁴of their houses and have suffered for my sake and have been slain in battle; verily I will wipe out their evil deeds from them, and I will surely bring them into gardens ⁵through which rivers flow, a reward from God and with God is the most excellent reward. Let not the success ⁶of the unbelievers in the land deceive you, it is but a slender provision and then their receptacle shall be hell, an unpleasant couch. But they who fear the Lord shall have ⁷gardens through which rivers flow, they shall dwell therein forever. This is the gift of God, for what is with God will be better for the righteous.”^b

The reply which you have written to the dervishes who are shut up has come to me and he whom you mention giving information that ⁹you desire submission, but the interference of the counsellors who are with you hinders you.^c On this account my pity increases for you ¹⁰and for them and for the weak^d who are shut up from me, and I wish for them all right guidance.

I have thought about your condition, standing ¹¹by the obligation God has imposed upon me, and I have written to you this [letter] and it is sent to you by four dervishes of our helpers who have freely given themselves to God in seeking for the joy which is with him, and great is the reward and God will reward them well. They are ¹³Muhammad Aḥmad and Bašîr, those whom we sent to you in the first place with the reply to your letter, and with them are two Muslims, ¹⁴Muhammad Yusuf, your lieutenant, and Jâbir (these are their names).^e So if you choose prosperity and desire your salvation in the two abodes, [then] on ¹⁵the arrival of our answer to you and to the [others] named, hasten to reply to us and submit yourself before our arrival and be with them^f

^a Koran 3183-192.

^b Koran 3193-197.

^c See Remark 2.

^d See Remark 3.

^e See Remark 4.

^f See Remark 5.

¹⁶in one state until we arrive in two days in haste, if God the Most High wishes, and behold he is ¹⁷my protector.

My intention is personally to hasten after them. So if, on our arrival, we find you Muslim then all will be well; but if not ¹⁸"then God will accomplish what is decreed".^a "And they who do wrong shall know with what treatment they shall be treated in the hereafter."^b

¹⁹So know that if you submit yourself, as we have advised you, before our arrival, then our pledge of safety will be for you, your property, ²⁰your household, and everything which your hands control, both little and great, excepting the special perquisite of the Ameer as that is a booty. 475¹And whoever of the Christians who are with you that submits himself likewise is safe upon this condition which we have just written. ²We pledge you safety upon this condition, all of you, with the pledge of God and his Apostle, and the pledge of the servant of God. So put an end to the shedding of your blood, ³and look to your lives and property, and let not the greatness of your number, the assistance and the army upon which you rely, deceive you. ⁴Our reliance is God, than whom there is no other. His might cannot be measured and his army cannot be defeated. How could it be, seeing that he is "the Wise and ⁵the Knowing"?^c The fulfillment of the covenant is surely binding upon us as soon as you agree to the conditions in our reply, otherwise not.

A letter has been sent by us to our agent Muhammad Othman Abu Kerjah with orders in regard to you and we have authorized him to deal with you in accordance with our ⁷pledge.

So if God has put into your heart the light of faith and you continue in grace, then go out to the said man and have a ⁸conference with him through the mediation of the dervishes who are sent and do not delay, as formerly, in following the erring ones, especially ⁹the evil counsellors.

[The saying] has come down: "When you see a wise man loving this world, be suspicious of him as to his position in regard to your religion, and do not ever listen to him ¹⁰in any advice of his." Verily they love this world and are nothing

^a Koran 843, 46.

^b Koran 26228.

^c Koran 618, 73; 341.

but dogs. His word is (God bless him and give him peace): "This world ¹¹is a carcass and those who desire it are dogs." Whether they like or not, the command of God, the Most High, is executed inspite of them. So the first demand ¹²upon them is obedience and a reasonable reply. If they believe in God, surely it is well for them.

And were it not for the fact that I have the light of God ¹³and the authorization of his Apostle (God bless him and give him peace) I would not have invited any one; nor would it be fitting that I say anything nor ¹⁴busy myself with the matter, for a moment even.

This is a warning to you, so hearken and turn ¹⁵to your Lord and submit yourself to him before punishment comes upon you. Then you will not be helped.

Verily God does not injure man in anything, ¹⁶but man injures himself. So beware lest you injure yourself and repent when ¹⁷repentance avails not.

Happy is the man who is warned by another and hastens to his own good. So come to salvation before your wings are clipped.

Peace be upon him who follows the right guidance.

Remarks.

Remark 1. The letter is not dated in the manuscript. From the sources available it appears that Gordon received only three formal letters from the Mahdi. At least no reference to any others has been found. Of these three the first one, which was received by Gordon March 22, 1884, is translated in full in Major (now Sirdar) Wingate's book: *Mahdiism and the Egyptian Sudan* (1891) pp. 111—115, and is dated March 10, 1884.^a The second letter was received by Gen. Gordon Sept. 9, 1884, the day before the steamer "Abbas" was sent down the Nile.^b It together with the other documents was lost in the wreck of the "Abbas". The third letter was received

^a In Boulger's *Life of Gordon*, London 1896, vol. ii. p. 136: "Even the Mahdi himself made his contribution to the general tribute, by sending Gen. Gordon on his arrival a formal 'salaam' or message of respect." Gordon arrived at Khartoum Feb. 18, 1884.

^b *Gordon's Journals*, Sept. 11. The references to Gordon's Journals are made to "The Journals of Major Gen. C. G. Gordon, C. B. at Khartoum" edited by a Egmont Hake, Boston, 1885.

by Gordon Oct. 22, 1884,^a and is translated in full in Appendix U pp. 453—459 of the "Journals". This last letter tells of the wreck of the "Abbas" on Sept. 18, 1884.

This points at once to our letter as the one Gordon received Sept. 9, and which was lost in the wreck of the "Abbas"; but as there is a possibility of other letters of which no mention has been found, further proof is necessary.

The letter which Gordon received on Sept. 9 was sent by means of two Muslims and some dervishes.^b The names of the two Muslims as given in Ibrahim's letter are Mohammed Yusuf and George Calamantino; and as given in the manuscript letter are Muhammad Yusuf and Jâbir. In a letter from Abd-er-Rahman en-Nejumi,^c el-Jâbir is identified with George Calamantino. The letter referred to in Gordon's Journals as being received on Sept. 9 and the manuscript letter were sent by the same messengers.

Muhammad Yusuf was the Italian Giuseppe Cuzzi.^d Cuzzi was taken captive at the fall of Berber, May 26, 1884, and sent to Abu Kerjah, who was in command of the besiegers of Khartoum. Abu Kerjah tried through the mediation of Cuzzi to induce Gordon to surrender, and failing in this he sent him to the Mahdi at Rahad.^e The Mahdi sent him back to Khartoum together with George Calamantino with letters for Gordon. In his Journal for Sept. 11 Gordon says: "Soon after Cuzzi had left for the Arab camp two dervishes came in with the Mahdi's letter." The facts seem to be that, when the messengers from the Mahdi arrived at the Arab camp besieging Khartoum, Cuzzi for some reason or other wanted to get into Khartoum before the letter was delivered, and as soon as he returned to the camp the letter was sent in. As stated in Gordon's Journal, Sept. 11, there is some discrepancy in the account, for he says Cuzzi came into the city "yesterday" i. e. Sept. 10, while

^a See *Gordon's Journals*, Oct. 22.

^b See the letter of Ibrahim Abd el-Kâder in App. A to *Gordon's Journals*, p. 371, which is dated Sept. 9, 1884; and cp. the manuscript letter p. 474 l. 11, 13, and 14.

^c App. A 2 to *Gordon's Journals*, p. 374.

^d *Gordon's Journals*, Sept. 13.

^e R. C. Slatin: *Fire and Sword in the Sudan, 1879—1895*. p. 305. Father Joseph Ohrwalder: *Ten Years Captivity in the Mahdi's Camp*, p. 125 f. Rahad is about 200 miles south of Khartoum.

he says the letter was received Sept. 9. Slatin says^a that Calamantino was admitted into the city but Cuzzi refused admittance. It may be that Cuzzi incurred Gordon's suspicion, and was refused permission to come into Khartoum a second time.

The Mahdi says in the manuscript letter that he has authorized Abu Kerjah to treat with Gordon.^b Gordon says in his Journals for Sept. 13: "Mahdi proposes that I should put myself on my surrender (!) under Abou Gugliz, who is a notorious breaker of the dervish rules." And in a letter from Gordon to Abd-er-Rahmân is the following: "Mahomed Achmed informs us that he ordered Abou Kerjah to convert us to his faith.^c The letter is dated 2nd Zu'l Hejjeh 1301; Aug. 24, 1884.^d In Gordon's Journals Abu Kerjah is consistently called Abou Gugliz.

The following, which undoubtedly refers to our letter and is a good summary of it, is taken from a letter from Abd-er-Rahmân en-Nejumi to Gordon.^e This letter has no date, but it was received by Gordon Sept. 21. It says: "The Imam has written to thee the truth in leading thee to God; and also that which concerns thy salvation and that of those with thee and how thou mayest attain salvation in this world and in the next."

The above evidence points clearly to our letter as the one that Gordon received Sept. 9, 1884.

It is impossible to determine the date on which the letter was written. It must have been after June, 1884, and probably before the Mahdi left Rahad, which according to Ohrwalder was Aug. 8, and according to Slatin Aug. 22. Both Ohrwalder and Slatin are very sparing in giving exact dates.

Remark 2. Just what the reference in ms. letter p. 473 l. 14 is, is not evident. It may be that Cuzzi when he came to the Mahdi represented himself as a messenger from Gordon, and told the Mahdi that he was authorized to tell him that Gordon would surrender if he dared, but that the Ulema of Khartoum prevented him.^f The Mahdi calls Cuzzi in the

^a Slatin, *F. and S. in Sudan*, p. 304—305.

^b Vide ms. letter 474 l. 6.

^c App. M to *Gordon's Journals* p. 397.

^d Aug. 24 is wrong; it should be Sept. 23.

^e App. L to *Gordon's Journals*, p. 392.

^f Ms. letter 475 l. 9.

letter "your wakīl" (lieutenant).^a It is impossible that Gordon should ever have offered to surrender and turn Muslim. Cuzzi may have presented things thus to the Mahdi to gain his favor. Ohrwalder says that the Mahdi received him well, loaded him with presents and then sent him back to Gordon with a letter.

Giuseppe Cuzzi had been English Consular Agent at Berber. Shortly before the fall of Berber (May 26, 1884) Cuzzi had been dismissed by Sir Evelyn Baring (now Lord Cromer) for criticizing Baring's plan of opening the road from Suakin to Berber. Gordon therefore thought that Cuzzi had betrayed Berber to the Arabs for revenge. Neither Slatin nor Ohrwalder say anything about Cuzzi as being a traitor, but circumstantial evidence is against him. For after the fall of Berber Cuzzi was sent to Abu Kerjah who was besieging Khartoum. Abu Kerjah sent him to Gordon to induce him to surrender but failed. He was then sent to the Mahdi who received him so well. After the letter had been delivered to Gordon Cuzzi went again to Berber. He evidently had more freedom than Slatin or Ohrwalder. The probability too that he entered Khartoum alone before the letter was delivered points to some double dealing on his part — whether he was plotting against Khartoum or simply working to save himself is hard to tell. If Cuzzi was such a man, it is easy to believe that he posed before the Mahdi as an agent of Gordon. This would also give a good reason why the Mahdi should write this letter. The other two letters were written, each of them, because of some special reason — the first one in answer to Gordon's letter appointing the Mahdi Sultan of Kordofan, and the other to tell Gordon about the capture of the steamer "Abbas".

