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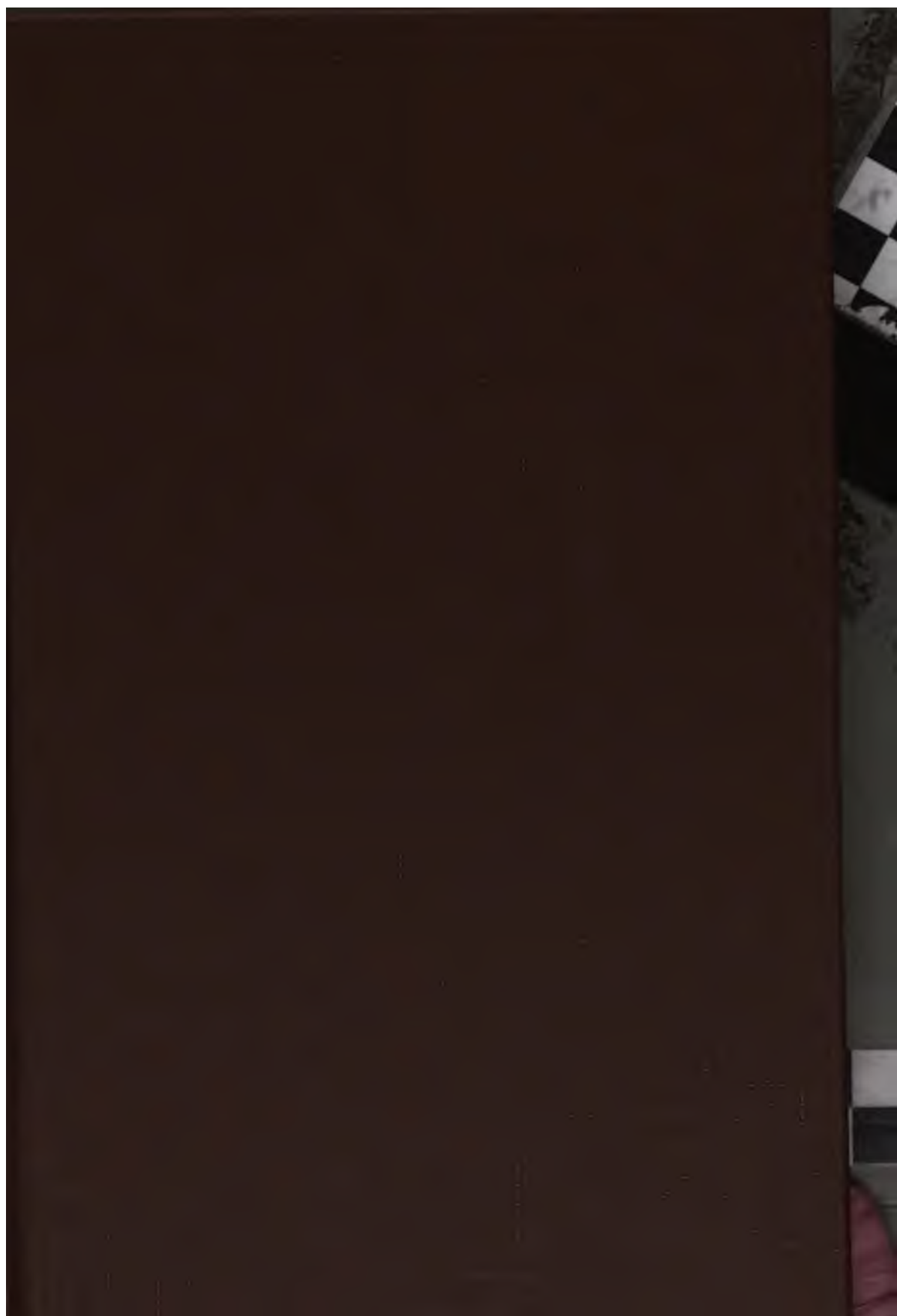
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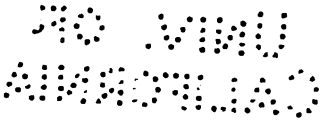
TRANSACTIONS
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AMERICAN PHILOLOGICAL ASSOCIATION,
1869-70.

I. — *On the Nature and Theory of the Greek Accent.*

BY JAMES HADLEY,

PROFESSOR OF GREEK IN YALE COLLEGE.

EVERY Greek word of two or more syllables had one syllable which was sounded on a higher key than the rest of the word: thus $\lambda\upsilon$ in $\lambda\epsilon\lambda\upsilon\kappa\omicron\iota\mu\iota$, $\kappa\epsilon$ in $\lambda\epsilon\lambda\upsilon\kappa\acute{\epsilon}\nu\alpha\iota$, $\kappa\omicron\varsigma$ in $\lambda\epsilon\lambda\upsilon\kappa\acute{\omicron}\varsigma$. For a long time the Greeks in writing their language made no attempt to distinguish the syllable which was thus sounded on a higher key: they aimed to represent the substance of their sounds, the different articulations, but not their relative pitch. It was not until the development of grammatical study in the Alexandrian period, that the grammarian Aristophanes of Byzantium, about 200 years before our era, invented a sign for this purpose. Over the vowel which was sounded on a higher key he placed a wedge-like mark, sloping downward to the left, which was called $\eta\ \acute{\omicron}\xi\epsilon\iota\alpha\ \pi\rho\omicron\varsigma\phi\acute{\omicron}\delta\iota\alpha$, 'sharp accent,' 'acute accent.' But it often happened, in the utterance of a long vowel or diphthong, that the higher key with which the word began was not maintained to the end; that, after pronouncing the first part on a higher key, the voice dropped down to a lower, and on this pronounced the last part of the long sound. For such cases Aristophanes introduced a compound sign: representing the higher key as before, he added, to represent the lower key, a similar mark, but sloping down-



ward to the right. The roof formed by the joining of the two marks was rounded off in writing, and the whole sign was called *ἡ περισπωμένη προσῶδια*, 'twisted accent,' 'circumflex accent.' The ordinary lower key was not generally represented by any distinctive mark: if the vowel of a syllable had no mark of higher pitch written above it, this was a sufficient indication of its lower pitch. And indeed, there was nothing in this lower pitch that called for designation. The essential fact to be recognized and made evident in the writing was not that some syllables were lower than the rest: it was that some were higher than the rest; or, rather, that one syllable in each word was made conspicuous and important above all others by the higher key on which it was sounded. Yet there were two cases in which the lower pitch was represented in writing. One of these has just been noticed, — when the lower pitch followed the higher in the same syllable, in the same long vowel-sound. The circumflex accent used for such a syllable consisted of two marks, a first representing the higher, and a second representing the lower pitch. The other case relates to oxytone words, where the higher pitch comes at the end of the word and belongs to the last syllable: *ἀγαθός, στρατηγός*. If such a word is followed by other words in immediate grammatical connection, the higher pitch of its last syllable changes to a lower one, as in *ἀγαθός στρατηγός ἐγένετο*. Here now, on the last syllable of an oxytone word, when in the connection of discourse its higher pitch changes to a lower, the lower pitch is represented in writing; and represented in the same way as in the latter part of the circumflex accent, that is, by a mark sloping downward to the right, and called *ἡ βαρεῖα προσῶδια*, 'heavy accent,' 'grave accent.' Aside then from these two cases, the ordinary lower pitch is always left without designation.

In this description of the Greek accent, it has been taken for granted that there was an actual regular difference of pitch between different syllables of a word, and that the proper use of the written accent was to represent that difference. The correctness of this assumption is implied in the very names of the accents. The words *ὀξύς*, 'sharp,' and *βαρῦς*, 'heavy,'

are the ordinary words used in Greek music for what we in our music call 'high' and 'low.' They are not used to denote difference in stress, or strength of utterance. We might find it natural that *ὀξύς*, 'sharp,' should be applied to a syllable which was pronounced with marked stress; but it would be strange if *βαρύς*, 'heavy,' was used of syllables pronounced without stress, the weaker or lighter syllables of a word. The term *προσῳδία* itself, as well as the Latin *accentus*, which is used to translate it, comes from a root which means 'to sing'; and in explaining the name, the ancient grammarians, both Greek and Latin, tell us that it is a singing of the syllable. There is a remarkable passage in a work of Dionysius of Halicarnassus (*de Comp. Verb.*, 11), in which he compares the melody of speech with that of song. The melody of spoken language, he tells us, is measured by a single interval, the so-called fifth, or, as he explains it immediately after, the interval of three tones and a semitone. He says that when the voice rises to the acute, it does not go higher than this interval; and when it falls off again to the grave, it does not sink lower than this interval. He adds that the two intonations, the acute and the grave, may be combined in the same syllable, and that such syllables are said to be circumflexed. It is perfectly evident that he is here speaking of the accent, that he describes it as a difference of pitch, and that he makes this difference about the same as the musical interval of a fifth, that is (as he himself says), three tones and a semitone. All this is pretty clear; but it is made still clearer by the contrasted description of music, which comes directly after it. Music, whether vocal or instrumental, uses a number of intervals, and does not confine itself to the fifth alone (these are his own words), but employs, for purposes of melody, first the octave (this being first named, as the most important interval), and the fifth, and the fourth, and the full tone, and the semitone, and, as some think, even the quarter-tone (the chromatic diesis) so as to be distinctly perceived. Further, he says, music claims the right to subordinate the words to the tune, instead of having the tune subordinate to the words; by which he means that it is the right of the musician to sing

the words to any tune he pleases, without reference to the natural tune (if we may call it so) which by the accent they have in spoken utterance. That this is his meaning becomes abundantly evident from a subjoined illustration. He quotes two or three lines from a chorus of Euripides, and points out at some length how the natural tune or accent of the words was wholly disregarded in the music to which they were sung. Thus, the first word, *σῖγα*, is sung upon a monotone, both syllables on the same pitch, though the spoken word had two tones, the acute and the grave, and indeed both of them combined in the circumflex accent of its first syllable. In another word, *ἀρβύλης*, which had the acute on the second syllable, the music gave both second and third syllables the same pitch, though in a spoken word the higher pitch of the acute accent was never maintained through two successive syllables. In *τίθετε*, the natural tune of the word, a high sound followed by two low ones, was completely reversed by the music, the first syllable being sung to a lower note and the last two syllables to a higher note. In *κρυεῖτε*, the circumflex of the second syllable, with its combination of acute and grave, was lost in the music, that syllable being sung upon a single note. And in *ἀποπρόβατε*, a word of five syllables with acute accent on the middle one, the higher intonation, which belonged to the *προ*, was in the music transferred to the *βα*. These are the illustrations and explanations given by Dionysius himself, whose authority on such a subject must be very high from his intelligence and learning, as also from his date, in the first century before our era. This passage alone, if there were nothing else to confirm it, would leave no doubt as to the melodic character of the Greek accent.

But is it not possible that this elevation of pitch, which characterized the accented syllable, was accompanied by an increased effort of the vocal organs, by a greater stress of pronunciation, such as marks the accented syllable in our own language and in other languages of modern Europe? It is possible, certainly; but there is scarcely any evidence to prove it true. In all that the ancient grammarians and other ancient writers have left us on the Greek accent—and the aggre-

gate is far from inconsiderable—there seems to be no statement or expression which implies that the accented syllable was pronounced with more force than the rest of the word. No such implication can be found in the remarkable passage just referred to, where Dionysius speaks of the melody of spoken language. We might perhaps expect to find it rather in a following section, where his subject is the rhythm of spoken language. But nothing of the kind appears there. In speaking of rhythm, he refers to quantity of syllables, to the succession of longs and shorts; and he remarks that common speech, the utterance of prose, does no violence to these, but keeps the syllables long and short according to their received or natural quantity. But music, which disregards the natural tune of words, disregards likewise their natural rhythm; it changes (so he says) the length of the syllables, increasing or diminishing their quantity, and occasionally even reversing the natural proportions; for (he adds), instead of making its own musical times subordinate to the natural quantity of the syllables, it makes the quantity of the syllables subordinate to the times of the music. In all this, there is no hint that any one syllable of a word was regularly distinguished from the others by its more forcible enunciation. Göttling, who believes that the accented syllable was actually pronounced with greater stress, can only refer in support of his belief to the modern Phavorinus. The silence of the ancient authorities may not prove that there was absolutely no difference in stress between accented and unaccented syllables; but it certainly warrants the conclusion that the difference, if there was any, cannot have been great or striking: it must have been far slighter than in English or in modern Greek. The grand fact about the accented syllable, to the mind of the ancients, was its higher pitch; its greater stress, if it had any, was either not noticed by them, or was felt to be comparatively unimportant.

The same conclusion—that the stress of voice on the accented syllable was little, if at all, greater than on other syllables—may be supported by probabilities resting on other grounds. It is the natural effect of a decided stress-accent

to weaken the following syllables of the word, and especially the one which immediately follows the accent, so that the vowel of that syllable is apt to be shortened or to be omitted altogether. In our own language, this tendency may be seen in the short *e* of 'mystery' as compared with the long sound in 'mysterious,' and in the suppressed *e* of 'every,' 'wond(e)rous.' In Greek such changes are confined to a few words, as *τίπτε* in Homer for *τί ποτε*, *ἦλθον* for earlier *ἤλυθον*. They are perhaps hardly more numerous than the cases where an accented vowel has disappeared; cases like *θύγατρες* in Homer for *θυγατέρες*, *βῆν* for *ἔβην*, etc. So far from being disposed to shorten the vowel which follows the accented syllable, the Greek shows rather a predilection for such forms as *ἄνθρωπος*, *τιθημι*, *λυθήσοισθον*. Latin proper names like *Dentatus*, *Moderatus*, *Salernum*, the Greeks were perfectly able to pronounce with their Latin accent: there was nothing in their own system which forbade it; yet we often find such words accented on the first syllable, *Δέντατος*, *Μόδεστος*, *Σάλερνον*, showing that an accented antepenult followed by a long penult was a combination agreeable to the Greek ear and regarded with a kind of preference.