It may also be that the reference is to the first messages which Gen. Gordon sent to the Mahdi making overtures to him and appointing him governor of Kordofan, the first step in carrying out the British-Egyptian policy of evacuating the Sudan and withdrawing the Egyptian troops. That was what Gordon had been sent to the Sudan to do.

Remark 3. By the "weak"^b were probably meant the wives and children left behind in Khartoum by Muhammadans who

^a Ms. letter 474 l. 14.

^b Ms. letter 474 l. 10.

had gone out to the Mahdi and submitted themselves to him. This was a cool piece of calculation on the part of these men; for, if Gordon held out till the English came, their families and property were safe, should the Mahdi succeed in taking Khartoum they could rely upon their fidelity in the Mahdi's cause to protect their families and property. Because Gordon permitted this he is criticized severely by Father Ohrwalder^a who maintains that the ethics of war are not those of peace and had Gordon driven these "weak ones" out he would have saved on his food supplies and have been able to hold out longer. It was at no time Gordon's policy to hinder those who wished to go out to the Mahdi. He would not, however, permit those who went out to come back again. The men who went may have told the Mahdi that the reason they did not take their families with them was that Gordon would not permit them to do so.

During the siege there were several attempts at conspiracy which Gordon nipped, putting the leaders in prison. The reference may be to such men.

Remark 4. In the letter there are five persons mentioned by name:^b Muhammad Aḥmad, Bašîr, Muhammad Yusuf, Jâbir, and Abu Ḳerjah. Muhammad Aḥmad and Bašîr are spoken of as having been the messengers who brought the letter of March 10, 1884. Muhammad Aḥmad is too common a name to be easily identified. There is a Muhammad Aḥmad wad el Bedri who is called by Ohrwalder^c one of the Mahdi's early and favorite adherents. Wad el Bešîr is mentioned by Ohrwalder^d as being sent by the Mahdi to head the revolt of the tribes of Gezireh which is between the Blue and White Niles. Slatin^e also mentions this man and calls him a brother-in-law of the Mahdi. Ohrwalder calls him a son-in-law of the Mahdi. These two men are probably the ones referred to in the letter.

Muhammad Yusuf is Giuseppe Cuzzi, and Jabir is the Greek George Calamantino.^f Abu Ḳerjah's name is spelled variously Abou Gurgy, Abu Girgeh, and Abu Girgah. He is also called

^a Ohrwalder op. cit. p. 152.

^b Ms. letter p. 474 l. 13. 14 and p. 475 l. 6.

^c Op. cit., p. 10. ^d Op. cit., p. 94.

^e Slatin, op cit., p. 280. ^f Cp. Remark 1.

Abou Gugliz. His full name is Hajji Muhammad Osman (or Othman) Abu Kerjah. Abu Kerjah is written ابو قرجه. In Egypt both ق and ج are pronounced as hard *g*. Gordon's name is spelled in two ways: غردون and جوردن.

Remark 5. Ms. letter, p. 474 l. 16. At first glance this seems to give a clue to the date of the writing of the letter; but, if the letter was written before the Mahdi left Rahad, it would mean that the Mahdi expected to reach Khartoum two days after the messengers with the letter did. There is no means at hand for determining how long it would take the messengers to cover the distance of about two hundred miles between Rahad and Khartoum. It would seem from this that the letter must have been written some time in August — probably after the middle — which would point to Slatin's date of Aug. 22 for the Mahdi's departure from Rahad as the correct one.

Remark 6. In the Appendix to Book III. of Major Wingate's book: *Mahdism and the Sudan*, pp. 535—549, there is a tabulated list of the letters and proclamations of the Mahdi and his successor Khalifa Abdullah Taashi which are contained in a manuscript captured at the battle of Toski, Aug. 3, 1889. In this battle the English completely routed the Arabs, and their general en-Nejumi, the man who was chief in command of the Arabs besieging Khartoum from September on, was slain. In this list of letters there are two given from the Mahdi to Gordon, pp. 24—26 and 26—28 of the letter-book. The date given is Jumada el-Awal 1301, Christian date 1885 (sic). It should of course be March 1884. These letters (the two are one letter with a short postscript of six or seven lines, as can readily be seen by comparing the résumé of the contents with the letter itself) are translated in full in the body of Wingate's book, pp. 111—115. There are in this letter-book one hundred thirty three letters, ninety-nine of which are from the Mahdi. The book contains one hundred forty or more pages, of which pages 33—38 are missing. There is no chronological arrangement of the letters, which run from 1881 to 1888.

Remark 7. In regard to عليه السلام.

In his "Régistre", Count Landberg says: "Que le manuscrit date d'une époque postérieure à la mort du Mahdi, est prouvé parce qu'on trouve parfois après son nom les mots عليه السلام."

This is hardly sufficient proof, for the use of the phrase after the Mahdi's name is found in letters clearly written before his death. There is a document, given as Appendix D to *Gordon's Journals*, which is an answer written by the Ulema of Khar-toum to the Sheikh Abdel Kader Ibrahim and to Wad en-Nejoomi, dated 23rd Zu'l Kada, 1301, Sept. 14, 1884. In this document (op. cit., p. 379) the Ulema complain that the followers of the Mahdi use this phrase in connection with his name. That the fact is so, can be seen from Appendix L. to the *Journals*, a letter from Abderrahman en Najoomi and Abdallah en Noor to Gordon Pasha, where the phrase is used after the word "Mahdi". The examples of its use in this way could be multiplied. The Ulema say that Abd el-Ghani en-Nablusi said in his book, the Hadik en-Nadih: "No one ought to be distinguished by the Salaam excepting the prophets, for one cannot say, 'Ali, on whom be peace'; and this rule applies both to living and dead alike, excepting that a person present may be addressed thereby, for people say, 'Peace be upon thee'.^a In a footnote to the same page: "Peace be on him", the usual formula of salutation to a true believer if alive, and used of prophets when their names are mentioned.

^a Op. cit., p 379.

Monosyllabic Roots in Pampanga.—By CARLOS EVERETT CONANT, University of Chicago.

One of the most interesting of the Philippine languages to the student of Indonesian phonology is the Pampanga, spoken by about 280,000 people in the province of the same name which forms the northern boundary of Manila Bay.

Altho its territory is contiguous to that of the Tagalog, spoken in Manila and the surrounding provinces, Pampanga presents a variety of striking phonological peculiarities not shared by its neighbor. Among these may be mentioned the following:

1. The lack of *h*, a very frequent sound in Tagalog, Bisaya and Bikol, e. g. Pamp. *ukúm* 'judge': Tag. Bis. Bikol *hukúm*; Pamp. *ápun* 'afternoon'; Tag. Bis. Bkl. *hápun*; Pamp. *buák* 'hair': Tag. Bis. Bkl. *buhúk*.

2. Vocalic change in the first syllable of a root¹, e. g. Pamp. *katám* 'a brush' but *ketáman* 'object brushed'; *kulubún* 'cover' but *kilubúnan* 'object covered'.

3. The treatment of the Indonesian RGH consonant², which in Tagalog, as in most Philippine languages, becomes *g*, but appears as *y* in Pampanga, e. g. Pamp. *yamút* 'root': Tag. Bis. Bkl. *gamút*; Pamp. *uyút* 'vein': Tag. Bis. Bkl. *ugát*.

¹ The term 'root' is employed in this paper in its traditional sense, namely, to indicate the dissyllabic type of base (Brandstetter's *Grundwort*, cf. *Wurzel und Wort in den Indonesischen Sprachen*, Lucerne 1910) characteristic of Indonesian languages. Whatever may have been the prehistoric type of the Indonesian root, which is regarded by some scholars, notably Pater W. Schmidt, Brandstetter and K. Wulff, as monosyllabic, the fact remains that the existing languages of the Indonesian branch *par excellence* regularly build their derivatives on dissyllabic bases, which, be their ultimate origin what it may, are felt and treated as roots subject to no further analysis, and hence may with entire propriety be spoken of as such in any discussion not concerning itself with the very problematic word structure of the parent speech.

² Cf. Conant, *The RGH Law in Philippine Languages*, JAOS vol. xxxi, p. 80 ff.

4. The representation of the indifferent vowel (pepet)¹ by *a*, while it appears regularly as *i* in Tagalog, e. g. Pamp. *ipás* 'roach': Tag. *ípis*; Pamp. *báyat* 'weight': Tag. *bíg'at*.

5. Metathesis of initial consonant and following vowel, which is generally an *a*, e. g. Pamp. *altáu* <**latau* 'to float': Tag. *litáu*; Pamp. *abyás* <**bayas* 'rice': Tag. *bígás*, this last example showing also the treatment of the RGH consonant and of the *pepet* vowel in Pampanga.

6. The contraction of two concurrent like vowels, e. g. Pamp. *tān* 'to stop, cease': Tag. Pangasinan *tāan*; Pamp. *duñ* 'to reach shore, land (of boats)': Tag. Bis. Bkl. *dúuni*. Such contraction is also regular in Ibanag (spoken in the Kagayan Valley, North Luzón), e. g. Ibg. *bāg* 'breech-clout': Tag. Bis. Bkl. *bahág*; Ibg. *big* 'all, nothing but, Ger. *lauter*': Iloko, Pang. *biig*. Sulu (spoken by the Mohammedan Malays of the Sulu Archipelago) contracts not only originally concurrent like vowels, e. g. Sulu *tō* 'right (hand)': Bis. Bkl. *to'ó*, but also dissimilar concurrent vowels, e. g. Sulu *nōg* 'descend': Bis. *náog*, Tag. (*pa*)*náog*, and those brought together by secondary Sulu loss of intervocalic *l*, e. g. Sulu *ō* 'head': Tag. Bis. Ilk. *ulo*; Sulu *sāh* 'fault, blame': Tag. Bis. Bkl. *sala*. Syncopation of intervocalic *l* also occurs in Tagalog, but less regularly than in Sulu (compare the examples last given), and without resultant contraction, e. g. Tag. *dáan* 'way, road': Sulu *dān*: Bis. Bkl. *dálan*.

7. Apheresis and apocopation of accentless syllables, composed mostly of a single vowel, e. g. Pamp. *tē*, the interjectional short form of *patē* 'dead'; *sak*, beside *asák* 'to pack'; *tun* 'cook rice': Ilk. Ibg. Mal. Kawi, Makass. Bug. Mlg. Samoan, Tahiti, Chamorro *tunu*, Haw. *kunu*.

As a result of the regular vocalic contraction pointed out above (6) and the sporadic loss of an accentless syllable, a considerable number of Indonesian dissyllabic roots have been reduced to monosyllables in Pampanga. Leaving out of account some twenty monosyllabic words consisting of enclitic pronominal forms, accentless adverbial and connective particles, the articles, and interjections (many of these being unquestionably of onomatopoeic origin), there remain about thirty-five monosyllabic

¹ Cf. Conant, *The Pepet Law in Philippine Languages*, Anthropos vol. vi.

roots in the language. The majority of these may readily be identified with roots of the ordinary dissyllabic form in other Philippine languages.

I. Roots showing contraction of Pamp. *aa* to *a*:

1. *dās* < **daas* < **daēs*¹ 'arrive': Tag. *daís*.
2. *kān* < **kaan* < **kaēn* 'eat': Ilk. *kaán*, Tag. *káin*, Bis. *ká'on*.
3. *māl* < **maal* 'dear, expensive': Tag. Bis. Mgd. Sulu, Mal. Sund. Dayak *mahal*. For loss of *h* in Pamp. see above (p. 1).
4. *pāt* < **paat* < **paēt* 'chisel': Ilk. Pang. *paēt*, Tag. *páit*, Bis. *pahut*, Mal. Dayak *pahat*.
5. *sāp* < **saap* < **saēp* 'farm hand': Bis. *saúp*, Bkl. *súup* 'apprentice, artisan's assistant'.

6. *tān* < **taan* 'stop, cease': Tag. *túan*, *tahán*, Pang. *túan*, Bis. *taán*, Mal. Jav. Sund. Day. *tahan*, Haw. *kaa*.

7. *lāt* < **laat* 'all': Tag. *lahát*.

II. Roots showing contraction of *uu* to *u*:

8. *dūn* 'to reach shore, land (of boats)': Tag. Bis. Bkl. Pang. *duun* (with varying accent), Tir. *duñu*, Ibg. *duñ*.

9. *līb* 'within': Tag. Bis. Pang. Ilk. *lúub* or *luúb*, Tir. *dob*.

10. *lūd* 'proseguir para acabar': Ilk. *lúud* 'ruin, destruction, completely destroy'.

11. *lūk* 'bay, inlet': Tag. Bis. Ilk. Pang. Bagobo *lók* or *lúuk*, Ibg. *lut* (for *luk* where the original surd stop has become in pronunciation the glottal stop and hence has lost its identity; cf. Ibg. *but* in use beside the correct historical form *buk* 'hair': Ilk. *buúk*, Pang. *buék*, Pamp. *buák*), Sulu *lōk*.

12. *lūn* 'cure (meats), preserve or dry (fruits)': Tag. Bis. Bkl. *ló'on* or *lú'on*.

13. *pūn* 'base, stem, trunk, origin, beginning, capital': Ilk. Bkl. *puún*, Pang. *poon(án)*, Tag. Bis. *puhón(an)* Sulu, Mal. Sund. *puhun*, Tir. *fúun*, Mgd. *puun* or *pun*, Ibg. *fun*.

14. *sūb* 'steam': Ilk. *súub*, Pang. *suúb*, which are connected by metathesis with Tag. Bis. Mgd. Tirurai *subu* of nearly identical meaning.

15. *sūn* 'rise (of tide), be borne on the tide': Bis. *suún* 'wander aimlessly, go with the current'.

16. *tūd* 'hit the mark, aim straight, be true': Bis. Pang. *túud* 'true, consider true, believe'.

¹ Wherever *ě* appears in this paper it indicates the indifferent vowel (pepet), which regularly becomes *a* in Pamp.

17. *tūg* 'basket of woven palm leaves': Tag. Bis. *túhug*, Ibg. *tug*.

18. *tūs* 'make good, remedy, repair': Tag. *túus*.

III. Roots showing contraction of *i* or *u* with the pepet vowel:

19. *sād* 'a kind of fish corral': Tag. *síid*, Bis. *sihod*, Bkl. *siód*.

20. *tūd* 'knee': Tag. Bkl. Bis. Sulu *túhud*, Ibg. *tuád*, Tir. *etur*, Sund. *tuur*, Toba *tut*, Kawi *tūr*. Kawi and (apparently) Toba have the same contraction. Compare also Toba *buk* 'hair' with Sund. *buuk* and the Phil. cognates in No. 11 above. In this connection it is interesting to note that Pamp. and Ibg. exactly reverse each other in their treatment of the words for 'hair' and 'knee', tho the vocalism of the two words is precisely the same:

Philippine	Tagalog	Pampanga	Ibanag
* <i>buék</i> 'hair'	<i>buhúk</i> ¹	<i>buák</i>	<i>buk</i>
* <i>tuéd</i> 'knee'	<i>túhud</i>	<i>tud</i>	<i>tuád</i>

IV. Roots showing apocope:

21. *tun* 'cook rice' Ilk. Ibg. Mal. Kawi, Makass. Bug. Mlg. Samoan, Chamorro, Tahiti *tunu*, Haw. *kunu*.

22. *sut* 'humiliate oneself to another': Bis. *suta* 'confess publicly'.

V. Roots showing apheresis:

23. *dam* 'borrow': Bkl. *hadám*, *harám*, Tag. *hirám*, Bis. *hulám*. The penultimate vowel, lost in Pamp., is an original pepet. The medial consonant is a good example of the RLD law.

24. *pan* 'perhaps, perchance': Tag. *apán*, *upán* 'perhaps', Ilk. *pan*, *apán*, *papán*, or *agpapán* 'altho', Cebuan Bis. *apán* 'but, however', Panayan Bis. *apán* 'but, however'.

25. *dat* beside *indát* 'quotiescumque'.

26. *pu* beside *apú* 'sir, Mr.'

27. *sak* beside *asák* 'to pack'.

28. *tē* (as interj.) beside *paté* 'dead'.

29. *tan* beside *atán* 'stop, cease'.

30. *tas* beside *atás* 'high, height'.

31. *tin* beside *atín* 'to have'.

¹ Tag. *buhúk*, *túhud* have *u* (instead of the regular *i*) for the pepet vowel by assimilation to the original *u* of the penult. Cf. Conant, *Pepet Law*. Brandstetter, *Prodromus*, p. 41 ff., considers the monosyllabic forms *buk*, *tud* as original, from which the dissyllabic forms are developed by expansion (*Zerdehnung*). Against this explanation, see my *op. cit.*, Table V, Note 2.

The syllable most frequently lost by apheresis consists of the unprotected vowel *a*, either original, as in the case of Pamp. *pan*: Tag. Ilk. Bis. *apán*; Pamp. *pu*: Pamp. Tag. Pang. Bkl. Bis. *apú*; or from *pepet*, as in *dam* (above No. 23).

VI. Words showing contraction following syncopation of *l* < RLD:

32. *ē* (long open *ē* = OEng. *ǣ*) beside *ai* and *alí* 'no, not', from *a* + *dí*, cf. Ilk. *dí* and *adí*, Bontok *adí*, Pang. *an-dí* and *alí-wa*, Ibg. *zi* (*z* for *d* initially before *i* as in Ibg. *zilá*: Tag. Bis. etc. *dila* 'tongue') and *arí*.

33. *mē*, from older *mai* from **mali* 'come, go': Bkl. Sulu, Mal. Toba, *mári*, Bis. *um-arí* generally shortened to *mári* in *mári ka* 'come here!' But Pamp. (*u*)*mai* may have been original (see below).

The history of this very common word is as interesting as it is complicated. Made up originally of demonstrative particles denoting place or direction, it has been an easy prey to contamination with other words and particles of similar meaning.

To be connected with the foregoing cognates are Bontok *umáli* in *umáli-ak* 'I come', and, without *um-*, *álika* 'come', where *-ka* is the enclitic 2 pers. pron., Pang. *día* 'here' (cf. *gála día* 'come here'), Tag. *halí* 'come here'. In these examples we have evidently the demonstrative particle *dí* (cf. Blake, JAOS xxvii, 350 ff.) with the deictic particle *a* either prefixed: Bis. *arí*, Bont. *áli*, Tag. *halí* (with initial breathing as often in Tag.), or suffixed: Pang. *día*. Tag. and Bont. employ the adverb alone as an imperative, while Bis. may either use *arí* alone or with the imperative prefix *um-* in the same sense. Here the base is distinctly felt as *ari*, *ali*, and also in Sulu *mari*, *kari*. But in Bkl. Mal. Toba *mari* we have a stereotyped form with initial *m*, which, after loss of the original *u* of *um-*, was no longer recognized as a prefixed element, cf. Mal. Toba *minum* 'drink' for IN *um-inum*.

On the other hand Ilk. *umái* (generally pron. *mai*), Ibg. *umái*, Tirurai *mai*, in *mai dīni* 'come here', point to a root *ai*, which is actually found in the sense of 'walk, go, come' in both Ibg. and Tir. Magindanau *ai* 'foot' is doubtless the same word.

That there has been a confusion between these two prototypes there can be little doubt, and to either of them could

be referred Pamp. *mai*, Chamorro *mage*¹, and the Polynesian *mai* 'hither, thence' found in Samoan, Haw. Tahiti and Marquesan.

The present study has yielded no cognates for the following monosyllabic roots: *bal* 'to order brought', *dan* 'lower leg', *din* 'to give', *kid* 'to remove from the fire (frying pan, etc.)'.

Puk 'to assign' and *tul* 'a measure for cotton' are Chinese loan words used in mercantile language, *puk* being Chin. 撥 *pu* 'to allot, assign', and *tul* being 斗 罌 *teh r* 'a basket used as a measure for raw cotton'.

It is evident from the foregoing examination of monosyllabic roots that Pampanga, like Ibanag and Sulu, represents a stage of linguistic development much more advanced than the other Philippine languages, which show the unreduced dissyllabic root so characteristic of both Indonesian and Polynesian.

But while the process of abbreviation was going on in Pampanga, there seems to have been even here an instinctive tendency to restore the dissyllabic character of the affected words which, as monosyllables, were felt to be incomplete, by prefixing a weak, colorless vowel, generally *a*. The movement doubtless took its origin from the large number of words having an initial *a* resulting from metathesis (see above p. 390). Thus, under the influence of *atlú* < **talú* (Phil. *télú*) 'three' and *apát* (Phil. *ěpát*) 'four', **dwa* (IN *dua*, *rua*, *lua*) 'two' became *adwá*. Similarly Pamp. *atyán* (Phil. *tian*) 'abdomen', *apyá* (Phil. *pia*) 'noble, good'. In the case of roots used always with formative elements the monosyllabic character of the root was not felt and hence most of the monosyllabic roots denoting action remained in their reduced form.

¹ Cf. Conant, *Consonant Changes and Vowel Harmony in Chamorro*, *Anthropos*, vi, p. 143.

Chicago, April 10, 1911.

A Divine Lament (CT. XV. Plates 24—25).—By J. DYNELEY PRINCE, Ph. D., Professor in Columbia University, New York City, N. Y.

Obverse.