Another consideration which goes to show that the Greek accent was not accompanied by any very decided stress of voice, is found in the structure of Greek verse. In this, the word-accent is wholly disregarded, the ictus of the verse being quite as likely to fall on an unaccented as on an accented syllable. In the heroic hexameter, for example, we know that there was an ictus, or verse-accent, that is, a special stress of voice, on the first syllable of each dactyl or spondee. But if we look at the first seven lines of the Iliad, out of the forty-two cases of ictus which they present, only sixteen are found on syllables which have the written accent. Now it would seem to us unnatural in our own language to take the words, "regarded with admiration and uncommon esteem," and read them as a hexameter, "régardéd with admíratíon and úncommon ésteem;" or to take the line, "'tis as moonlight unto sunlight or as water unto wine," and read it as an iambic tetrameter catalectic, "'tis ás moonlíght untó sunlíght

or *ás watér untó wine.*" But we must suppose that the Greeks did something very much like this, if we assume that with them, as with us, there was a decided stress of voice laid on the accented syllable. It is true that there is something hazardous in such reasoning. The Greeks in the construction of their verse may have treated their language with more freedom than we allow in the treatment of ours. Different languages, or, rather, the people who use them, differ widely in this respect. Thus the German poet has greater liberty than the French in departing from the established forms and idioms of prose speech. We have seen that in Greek music the natural tune of the word, the differences of pitch depending on the accent, were not observed, but were freely superseded by other combinations of tones at the pleasure of the composer. If, then, the Greeks in their music were willing to substitute other tones for those given by the accent of the spoken language, it is conceivable that in their verse also they may have been willing to substitute other stresses for those of ordinary speech, to lay the emphasis on other syllables according to the rhythmical arrangement of the poet. Yet we cannot but regard it as highly improbable that a stress-accent, if it were as decided as ours, should be wholly neglected and superseded in the composition of verse. And in this view we are confirmed by the modern Greek, which, having a decided stress-accent, makes it, as we do, the basis or determining element of its verse-system.

Taking all these considerations together, we hold it all but certain that the Greeks did not lay any marked or forcible stress on the accented syllable. It is even doubtful whether they laid *any* stress upon it, more than on other syllables of the word. It is certain, however, that in the history of their language they have either adopted a stress-accent, or have given strength to a weak one existing from the first. In the modern accent, the leading element is stress, and difference of pitch, if it is not wanting, has at any rate ceased to be prominent and uniform. The distinction between acute and circumflex has been wholly obliterated. The forms *δηλώσαι*, 'to make manifest,' and *δηλώσαι*, 'might make manifest,' are

undistinguishable in the modern pronunciation. With this change in the character of the accent, was connected, as we just saw, the adoption of accent as the basis of versification. When verses began to be constructed on this basis, they were called *στίχοι πολιτικοί*, 'political' or 'popular verses,' in contrast with the old quantitative verses, which continued to be written, as a kind of literary exercise, long after the pronunciation on which they were founded had ceased to be heard. Now these political verses were composed as far back as the eleventh century, and probably much earlier. Whenever they began to be made, we may be sure that the Greek accent had already changed its character, and had come to exhibit a decided stress. But the change, we may presume, was very slow, and may have been going on for centuries before the stress element was strong enough to express itself in verse composition. It is quite supposable, therefore, that a weak stress may have been heard on the accented syllable, as a regular accompaniment, even in the time of Herodian, the principal authority on accent, if not yet earlier in the time of Aristophanes of Byzantium, the inventor of the accentual signs. If this were so, we might find in it an explanation of the fact already noticed, that the last syllable of an oxytone word has an accent written upon it, even when its tone changes from high to low. In *βασιλεὺς ἐγένετο*, the grave accent on *λεὺς* shows (so we are told) that it was pronounced on a low tone. But why then should it have any mark over it, more than the other syllables of the same word *βασιλεὺς*? Or why should *βασιλεὺς*, which in this case has no high tone, which is all pronounced on a low tone, have any mark of accent over it, more than an enclitic word, more than *ἐστίν* (for instance) in *χαλεπὸν ἐστίν*, where the verb appears without accent? To such questions it might be replied, not wholly without plausibility, that though *βασιλεὺς* in the case supposed had no elevated pitch, no accent properly so called, its last syllable was yet distinguished from the rest by a slightly superior stress, and was therefore allowed to have a distinctive mark over it; while the enclitic *ἐστίν* was written without any such mark, because it had neither elevated pitch nor superior

stress on either of its two syllables. This, I say, would be a possible solution of the difficulty. But there is another solution, of which I am now to speak, and which brings up a question of much interest for the theory of the Greek accent.

Did the Greek accent distinguish only two tones, a high and a low? Or was there some middle tone, having a regular place in the system, some intermediate between the two extremes? It must be confessed that the evidence given on this point by the ancient writers is not so distinct as could be wished. In general, they speak only of two tones, high and low, or (as they term them) acute and grave. Still they do not explicitly assert that all grave tones were equally low. It may be that they thought it important only to distinguish the high tone, as dominating the whole word, and that differences between the lower tones seemed to them of too little practical consequence to require mention. Yet we do find in ancient writings indications of a middle tone. Thus Aristotle (*Rhet.*, 3, 1, 4) speaks of three "tones, acute, grave, and middle;" though it is possible that by "middle" here he intends the circumflex, which, combining as it does both acute and grave, might be regarded as having an intermediate character. But the Greek grammarian Tyrannio of Amisus, as quoted by Varro, enumerates four accents, grave, middle, acute, and circumflex. Tyrannio, indeed, may have been speaking of the Latin accent; but Varro refers to other writers as recognizing a middle accent, Glaucus of Samos, Hermocrates of Iasos, and the Peripatetics Theophrastus and Athenodorus, some, if not all, of whom must have referred to the Greek. And the grammarian Servius says: "It must be understood that this doctrine of a middle accent is no invention of recent times, but belongs to all who before the time of Varro and Tyrannio have left any thing on accent; since the majority of these, and the most distinguished writers, have made mention of this middle accent, all of whom Varro refers to as his authorities." This language of Servius, doubtless, overstates the case. The number of writers who expressly recognized a middle accent cannot have been so great as here represented. But a reason may be found for this in a remark

of Servius himself, that "the middle accent, which is a sort of border between the two others, resembles the grave more than it does the acute, and is therefore reckoned with the lower rather than with the higher tone."

The evidence of a middle tone, which has come to us from ancient writers, deficient as it is in definiteness and consistency, seems on the whole sufficient to warrant the inquiry, whether the phenomena themselves of the Greek accent furnish any indications of such a tone. G. Hermann, in his essay *De emendanda ratione Grammaticæ Græcæ* (p. 66), suggested that the grave accent, where it was written for the acute on the last syllable of an oxytone word, was the sign of a middle tone, intermediate between the acute and the unmarked grave. On this point Buttman also, in his *Ausführliche Grammatik*, takes substantially the same ground. More recently, G. Curtius, reviewing Bopp's *Accentuationssystem* in Jahn's *Jahrbücher* (1855, vol. 71), expresses the opinion that the grave accent, where it forms the second part of the circumflex, represents not the ordinary low tone of the word, but an intermediate tone. This view seems to have been suggested to his mind by the Sanskrit system of accentuation: here, the *udâtta* (or elevated tone), corresponding to the Greek acute, is regularly followed in the next syllable by the *svârîta*, which certainly differed from the *anudâtta* (unelevated, depressed tone) of the other syllables. The Indian grammarians describe the *svârîta* as a combination of the *udâtta* and *anudâtta*, similar to the Greek circumflex; and this must clearly have been its character when used as an independent accent. But where it is the mere follower of an *udâtta*, and especially where it belongs to a short syllable, the statement that it was a compound accent, a circumflex, seems far from probable: we could much more easily believe it to have been an intermediate tone. Curtius intimates that he would not confine his recognition of a middle tone in Greek to the last part of the circumflex accent; yet he has not actually given further development to the theory. But a recent writer, Franz Misteli, in an able article contributed to the 17th volume of Kuhn's *Zeitschrift*, has taken it up and

carried it to a much greater extent. He holds that the acute accent in Greek, as in Sanskrit (?), was regularly followed by a middle tone, this middle tone being either written as the last part of a circumflex, or being merely understood on the syllable which comes after the acute. If the acute stands on the last syllable of a word, where there is no room for a middle tone after it, the acute itself loses its high pitch and becomes a middle tone, represented by the so-called grave accent. Only at the end of a sentence, or before an enclitic, does the acute under such circumstances retain its high pitch, and the word appear as an oxytone. This theory of a middle tone Misteli applies with much ingenuity to account for the general laws of Greek accentuation. In showing how it may be made to answer this purpose, I shall not confine myself to his statements, but shall take the liberty to depart from them in various particulars, and shall introduce some views (especially those on Latin accent) which do not appear in his exhibition of the subject.

The general laws here referred to are the four following :—

1. The acute cannot stand on any syllable *before* the antepenult.—2. The antepenult, if accented at all, must have the acute; but it cannot be accented at all, if the ultima is long: thus *ἄνθρωπος*, but *ἀνθρώπου*.—3. The penult, if accented, must have the acute, when the ultima is long (has a long vowel-sound): thus *ἀνθρώπου, τοιαύτη*.—4. A long penult (one which has a long vowel-sound), if accented at all, must have the circumflex when the ultima is short: thus *τοιοῦτος*.

The Greek accent is confined to the last three syllables of a word. But in Sanskrit there is no such restriction. The accent may go back to any syllable, however far removed from the end of the word. In *ābubodhishāmahī*, 'we wished to know,' it stands at the beginning of a seven-syllable word. The same freedom, we may presume, belonged to the primitive Indo-European language. There must have been some time, therefore, in the history of the Greek language, whether before or after it became distinctively Greek, when a change took place in this respect,—some time when all accents standing before an antepenult were carried forward and thrown

upon one of the last three syllables. If we ask for the cause of such a change, none could be imagined more natural or probable than a fondness for some particular succession of tones at the end of a word. If the earlier accentuation had a threefold distinction of tones, a high tone, middle tone, and low tone, we can easily conceive that this succession, these three tones in the order of their height, should have been found an agreeable cadence for the close of a word. It is a cadence which appears in Sanskrit in very many words; it may have been common in the Indo-European language prior to the separation of its branches. What we should have to suppose in regard to the ancestors of the Greeks would be that at some time a special taste or fondness for this cadence developed itself among them, with a dislike for any cadence in which the high and middle tones were followed by more than one low tone, so that, in order to secure what they liked and avoid what they did not like, they came at length to change the accent of words, to shift it from an earlier to a later syllable. Changes in an opposite direction, from a later syllable to an earlier, were not made, even to secure this favorite cadence; or if such a change took place in particular cases, it did not become the general law. One thing further we must suppose to account for the Greek accent: that in this cadence the Greeks preferred that the final low tone of the word should be a short one: they did not like to have it maintained through a long syllable. Our hypothesis, then, may be stated in a single sentence:—that the early Greeks changed the older accent of words so as to secure this cadence, ‘high tone, middle tone, short low tone,’ wherever it could be secured without throwing back the accent. This single hypothesis will be found sufficient to account for the four general laws already given. Thus:—

1. “The accent cannot stand on any syllable before the antepenult.” In *ἐλείπετο*, ‘was left,’ the accent (it can hardly be doubted) was originally placed on the augment, as it regularly is in Sanskrit: it fell, therefore, on the syllable before the antepenult. The middle tone would then fall on the antepenult *λε*, and the remaining two syllables *πε* and *το*

would have the low tone. But the preferred cadence allowed only one syllable, and that a short one, for the low tone at the end of the word. It was necessary, therefore, to place the high tone or accent on the antepenult $\lambda\epsilon\iota$, leaving $\pi\epsilon$ for the middle tone and $\tau\omicron$ for the low tone.

2. "The antepenult, if accented at all, must have the acute." Of course, if accented at all, it must have either the acute or the circumflex. Suppose, then, that in the word $\epsilon\lambda\epsilon\iota\tau\epsilon\tau\omicron$ the circumflex accent was placed on the antepenult $\lambda\epsilon\iota$: that syllable, from the nature of the circumflex, would have the high tone on the first part and the middle tone on the last; and thus again as before there would be two syllables, $\pi\epsilon$ and $\tau\omicron$, for the low tone. The circumflex on the antepenult would, therefore, be incompatible with the cadence required. But the rule asserts also "that the antepenult cannot have any accent, even the acute, if the ultima is long." For suppose that the first person $\epsilon\lambda\epsilon\iota\pi\acute{\omicron}\mu\eta\nu$ could have the acute, the high tone, on the antepenult $\lambda\epsilon\iota$: the middle tone would fall on $\pi\omicron$, and the low tone on $\mu\eta\nu$, a long syllable. But the cadence required was 'high tone, middle tone, short low tone.' Hence the high tone or acute must be placed on the penult $\pi\omicron$, and the final long syllable $\mu\eta\nu$ must be divided between the other two tones, its first half being sounded with the middle tone, and its last half (which, of course, has the quantity of a short syllable) being sounded with the low tone.

3. "The penult, if accented, must have the acute when the ultima has a long vowel." For in the feminine $\tau\omicron\iota\alpha\acute{\iota}\tau\eta$, 'such,' suppose that the circumflex could stand on the penult $\alpha\nu$. This syllable, then, by the nature of the circumflex, would have both high tone and middle tone, and the low tone would fall on $\tau\eta$, a long syllable, which is inconsistent with the required cadence. To secure this, the high tone, or acute accent, must be placed on the penult $\alpha\nu$, and the final long $\tau\eta$ must be divided between the other two tones, the first short time contained in it being sounded with the middle tone, and the last short time with the low.

4. "A penult with long vowel-sound, if accented at all, must have the circumflex when the ultima has a short

vowel." For suppose that the masculine *τοιούτος*, 'such,' had the acute or high tone on the penult *ου*; the middle tone would then fall on the last syllable *τος*, and the final low tone would be excluded. In many words, as in *λόγος*, 'speech,' this was something unavoidable: the high tone falling on *λο*, the short penult, must fill that syllable, the middle tone must fill the last short syllable *γος*, and there is no room left for the closing low tone. But with a penult long by nature, as in *τοιούτος*, there was no such necessity. It was enough to divide the long *ου* between the high tone and middle tone, in other words, to sound it with the circumflex accent: the ultima *τος* was then left for the short low tone, and the desired cadence was thus obtained.