11. *likir* (LID ŠA) *zal* (NI)-*ma-al a* (ID) *nu-ma-al*
Heart which is full (and) strength I have no
men (DU)
longer.
12. *nin-men* (DU) *kisal-ma* (MAL) *likir* (LID ŠA) *nu-ma*
Though I am lady, in my sanctuary heart I have
al-la-men (DU)
no longer.
13. *e-ne-am* (RAM)-*ma* (MAL)-*ni ba-da-ul-e en-na sa* (DI) *in*
His word drove me; when it
ga-mu-ub-dug (KA) *i-de-ma* (MAL) *ša i-ni-ib-gaba* (GAB).
reached me, my face verily it cast down.
14. *ud-ba nunuz-li ag* (RAM)-*gin* (DU)-*na-mu ud-ba me*
When to my progeny I wished to go; then where
li-e-a
were they?
15. *dim-di ud-ba nunuz-li ag* (RAM)-*gin* (DU)-*na-mu*
Weakling, when to my progeny I wished to go;
ud-ba me-e li-e-a
then where were they?
16. *ud e-ne-am* (RAM) *An-na ma(ra) i-ir-a-bi*
When the word of Anu to me they brought;
17. *e-ne-am* (RAM) *dimmer Mu-ul-lil-la* (LAL) *ma-ra i-ir*
the word of Bêl to me when
a-bi
they brought it;
18. *e* (BIT)-*mu-a mu-ši-in-gin* (DU)-*na-ba*
into my house when they came;
19. *xar-ra-an kur-ra mu-ši-in-tur* (TU)-*ra-ba*
upon the way of the land when they entered;

20. *má* *mu-ši-in-gin* (DU) -*na-ba*
on the ship when they went;
21. *má* *mu-ši-in-us-sa-ba*
on the ship when they stood;
22. *mu* *a mu-ši-in-tur* (TU) *ra-ba*
when to they entered.
23. *mu-(lu) su-e-sir* (BU) -*mal i-ni-in-tur* (TU) -*ra-ba*
the men with shoes on, when they entered;
24. *šu nu-lax-xa-ni* (*mu-ši-in*) *ir-ra-ba*
their unwashed hands (on me) .. when they laid them;

Reverse.

1. *ma-an-ga má sag-ga* (MAL)
when, although ruler, on the prow of the ship (I stepped)
2. *ga-ša-an-ga má egir-ra ba-e-šub* (RU) -*a-ba*
when, although lady, on the stern of the ship I trod;
3. *ni* (IM) -*te amar* (ZUR) -*a-bi ba-e-te-a-ba*
when of its own accord that brood drew nigh;
4. *ur-ri me-ri su-e-sir* (BU) *ma-al-la-ni kisal-ma* (MAL) *mi-*
the foe, having shoes on their feet, into my sanctuary
ni-in-tu
entered;
nakri šû ina šêpišu šênu šaknu ana maštakia irubam
5. *ur-ri-bi šu nu-lax-xa-ni ma-šu* (KU) *mu-ši-in-ni-ir*
that foe his unwashed hands on me he laid.
nakri šû qatâšu lâ mesiâtî iâši ubla
6. *šu mu-ši-in-ir ni* (IM) *mu-un-te ma* (MAL) -*e ni* (IM) -*bi*
His hand he laid on me; fear he caused; I fear of him
ma-te
felt.
qatîšu ublamma uparridanni
7. *ur-ri-bi šu-ni mu-ši-in-ir me-da mu-un-gam-*
That foe his hand he laid on me; in me he made a bowing
men (DU)
down.
nakri šû qatsu ublamma ina puluxti ušmiṭanni
8. *ur-ri-bi ma* (MAL) -*e ni* (IM) *ba-da-an-te e-ne nu-mu-*
That foe I fear felt for him; he feared
da-an-te
me not.
anâku adluxma šû ul iplaxanni

9. *ur-ri-bi tub* (KU) -*mu mu-un-kar dam-a-ni ba-ni-in-tug* (KU)
That foe my garments he seized; his wife he clothed with
them.
çubâti iŝxuṭannima aššatsu ulabbišu
10. *ur-ribi za-mu mu-un-tar dumu* (TUR) -*niba-ni-*
That foe my jewels he snatched; his daughter he adorned
in-la (LAL)
with them.
nakri šû uknî ipru'ma maratsu iškun
11. *ki-gub* (DU) -*ba-bi am* (A-AN) -*gug me*
His courts I must tread; even I.
manzassu akabbas
12. *dim* (GIM) -*ma ni* (IM) *ma* (MAL) -*šu* (KU) *ki am* (A-AN) -*ši-*
When of my own desire for myself the sanctuaries I
qin-qin
seek;
ina ramânia ašrâti eštenî'e
13. *ud-ba ni* (IM) *ba-te ba-e* (UD-DU) -*ta na-e* (UD-DU)
then fear I feel to go forth, (and) I go not forth.
14. *e* (BIT) -*ma* (MAL) *ba-an-ul-li-en ingar-ma* (MAL) *ba-ab-*
Out of my house they drove me; out of my enclosure
xu-lax-e
they frightened me.
ina bîtia urrixanni ina igaria ugallitanni
15. *tu [xu] ni* (IM) -*te-a-dim* (GIM) *giš-ur-ra ud-ba e-ir*
Like a terrified dove on a beam then I went up;
kîma summatum paritti ina gušûri abit
16. *su-din xu tal* (RI) -*la-dim* (GIM) *du* (XI) -*de al-gi-ri*
like a sudin fluttering to a cleft I betook me;
kîma sudinnu pariši ina niğiççi ešteri
17. *me-e e* (BIT) -*mu-da xu-dim* (GIM) *im-ma-ra-tal* (RI) -*en*
me out of my house like a bird they caused me to fly;
ina bîtia kîma iççûri ušaprišanni
18. *ga-ša-an men* (DU) *eri-mu-da xu-dim* (GIM) *im-ma-ra-*
though I am lady, out of my city like a bird they caused
tal (RI) -*en*
me to fly.
19. *egir-mu-a e* (BIT) -*mu egir-mu-a gu* (KA) *mu-un-de-de-e*
"Behind me is my house, behind me", I say;
bîti arkia iltanassia

20. *nin-men* (DU) *eri-mu egir-mu-a gu* (KA) *mu-un-de-de-e*
 "though I am lady, my city is behind me", I say;
bêliku ali arkia
21. *še-ib Ni-si-in-ki-mu egir-mu-a gu* (KA) *mu-un-de-de-e*
 "the brick walls of my Nisin are behind me", I say;
22. *eš* (AB) *e* (BIT) *-gal-max-mu egir-mu-a gu* (KA) *mu-un-*
 "the abode of my glorious temple is behind me", I
de-de-e
 say;
23. *še-ib La-ra-ak-ki-mu egir-mu-a gu* (KA) *mu-un-de-de-e*
 "the brick walls of my Larak are behind me", I say;
24. *gig* (MI) *tuš* (KU) *-imīna-mu egir-mu-a gu* (KA) *mu-un-*
 "dark are my seven dwellings behind me", I
de-de-e
 say;
25. *me-e e* (BIT) *·mu e* (BIT) *-mu nu-me-en a-dim* (GIM) *in-*
 I to my house "thou art no more my house", thus
na-gu (KA)
 I speak.
anāku ana bītia ul bīti attam kî aqbû
26. *me-e eri-mu eri-mu nu-me-en a-dim* (GIM) *in-na-gu* (KA)
 I to my city "thou art no more my city", thus I speak.
27. *na-an-ni-tu-tu ne um-mi-ka-a la-bi mu-ka-e*
 "I cannot enter it"; thus I speak (and) its beauty biteth me.
lâ errubšu aqbîma lalûšu ikkalanni
28. *na-am* (RAM) *-da-ma* (MAL) *ne um-mi-ka (i)-si-iš-bi*
 "I shall be there no more"; thus I speak (and) weeping for it
mu-ta-çi-(gi)
 overwhelmeth me.
lâ uttak- kî aqbîma çixitašu
ušanašanni

Commentary.

This text, which is the last of the Prince-Vanderburgh series, CT. XV, 7—30, has been published with translation by Dr. Stephen Henry Langdon in his "Babylonian Psalms", 1909, pp. 1—6, but without commentary. The Assyrian paraphrase, which is *not* a translation of this text, I have taken from T. G. Pinches "Lament of the Daughter of Sin", PSBA., 1895, pp. 66 ff., which is a parallel, but not an identical text with CT. XV, 24—25. I am indebted to Dr. F. A. Vanderburgh

for his helpful collaboration and assistance in the publication of the entire series.

There can be little doubt that this lament was written and sung by the priests of Nanâ, whose image was taken by the Elamites in 2270 B. C., according to the Prism Inscription of Aššurbanipal, Col. VI, 107—124. Aššurbanipal in 635 B. C. retook and restored the image to its original habitat in Uruk (Erech) amid great rejoicings at his pious act. The goddess had been absent from her shrine for sixteen hundred and thirty five years. The fact that in the present hymn the lamenting deity does not mention Uruk, but Isin, does not militate against this idea, because we know that the dynasty of Isin prided themselves on their cult of Nanâ and that they were especially assiduous in building and restoring the shrines of this goddess. Nanâ's chief sanctuary was E-an-na ('house of heaven') in Uruk (Erech), but she also had temples in Agade (E-ul-maš) and at Ur. This hymn is of particular importance from an historical point of view, as it confirms the Aššurbanipal record. It was, no doubt, sung and composed shortly after the rape of the goddess in 2270 B. C.

Obverse.

11. LID-ŠA can only = *likir* (8897) 'heart'. NI = *zal* = *barû* 'be full', 5314.

13. *ba-da-ul-e*: in Rev. 14 = *arâxu (urruxu)* 'drive, cause to hasten'. That UL can mean this is clear from MSL. p. 85, primarily = 'bull'; note *ul* = *naqâpu* 'gore, push', said of a bull, 9144. *en-na* here probably = 'when, as soon as' = *adi* 'until', 2809. *sa-dug* = *kašâdu* 'reach, arrive at', 9542. *ša* = *lû* 'verily', 7047. *gaba* (GAB); val. *du* = *paṭâru* 'loosen', 4473; GAB also = *labânu* 'cast down', said of the face, Sb. 342 (4481).

14. *nunuz* = *lipu*, 8177; *pir'u*, 8179 'progeny', and *li* can = *ana* 'unto', V. 27, 44. RAM = *ag* = *madâdu* 'love, measure, intend'; note it = *mu'ûru* 'intend', 4744 (see MSL. 21). *me* = *iâ'nu*, 10366; *iânu*, 10365 'where'? The combination *li-e-a* is difficult, but *li* = *šuašu*, 1118; *šuatû*, 1119 'that one', so that *li-e-a* here may be regarded as a prolongation of *li* with the demonstrative sense; i. e., 'where are they'. Another possibility is to consider LI here to mean 'stand', since LI = *gub* and *gub* (DU) also = *nazâzu* 'stand'. This does not seem to me so probable as the first suggestion. The

context certainly demands the question 'where are they', or 'where were they'?

15. I regard *di* after *dim* here as an ES. gloss to denote the correct pronunciation of *dim* = *dunnamû*, 4253; *ulalu*, 4255 'weakling'.

Lines 11—15 indicate the goddess's state of mind on being informed of what is to follow; viz., that she is to become an exile from her children.

16. To *ma* here we must add the postpositive *-ra* as in Obv. 17. Note *ma-šu* (KU), rev. 5.

21. In the above lines, the goddess is made to describe the approach of her captors, and the route they took in removing her from her shrine. First (obv. 19), she is carried by way of the land; then she is placed apparently on a ship (obv. 20—21) to be carried away to Elam. That the captors were regarded as thoroughly alien desecrators is seen from line 23 following, and Rev. 4—5.

23. *su-e-sir-mal*: literally 'skin or leather (SU) of the street' (E-SIR = *sûqu*), the whole combination meaning *šênu* 'shoe' + *mal* = *šakânu*, 5421, i. e., *mu(lu) su-e-sir mal* 'the men who have shoes on' = the profane invaders of her shrine, which must be entered unshod by her worshippers.