We see, then, that these four general rules of Greek accent, which have the appearance of being unconnected, arbitrary and capricious, are all of them direct corollaries from a single hypothesis, all of them necessary results from the extension of a single cadence, 'high tone, middle tone, short low tone,' at the end of words. But what shall we say of polysyllables like *χαλεπός*, 'harsh,' with acute on the last syllable, or like *χαλεπῶς*, 'harshly,' with circumflex on the last syllable, or like *λελυμένος*, 'having been loosed,' with acute on the penult before a short ultima? In these words there is room for the favorite cadence, but they do not have it: they close either with the high tone itself (as in *χαλεπός*), or with the high tone followed by the middle (as in *χαλεπῶς*, *λελυμένος*). How can this be accounted for? By the last clause in our hypothesis: "The Greeks changed the older accent of their words, so as to secure the favorite cadence, *wherever this could be secured without throwing back the accent.*" We hold it to be true, as a general fact, that words like those just given were thus accented in the primitive period,—i. e., either on the last syllable, or on the penult with short ultima following;—and that they did not assume the threefold cadence, because the tendency to this was not strong enough to produce a retraction of the accent from a later to an earlier syllable. By this we do not mean that such a retraction never occurred. It may have taken place in numerous instances, but it never became

the general law. And thus the Greek has many oxytones, which of course end with a high tone; many perispomena, which end with a middle tone; and not a few paroxytones with short ultima, which likewise end with a middle tone; and these, not in short words only, where the full cadence was impossible, but in very many longer words, where there was room enough and to spare for the succession of 'high tone, middle tone, and short low tone.'

But there was one branch of the Greek people—the Aeolians of Asia Minor—which went farther than the rest in the fondness for this cadence. The Aeolians did not hesitate to retract the accent for the purpose of securing it. Thus *λελυμένος* was changed by them to *λελύμενος*, *χαλεπός* to *χάλεπος*, *χαλεπῶς* to *χάλέπως*,—*χάλεπως* they could not say, for that would make a *long* low tone. If there was not room for the complete succession of three tones, they secured as much of it as they could, saying (for instance) *σόφος* with high tone and middle tone, instead of the common Greek *σοφός*, 'wise,' an oxytone word. Hence in the Aeolic dialect the only oxytones were monosyllables, and even these were oxytone only when the vowel was short, as the articles *τόν*, *τό*, *τά*. If the vowel was long, there was room for a middle tone after the high tone: the monosyllable was then pronounced with circumflex accent, as *τῆν*, *τούς*, instead of the common Greek *τήν*, *τούς*. It was only in prepositions and conjunctions that the Aeolic, in agreement with the other Greek dialects, admitted oxytone words of greater extent than one short syllable.

We observe now that a similar hypothesis may be used to explain the peculiarities of Latin accentuation. The Latin, beside the acute accent, or high tone, has a circumflex, which it uses just where the Aeolic dialect would use the circumflex, that is, on all monosyllables with long vowel (except only *ne* with the imperative), and on all penults with long vowel followed by short ultima. On all other accented syllables the acute was used, viz. on antepenults followed by short penult,—on long penults followed by long ultima,—on all penults long only by position,—on short penults of dissyllables,—and on all monosyllables with short vowel, enclitics of course excepted.

It is evident that in changing the primitive accent the Latin has not confined itself to one direction, from earlier to later syllables : like the Aeolic Greek, it has freely moved the accent backward, from later syllables to earlier, in order to secure the desired cadence. But the cadence required to account for the Latin accent is in one respect different from that which served to explain the Greek. The Greek would not allow the middle tone to be followed by a long low tone: the Latin would not allow the low tone to be preceded by a long middle tone, a middle tone extending over the whole of a long syllable, whether long by nature or by position. Hence for the Latin the cadence becomes, 'high tone, short middle tone, low tone.' For example, in *legere, legeres, legeret*, the low tone fell on the last syllable *re, res, ret*, without reference to its quantity, whether long or short; the middle tone on the short penult *ge*, and the high tone on the antepenult *le*. This example is enough to show that, by the necessity of such a cadence, the accent could never go farther back than the antepenult; that the antepenult, if accented at all, must take the acute; and that the antepenult could only be accented when the penult was short. In such forms as *gaudere* or *gauderet*, the acute must stand on the long penult *de*; but if the desired cadence is to be obtained, it must admit the middle tone to the latter half of the long vowel, for the short ultima has only room enough for the low tone: the word, therefore, could only have the circumflex (the combination of high and middle tone) on the penult. But in forms like *gauderet*, where both penult and ultima have long vowels, the Latin preferred to divide the long ultima *res* between the middle and low tones, leaving only the high tone for the penult *de*: the word, then, has the acute on the penult. So too have forms like *legendus*, where the penult has a short vowel, and is only long by position. Here the circumflex is impossible: the short vowel in *gen* cannot be divided between two tones, the high and middle: *gen* must have the high tone, *dus* the middle, and the low tone is excluded by the necessity of the case. In *legendi*, the cadence could be made complete by dividing the long *di* between the middle and low tones; but in *legendus*, it is necessarily

incomplete, as much as in *legit* or *legunt*, where both vowels are short, or in the Greek *λόγος*, having only the high and middle tones.

It is not necessary to go further into details to show that all features of the Latin accentuation may be accounted for by the assumed tendency to close all words with the succession of 'high tone, middle tone, low tone,' or so much of it as possible, consistently with the one restriction that the low tone must never have before it a middle tone which occupied the whole of a long syllable. But if we compare the Greek accentuation with the Latin, and both with that freer system of primitive Indo-European speech which is best represented to us by the Sanskrit, we may naturally conclude that the first step in the series of changes which gave the accentual systems of the Greeks and Romans their peculiar character, was caused by a simple distaste for a succession of low-tone syllables at the end of a word. I repeat, the beginning of a special Greek and Roman accentuation would seem to have sprung from the mere unwillingness to hear more than one low-tone syllable at the end of a word. This unwillingness, carried into practical effect, would confine the accent (that is, the high tone) to the last three syllables of the word. But it would not cause any retraction of the accent: it would allow such forms as *χαλεπός*, *χαλεπῶς*, *λελυμένος*; for these have not even one low tone, still less have they a succession of low tones at the end. And further, this simple distaste or unwillingness, as it implies no restriction on the long or short quantity of the single tones, would allow such forms as *ἐλείπομην*, *ἄνθρωπον*, in Greek, and such forms as *gaúderet*, *légendus*, in Latin. This first step we may naturally suppose to have been made in the Græco-Latin or Græco-Italic period, that is, while the common ancestors of these peoples spoke a language, differing indeed from the original Indo-European, but not yet divided into branches having a distinct character as Greek, and Italian or Latin. But the next step must have been taken after this division, as it is different in the two branches. In the Greek, it springs from a distaste for a long low tone, a low tone stretching through a whole long syllable, following the

high and middle tones at the close of a word. This would require *ἐλείπομην* instead of *ἐλείπομην*, *ἀνθρώπου* instead of *ἄνθρωπου*. The corresponding step in the Latin springs from a distaste for a long middle tone, a middle tone stretching through a whole long syllable, between the high and low tones at the close of a word. This would require *gaudéres* instead of *gaúderes*, *legéndus* instead of *légendus*. In Greek the effect of this second step was to make the cadence, 'high tone, middle tone, short low tone,' the prevailing one for words which were long enough to admit of it; though there still remained a large number of words, represented by *χαλεπός*, *χαλεπῶς*, *λελυμένος*, which did not have it. Now one section of the Greek race, the Aeolic of Asia, went further than this: they took a third step, probably much later than the second: they threw back the accent of these words, so as to make the already prevailing cadence universal, so far at least as the length of the word would allow. Whether the whole Italic race, in all its branches, Umbrian, Oscan, Sabine, etc., took a similar third step, we are unable to say. It is certain that one branch did so, the Latins: they threw back the accent, so that the cadence already prevailing should be made universal, as far as the length of the word would allow.

Perhaps I should leave a false impression, if I were to close without calling attention in one word to the hypothetical character of what has been said here about a middle tone. The existence of a middle tone in Greek and Latin has a good deal of positive ancient testimony in its favor. But that a high tone, when it did not come at the end of a word, was regularly followed by a middle tone, is a proposition, which, however supported by Sanskrit analogies, has no direct evidence in the statements of the ancient writers. And of course, if there were no doubt of its truth, still the use here made of it to account for the ante-historic changes and the earliest historical appearances of Greek and Latin accentuation, would be purely hypothetical. At the same time, it may be said with justice, that the hypothesis is so natural in itself, it is so readily suggested by known facts, and it offers so simple and perfect an explanation for a variety of seemingly unconnected and capri-

scious phenomena, that one can hardly help believing that it has a foundation in truth.

To some persons it may seem hard to believe that the ordinary utterance of discourse and conversation should have had so much of musical intonation: that this threefold distinction of tone should have found place in it as a recognized and constant element. But in the Chinese and the languages cognate to it, as spoken at the present day, we find the musical element playing a much larger and more important part. In some of the popular dialects of China, a large proportion of the syllables which make up the language are pronounced with seven or eight intonations: thus, as a short abrupt monotone (compare the English preposition *to*, in its ordinary short pronunciation); or as a prolonged monotone (compare the English numeral *two*); or with mixed falling tone (like the Greek circumflexed *τοῦ*); or with mixed rising tone (like the English *two* at the end of a question: "*two?*"); or with similar intonations duplicated on a lower key. Thus the same syllable may be pronounced in seven or eight different ways, having each their special and widely diverse meanings. Compared with such complexity of musical intonation, that which we have hypothetically ascribed to the early speakers of Latin, Greek, and Sanskrit, and the yet earlier speakers of the undivided Indo-European speech, is a very simple and easy matter.

II. — *On the Nature and Designation of the Accent in Sanskrit.*

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This paper was originally intended only to give such an exposition of the nature of the Sanskrit accent as should illustrate and support the views presented by Professor Hadley in the preceding paper respecting the Greek accent. It has seemed best, however, to treat the subject somewhat more comprehensively than that intent would demand, because full and correct knowledge of Sanskrit accentuation is less accessible to scholars in America than it ought to be. The Sanskrit grammars in English which are most used among us (Monier Williams's and Max Müller's) hardly touch accent at all;* and the older works ignore it altogether; while to the treatment of the matter by Oppert and Bopp (and even, in a less degree, by Benfey) much exception is to be taken. To the student of classical Sanskrit merely, accent is a matter of subordinate consequence; no one pretends to give the Sanskrit words their proper tone, and it is the general custom among Western scholars to pronounce them according to the rules of Latin accentuation. This is because the accented syllable is, in the majority of words, unknown; the written texts are not marked for accent, and the notices of the native grammarians are not sufficient to supply the lacking knowledge. With the Vedic student, the case is otherwise; the Vedic texts of the first class (namely, the original Sanhitâs of the Rig, Sâma, Yajur, and Atharva Vedas) are completely accented, and also several works of the second or *brâhmana* class (namely, the two principal *brâhmanas* of the Yajur-Veda, the Çatapatha and Tâittirîya Brâhmanas, and the Tâittirîya-Âraṇyaka);† and the accent is a highly important element in aiding

* Müller's second edition, which has appeared since the above was written, accents its paradigms, and gives an Appendix on the general subject.

† All the works here mentioned are either published or publishing, and will be soon accessible in printed form, complete.

both the grammatical and the lexical comprehension of the texts. And, of course, every student of the history of the Sanskrit language, or of the history of Indo-European language by the aid of the Sanskrit, requires to understand thoroughly a part of the phonetic structure of the latter which is so fundamental in its character, and has exercised so powerful an influence in the shaping of words and forms.

In investigating the nature of the Sanskrit accent, we are not limited to the drawing of inferences from the facts of accentuation laid before us in the texts; our chief sources of knowledge are the Hindu grammarians, who have treated the subject, as they have most other departments of grammatical theory, with great fullness and acuteness. The great grammarian Pânini, whose work has become the acknowledged authority for all after time, is clear and intelligible in his statements as to accent; and upon the foundation of his work and its commentators alone, without access to any accented texts, Böhlingk gave in 1843* an acute, intelligent, and very correct account both of the theory and of the main facts of Sanskrit accent, one that in many respects has not been surpassed or superseded by anything that has since appeared. But the brevity of Pânini is most acceptably supplemented by the more detailed statements of the Prâtiçâkhyas. These are treatises which attach themselves each to a single Vedic text, as phonetic manual of the school to which that text belongs. They deal with all the elements of articulate utterance—with the mode of production and the classification of articulate sounds, with accent and quantity, rules of euphonic combination, and the like; and they prescribe how the various forms of text in which their Veda is preserved are to be constructed, cataloguing its slightest irregularities of form, and endeavoring to fix its readings beyond the reach of question or change. Four such treatises have come to light: one belonging to the Rig-Veda, one to the White Yajus or Vâjasaneyi-Sanhitâ, one to the Black Yajus or Tâittirîya-Sanhitâ, and one to the Atharva-Veda; for the Sâma-Veda alone none has yet been found.

* *Ein erster Versuch über den Accent im Sanskrit*, von Otto Böhlingk, in the *Memoirs of the St. Petersburg Academy*, vol. vii., series 6th, 4to.

Prior to the publication of any of them, the teachings of the first three with regard to accent were summarily presented by Roth (who was the first to call the attention of scholars to this class of works) in the Introduction to his edition of Yâska's *Nirukta* (Göttingen, 1852, pp. lvii.-lxxii.). All have been since edited in full; the Rik-Prâtiçâkhyâ by Regnier (in the *Journal Asiatique*, Paris, 1857-9) and Müller (Leipzig, 1856-69), the Vâjasaneyi-Prâtiçâkhyâ by Weber (in his *Indische Studien*, vol. iv., Berlin, 1858), the Atharva-Prâtiçâkhyâ and the Tâitirîya-Prâtiçâkhyâ by myself (in the *Journal of the American Oriental Society*, vols. vii., 1862, and ix., 1871). I have also discussed—with more fullness, I believe, than any one else has found occasion to do—some of the general questions relating to the subject, in a critique on Bopp's *Accentuations-system*, in the *Journ. Am. Or. Soc.* (vol. v., 1856, pp. 195-218), and in the note to *Ath. Prât.* iii. 65 (*Journ. etc.* vii. 494 ff.); and have set forth the rules respecting the accent of the verb in the sentence, with illustrations from the Atharva-Veda, in the same *Journal* (v. 387 ff.).