24. On *šu nu-lax-xa-ni* 'unwashed hands'; another sign of their desecration; see Rev. 5.

Reverse.

In lines 1 and 2, *ma-an* must = the double corner wedge sign = *dannu* 'mighty', 9955; *šarru* 'king', here probably 'queen', 9961. The suffix *-ga* probably has the force of *kî* = *kîma* which here we may render "though". The idea is that although the goddess was queen and lady, she was compelled to step on the hostile ship, which was to bear her away from her shrine and people. Cf. the parallel from Pinches cited by Radau, Misc. Sumer. Texts, 1910, p. 386 and n. 1. The verb RU = *šub* in our text = *nadû* 'set, place', *scil.* here 'foot', corresponds to the Pinches version *kar* = *kabâsu*.

3. I render *ni* (IM)-*te* 'of their own accord, as IM clearly means *ramânu* here (Fossey, 4192) and not 'fear'. The 'brood' *amar* (ZUR) = *bûru*, 9068, 'approaches' (*te*) her shrine to molest her *of their own volition*.

4. Now begins the Assyrian parallel from PSBA., xvii., p. 66, line 6, in this line an exact translation. Note the relative Sumerian suffix *-ani* in *ma-al-la-ni* 'those who have', &c. For *kisal*=*maštaku*, see obv. 12, and cf. IV. 27, 8—9b.

5. *lax* = *misû* 'wash', Sb. 76. Note also *ma-šu* (KU) for *ma-ra* in obv. 17.

6. The Assy. *uparridanni* 'he hastens me away'; "hustles" me out' (!) is a translation of a parallel text. In our Sumerian line *ni* (IM) is the direct object of the verb *te*; IM-TE = *puluxtu* 'fear', 8465. Note below on line 8.

7. *gam* = *qadâdu* 'bow down', used of the neck *kišadsu*, Fossey, 3664. It is rendered by the Assy. parallel *ina puluxti ušmiṭanni* 'in fear he lowers me'; from *maṭû* 'lower, decrease'.

8. Cf. line 6 rev. with this, and note the omission of *nakri šu* = *urri-bi* from this line. The Assyrian translator uses *adlux* 'I am disturbed' for *ni* (IM) *ba-da-an-te* 'I feel fear for him'.

9. *kar* really means *ekêmu* 'seize, snatch', 7740, in contrast with the more vivid Assyrian *išxuṭannima* 'he tears it off me'.

10. *za* here for Pinches *za-gin* = *uknê. tar* (*kud*) means 'cuts off violently'. The Pinches version reads *maratsu* 'his daughter', which is not indicated here by the sexless word *dumu* (TUR) 'child'.

11. *gug* = *kabâsu* 'tread', 1372. Note the overhanging *me*, clearly the first personal pronoun.

12. *dim* (GIM) = *šumma* 'if, when', 9125; = *kî* 'as, when', 9120.

13. I render *ba-e* (UD-DU) *-ta* as dependent on the preceding verb. That the prefix *na-* can mean 'not', as a variant of *nu*, is seen from Fossey, 796—797.

14. On *ul*, see obv. 13. *xu-lax-e* = *galâtu*; *gullutu*; *šuglutu* 'terrify', Fossey, 1061—1063.

15. Pinches's form *paritti* (thus corrected by Langdon) is of uncertain meaning. Cf. IV. 22, 5a: *labartum parittum* (?). The form *abit* Langdon translates as if from *nabâtu* 'repose', but it is from *בית* 'dwell'. This is not indicated in the present Sumerian text, which plainly signifies 'go' = *e-ir*.

16. RI = *tal* = *parâšu* 'fly'. 2571. *du* (XI) = *nigiççu* here is undoubtedly cognate with *di-da-al* = *nigiççu*, PSBA. xvii. 65; *dü* = *di*. The usual ideogram is *ki-in-dar*, *ki-in-dir*, 9683.

gi-ri = *gir-ri* = *šêpu* 'foot'; *tallaktu* 'going'; simply = 'go'. I regard *ešteri* as an *ištafal* from *a'ru* 'go, proceed'.

18. I render *gašan* 'lady' here, just as *nin* may mean both 'lord' and 'lady'.

21. *še-ib* = *libittu*, 7492. *Ni-si-in-ki-mu* 'my Isin'. NI has the value *i* as well as *ni*.

23. *la-ra-ak-ki-mu* 'my Larak' = Larsa (?). Jastrow suggests (by letter) that *larak* may mean 'a grainery'. My interpretation of the combination agrees with this; viz., *la*=*lalû* 'fullness, plenty' (Fossey, 530) + postpos. *-ra* + *ak* = *epêšu* 'make'. The combination *la-ra* + *ak-ki* would then mean 'the place (*ki*) which is made (*ak*) for plenty' = 'storage' (*la-ra*).

24. 'Seven dwellings' probably refers to her shrines.

27. *ne* 'this' = *annû*, 4580. See also next line below.

28. *ma* (MAL) -*ma* (MAL) = *bašû* 'be', 5430. In 11604: *isiš* = *nissatu*; *çixtu* 'lamentation'. A-ŠI is the *bakû*-weep-sign. I render Pinches's parallel *çixita* as equivalent to *çixtu* 'weeping'. *Ušanâšanni* 'it overwhelms me', from נוש; cf. IV. 7, 14—15a: 'he shakes him' = *itanâšaššu*.

Indo-Iranian Word-Studies.—By EDWIN W. FAY, Professor in the University of Texas.

1. A good deal of attention has been paid in late years to Foy's proposal (KZ. 35, 31) to separate Iranian *hačǎ* 'ab, ex' from Skr. *sacā* 'cum, unâ cum'. To solve this problem seems, however, a task of no great difficulty. Authorities so out of date as the Latin lexicon of Lewis and Short seem to me in their note on *secus* 'secundum, aliter' to present the right point of view for the solution of the semantic problem, and if modern observers differently conceive the problem, almost nobody seems to doubt the cognation of *secus*¹ with *sequitur*, nor of Skr. *sacā* with *sácate*.

2. In Etymology, as well as touching the Homeric question, there will always be chorizonts, owing to the difference in human temperaments and the inherently greater ease of analysis as contrasted with synthesis. But temperament or no, preponderance of evidence now throws a searcher into one camp, now into another. Temperamentally, I sympathize with the antichorizonts, and certainly in regard to Iranian *hačǎ*, the usage of which I now propose to examine, on the basis of the examples collected by Bartholomae in his magnificent lexicon. Now Bartholomae compares *hačǎ* with Skr. *sacā*, but not without acknowledging that he feels the force of Foy's objections. I suppose, however, that it is on the legal principle of asserting definition from usage that he rubricates his examples as though the primary sense of *hačǎ* were 'from'. But if *hačǎ* is cognate with *sacā* it were well to attempt a rubrication based on 'cum' as the approximately original sense, that is for Indo-Iranian.

3. Sporadically in Avestan, and still less in Persian, *hača*, though we more conveniently render it by 'from', is combined with the instrumental, which is not, on the face of things, a

¹ The notion of inferiority clearly arises in our colloquial description of cigars and other goods of poorer quality as "seconds".

case to indicate the separative relation. But we can often here restore the sense of 'cum', e. g. in Y. 10. 17 (ap. Bthl., 1751, II. 1. 2),

arəzataēna hača tašta zaranaēnem aoi taxše

where, though as regards the context *argenteo ex poculo aureum* in <poculum> *affundo* is the letter rendering, yet *arg. cum* p. may be defended as the original conception, cf. in Latin the following, albeit far less concrete, examples from Ennius: Ann. 175, *tum cum* corde suo *divum* pater atque hominum rex | *effatur* and, much more specifically, ib. 540, *effudit* voces proprio *cum* pectore sancto.

In the latter example *cum* is attached to a "sociative" with which it does the work of an abl. of means, but in both contexts the combination with *ef-* is noteworthy, and from a usage like 540 the separative relation might have developed. In such contexts as this (see Vahlen in Rh. Mus. 14. 566 for other examples) *cum* might also have developed—or shall we say have sunk to—use as a mere case exponent. This is what has happened, in a sense, with OPers. *hačā* which, though used with the instrumental, is an invariable case exponent of the ablative.

4. In Old Persian, the adjective *ha-miθriya-* 'rebellious' is construed with *hačā* + abl. Etymologically *miθriya-* belongs with Skr. *methete* (dual) 'inter se pugnans, altercantur'. I see here a compromise construction, as though in Latin (1) *alienatus* [a] + abl. had been so associated with (2) *altercans cum* + instr. as to yield *(3) *alienatus cum* + abl.; or as though in Greek the interplay of (1) ἀλλοτρίως τινός and (2) ἀλλοτριῶσθαι [συν] τινί had yielded *(3) ἀλλοτριῶσθαι <συν> τινός. For the general psychological problem involved cf. Latin *divortium facere cum aliqua*, and the English conflict between *differ from* and *differ with*. In Irish, *fri* 'adversus, in' reached the sense of 'cum' in comparisons ("gleich gegen = gleich mit"), which developed into a sociative and instrumental 'cum', and at last, with verbs of separation, into 'ab, ex' (cf. Windisch, Irische Texte, Wrtbch., pp. 577—578). The following examples are in point: Bh. 2. 2 (= 1750, II. 1. 1. C), *dahyāva^h tyā hačāma^h hamiθriyā abavaⁿ* = regiones quae cumme altercantes factae sunt; Bh. 1. 11 (= 1778, top, s. v. *hamo*) *pasāva^h kāra^h haruva^h hamiθriya^h abava^h hačā karbujiyā^h* = inde populus universus stomachatus fuit cum Cambyse.

5. In the Gāthic passage Y. 37. 2 (= 1749, II. 1. 1. B), *yōi gāuš hača šyeinti* = qui a bove habitant, we might rather interpret by qui cum bove stant (for habitant), and Mills renders by "who abide beside¹ the kine".

6. Common in Gāthic as in later Avestan is the locution *ašāt hača* which verbally = *ritu*² *cum*, but idiomatically *e ritu*, *e veritate*. For the origin of this locution we might assume a contamination of an Indo-Iranian **rtād*³ 'rected', combined with **sacā rtena* 'cum rectitudine' (cf. the actual form *án-rtād* "um der Sünde willen", Delbrueck, ai. Synt., § 74), but we will do better now to enquire what *sacā*, instrumental of a noun *sac-* 'a following, pursuit', might mean, and I would indicate my answer to the question by rendering *ašāt hača* by 'e-ritu *consequentia*' or, sacrificing the case relation, by 'ritum *secundum*', cf. *secus consuetudinem* in CIL. 5, 4017; and *secus merita eius*, Inscr. Orelli 7, 70.

7. But *ašāt hača* 'ritum secus' is a phrase so trite in its adverbial sense that we shall do well to examine its less phraseological uses, e. g., Y. 51. 5 (= 1749, II, 1. 1. B), *yaθā ašāt hača gam vīdat vāstryo* = num per ritum bovem acquirat agricola (ind. quest.). Here the ablative alone expressing cause or rather consequence, would suffice, but *hača* reinforces the consequential idea. Similar are Y. 43. 14, *ašāt hača frastā* = <haec petitio> ritum secus recipiatur; Y. 53. 1, *yezi hōi dāt āyaptā ašāt hača* = ut ei det maiestates ritum secus; Y. 45. 4 *a. h. vaēdā..yē īm dāt* = ritum secus (per r.) cognovi..quis eam <vitam> faciat; Y. 44. 17, perhaps especially perspicuous because of *rāthemō*, *yē rāthemō a. h.* = qui socius ritu<m> secus. With other nouns note Y. 32. 2, *xšaθrāt hača..paiti-mraot* = per regnum..respondit, V. 9. 2, *yaoždāθryāt h.* = purificatione<m> secus.