The information which we derive from all these enumerated sources is full enough, not only to let us see clearly the views held by the ancient Hindu grammarians (their age, unfortunately, is not ascertained, but is generally believed to precede by some centuries the Christian era) respecting the accent of their learned and sacred language, but also to enable us in some measure to trace the development of their accentual theory, and to criticize it in its details. For, though we cannot help admiring and respecting, and in a very high degree, the acuteness and sagacity of those oldest known students of phonetics, we cannot accept for truth what they give us without first carefully questioning it, and testing it by fact and by theory; and we shall be likely to find in their treatment of more than one point their characteristic and national weaknesses, and to be led to modify and amend their doctrines.

The general name given to accent is *svara*, which means literally 'tone;' and, in virtue of this meaning, is applied also to designate other things beside accent. Thus, it is the name of a 'vowel,' as being a *tone*-sound, an utterance in which the

element of tone predominates over that of articulation ; and it is in the Prâtiçâkhyas used a dozen times in this sense to once in any or all others. It designates, moreover, the 'tones' or musical notes which compose the scale. There is, then, nothing about the word that necessarily implies a particular theory respecting the nature of accent ; although the absence of any reference in it to stress or force of utterance, and its connection with musical pitch, are distinctly suggestive of a musical theory.

This suggestion is made a certainty by the names and definitions of the separate accents or "tones." Of these, three are recognized, and they are called respectively *udâtta*, *anudâtta*, and *svarita*.

Udâtta (passive participle of the root *dâ*, with the prepositions *ut* and *â*) means literally 'taken up, raised, elevated.' And the description of the accent by all the authorities corresponds with this title ; it is defined everywhere, in nearly identical terms, as being utterance *uccâis*, 'in a high tone.' (So Ath. Prât. i. 14 ; Vâj. Prât. i. 108 ; Tâitt. Prât. i. 38 ; Pân. i. 2. 29 ; the Rik Prât. alone, iii. 1, is less explicit, but its whole doctrine accords with that of the rest.)

Anudâtta is the same word with the negative prefix, and so means 'not elevated.' The authorities define it as signifying utterance *nîcâis*, 'in a low tone.' (See Ath. Prât. i. 15 ; Vâj. Prât. i. 109 ; Tâitt. Prât. i. 39 ; Pân. i. 2. 30 ; the Rik Prât. defines *udâtta* and *anudâtta* as characterized respectively by "tension" and "relaxation" — i. e. of the organs of articulation.) This lowness of tone does not imply, of course, a fall from the ordinary pitch of voice ; the tone is low as compared with *udâtta* ; it is the simple negation of that uplifting of pitch which marks the positively accented syllable.

The name of the third tone is *svarita*, and it is uniformly explained as consisting in a combination of the other two. Thus, Pânini and the Tâittirîya-Prâtiçâkhyas say, in identical phrase, *samâhârah svaritah*, 'the combination [of the two others, just defined] is *svarita* ;' the Vâjasañeyi-Prâtiçâkhyas has *ubhayavân svaritah*, 'one [i. e. a vowel] possessing both [the two tones as already defined] is *svarita* ;' the Rik-Prâtiçâkhyas

is more elaborate in its statement: "in case of the occurrence together of the two preceding [tones] in one syllable, the accent is *svarita*;" the Atharva-Prâtiçâkhya alone is here ambiguous, using a term (*âkshiptam*) which is not explanatory, but itself requires to be explained in accordance with what we know by other means of the theory involved. The further specifications added in nearly all the treatises make this definition still more unequivocal. Thus, Pâṇini (i. 2. 32) says, "half [the quantity of] a short vowel at its beginning is *udâtta*;" the Ath. Prât. (i. 17), "half the quantity of a *svarita*, at its beginning, is *udâtta*;" the Vâj. Prât. (i. 126), "at its beginning, half the quantity of the vowel is *udâtta*." The other two Prâtiçâkhyas complicate the definition with a further development of the accentual theory, to be explained hereafter; but in regard to the essential characteristic of the accent, that it is a union of higher and lower tone in the same syllable, they accord entirely with those already quoted. The Rik Prât. (iii. 2, 3) says "half a mora, or half the quantity, of this [*svarita*] is higher than *udâtta*; the following remainder is *anudâtta*, but is heard as *udâtta*"—that is to say, the descent of tone, instead of being from *udâtta* to *anudâtta*, is from a higher pitch than *udâtta* down to something sensibly equivalent to the latter. And the Tâitt. Prât. (one of whose peculiarities it is everywhere to quote conflicting opinions on controverted points) says, yet more at large (i. 41-7): "of this *svarita*, when it immediately follows an *udâtta*, the beginning, to the extent of half a short vowel, is uttered in a higher tone than *udâtta*; the remainder is equivalent to *udâtta*; or, this following part is in a lower tone; or it is equivalent to *anudâtta*; the teachers say that the first part is equivalent to *udâtta* and the rest to *anudâtta*; some hold that the whole is a downward slide."

We thus see that there is no discordance whatever among the ancient Hindu grammarians with regard to the nature of the *svarita* accent, as being the union of a higher and lower tone upon the same vowel, or within the same syllable. No hint of a different explanation is given us, nor do we discover any traces of the former prevalence of another view, crowded

out and replaced by this. Of the name *svarita*, however, by which it is called, it is exceedingly difficult to find a satisfactory explanation. The word is most likely a quasi-participial formation from *svara* itself, and means 'toned;' possibly it was applied to the syllable because this exhibited all the tones which have to be taken account of in accentuation; or because the element of tone was most conspicuous in it; its change of pitch gave it a sing-song or cadenced effect. That it signifies 'accented,' in our sense of that term, there is no reason whatever for supposing. Other conjectural explanations, of which not a few have been ventured, may be left here unnoticed. What is unmistakably clear with regard to it is the view which the Hindus unanimously held as to the nature of the accent which it designated; and any interpretation which we may try to put upon it must be subordinated to this; we have no right to make an etymology of the name, and then force it into a definition of the thing.

Such being the defined character of the three tones, their accordance with the Greek acute, grave, and circumflex, as defined above, in Prof. Hadley's paper, is clear and undeniable; and the accentual system either of the Greek or the Sanskrit, if it needed any support from without, would find it abundantly in this close parallelism with the other. There being no possibility of a copying of the accentual theory on either side, both must be regarded as independently founded upon the facts of the two languages, and as faithfully and fairly representing them. And we are justified in setting aside, when speaking of the Sanskrit accents, the outlandish Sanskrit terms, and employing instead of them the familiar designations "acute," "grave," "circumflex."*

Unless, indeed, we shall find sufficient evidence somewhere in the phenomena of accentuation of either Greek or Sanskrit to convict the native grammarians of having blundered in their observations and deductions. And that this is not the

* These were used by Böhtlingk, in the essay which first opened to Europe the knowledge of the Sanskrit accent; and the more the latter is understood, the more generally will they be adopted.

case as regards the Sanskrit, I shall endeavor to show by a concise exhibition of the rules for the occurrence of the *svarita* or circumflex in that language.

The circumflex in Sanskrit is a rare and inconspicuous phenomenon as compared with the Greek. Only a very small class of words have it as their proper accent, and it arises chiefly in the course of the combination of words into phrases, by the peculiar euphonic system of the Sanskrit, which, as is well known, does not leave its words to stand independently side by side, but adapts their final and initial elements to one another, avoiding the hiatus, or any collision of incompatible consonants.

The first class of circumflexes arises when an acute *i* or *î*, or *u*, is converted into *y* or *v* before an unaccented dissimilar vowel. Thus, *vi* and *evá* are combined into *vyéva**; *nadí*' and *asya* into *nadyáasya*; *apsú* and *agne* into *apsvagne*. That is to say, the single syllable into which the higher and lower tone are combined still retains the double pitch belonging to its constituent parts. This kind of circumflex is in all the Prâtiçâkhyas† styled *kshâipra*, literally 'hasty, quick,' as being accompanied with an abbreviation of quantity, in the contraction of two syllables into one.

One of the most peculiar and problematical processes in the whole Sanskrit euphonic system is that by which a final *é* or *ô* absorbs or elides an initial *á* of the word that follows. This, which has become the regular and necessary mode of combination in the later or classical Sanskrit, was only an occasional license in the older Vedic language; in the Atharva-Veda, for instance, the *a* was elided in only a little more than one-sixth of the cases in which it followed *e* or *o*. Wherever, now, the *e* or *o* was acute and the *a* grave, the accent of the former after the absorption of the latter was made circumflex. Thus, *té abavan* became *tèbravan*; *só abavit* became *sòbravit*.

* For want of means to do better, I signify the circumflex accent by what we ordinarily call the sign of grave; the sound represented (in accordance with usual custom) by *v* is that of our *iv*.

† The distinction, namely, of the kinds of circumflex, with the corresponding nomenclature, is unknown to Pâpini.

Here, again, the acute and grave tones of the constituent elements are both represented in the circumflex given to the syllable that results from their combination. This second circumflex is styled *abhinihita* (or, by the Tâitt. Prât., *abhinihata*): the literal meaning and ground of application of the term are not very clear.

In case, however, the accent of the two elements is other than has been defined, no circumflex arises; if the second element is acute, the combination is acute; if the first as well as the second is grave, the combination, of course, is grave also.

If, moreover, two vowels are fused together into a single vowel or diphthong, then, if either was acute, the resulting combination, as a general rule, is also acute: that is to say, the acute element is powerful enough to assimilate the other, raising the whole syllable to the higher tone. Thus, *sá'* and *asti* become *sá'sti*, *sá'* and *eshá'* become *sá'ishá'*, *sá'* and *út* become *sót*; *nayati* and *indraḥ* become *nayati'ndrah*; *stha ú'rjam* becomes *sthórjam*; and so on. This is the rule laid down in all the Prâtiçâkhyas; and all the Vedic texts of the first rank, the Saṁhitâs, conform to it. Pâṇini, however (at viii. 2. 6), also permits the result of combination of a final acute with an initial grave to be circumflex; that is, he allows *sá' asti* to become either *sá'sti* or *sá'sti*, and so on. And there is a single Vedic text of the second order (the Çatapatha-Brahmana, belonging to the White Yajur-Veda) which makes its combinations in this manner circumflex. Of course, this is just the exception which we might expect to see made, considering the nature of the circumflex; and that it is not universally recognized in Sanskrit usage indicates the very different position which the circumflex takes in the Sanskrit system, as compared with the Greek: the latter language has a predilection for it, and lets it appear in innumerable cases where it has no etymological justification; the former has a prejudice against it, and exhibits it only where compelled, as it were, to do so.

But there is one exceptional and infrequent case where the Prâtiçâkhyas require, and Vedic usage shows, a circumflex as result of the fusion of an acute vowel with a grave into one.

It is where two short *i*'s are combined, forming long *î*. Thus, *divi iva* becomes *divîva*, *abhî ihî* becomes *abhîhi*, and so on. This appears very arbitrary, as we can see no reason why *î* under such circumstances should receive a circumflex accent any more than *â*, or *û*, or the diphthongs *e*, *âi*, *o*, *âu*. And the impression of arbitrariness is increased when we come to notice that one Prâtiçâkhya (the Tâitt. Prât., at x. 17) denies the circumflex to *î*, but gives it to *û*, combining *mâsû ut* into *mâsû't*, and so on. This is equivalent to restricting still further the occurrence of the circumflex in question: there are no more than sixteen cases of *î* in the whole ample text of the Atharva-Veda; but there are only five of *û* in the yet ampler Tâittirîya-Sanhitâ (which contains about thirty passages in which *î* would appear, if the usage of the text permitted). This rare and anomalous circumflex is styled *praçliṣṭa* (or *praçliṣṭa*), 'resulting from fusion.'

Such, then, are the cases in which a circumflex arises by the combination into one syllable of a preceding acute and a following grave element. Besides these, there is a limited class of words which show a circumflex as their proper and sole accent: for example, the nouns *svâr*, 'heaven,' and *kanyâ*, 'girl,' the particle *kvâ*, 'where?', the adjective *budhnyâ*, 'fundamental,' and so on. But every word of this class contains a *y* or *v* before the vowel of its accented syllable; that is to say, the syllable is of the same kind with those which in combination receive the *kshâipra* circumflex; and it is obvious that the circumflex is indeed essentially a *kshâipra*, its origin lying merely a step further back. By this I mean, that *kanyâ* and *kvâ*, for example, stand for more original *kani-â* and *kû-a*, so that the circumflex of *kanyâ* is precisely analogous with that of *nadyâsya* from *nadi asya*. And the Vedic verse clearly shows that the fusion of the two syllables into one, with consequent circumflex, is a fact not yet accomplished in Vedic times: such syllables are more often to be read as two than as one, *kvâ* becoming dissyllabic, *kanyâ* trisyllabic, and so on. Indeed, the Tâittirîya-Sanhitâ (which has a peculiar orthographic usage with regard to a part of these words) regularly writes *sûvar* instead of *svâr*, *budhniya* instead of *budhnyâ*, and

so on— while, on the other hand, it resolves *indrāgnyōs* into *indrāgnyōs*, *bāhvōs* into *bāhuvōs*, and so in other like cases.

To the circumflex accent which thus appears as the original accent of a word, and does not arise in the course of the euphonic combination of words into phrases, most of the Hindu grammarians give the name of *jātya*, 'native, natural;' the Tāitt. Prât. alone calls it *nitya*, 'constant, unchanging.' We may class the cases of its occurrence under four heads:

a. Words like *svār* and *kvā*, of which the derivation is obscure or without extended analogies.

b. Words having the circumflexed suffix *yā* (representing *t-a* or *t̄-a*), like *kanyā*, *vīryā*, *dhanvanyā*, *saṁsrāvyā*: this class is a pretty large one.

c. Forms of declension made by adding an unaccented case-ending to an accented final *i* or *ū*: thus, *svādhyās* from *svādhi*; *lalāmyām* from *lalāmi*; *tanvās*, *tanvām*, *tanvè* from *tanū* (these last are especially frequent; the Tāittirīya-Saṁhitā writes them *tanūvas*, *tanūve*, etc.), *prḍākvās* from *prḍakū*. These are mostly nominatives singular dual or plural, or accusatives singular or dual, since the endings of all the cases except these five tend to draw the accent forward upon themselves; and so we have, for example, from *nadī*, the nom. dual *nadyāū* and nom. pl. *nadyās*, but in other oblique cases *nadyā'i*, *nadyā's*, etc., just as we have from *nā'us* the nominatives *nā'vāu* and *nā'vas*, but the oblique cases *nāvé*, *nāvās*, *nāvī*, etc.

d. Accented vocatives, like *dyā'us*, *jyā'ke*. It is the rule, namely, in Sanskrit, that the vocative, if accented at all, is accented on its first syllable. If, now, this syllable, as written, is one of which a semivowel preceding the vowel has in the metre the value of a syllable by itself, that element alone takes the acute tone, and the written syllable is circumflexed. The words given above, therefore, are equivalent to *dī-āus*, *jī-āke*, and have to be so read in scanning the verses in which they occur. The case is quite a rare one; it occurs, I believe, only twice in the Atharva-Veda (at i. 2.2 and vi. 4.3: but in the latter passage the edited text reads incorrectly *dyā'us*),

and I presume there are hardly more than that number of cases in the Rig-Veda.