8. Semantically, general lines of reasoning strongly recommend the definition of *hačā* by 'in consequence of' (see § 6), and the combination of *hačā* in this sense with the ablative is just what we should expect, cf. Delbrueck, ai. Synt. § 74, "nicht selten übersetzen wir den Abl. durch in Folge von". This

¹ We might restore the sense of 'in-the-train' to *hača*, see §§ 6, 9.

² Interpret *ritu* according to the gloss *ritus* 'ἱερῆκελα, i. e. 'religio, pietas'.

³ I am transcribing these forms as though they were Sanskrit.

definition adequately absolves the examples under Bartholomae's rubric II. 1. 3 (= 1750), to-wit: V. 18. 1, *diwžat hača āθrava sanhaite* = fraudis causa (better fraude<m> secus) sacerdos nominatur. Further note Y. 35. 10 (= 1751), where *ašāat hača* (= ritu<m> secus) is rendered by Bartholomae (col. 88, top) as "um des Aša willen" but by Mills as "by reason of thy Righteous Order": here the prior rendering may be etymologically justified by "in pursuit of", and the latter by "in consequence of".

9. With persons, the combination *hačā* + ablv. designates the agent, the person in consequence of whom the act is performed. Examples are: V. 19, 6 (= 1750), *barəθryāt hača zāviši* = matre ab vocatus sum; D. 6. 3 (= 1751) *hačā-ma^h* = a-me <mandatum>, where we might think of 'in attendance upon' as the primitiv sense of *hačā*.

10. The next examples are of *hačā* with the ablative after verbs of fearing. The act of shrinking which is the physiological expression of fear lies, I take it, behind the Vedic construction of the ablative with verbs of fearing, and the same note accounts for separatives as represented in the Latin locution *ab aliquo metuere, timere*. In the Persian and Avestan usage of *hačā* with the ablative I suppose that the simple ablative, expressing the idea of (shrinks) 'from', has yielded to a somewhat phraseological (shrinks) 'in consequence of'. The examples I have selected are P. 21 (= 927, mid.) *niwyeiti zī...ātarš...hača...aiwyo* = metuit ille...ignis ab aquis; Yt. 10, 99 (= 1748, II. 1. 1. β), *yahmat hačā fraterəsənta* = quo ab metuebant; D. 5. 2, *dahyāva^h...tyā hačā-ma^h atarsaⁿ* = regiones...quae ab-me(d) metuebant; Bh. 1. 13, *hačā daršmaⁿ(?) atarsa^h* = <populus> ab <eius> saevitate metuebat; Bh. 4. 5, *hačā draugā^h daršam patipaya^huvā* = a fraudulentia valide cave; D. 4. 3, *imam dahyāum a^hura^hmazdā pātuv hačā haināyā* = hanc regionem, A. M., servato ab exercitu.

11. In the locution with verbs of fearing *hačā* 'in consequence of' had sunk nearly to the level of being a mere case exponent (cf. Brugmann, Kvg., § 593, and note the Spanish use of exponential *à* before names of personal direct objects), and there was the same possibility with verbs of obtaining and demanding (= seeking to obtain), which took a separative case, e. g. Homeric *παῖδός ἐδέξατο* = (a) filio accepit, Skr. *grhnyāt sādhrutah* = 'accipiat (a) bono', Latin *Hinnād cepit* (CIL.,

I. 530); ἀπατεῖν τινός (ἐκ-, παρὰ-) = postulare (ab) aliquo, Skr. *kenā ambho yācitam bhūyāt* = per-quem aqua petita <est> a-rege. Iranian examples are: Y. 44. 17 (1749, II, 1. 1. B, cf. col. 1670), *kaθā zarēm čarānī hača xsmat* = num voluntatem impetrem a vobis¹ (= per vos, in Folge von); Bh. 1. 14 (1750, II, 1. 1. c) *hačā amāxam taumāyā parābartam* = a nostri (sic) gente ablatum; Y. 62. 7 (1748, II, 1. 1. β) *vīspaēibyō hača izyeiti hubarētīm* = omnibus ab postulat bene-sacrificatum; Y. 31. 14 (1749, II, 1. 1. B), *yā išudō dadantē dāθranam hača ašāunō* = quae postulata fiunt debitorum (neuter) ab Aša-discipulo.² — In this category we may, with some reinforcement of the etymological sense of *hačā* (see §§ 6, 9), render by 'with compliance from' (i. e. on the part of).

12. With the verbs of obtaining (cf. Lat. parare) we may associate verbs of begetting (cf. Lat. parere), satisfying ourselves by citing the one example of Yt. 13. 87 (1748, II, 1. 1. β), *yahmat hača frāθwərsat nāfō* = quo ex [cum] procreavit gentem.

13. Much the larger number of examples of *hačā* + abl. follow after verbs of motion, and it hardly seems likely that here we have a mere casual exponent brought over from the separative connotation with verbs of fearing (§ 10). For this usage it is tempting to seek for *hačā* direct derivation from a rootnoun **sek^w*, quasi 'iter, cursus, trail, track', a definition certainly justified *a priori* by the usage of verb forms of the root *sek^w*. This leads us to the simple definition of *hačā* by 'away, weg (von) &c.' (cf. Fick-Stokes, Wtbch., p. 296).³ Still, in matters of definition the argument *a posteriori* furnishes the line of procedure I prefer to follow, and it is worth our while to ask whether, in the construction of verbs of motion with *hačā* + abl., *hačā* did not originally go with the verb, somewhat in the sense of 'secundum' (= along), e. g. in Bh.

¹ Mills renders by "shall I proceed to that conference with you"?

² This is what I understand Bartholomae to mean by his rendering (col. 733, mid.): die Schuldforderungen die auf Grund der Buchungen an den Aša-anhänger gestellt wurden. Mills renders by "What prayers with debt-confessions are offered *with* the offering of the holy".

³ The assumption of a root noun *sek^w* 'trail, track' leads to a pretty result for a somewhat isolated usage of ἐπι viz: as in a 278, β 197, ἐέδνα | πολλὰ μάλ', ὅσσα εἰκε φίλης ἐπι παίδος ἐπεσθαι. If we read **ἐπι* here, we have a reference to the route of the homegoing bride. In form, we may compare skr. *me saci* (ÇBr. 4. 1. 3. 7) 'in my support, mihi auxilio', but literally something like 'mei (gen.) <in> comitatu'.

2. 12 (= 1750, II. 1. 1. b), *pasāva^h adam niṣāyam hačā babi-rauš* = postea ego abii secundum Babylone [unless in a military context like this *hačā* meant in expeditione(m)], i. e. 'along' or 'on' from Babylon. In such contexts, if *hačā* were subsequently drawn to the noun, 'secundum' would pass through 'porro'¹ to 'ex'. — Again, in sentences containing verbs with plural or joined subjects or objects, *hačā* in the sense of *unā*, really to be taken with the verb, might have been drawn as a mere exponent to the separative ablative following. Examples: V. 5. 19 (1746), *yaoždya tačinti āpo zrayanṣhaṭ hača pūitikāt avi zrayō vouru-kašəm* = purificatae ruunt aquae una <a> mari P. ad mare V.; Yt. 10. 39 (1746), *zarštvaciṭ vazəmna hača bā-zubhyo* = tela quidem .. missa unā <a> lacertis; V. 3. 7 (1747), *daēva han-dvarēti..hača gərədāda* = diaboli con-currunt.. unā²<a> fossa; Yt. 9. 10 (1747), *apa-barāni ūva šudəmčā baršnəmčā hača mazdā dāmabyō* = au-feram ambas famemque sitimque unā <a> creatoris locis; V. 9. 53 (1747), *ahmaṭ hača asanṣhaṭčā šōiṭrāatčā axštāt .. ižāča āzūitišča* = eo unā <a> locoque domoque ab-sistet .. fortunaque opulentiaque; Yt. 8. 32 (409, s. v. *us-hən-dava*-), *dunmaṇ ḥam-hištēti us-həndavat hača garōiṭ* = vapores constant (= colliguntur) *us-hindu-* unā <ex>-*mari*.

14. Far be it from me to assert that these restorations of a vanished sense to examples of a developed *hačā* — a restoration that may be diagrammed in part by saying that *unā* <a> yielded [*unā*] *a* — prove an original meaning of 'unā, simul', but it is well to show from extant examples that the developed sense may be but an accident, a mere consequence of the word's having become otiose in certain contexts; and if *hača* = *unā* with verbs of motion came to be felt as otiose, its other ablative connections — I particularly think of verbs of fearing with their note of physical recoil³, see § 10 —

¹ i. e. Eng. 'forth'. — I find in the rather full English-French lexicon of Fleming and Tibbins that *forth* is defined by "en avant, ensuite; dehors, au dehors &c." This ought to mean that *aller ensuite* may be used to replace *aller en avant*, but this usage is unknown to several high authorities on French diction whom I have consulted.

² The tautology of *con-* and *unā* may be compared with the doubled *αμα* with *επομαι* in Homer (i 371).

³ Cf. *φεύγειν* = 'to flee or escape from' (with gen., Odys.), but *φόβα* = *φόβος*, *δειλα*' (so Hesychius; cf. Lith. *būgti* 'terreri').

rendered it liable to be taken up as a mere casual exponent. With verbs of fearing, 'in consequence of' readily yielded 'from', and we bridge over to the purely local sense by assuming the start to have begun from the nouns of place-persons like Skr. *Dyāus*, Greek Ἄδης, Latin *Orcus*.

15. The local sense may also be glimpsed in a context like the following where, after describing the origin of two mountains, the text continues, Yt. 19. 2 (1747), *ahmat hača garayō fraoxšyan* = inde successim (= ensuite) <hi> montes procre-scut. Also note Yt. 19. 34, where *vaēnəmnəm ahmat hača xʷarənō . . frašusat* (= evidenter eā ex gloriā . . abscessit) may be etymologically realized by thinking of English 'to part with', contaminated with 'to (de-)part from'.

16. In the old Persian we find a rather neat testimony to the rôle I have assigned, in the development of the idiom of *hačā* + ablv., to the construction after verbs of fearing, viz: D. 4. 2 (1752), where we have *iyam dahyāuš . . hačā anīyanā naiy tarsatīy* = ea regio . . cum (sic) <a> hoste non metuit. Here we have the instrumental (cf. Bartholomae in Gr. Ir. Phil. I § 378. 6) retained with *hačā* (= 'in consequence of').