To illustrate the degree of frequency of the circumflex accent in actual use, in its different kinds, it may be stated that in the first twenty hymns of the Rig-Veda (about two hundred lines, mostly of twenty-four syllables each; a part, of thirty-two), there are but ten cases of it, namely six *ksháipra*, one *abhinihita*, and three *játya*; of which last, there is one case each falling under *a*, *b*, and *c*. In the first *praçna* or chapter of the Tãittiríya-Sanhitã, again (a somewhat less body of text, chiefly prose), there are six *ksháipra*'s, eleven *abhinihita*'s, and three *játya*'s (all falling under *b*). In the first book of the Atharva-Veda (having about the same extent as the passage from the Rig-Veda already reported), once more, there are forty-six cases; eleven *ksháipra*'s, three *abhinihita*'s, and thirty-two *játya*'s; of which last, ten fall under *b*, twenty-one under *c*, and one under *d*.

The diversity thus appearing between the different passages compared is in part accidental, in part characteristic of the texts from which they are respectively taken: in general, it will probably be found that the *ksháipra* circumflex appears oftenest, and the *játya*, its nearest kindred, next; the *praçlisha*, as already explained, is by far the rarest of the four.

So far, there is nothing difficult or questionable either in the theory or in the practice of Sanskrit accentuation, and all the phenomena are of a nature to favor and establish the truth of that description of the nature of the *svarita* or circumflex accent which is given by the grammarians. But we have next to consider an addition to the theory which is of a very problematical character. The native authorities, namely, teach unanimously that a syllable naturally grave, if it follows an acute, in any part of a word, or in a succeeding word in the same phrase, takes the circumflex tone. Thus, the Rik-Prãtiçãkhyã, which makes the fullest statement, says (iii. 9) "a grave syllable preceded by an acute is circumflexed, whether separated from it by a hiatus or by a consonant;" and the others teach virtually the same thing.* That is to say (as

* See Váj. Prát. iv. 134, Tãitt. Prát. xiv. 29, 30, Ath. Prát. iii. 67, Pãp. viii. 4. 66.

we may state to ourselves the virtual meaning of the doctrine), the voice, when once raised to the higher pitch of acute, is not able to descend to the general level of utterance in the interval between the acute syllable and its successor, but slides down in the course of the latter; it occupies a syllable in its descent. Thus, *īti* is not grave, but circumflex, on its final; *sā'* and *asya* become *sā'sya* with circumflex on the last *a*; the *bru* of the toneless *bruvanti* is circumflexed in the combination *tē bruvanti*, and so on. This circumflex, by European grammarians, is conveniently distinguished from those which have been described above by being called the "dependent" or the "enclitic" circumflex: the term, however, has no correspondent in Sanskrit, nor do the Hindu grammarians, by description, classification, or designation, intimate a recognition of any difference in character between the enclitic and the independent varieties of this accent. The Prâtiçākhyas divide the former, as they do the latter, into sub-varieties, calling *tâirovyañjana*, 'having consonants interposed,' a circumflex vowel between which and the occasioning acute consonants intervene (as in the examples above cited), and *pâdavr̥tta*, 'with word-hiatus' (or, in the Rik Prât., simply *vâivr̥tta*, 'with hiatus'), one that is separated from the acute by the hiatus that sometimes intervenes between two words (as in the *u* of *yâ' u ca*, from *yâ' h u ca*, and of *tâ ucyante*, from *tē ucyante**). No attempt is made to describe these two varieties as exhibiting

* There are unimportant differences among the different Prâtiçākhyas in regard to the classification of the enclitic circumflexes. The Vâj. Prât. (i. 118) makes a special class, *tâirovirâma*, 'with intervening pause,' of those which are separated from the occasioning acute by the pause which in *pada*-text divides the two parts of a compound word: thus, *gô patâ' i* or *yajñâ' patim* has this kind of circumflex on *pa*; and it is probable that the Tâitt. Prât. (xx. 3) intends to designate the same as *prâtiçâta*, though the native commentary understands the case otherwise, and makes *prâtiçâta* signify a circumflex standing in another word than the acute and separated from it by consonants, like the *â* of *yâ' trâ*, or the *u* of *tē bruvanti*, as given above. The Tâitt. Prât. further confines the name *pâdavr̥tta* to cases involving a hiatus between two independent words, and in the exceedingly rare cases where there is a hiatus within the word itself (as in *prâügam*), classes the circumflex as *tâ'rovyañjana*, though there is no 'intervention of consonants' at all here. And the Vâj. Prât. (i. 120) has a peculiar name, *tâthâbhâçya*, for the very uncommon and somewhat anomalous case of an enclitic circumflex between two acutes.

any difference of character, and their distinction is evidently only an example of that tendency to over-refinement in classification which is characteristic of Hindu systematists.

It is not possible to accept the teachings of the Sanskrit grammarians as to the enclitic circumflex with the same trust as those respecting the independent circumflex. Even the Greek, which shows a marked predilection for the circumflexed tone, never admits it save in an actually long vowel, not finding room elsewhere for the exhibition of the double tone or downward slide. And the Sanskrit, as we have seen, has so much less inclination to this tone, or capacity for it, as to admit it only in very rare cases even upon a long vowel or a proper diphthong: to bring it out, there is needed an improper diphthong, as we may fairly call it—a vowel-group in which the first element is an *i* or *u* sound, written as a *y* or *v*, but still evidently retaining in good measure its vowel value and its capacity of tone. In a language of this habit, then, it is next to incredible that we should find a circumflex tone developed with the utmost freedom even in short vowels (as the finals of *iti* and *mādhu*) by the simple neighborhood of an acute. We cannot, so it seems to me, avoid suspecting the accuracy of the observations which underlie the whole theory of the enclitic circumflex. The Tâittirîya-Prâtiçâkhya is ingenuous enough to inform us (xiv. 33) that some authorities denied this circumflex *in toto*. If we do not carry our own skepticism so far as that, we shall be likely to take refuge in the theory of a “middle tone,” like that assumed by Misteli and Hadley (see the preceding article, p. 11.) in explaining the peculiarities of Greek and Latin accent. This would imply that the enclitic tone which was perceived to lead down from acute pitch to grave was in reality a step intermediate between the two, and was hastily and inaccurately apprehended by the Hindu grammarians as a combination of the two, or a slide, and so identified with the independent circumflex, of which the origin and character were too clear to admit of any doubt or question. Through this modification of the Hindu theory, we may win from the Sanskrit enclitic circumflex a degree of support for the “middle tone;” but it is necessary

that we understand and confess the fact of the modification. Quietly to assume, as Misteli does, that the whole Sanskrit circumflex, in both its independent and its enclitic varieties, is only a middle tone, is wholly unallowable, being opposed to the plain and unanimous statements of the Hindu grammarians, and, not less, to the teachings of a sound accentual theory.*

A single exception is made by all the Hindu text-books to the rule that a grave syllable following an acute takes the enclitic circumflex: if, namely, an acute or a circumflex (of course, independent) immediately follows, the grave retains its proper quality. Thus, in *yé ca*, *ca* is circumflexed; but in *yé ca té* or *yé ca svâr* it is grave (Rik Prât. iii. 9, Vâj. Prât. iv. 135, Tâitt. Prât. xiv. 31, Ath. Prât. iii. 70, Pân. viii. 4. 67). The Tâittirîya-Prâtîçâkhya (xiv. 32) reports a single grammarian (Âgniveçyâyana) as disallowing this exception, and maintaining the circumflex even before a syllable having or beginning with high tone; and Pânini (viii. 4. 67) mentions three authorities (Gârgya, Kâçyapa, and Gâlava) as holding the same doctrine. I do not see that theoretical considerations teach us anything with definiteness upon this point; we should quite as naturally, however, in my opinion, expect the enclitic tone, whether slide or middle tone, to maintain itself before an acute or circumflex as well as before a grave.

These are the principal features of the system of Sanskrit accentuation. We need, however, to follow it out into one or two further details, important as regards the native theory; and, before we can do this, we must take note of the Hindu

* It would almost seem that Misteli's view was to be looked upon as the Italian one, since Ascoli also, in his lately published lectures on comparative philology (*Corsi di Glottologia* etc., first part, Comparative Phonology of the Sanskrit, Greek, and Latin, p. 15), expresses himself upon the subject as follows: "The syllable, finally, that follows the acute, becomes *svârîta*, 'tonic,' or, in other terms, assumes the *svârîta* accent—which some European grammarians (infelicitously, as it appears to me) have called 'circumflex'—; that is to say, it has a tonality higher than the ordinary, but not so high as is that of the syllable with acute." A scholar of Ascoli's rank and claims to respect should not allow himself thus summarily to set aside the carefully deduced results of his predecessors, without bringing up a single consideration to support the view he takes.

mode of designating accent. This is in the main the same in all the accentuated texts: some minor differences will appear as we go on; others may be passed over as of no importance to our purpose.*

By a striking — and as I think, an ill-judged and unfortunate — peculiarity of usage, the Hindu does not designate directly the really accented or acute syllable, but, instead, its surroundings, or the preceding grave and the following circumflex. Or, as we may express it, the acute syllable is left unmarked; but the grave syllable is marked, by a horizontal stroke beneath the syllable; and the circumflex (whether enclitic or independent), by a perpendicular stroke above. In the manuscripts (so far as I know, without exception), these strokes are added in red ink; in printed text, of course, they have to be represented by black lines.

Thus, examples of single words (with transliteration, accented according to our method, written below each word) are

1. अग्निना । कुरिष्यसि । चोद्यित्रिभिः ।
a-gní-ná ka-ri-shyá-si co-da-yi-tri'-bhiḥ

An independent circumflex is generally to be distinguished from an enclitic (of which latter kind are those in the above examples) by having no unmarked acute before it: thus

2. स्वः । कन्या । यातुध्यान्यः ।
svàḥ ka-nyá yá-tu-dhā-nyāḥ

A word that is unaccented has the mark of grave under every syllable; an acute monosyllable has no mark at all; and an initial acute has, of course, no grave mark before it, nor a final acute any circumflex mark after it: thus

3. च । वक्षति । सः । पोषम् । अग्निम् । सुवृषकृतम् ।
ca va-kṣa-ti śáḥ pó-sham a-gnim su-rú-pa-kr-tám

We may conjecture plausibly enough that these marks are symbolical: the horizontal line below intimates the lower tone

* The designation of the independent circumflex in the White Yajur Veda is in sundry points peculiar; see Weber's edition, Preface, p. x.

at which the voice moves on; the other directs the voice downward from a higher key.

This mode of accentuation would seem to involve an excessive repetition of the sign of grave tone; but the difficulty is avoided (as we may provisionally say) by omitting all signs of grave after a circumflex except under a syllable that precedes another acute or an independent circumflex. In this way, there is no repetition of the grave sign under successive syllables except at the beginning of a word or phrase, before the first accented syllable is reached. Thus,

६. होतारम् । रत्नधातमम् । चित्रश्रवस्तमः ।
hó-tá-ram ra-tna-dhá-ta-mam ci-trá-śra-va-sta-mah

The same rule is followed, of course, where words are combined into phrases; and

७. अग्ने । यम् । यज्ञम् । अध्वरम् । विश्वतः । परिभूः । अस्ति ।
á-gne yám ya-jñám a-dhva-rám vi-śva-tah pa-ri-bhū'h á-si

becomes, as a sentence,

८. अग्ने यं यज्ञमध्वरं विश्वतः परिभूरस्ति ।

In this phrase, it is to be noted, the *e* of *agne*, which was enclitically circumflex when the word stood alone, becomes grave again (by the rule stated above, p. 33) when the acute syllable *yám* comes to stand after it: and, on the other hand, the grave initial *a* of *adhvarám* takes the enclitic circumflex when conjoined with the acute final of *yajñám*. The penultimate and antepenultimate syllables of the line, as both alike standing between grave and circumflex signs, are both acute, the voice when once sent up by the former sign remaining raised until sent down again by the latter. In the same manner, when conducted down by the circumflex sign, it continues at the lower pitch till the other directs it to go up: an example illustrating more fully this effect is

९. ओमासश्चर्षणीधृतो विश्वे देवासु आ गत ।
ómāsaś carṣaṇīdhṛto viśve devisa á gata

where the first four words are vocatives, and the last a

finite verb in an independent clause—both of which classes of words are toneless in Sanskrit, except when, like the first and third words, they stand at the head of a sentence or of a primary division of a verse.

I will note here but one other peculiarity of the mode of designation: namely, that if an independent circumflex follows an acute, it is in no way distinguished from an enclitic circumflex; so that, for example, in

a. ताः स्वर्वतीः

it is impossible to tell whether the latter word is a toneless vocative, *svarvatīh*, or a nominative or accusative with its regular accent, *svārvatīh*.

It thus appears that two classes of syllables in accented text are left unmarked: first, those which are properly acute or *udatta* (as *ó*-, *víg*-, and *á*’, in the last example but one); and second, those which are properly grave or *anudatta*, but which neither receive the enclitic circumflex as following an acute, nor are marked by the grave sign, as preceding an acute or circumflex. But there is a strange and perplexing addition to the Hindu theory which virtually identifies these two classes with one another in respect to tone: and this we have next to examine.

The point is thus stated in the *Tāittirīya-Prātiçākhyā* (xxi. 10, 11): “in continuous text, after a circumflex, a series (*pracaya*) of grave syllables has the tone of acute (literally, ‘sounds, or is heard, as acute’), except the syllable that is followed by an acute or circumflex.” The other *Prātiçākhyās* have equivalent rules (*Rik Prāt.* iii. 5, 11, 12; *Vāj. Prāt.* iv. 138–40; *Ath. Prāt.* iii. 71, 74).*

*The *Vāj. Prāt.*, in describing the character of the accent, uses the term *uddtamaya*, ‘made of, or of the same material as, acute,’ instead of (like the rest) *udattaçruti*, ‘having the audible quality of acute.’ The *Rik Prāt.* states the rule twice over, calling the tone once (in verse 11) *udattaçruti*, and once (in verse 5) *udatta*, ‘acute,’ outright; it also adds one or two peculiar items, the first to the effect that “some, however, depress (to grave tone) one syllable, or more than one, at the end of the series; or even all but one or two;” the other (verse 13) is too obscure to be made intelligible without more exposition and discussion than we have room for here.

To this accent is given the name *pracaya*, 'accumulation, indefinite series,' or *pracita*, 'accumulated, indefinitely continued,' from the way in which it is liable to run on, to the extent, sometimes, of ten or a dozen syllables, or more.*

According to the Prâtiçâkhyas, then, the treatment in continuous text of syllables naturally grave is as follows: a single such syllable following an acute before a pause becomes an enclitic circumflex, but before another acute or circumflex retains its grave character (compare *agne*, above, illustrations 5 and 6); of two such syllables, the first always has the circumflex, the second is either grave before another accented syllable (as *-dhva-* in illustration 6), or *pracaya*, with acute tone, before a pause (as the finals in the last two words in 4 and the last in 7); of more than two, either all but the first and last, or all but the first, are *pracaya* (as *-saç carshanîdhr-* and *devâ-* in 7, or *-vastamaḥ* in 4);—after a circumflex, the treatment is the same, with the exception that the first syllable is not circumflexed, but remains grave or becomes *pracaya*, according to the character of what follows it;—finally, any number of grave syllables coming before the first acute or circumflex in a phrase retain their grave character.

The striking result of this is, that there comes to be a complete accordance between the theoretical tone of each syllable and the way it is marked. Every syllable that has the perpendicular stroke above it is circumflex, and of the same tone, whether the circumflex is independent or enclitic; every syllable that has a horizontal mark beneath is grave, or of low tone; every syllable that has no mark at all is of high tone, whether it be properly acute, or originally grave and converted to *pracaya*.

An interesting and important question now arises: What is the ground of this complete accordance? Is the mode of designation posterior to the theory? Did the Hindus leave the *pracaya* grave syllables unmarked, like acute, because

* For example, in the series of toneless vocatives *agne dudhra gahya kimçila vanya*.

they gave them the tone of acute, so that their identity of treatment is due to a perceived identity of character? or, on the other hand, was the omission of a part of the marks indicating grave tone made for the sake of convenience, of brevity (as I have, provisionally, assumed above to be the case), and is the theory an afterthought, suggested by the identity of designation, and aiming to establish a corresponding identity of character?

To many scholars, perhaps even to nearly all, the question I have raised will seem strange, and the latter of the two suggested explanations one altogether to be rejected, as implausible and incredible. Nevertheless, I am convinced that the matter merits a serious discussion. And, in the first place, we shall not, I think, be doing the ancient Hindu grammarians an utter injustice, in supposing them capable of fabricating a theory like that of the *pracaya*-accent, under the inducement stated above. The "schools" of Vedic study in which the Prâtiçâkhyas originated were far removed from the period in which their sacred texts had grown up, or even had been brought into their present shape; and these texts had begun to be treated in more than one respect in a somewhat formal, arbitrary, and unintelligent manner. The acuteness of observation, and the skill in combination and systematization, displayed by the grammarians, as by the Hindu workers in other departments of science, are worthy of high admiration: but we cannot equally commend their moderation, nor is their soundness to be trusted to the end. They never knew where to stop; and their systems, as has been said elsewhere, always tended to take on a prescriptive character where they were intended to be descriptive only — putting violence upon the facts which they set out simply to examine and classify. I should not be restrained from regarding the *pracaya*-accent with acute tone as a later and artificial addition to the original accentual theory by any exaggerated faith in the infallibility of the authorities who report it to us.

A single scholar, of high rank, and especially conversant with the Prâtiçâkhyas,* has, it is, true, maintained that the

* M. Müller, in his History of Ancient Sanskrit Literature, p. 497ff.

Prâtiçâkhyas antedate the use of writing in India, and do not presuppose any recorded text at all. But, if I am not mistaken, this view of his is generally rejected as paradoxical. The Prâtiçâkhyas do, indeed, like most of the sacred literature of India, and some of its literature in other departments, studiously and successfully ignore everything written, and acknowledge only the oral tradition of the schools as the lawful channel for the conveyance of knowledge from generation to generation; but, in the view of most men, such phonetic analysis as they make, and such fixation of the nicest details of reading as they imply, would be more than wonderful, it would be absolutely miraculous, without the aid of writing. A race that had made advanced and recondite studies in every department of grammar without even possessing an alphabet would be a greater prodigy than "the Anthropophagi, and men whose heads do grow beneath their shoulders."

The obstacle in the way of our accepting the doctrine of the *pracaya*-accent is the seeming impossibility of working it in as a part of the general accentual system, such as this has been described above. The acute is a syllable which is accented or rendered conspicuous by being lifted above the lower or grave tone of utterance: but what does this distinction amount to, if the grave syllables also are to be raised, even in masses, to the same level? What a strange grave tone is that which can only maintain itself by the help of an immediately following acute! What are we to think of the independent circumflex, made by the combination of an acute and a grave element, when the grave syllable, even without the encouragement of an acute joined with it, can hardly be held down at grave pitch, but is constantly rising to the higher plane of utterance? Yet worse, what sort of an enclitic accent is that which leads down the voice from acute pitch no-whither, since, the moment the transition is past, the voice leaps back again to acute?

The last of these difficulties, and the most insurmountable of them, seems to have been felt by the Hindu theorizers themselves, who have made a very curious attempt to avoid it: namely, by shifting the circumflex itself to a higher plane.

Thus, the Rik Prâtiçâkhyas (iii. 2, 3) "of this [circumflex], a half-mora, or the moiety, is more acute than acute; the following remainder is grave, but sounds like acute" (literally, 'is *udâttaçruti*,' which is the same term that is used in describing the *pracaya*). That is to say, the circumflex begins higher than acute, and descends only to acute pitch, thus conducting the voice to the level at which it then runs on in *pracaya*. And the Tâittirîya-Prâtiçâkhyas (i. 41, 42, 44, 45) declares "of this [circumflex], when it follows an acute, the beginning, to the extent of half a short vowel, is higher than acute; the remainder is the same with acute; or the remaining part is still lower; or it is the same with grave." Of these rules, the first two state the theory squarely; the others appear to express the scruples of those who are struck by its inconsistency with the fundamental principle, that circumflex is the combination of acute and grave within the same syllable. The remaining two Prâtiçâkhyas take no notice of any such modification of the nature of the circumflex. And, we may say, with very good reason; for nothing is really gained by it. On the contrary, it would be no less strange that the enclitic accent, the transition step from an acute to a following grave, should rise a grade above acute, and come down to acute itself, than that the grave to which it led should spring to the height of its first element. And, according to the Rik form of the theory, we should have the independent circumflex, arising out of the union of an acute and a grave element, and having no existence except as the result of such union, lifted up in all or nearly all its substance above acute pitch; while, in the Tâittirîya form, whether it were so lifted or not would depend upon the accidental circumstance whether it were preceded by an acute or a grave syllable. There would be no sense in our assuming that even an independent circumflex after an acute might be raised in pitch for the sake of clearer distinction from that acute; for it is sufficiently distinguished by its sliding tone; and, if it had any right to be further distinguished, an acute following an acute would have much more right; while, nevertheless, any number of acutes are

allowed to succeed one another, without modification of their natural character.

To my own mind, I must acknowledge, the difficulties that encompass the Hindu theory of a *pracaya* accent, giving to grave syllables the tone of acute, are more numerous and formidable than those involved in its rejection. If there be found any one, skillful enough to smooth these difficulties away, or to devise an explanation of the setting up of the theory other than that which I have suggested, no one will rejoice in his success more than I shall. But for the present, I shall discredit the existence of a fourth or *pracaya* accent, and shall hold it to be at least probable that this was fabricated merely in order to establish an identity of character in those syllables which, according to the current method of accentuation, agreed in their mode of designation—or rather, in being alike undesignated.

In what has been said of the *pracaya*, regard has been had only to the teachings of the Prâtiçâkhyas, since they alone distinctly recognize and name this accent. But in Pâṇini also appears a somewhat kindred doctrine. The great grammarian, namely, has the rules (i. 2. 39, 40) that “grave syllables, following in continuous text a circumflex, are uttered in monotone (*ekaçruti*); but one that is followed by an acute or circumflex is more depressed (*sannatara*, which the commentators explain by *anudâttatara*, ‘more grave,’ i. e. ‘lower than grave’).” Precisely what is intended, now, by *ekaçruti*, ‘monotone,’ is less clear than were to be desired. It is by the commentators defined to mean, ‘without distinction of acute, grave, and circumflex’; but, if it signified only this, there would seem to be no good reason for declaring it to belong to a series of grave syllables anywhere; these would of course all be uttered in the same tone, unless there should be given express direction to the contrary. The first mention of *ekaçruti* is a little above (in rule 33) where it is declared to be the tone used “in calling to a person from a distance;” and it is further prescribed in the rules that follow, for certain conjunctures of sacrificial ceremony from which we can infer nothing definite respecting it. But

certainly, in shouting to a distance a raising of the voice would seem to us a natural and almost necessary accompaniment of the obliteration of ordinary distinctions of tone. We have, then, both a negative and a positive reason for suspecting in Pânini's *ekaçruti* a peculiar and a higher tone, instead of a mere negation of varied tone; and so for recognizing a nearer relationship between his teaching and the *pracaya*-doctrine of the Prâtiçâkhyas than appears at first sight. An unequivocal sign of the same relationship is the prescription of a lower tone for the syllable, naturally grave, that precedes an acute or circumflex. Whether this actually means, as is generally assumed, a yet lower tone than grave, or only a lower tone than the heightened monotone of *ekaçruti*, it seems to me an equally unacceptable part of a sound accentual theory. I cannot recognize a positive sinking of the voice as a necessary or natural preparation for its rise to the pitch of acute.

I am not aware that any one has ever undertaken an investigation of the modes of accent usual among the modern languages of India for the purpose of casting light upon the ancient systems, as laid down in the grammatical text-books and exemplified in the Vedic texts. The mode of recitation of the Vedic texts themselves, however, as practiced by the native scholars of the present day, has been carefully observed by an eminent European Sanskritist, Dr. Haug (now of Munich), and reported in the *Journal of the German Oriental Society* (vol. xvii., 1863, pp. 799–802). I quote the most important paragraph:

“The fundamental law of the Vedic accent is a triplicity of tone. In by far the greatest number of cases the voice begins with a strong tone, the low tone, called *anudâta*, rises in *udâta*—which, however, has absolutely no perceptible tone [i. e. stress]—and only reaches its full height and force in the *svarita*, or high tone. The real chief accents are the *anudâta* and *svarita* alone, which are also constantly interchangeable, as is sufficiently shown by a comparison of the *pada* or word-recitation with the continuous or *sanhitâ*-recitation. The *udâta* is only a kind of auxiliary accent, and I could never, with the closest observation of the mode of recitation, perceive

that the syllable having *udatta* is really an accented syllable..... The *udatta* is only imperceptibly distinguished from the *pracaya* or entirely accentless syllable.”

A very cursory comparison of this description with the teachings of the Prâtiçâkhyas, reported above, will show how far the rules of utterance laid down and followed in the ancient schools of Vedic study are maintained in their modern successors. The identification of the unmarked acute with the unmarked grave, in point of tone and character, is the same now as of old. The distortion of the circumflex, by pushing it up to a higher position in the scale of tones, which had begun to appear in the Prâtiçâkhyas period, has now become complete. And, partly under the influence of these two causes, there has come about an absolute inversion of the original accentual relations. The effort has been to mark and distinguish by the voice the two tones that were marked and distinguished by writing. And so the old accented syllable, the acute — the central and determining point of the whole system, out of which and in strict subordination to which the others have their being — since it has no written sign, has sunk into insignificance, and become a mere “auxiliary” to the other two, which were fortunate enough to be plainly designated. The influence of the written sign on the theory and practice of the spoken accent here exhibited is an important support to the explanation suggested above of the origin of the so-called *pracaya* accent.

There is one further point in the theory and designation of the Sanskrit accent which it is desirable to consider, in order to make our view of the subject more complete. It is the *kampa* (literally ‘trembling, shake, trill’), or the peculiar modification undergone by an independent circumflex when followed by another circumflex or by an acute. This modification consists, according to the Prâtiçâkhyas, simply in a depression of the last portion of the circumflexed syllable to a lower than the ordinary pitch. Its explanation makes a very small figure in the rules of the different treatises. In the Vâj. Prât. (iv. 137) it is so obscurely stated, and in such ambiguous connection, that it would hardly be intelligible, but

for the comparison of the other kindred works, and the light that the written form of the texts throws upon it. In the Rik Prât., also, it appears only as an exception to the definition of the ordinary character of the circumflex: the latter part of the circumflex is grave, but has the tone of acute—"except when an acute or circumflex syllable is spoken immediately after it" (iii. 3). The Ath. Prât., however, says distinctly that, of the varieties of independent circumflex, "when followed by an acute or a circumflex, a quarter-mora is depressed" (iii. 65). And the Tâitt. Prât. (xix. 3) mentions it as "the opinion of some authorities that, in a circumflex that is followed by a circumflex [not by an acute, as well], a quarter-mora is depressed." The mode, however, of designating this peculiarity is in nearly all the texts a very conspicuous one, and involves an element of prolongation of the vowel suffering *kampa*, of which the Prâtiçâkhyas give no hint, and which is intimated by writing a figure, 3 or 1, after the vowel. Thus, the Rig-Veda writes *tishyò yáthá* and *yò hyò vartanîh* as follows:

9. ति॒ष्यो॑३ यथा॑ । यो॑३ क्षो॑ वर्त॒निः ।

If the affected vowel is short, the Rig-Veda writes a 1 instead of a 3 after it: thus,

10. न्य॒॑न्यं॑ स॒हसा॑ ।
ny à-nyám sá-ha-sá

The Sâma-Veda (to which there is no known Prâtiçâkhyas), however, always lengthens the vowel in such a case—thus, *ny á-nyám*—and so writes a 3 after it, without exception. What is the proper usage in the Atharva-Veda is somewhat doubtful, since the known MSS. are very irregular and inconsistent in this whole class of cases; but the editors of the published text have adopted and carried out the method of the Rig-Veda. In the Tâittirîya-Sanhitâ, the modification is, in accordance with the doctrine referred to in its Prâtiçâkhyas, restricted to the case of a circumflex followed by a circumflex; the figure used is always 1, and the affected vowel, if short, is lengthened: thus,

11. दे॒व॒त्याँ॑ꣳ क्ये॒तत् । सो॑ꣳ ज्यो॑ꣳ ऽभ्य॑म्रियत् ।
 de-va-tyā'ñ hy è-tat sò 'pò 'bhy à-mri-ya-ta

devatyā'ñ in the first example being from *devatyām*. The Vájasaneyi-Sanhitá alone leaves the quantity of the vowel unchanged, and uses no figure, but only a modification of the usual circumflex stroke beneath the vowel.