17. A quite isolated accusative regimen (cf. Lat. *secus*, *secundum*) is found in V. 12. 1 (1752), where *hača* is taken in the general sense of 'ad' (= as regards), *čvat aēšqm upa-mqanayən puθro hača pitarem* &c. = quamdiu eorum <funera celebrantes> manent, filius propter patrem &c., where I take *propter* for 'in consequence of'. In V. 5. 1, 2, *hača* 'from' is combined with the accusative in the locution 'from the tops of the mountains (= *hača barəšnavō gairanqm*) to the depths of the valleys' (= *avi jəfnavō raonqm*), and conversely; cf. also Yt. 10. 67 (1752) 'from region to region' (*hača karšvarə avi k.*). In both these locutions 'secundum' (= down along, cf. *sec. flumen*) would serve, i. e. (1) 'down along the mountains <in>to the valleys' and 'along the valleys <up> to the mountains, and (2) secundum <alteram> regionem ad <alteram> r. We have besides (3) Y. 61. 5 (1752), *yača hīm jānāma . . vīspāiš hača karšvən yāiš hapta* = ut eam expellamus . . uni-versis [cum] <ex> regiones (sic) illis septem, where *hača* takes an instrumental of the adj. and an accusative of its noun. Here perhaps *hača karšvən* (= secundum regiones) represents a use originally distributive (cf. Lat. *in dies*), i. e., 'along region

after region; which tended to develop to the sense of *ultra* (*praeter*) *regiones*.

18. I think I have now shown how, starting with an etymological sense of 'in consequence, ensuite, in Folge', with instrumental regimen, we account, in not all too complicated a manner, for the development of a sense approximating 'from', which made *hačǎ* a fit exponent — or shall I say coefficient? — for the ablative. With the accusative, the sense of 'secundum' may have developed into 'ultra' (= 'beyond, past').

19. This brings us to the support chiefly relied upon by the chorizonts who would separate Iranian *hačǎ* from Skr. *sácā*, viz: OIr. *sech*, defined by Zeuss as 'praeter, ultra, supra, extra'. The cognation of *sech* with the root of *sechim* 'sequor' seems to me properly upheld by Fick-Stokes (l. s. c), and by Brugmann (Kvg., § 618), as against Foy and Thumb (see Walde, s. v.).¹ Thurneysen in his grammar defines *sech* by *vorbei an* (Eng. 'along past', often simply 'by'), and compares Lat. *secus*, but it does not appear whether he derives *secus* from *sequitur* or not. As I see it, if we start with the sense of 'following', i. e. 'in attendance upon', we come easily to 'alongside of' (a person) and then to 'by', and finally 'past, beyond', cf. e. g. in Windisch's *Texte*, p. 207, 26 *luid seocu*, which means <saxum> iit praeter eas. In other contexts *sech* may be rendered by our English use of *via* = 'by way of, Germ. *über*' in the address of a letter. See the description of a travel route in the *Scél mucci Mic Dáthó* § 20 (Windisch, l. c. p. 106, 5 sq.) where *sech* is followed by various names of places 'past' which the traveller went. The adverbial use of *sech* (= "außerdem") is etymologically given by 'folglich; besides'. Welsh *hep* 'sine' has developed on the lines of Osc. *perom* 'sine' (: Lat. *per*) "eigentlich 'darüber hinaus'" (Walde, p. 574).

Sanskrit sakā.

20. As a corollary to the discussion of Iranian *hačǎ* a word may be said of Skr. *sakā* which occurs one each in the *Rig* and *Atharva Vedas*, and both times in a hymn which is a charm against snakes (or, for the *Rik* hymn, against poison

¹ I am entirely skeptical as to Walde's explanation of *sēd*, which I am beginning to define by 'away, weg, via' and to connect with *ōdōs*, see *Class. Phil.*, 4. 301, fn.

in general). I am prepared to admit that each of the hymns (RV. 1. 191 and AV. X. 4) is popular rather than hieratic in point of diction and that linguistically considered they are late. But religiously considered, a snake charm is likely to be early and when in such a charm a word is found that is virtually absent from the other literature¹ that word is no less likely to be a technical archaism than a popular neologism. According to the lexica (supported by native authority) *saká-* is a diminutive of the article *sa-*, being defined as *dieser geringere*, — *winzige* (PW²), and compared with *eṣaka- yaká-* (PW¹). These comparisons are not illuminating, for *eṣaka-* is not genuinely extant, and *yaké* in RV. 8. 21. 18 (*anyaké yaké* = *aliquicunque quicunque*) seems to me clearly equivalent to a Greek **ὀ-τινές* (sic) — that is to say that *ya-ka-* compounded here does the usual work of *yaḥ kaḥ* (+ *-ca*). But if *saká-* really is a derivative of the article, I think rather of the *-c(e)* of *hic*, *illic*, *istic*, though this raises the question whether we restore **ĥe* (so Brugmann) or **ke* as the startform of Lat. *-ce*. For the full adjectivization of *sa-ká-s*, as compared with *illi-c(e)*, cf. Lat. *ipsus* | *ipse*.

21. The passages for *saká* are, in translation, as follows, "The little girl of the Kirātas, *she the little* one, digs a remedy" (Whitney's translation of AV. X. 4. 14) and "*This little* bird, so very small, hath swallowed all thy poison up" (Griffith's Rig Veda, 1. 191. 11), and I can but think it curious that the two most genuine uses of one word are found in descriptions of antidote procurers. In either case *saká* may be a participial and mean 'sequens' (= *quaerens*, cf. *quaerit* of the antidote-seeker in Aeneid 4, 513—515), or even 'secans'; or it may be an instrumental of a noun *sa^{*k}o* 'bill' (= *gladium*; *rostrum*), allied to Lat. *sacena*, and *saxum*. If we were quite sure that *saká* meant 'small', we might still derive it from the root of *secat*, in the sense of 'segment' ('fragment'), cf. Eng. *snip* and *bit*.²

¹ Of course I have at my command no other guide to usage than the Petersburg lexica.

² This semantic correlation perhaps obtains in the following words, Lat. *minor* (Fay, AJP., 26, 176), *σμικ-ρός* (ib. 177), Lat. *paulum* (ib. 188), *parvus* (194), ? *vilis* (202), Skr. *dabhrás* (385); further cf. Skr. *kṣudrás*: *kṣód-ati* (so Uhlenbeck).

Sanskrit *sācís* (advb.) 'sidewise. aside'.

22. The relation of meaning between *sācís* and *sācate* 'se-quitur' is, as Uhlenbeck recognizes in his lexicon, not obvious. I define *sācī-*, spoken of a dependant, a pedisequus, one of the suite, by 'alongside of, beside' (cf. Ir. *sech* § 19) whence by subsequent restriction—or enlargement?—'on (the) side; aside'; cf. Eng. *aside from* (with a sense near to the sense of Welsh *hep* 'sine' (§ 19, *fin.*), and *beside* in "beside the question, the mark" &c.

Sanskrit *sak-thán-* 'thigh'.

23. With the root of *secat* I would join Skr. *sak-thán-* 'thigh'. One cannot read his Homer and find *μηρός ἐξέταμον* (= "the thighs they cut off") without realizing that **sektó-* 'cut' would constitute a very proper designation for the thigh¹, cf. Eng. 'cuts', of the different portions of a slaughtered animal. Flexionally, *sakthan-* has been modelled on *asthán-* 'bone'².

Two Sanskrit Words for the Hand.

24. I have, in another place (AJP. 31, 416) explained Skr. *añ-gú-ṣṭha-s* 'thumb' as a compound of three members = 'in-manu-stans'. In the same essay (pp. 416. 419) I interpreted the startform **tri-st(h)os* 'third' (but **tri-st(h)is* in Latin *testis*) as 'tip-standing' (of the left mid-finger), and the startform **ksw-ek(s)-stho-s* 'sixth' as 'co-ex-stans' (of the second thumb in the digital enumeration).

25. In view of these three finger-names in *-stho-s* (*-sthi-s*)—with which we may do well to compare Gr. *παλα(ι)-στή* 'palm'—

¹ Possibly *μηρός* originally simply meant 'cut', and belongs with *μέρος* 'part', to a root *mē̃r*, found in Lat. *mor-d-et* 'bites'.

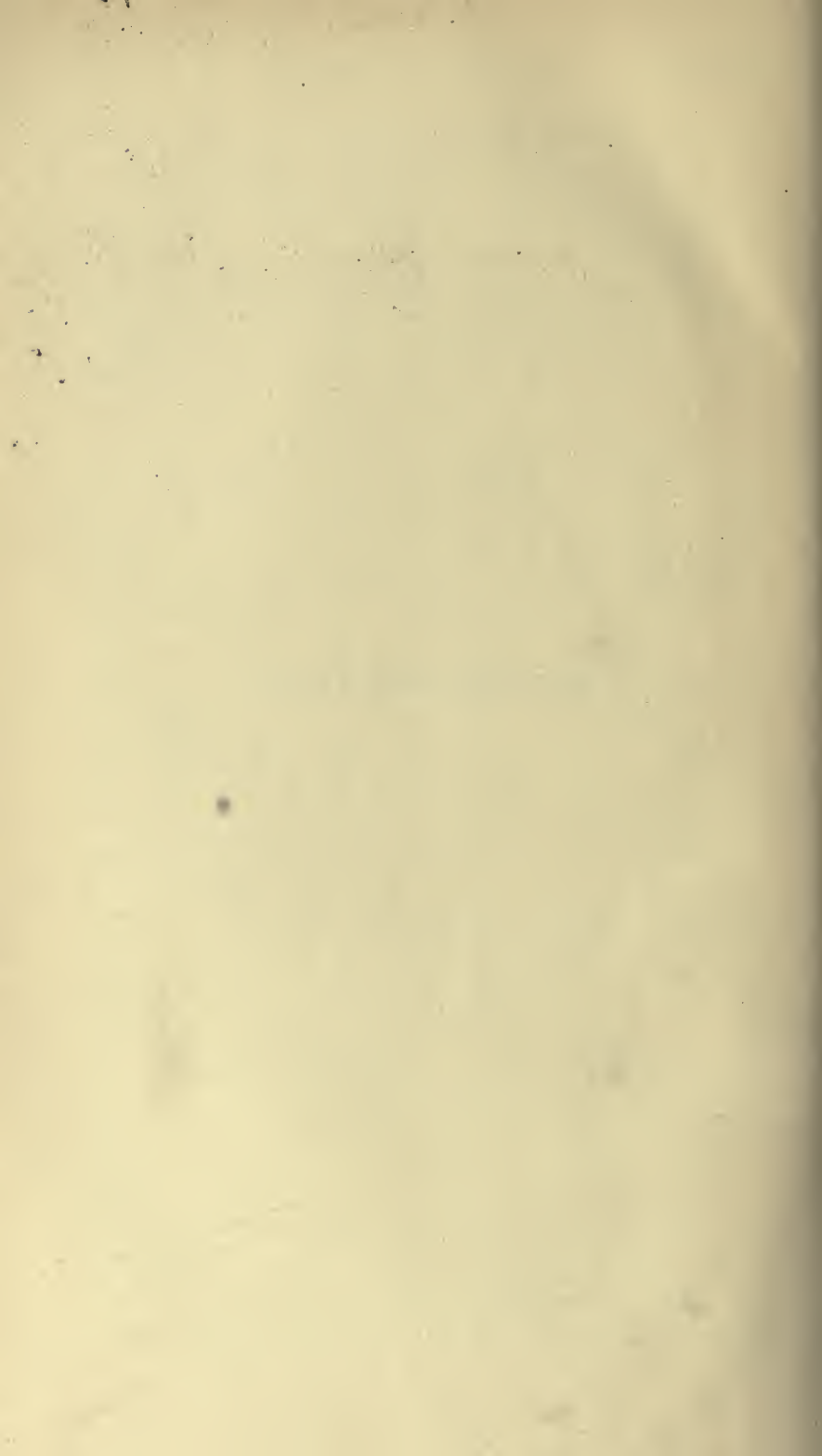
² The phonetic difficulty with the relation of Lat. *ossi-s* (gen.) to Skr. *ásthi-* was not solved by Johansson in LF. 14, 322, for the startform *od-thi-* would, to the best of our knowledge, yield Skr. **atthi-* and not *ásthi-*. But I know no phonetic obstacle to assuming for the startform **od-sthi-*, whence *-tsth-* with the treatment of *tsth* in Latin, but a different treatment in Sanskrit. This **od-sthi-* was a compound, and if (o)*dsth-* tended in the primitive speech to (o)*sth*, recomposition may have reintroduced the vanishing (or vanished) *d*. I define *od-* by 'stone': Skr. *ád-ri-s* 'stone, cliff' (? *ádyu-s*, if = stump), and *-sthi-* either means 'state, condition' (the whole = "possessing the stone-condition"): the root *sthā(y)-*; or it meant 'hard' in this compound (= stone-hard), and is cognate with the root to which Eng. *stone*, Lettic *stine* 'Eisenstange' belong (see Prellwitz, s. v. *σῆλα*).