Whatever may be the origin of this peculiar doctrine and designation, it answers in the majority of texts (Rik, Sâman, Atharvan) a useful purpose by distinguishing in many cases an acute syllable from a *pracaya* grave after a circumflex. Thus, in the last examples quoted, the accentuation does not show us that the final *-tat* in the one case is acute, and that the final *-mriyata* in the other is *pracaya*, while, as written by the Rig-Veda—namely,

12. दे॒व॒त्यं॑ꣳ क्ये॒तत् । सो॑ꣳ ज्यो॑ꣳ ऽभ्य॑म्रियत् ।

the difference is brought clearly to light. But that this practical advantage had any thing to do with the development of the theory, is not lightly to be assumed. The designation seems to signify that the circumflex vowel, in order to the reduction of its latter portion to *anudatta* tone, or to a yet lower pitch, requires to be somewhat prolonged in quantity, either by a single added mora or by extension to three moras. But the whole subject is quite obscure, and I do not venture to enter here into the discussion of it, for fear of occupying much space without sufficient result.

It does not belong to what I have undertaken that I should consider at all the correspondences and differences of the Sanskrit and Greek with reference to the actual phenomena of accentuation—the clear evidences which they exhibit of an originally identical system, and of the abandonment of this system in part by the Greek, under the influence of the new law of cadence set forth in the preceding paper. These correspondences are most fully and clearly stated in Bopp's "Accentuations-system," a work which, though often wrong in matters of theory, is to be highly commended as a clear and comprehensive exhibition of the facts of which it treats.

III. — *On the Aorist Subjunctive and Future Indicative with*
ὅπως and οὐ μή.

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The rule was first laid down by Dawes, an English scholar of the last century, (*Miscellanea Critica*, pp. 222, 228,) that *ὅπως μή* and the double negative *οὐ μή* can take the future indicative of all voices, but the aorist subjunctive active and middle only in the *second* form. This declares the *first* aorist subjunctive active and middle a solecism after these particles. Later writers have extended the rule to *ὅπως* (without *μή*;) and indeed there seems no good reason for restricting such a rule to negative clauses. A large number of examples are given by Dawes and his followers, showing that there was a strong tendency on the part of the Greek writers to observe some such principle as the one above stated. This arises from the fact that the future indicative and most of the prohibited forms of the subjunctive differ only by the quantity of a single vowel; so that, whenever a writer wished to use a subjunctive after a particle which allowed both the future and the subjunctive, he naturally avoided, if possible, an expression which was nearly identical in sound, and (before long and short *E* and *O* were distinguished in writing) generally identical in form with the future. For example, the regular use of *ὅπως* with the future indicative is found in object clauses after verbs of *striving, effecting, &c.*, where the dependent clause is the real object of the leading verb or in apposition with an accusative like *τοῦτο*; as *σκόπει ὅπως τοῦτο μὴ ποιήσει, see to it that he does not do this*. Now when a subjunctive was required in a pure final clause, an author would avoid such an expression as *ὅπως* (or *ὅπως μή*) *ποίησῃ*, and would prefer some other final particle (as *ἵνα*); or he would use some synonymous verb in which the second aorist subjunctive occurs, or perhaps a present subjunctive. This, however, was a mere *tendency*; and it should not be raised to the dignity of a grammatical principle.

The construction just mentioned, that of object clauses with

ὅπως, supplies nearly all the standard examples of ὅπως and the future. Here the subjunctive is allowed only as an exceptional form, apparently as a less vivid form than the future indicative; and it was especially natural here that a writer should choose the second aorist, when he wished to use a subjunctive, rather than a form which was almost identical with the ordinary future. Still, unless we determine to carry out the general principle against the highest manuscript authority, we must admit a few cases of the first aorist subjunctive even here; as in Demosth. Phil. III. p. 128, 25: ὅπως μηδεὶς ἀνατρέψῃ, τοῦτο σκοπεῖσθαι (as all MSS. have it), where modern editions have ἀνατρέψει by emendation. Again, in Demosth. Olynth. I. p. 9, 17: παρασκευάσασθαι τὴν ταχίστην ὅπως ἐνθένδε βοηθήσῃτε καὶ μὴ πάθητε ταυτόν (where modern editions have βοηθήσετε and πάθητε, although all the MSS. except one have βοηθήσῃτε), there seems to be no good reason for objecting to the first aorist subjunctive, when all admit the other subjunctive πάθητε. The mixture of the two moods is certainly more objectionable than that of the two forms of the aorist, especially when the former is the result of conjectural emendation. Whatever we may think of doubtful cases like the first example, where certainly the authority of usage is decidedly in favor of the future and against the subjunctive, there is no ground for an extension of the principle to a construction in which option between the subjunctive and the future was hardly allowed in Attic Greek. I mean that of pure final clauses, in which the subjunctive is the only good Attic prose construction, the exceptional cases of the future being too few to be considered. But even here the emendation on Dawes's principle has been extended, so that many sentences have been made nearly or quite ungrammatical by unnecessary emendation. Thus in Thuc. VII. 39, ὅπως ἀριστοποιήσωνται καὶ . . . ἐπιχειρῶσιν is supported by many of the best MSS.; but the editions have ἀριστοποιήσονται, which is entirely opposed to Attic usage. So in Thuc. II. 60, ξυνήγαγον, ὅπως ἰππομνήσω καὶ μέμψωμαι is very often emended by reading μέμφομαι, a reading which ought not to be accepted without the highest manuscript authority, and then only as a rare exception. Again in Xen. Cyr. VII. 5, 82, ὅπως . . . ἀπολαύσωμεν καὶ ὅπως . . . γενώμεθα is

unobjectionable, although it violates the rule of which we are speaking; if it conformed to that rule it would be irregular, not to say ungrammatical. These cases of the first aorist are rare, for the simple reason given above; but the general statement of the rule, and its application without distinction to both constructions of *ὅπως*, ignore one of the most important principles of Greek syntax.*

A large number of cases in which the first aorist subjunctive with *ὅπως μή* has been emended to the future indicative belong to the elliptical construction in prohibitions, where a verb like *σκοπεῖτε*, *see to it*, is understood (as in *ὅπως μή με θύσετε*, *see that you do not sacrifice me*, i. e. *do not sacrifice me*, Aristoph. Nub. 257). For example, in *ὅπως ἐὲ τοῦτο μή διδάξης μηδένα*, *but see that you teach this to nobody*, Nub. 824, the modern editions read *διδάξεις* against the authority of all the MSS. Now, even if we do not admit the full construction *σκόπει ὅπως μή διδάξης* to be classic, it is a new and (as it seems to me) an unwarranted assumption that, when *σκόπει* was omitted and the expression became a mere prohibition,—in which, probably, no common Athenian ever thought of *σκόπει*, or ever knew that he was committing an ellipsis of that verb,—every

* In Soph. Elec. 956, *ὅπως μή κατοικήσεις*, the emendation made on Daves's principle, supported by a few late MSS. and now universally accepted, can be justified only on the ground that *εἰς σὶ βλέπω* in the leading sentence implies an exhortation or entreaty, so that the clause with *ὅπως* may be considered a sort of object clause. (See Plat. Rep. VIII. p. 549 E: *διακελεύονται ὅπως τιμωρήσεται πάντας τοὺς τοιοῦτους*.) Even then the subjunctive would merely belong to the same class with the doubtful instance above quoted from Demosth. Phil. III. If, however, it were a pure final clause, the future could be justified only by the highest manuscript authority, like any other rare exception.

In Plat. Gorg. p. 513 A, *ὅπως μή πεισόμεθα* has generally been interpreted as a final clause, *that we may not suffer*. It has seemed to me, on the ground above stated, that this must be an object clause depending on *ἄρα*; and I am glad to be confirmed by the high authority of Dr. Thompson, who, in his admirable commentary on the Gorgias, translates the passage, *see that we do not suffer*, &c. I cannot help venturing to dissent, however, from the same learned scholar, when (in his note on p. 510 A) he approves the common emendation *ἀδικήσομεν* as "indispensable" in the passage: *καὶ ἐπὶ τοῦτο ἄρα, ὡς τοιαύτη, παρασκευαστέον ἐστὶ δύναμιν καὶ τέχνην, ὅπως μή ἀδικήσωμεν*. Here the clause with *ὅπως* is not the object of *παρασκευαστέον*, or in apposition with a *τοῦτο* which is the object of that word; but it explains *ἐπὶ τοῦτο*, *to this end*, and is therefore a final clause requiring the subjunctive.

one was bound on theory to say ὅπως μὴ διδάξεις rather than ὅπως μὴ διδάξης. In fact, we may perhaps doubt whether the more common form of prohibition, μὴ διδάξης, did not make ὅπως μὴ διδάξης a more natural form here than the other: certainly the analogy will help to justify this form here, when it is supported, as it is in many familiar examples, by the best manuscript authority.

In regard to οὐ μή, the doctrine of Dawes as modified by Elmsley's theory (explained below) has long prevailed; and even scholars who reject both Dawes's Canon and Elmsley's theory, still follow the former in their practice. As to Dawes's rule, what has been said of ὅπως in object clauses holds true of οὐ μή, that two constructions (the future indicative and the subjunctive) being allowed by usage, the form of the aorist subjunctive which was not liable to be mistaken for a future would naturally be chosen, when that tense was to be used at all. But by Elmsley's theory, two entirely distinct constructions with οὐ μή are to be recognized; one in ordinary negative assertions, where all agree that οὐ μή with either the subjunctive or the future indicative (but commonly the subjunctive) is equivalent to a strong future (οὐ μὴ γένηται or οὐ μὴ γενήσεται = οὐ γενήσεται); and another confined to the second person in prohibitions, where only the future indicative is to be tolerated, and where, for example, οὐ μὴ τοῦτο ποιήσεις; is a question, meaning *will you NOT NOT do this?*—i. e. *do not do this*. If this view is accepted, of course it seems very natural that there should have been a distinction in the form allowed in such entirely distinct constructions; and accordingly the rule is stated absolutely, that only the future can be used in the interrogative construction and that *no case of the subjunctive is to be found in it.* Surely enough, if we examine the Greek poets in modern editions, we shall find no example of the subjunctive, but invariably the future indicative, in the prohibitive construction with the second person; although many editors now abandon the interrogative theory, and apparently explain both constructions on the same general principle. A very different result, however, will be obtained if we refer to older editions, or to the manuscripts themselves, as will be

shown below. In the other construction (the mere negative assertion) both moods are found in all our editions, except that the first aorist subjunctive in the proscribed forms is generally changed to the future indicative.

The theory of Elmsley is a mere theory; and it is fast becoming obsolete, except so far as its influence still keeps up a distinction between the two constructions with *οὐ μή*. Its chief support is found in a few sentences in which a command in the form of a question is followed by a prohibition with *μή*, as in Soph. Oed. Tyr. 637: *οὐκ εἶ σύ τ' οἴκουσ, σύ τε Κρέων κατὰ στέγας, καὶ μὴ τὸ μηδὲν ἄλλοσ εἰσ μέγ' οἴσσειε*. If this is to be explained as entirely interrogative, it seems more natural to consider the first part a common question with *οὐ*,—*Will you not go?*—and the last part a question with *μή*, implying a negative answer,—*You will not raise, will you?* As it is more than probable, therefore, that there is no combination of *οὐ* and *μή* at all in these expressions, they are entitled to little weight in the discussion; and there are probably few scholars who would be willing to accept Elmsley's theory for the other clauses without this support. Apart from the exceeding awkwardness of the expression, *Will you not not do this?* for *Do not do this*, Elmsley's theory is open to the fatal objection that it attempts to explain expressions so obviously similar as *οὐ μὴ τοῦτο ποιήσῃσ* and *οὐ μὴ τοῦτο ποιήσει* on entirely different and opposing principles. If the former means *Will you not not do this?* it is incredible that the latter should mean *He will not do this*, or even *There is no fear that he will do this*. The theory cannot stand for a moment, if it is shown that the subjunctive is as authentic a form in the prohibitive construction as the future, so that no distinction *in form* between the two constructions can be maintained.