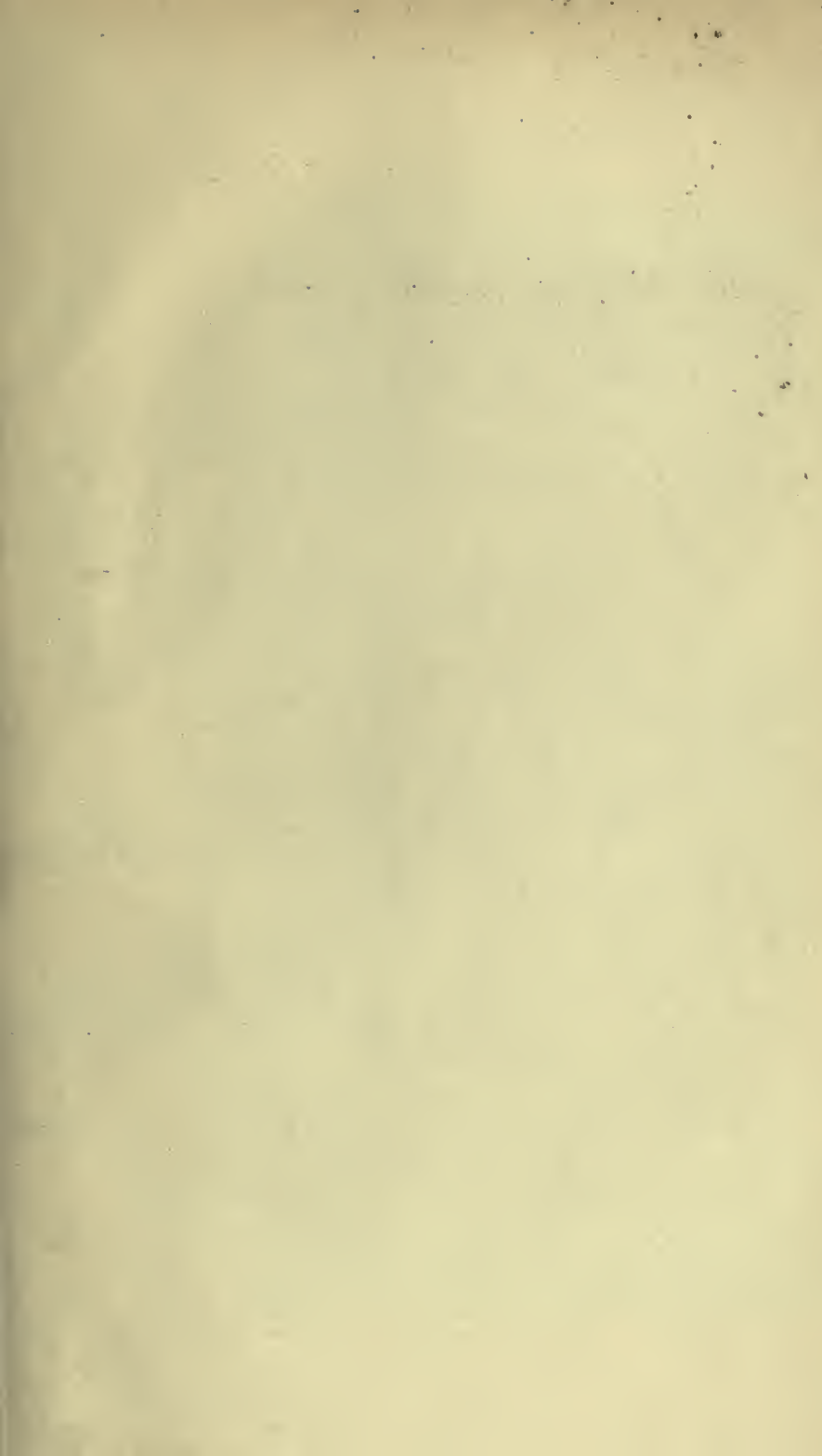
we may ask if in Skr. *gābha-sti-s* 'hand, forearm' *-st(h)i-s* 'stans' is not to be recognized as the *posterius*, reduced in value to a mere suffix. The sense of *gābha-stis* will be 'Greifer' (cf. Viennese *Greiferl*), and it will belong with Lat. *habet* 'holds' (see Uhlenbeck, s. v.).

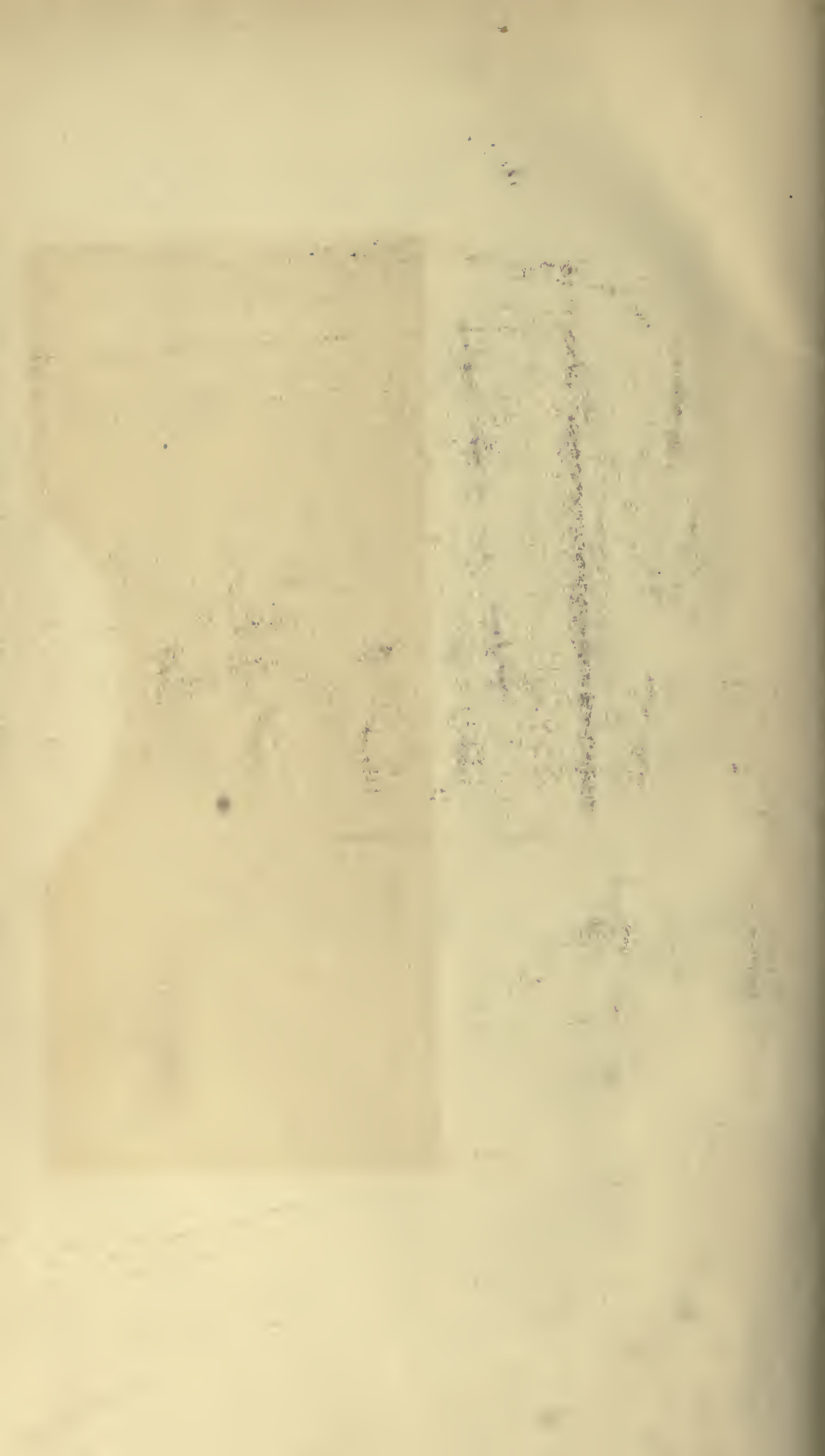
26. By the same token we may divide Skr. *hāsta-s* into *hā + st(h)a-s*. What is *hā*? It is either for *hab(h)-* or for *had(h)-* with the final sonant dropped before *st(h)*. I suppose the startform to have been rather **ghod-st(h)o-s* than **ghabh-stho-s* but without being able to give a perfectly convincing reason for my preference, even though Greek *ἀ-γοστός* shows *o* in the root syllable. The root *ghed-* (guttural, not palatal) in the sense of 'grasp' is well attested (see e. g. Walde, s. v. *prehendo*), though some of the forms cited, e. g. Lith. *pasi-gendū* 'desidero, cupio' belong more naturally with the root *g^whed(h)-* in *θέσασθαι* 'precari': Av. *ǰaidyām* 'orare'. A palatal variety (*ghed-*) of a root with pure guttural is not to be incontinently rejected. Thus Skr. *hāsta-s*, from *ghod-stho-s*, also means 'seizer', and 'seizer' is the apparent (and I believe the real) definition of Gothic *handus* (: *hinþan* 'seize') as well as of Greek *χείρ*. Why suspect this definition? Is not the scientific language of today, when set to point out the differences between man and his ape-progenitor, driven to the designation of the *hand* as the 'Greif-hand', as the ape's foot is a 'Greif-fuß'?

27. It is valuable for the definition to compare Lith. *pa-žastis* 'armhole, armpit'. The way in which the sense derived is made clear by quoting Horace, *epist.*, 1. 13. 12, *ne forte sub ala fasciculum portes librorum, ut rusticus agnum*. In short, the *arm-hole* is an *arm-hold* as, conversely, a ship's *hold* is a ship's *hole*. I have elsewhere given to *pa-žastis*, but with less semantic support, I think, the definition of 'res impressa', and to Skr. *hās-ta-s* the definition of 'quod ferit', deriving it from the root *ghes-* 'ferire' (see Mod. Lang. Notes, 22. 38).

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