The analogy of ordinary prohibitions gives a strong presumption in favor of the aorist subjunctive in the prohibitive construction with *οὐ μή*. What was said above of the elliptical prohibitions introduced by *ὅπως μή* applies with still greater force here. The familiarity of such expressions as *μὴ τοῦτο ποιήσῃσ* or *μὴ ληρήσῃσ* would seem to make *οὐ μὴ τοῦτο ποιήσῃσ* or *οὐ μὴ ληρήσῃσ* a perfectly natural form for expressing the same

idea with greater emphasis. But the question must be tested by an appeal to the only real evidence that we have as to the usage of the Attic writers. It required no new collation of the manuscripts to establish the fact that there is good authority in them for expressions like οὐ μὴ ληρήσης. But the answer is always ready, that εἰ and ἦ are so constantly confused in Greek manuscripts that no argument can be based on the authority of the copyists. I have therefore examined the most important passages of the *Clouds* and *Frogs* of Aristophanes in which οὐ μὴ occurs, in the two Venetian MSS. of the Library of St. Mark (Nos. 474 and 475),* and in the seven Paris MSS. which contain both comedies (including No. 2712), and also those of the *Clouds* in three other Paris MSS. At the same time, in order to ascertain whether the copyists of these MSS. were careless in writing εἰ and ἦ, I examined several passages in the same MSS. containing futures in -εις or subjunctives in -ης, which (on metrical or grammatical grounds) could not be changed to the other forms. Passages of this last class are Nub. 1352, πάντως δὲ τοῦτο ἐράσεις (where no MS. has ἐράσης); 1035, εἰ ὀφλήσεις (where one MS. has -ης); 1479, μηδέ μ' ἐπιτίψης (all the MSS.). So we find *κατερείς* and *οἴσεις*, Ran. 298, 524, without variation; although in 298 most, if not all, MSS. have οὐ μὴ καλῆς (which is evidently intended for a present subjunctive, and might perhaps be allowed on the authority of οὐ μὴ δύνηται, οὐ μὴ οἶός τ' ᾔης, &c.). Ἀκολουθήσεις in Nub. 505 is instructive here; for although one Venetian and six Paris MSS. have λαλήσης (or -ης), only three very poor Paris MSS. have ἀκολουθήσης (one of these has -σης by correction from -σεις). This shows that there was something in the future in the second case which prevented copyists from writing it with final -ης or -ης, even after they had just written λαλήσης or λαλήσης (see below). I give these

* The MS. designated Ven. 475 is the elegant folio said to have been copied from the older Venetian MS. 474 in the fifteenth century. As it often differs from the older MS., even in the few lines here quoted, I have thought its readings worth noting. The readings of a late MS. are valuable as far as they show the care of the copyist in copying certain forms (as -εις and -ης) or indicate the readings of the older MS. which he copied. Among the MSS. here included, only Ven. 474 and Par. 2712 are old enough to be of independent authority for the text.

results merely to show that, whatever may be the authority *on other grounds* against *οὐ μή* and the aorist subjunctive in prohibitions, and however we may choose to despise the copyists who have transmitted this form to us, it cannot be said that *these particular copyists* of the MSS. of Aristophanes were so careless of the distinction between *-ης* and *-εις* as to write one for the other indiscriminately.

I give the readings of the above mentioned MSS. in Nub. 296, 367, 505, 824, and Ran. 524 retaining the peculiarities of the copyists in writing *οὐ μή* and *μηδέ* in the first and third passages :

I. Nub. 296, 297. Οὐ μή σκώψης· μηδέ ποιήσης ἄπερ οἱ τρυγο-
δαιμονες οὔτοι· ἀλλ' εὐφήμει. Ven. 474, Par. 2712. — Οὐ μή σκώψης·
οὐδὲ ποιήσης, &c. Ven. 475. — Οὐ μή σκώψης μηδὲ ποιήσης, &c.
Par. 2821, 2824, 2902. — Οὐ μή σκώψης μηδὲ ποιήσης, &c. Par.
2822. — Οὐ μή σκώψης· μηδὲ ποιήσης, &c. Par. 2598, 2716, 2820.
— Οὐ· μή σκώψης· μή δὲ ποιήσης, &c. Par. 2823 (with schol. ὄρα
ἵνα ὑβρίσης). — Οὐ· μή σκώψης· μηδὲ ποιήσης, &c. Par. 2717.—Par.
2716 has φλυαρήσης over σκώψης.

II. Nub. 367. Οὐ· μη ληρήσης. Ven. 474, Par. 2823 (-ης).
2824. — Οὐ μη ληρήσης. Ven. 475, Par. 2712. — All others have
οὐ μη (οὐ μη, or οὐ μη) ληρήσης, except Par. 2821, which has οὐ μη
ληρήσεις (with ὄρ' ἵνα over οὐ), and Par. 2822, which has οὐ μη
ληρῆς.

III. Nub. 505. Οὐ· μη λαλήσεις· ἀλλ' ἀκολουθήσεις ἐμοί. Ven.
474. Same, with οὐ μη, Par. 2716, 2824. Οὐ μη λαλήσης· ἀλλ'
ἀκολουθήσεις ἐμοί. Ven. 475, Par. 2712, 2821, 2902. Οὐ μη
λαλήσης· ἀλλ' ἀκολουθήσης ἐμοί. Par. 2717, 2823; also, Par. 2598
has -σης by correction from -σεις. Par. 2820 has οὐ μη λαλή-
σεις· ἀλλ' ἀκολουθήσεις ἐμοί, (with -σον written over -σεις in both
verbs.) Par. 2822 has σὺ (corr. to οὐ) μη, λαλήσεις. ἀλλ'
ἀκολουθήσεις ἐμοί.

IV. In Nub. 824, all manuscripts have ὅπως δὲ τοῦτο μη διδάξης
μηδένα, except that Par. 2823 has διδάξης. Par. 2716 omits the
verse, and has in the margin ὄρα ὅπως δὲ του μη δείξης μηδένα.

V. Ran. 524, 525. Οὐ μη φλυαρήσης ἔχων . . . ἀλλ' ἀράμενος
οἷσεις πάλιν τὰ στρώματα. Ven. 474, 475; Par. 2712, 2716,
2821, 2820 (with -σον over -σεις). Par. 2717, 2822, 2824 have
φλυαρήσεις and οἷσεις.

According to the best authorities accessible in this country, the Ravenna MS. has the aorist subjunctive in Nub. 296* (in both verbs), 367, and 824; in 505 it has λαλήσης corrected to -σεις, and ἀκολουθήσεις. I can find no trustworthy statement of its reading in Ran. 524.

It will be seen that, although there is excellent manuscript authority for the future indicative in some examples, especially those in which this tense follows in a second clause (as in Nub. 505), there is also the very best authority in other cases for the subjunctive. The strongest case, and indeed the case which makes the real nature of these examples clearer than any other, is that of Nub. 296, 297. Here we have the unanimous authority of the MSS. for σκώψης and ποιήσης. Now there is no future σκώψω known in classic Greek; and the change to σκώψει, which was made by Elmsley and is generally adopted in modern editions, is certainly a bold emendation to make in support of a mere theory, and a still bolder one to maintain after that theory is abandoned. This passage alone is sufficient to show that Elmsley's theory is unsound, and it refuses to conform to the required punctuation. In Nub. 505, for example, the interrogation-mark (on Elmsley's theory) would follow ἀκολουθήσεις ἐμοί. But where can it be placed here? Surely not after ἀλλ' ἐνφίμει: and if it is to precede this, why should it not precede ἀλλ' ἀκολουθήσεις in v. 505? The use of the imperative here in the second clause shows plainly that the preceding words are a mere prohibition and not interrogative. And if such expressions are mere prohibitions, it is much simpler and more satisfactory to explain this and the more common construction of οὐ μή on the same principle. I cannot pretend to account for the doubling of the negative in either construction of οὐ μή, any more than in that of μή οὐ with the infinitive and participle. The common explanation, that there is an ellipsis of a word like φόβος or δεινόν, is unsatisfactory, especially in explaining the future indicative with οὐ μή. The future is a well established con-

* While this paper has been printing, I have learned from a distinguished English scholar, who has collated the Ravenna MS. of Aristophanes, that this MS. reads οὐ μή σκώψηται in Nub. 296.

struction in the first and third persons with *οὐ μή*, and yet it is a very rare form with *μή* after expressions of *fear* or *danger*. Whatever may have been its origin, I cannot doubt that in an expression like *οὐδέποτε οὐδὲν ἡμῖν οὐ μή γένηται τῶν δέοντων* (Dem. Phil. I. p. 53, 4) the speaker merely used the strongest negative which the language afforded for what would commonly be expressed by *οὐδὲν τῶν δέοντων ἡμῖν γενήσεται*. To supply a verb of *fearing* here would be clearly absurd. The second person is often used in this way, as in *ἀλλ' οὐ ποτ' ἐξ ἐμοῦ γε μὴ πάθης τόδε* (Soph. Elect. 1029), where the position of *ποτ'* shows that *οὐ* belongs to *πάθης* quite as much as *μή* does. In these cases the subjunctive seems to be a relic of the common Homeric subjunctive, which is nearly or quite equivalent to a simple future, as in *οὐ τοίους ἴδον οὐδὲ ἴδωμαι*. The use of the future indicative in prohibitions is amply justified by its use in imprecations, as *ἀπολείσθε, οἰμώξεσθε*, and still more by examples like *πάντως δὲ τοῦτο δράσεις* (Nub. 1352), *but by all means do this*, where the future has nearly the force of an imperative. The same use of the future is seen in *ἀκολουθήσεις* (Nub. 505) and *οἴσεις* (Ran. 525), quoted above, which express mere command. *Οὐ μὴ εὔρη τοῦτο*, therefore, means simply *he will not find this*; *οὐ μὴ εὔρης* means *you will not find*; so *οὐ μὴ ποιήσεις τοῦτο* or *οὐ μὴ ποιήσης τοῦτο* means *you will not (or shall not) do this*, which may be a prohibition equivalent to *do not do this*.

In Soph. Phil. 381 we find *καὶ ταῦτα . . . οὐ μὴ ποτ' ἐς τὴν Σκύρον ἐκπλεύσης ἔχων*. Here we could not read *ἐκπλεύσεις*, as there is no such future; nor even *ἐκπλεύσει*, as the metre forbids. The meaning clearly is *you shall not sail away, &c.*, and yet the clause cannot be made interrogative. Is not this passage a striking illustration of the inseparable unity of the so called "two constructions" with *οὐ μή*, and does it not, with the aid of the imperative in Aristoph. Nub. 297, clearly show that both subjunctive and future are simply *emphatic futures* in meaning, which may in the second person — like all futures — have the force of commands?

In conclusion, I would maintain as the result of this investigation, that *οὐ μή* can take either the subjunctive (commonly

the aorist) or the future indicative in every person, and that the common exclusion of the subjunctive of the second person in prohibitions is not authorized by the Greek manuscripts, or by any known principle of the language. As to ὅπως, the construction always determines whether it regularly takes the future indicative or the subjunctive; and whatever view we may take of exceptional subjunctives in object clauses, no arbitrary rule can ever justify a future indicative in a pure final clause, in Attic Greek, against manuscript authority.

IV.—*On the best Method of Studying the North American Languages.*

BY J. HAMMOND TRUMBULL,
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THE collection of materials for the study of American aboriginal languages is already large. Indian vocabularies, grammars and grammatical notices may be reckoned by hundreds, and every year adds to their number. Among these are to be found many works of permanent value, indispensable to students of the languages of which they treat, a few of distinguished excellence, widely known and highly appreciated as contributions to comparative philology, and many others which, without imparting thorough or exact grammatical or lexical knowledge, have been very useful to explorers, missionaries and others, by facilitating communications with savage tribes. But if we look carefully through the entire collection (excluding, however, from present consideration all additions which have been made to it in the last ten years) we shall be obliged to confess—not without some mortification to the pride of American scholarship—that a great part of it is absolutely worthless to critical students of language, and what is worse, that the real value of original materials has in many instances been lost or much depreciated by the method of their exhibition. We shall find many rash gener-

alizations from insufficient data, much ingenious speculation from questionable facts and too frequent resort to the comparative method by writers who had, apparently, very little knowledge of either the vocabulary or the grammatical structure of the languages compared. The materials for the study of a new language or dialect have too often been collected and arranged with constant reference to its supposed likeness to some other languages previously known. This last-mentioned source of error has perhaps been more mischievous than any other. A great deal of ingenuity has been wasted in tracing analogies and resemblances between Indian languages and the Hebrew, Greek, and Latin. Even John Eliot, to whose rare linguistic genius his version of the Bible in the Massachusetts dialect testifies, was not exempt from this tendency to try the new by the old. He would have succeeded better in his "Indian Grammar Begun" if he could have forgotten all the Greek and Latin he knew. He was hampered by his 'accidence,' and sometimes overlooked the true characteristics of the Massachusetts language while he was striving to cast it in a classic mould,—searching for gerunds and supines which were not to be found and puzzling himself about reduplication, augment, and the optative mood.

One writer* after having, as he assured his readers, "pursued the comparative examination of the Haytian language and dialects, *upon all the languages of the earth*" (the italics are his own), pronounces the Haytians, "of Pelagic origin," but traces the northern Algonkins to central Asia. Another presents a list of words to exhibit the likeness of the *Micmac* to classic Greek. A third searches twenty American languages for Egyptian roots, and finds them in abundance. A fourth goes straight to the origin of language, and gleans from the vocabularies of different tribes those words only which he conjectures to have been formed by imitation of natural sounds,—a conjecture which better acquaintance with the structure of these languages would have convinced him was unfounded.

A time may come when the relation of the languages of

* C. S. Rafinesque, in *The American Nations*, vol. i. pp. 217, 219.

America to those of Asia and Europe can be intelligently discussed — if not established: but a great deal of work must be accomplished first in a field in which American scholars have as yet hardly broken ground. Why waste time groping in the dark after genetic correspondences with Asiatic and African languages when we have not advanced far enough in our knowledge of the American to discover their relations one to another? Take, for example, two groups for the study of which our materials are most copious and on the whole most trustworthy,—the Algonkin and the Iroquois: who has demonstrated or is prepared to demonstrate the genetic connection of the Mohawk with the Massachusetts, Abnaki or Chippeway?

The science of language is yet in its infancy. That it has made little progress in dealing with the problems which the almost innumerable languages of America present, need not surprise or discourage us. But true progress ought not to be impeded, at its starting point, by obstacles placed in its path, nor should time which might have been devoted to the investigation of new truths be so heavily taxed for the elimination of old errors.

While a few scholars have labored unprofitably to extract Semitic and Turanian roots from American words whose structure they had taken no pains to analyze, another and a larger class of collectors and editors have impaired the value of their materials by endeavoring to fashion them to an English pattern. I allude now to the very general adoption of some standard English vocabulary as the framework of collections and for the exhibition of results. An erroneous impression appears to have been very generally received, that real progress in the knowledge of a language has been made when one or two hundred words taken from its vocabulary have been set over against certain words of our own language which have meanings not very dissimilar.

Forty or fifty years ago, when Mr. Gallatin undertook his great work of classifying the North American languages, the advantages to be secured by the adoption of a standard vocabulary were obvious. Twenty years afterwards, there was still

good reason for employing the same vocabulary (with some unimportant changes introduced by Mr. Hale) in the arrangement of collections made by the U. S. Exploring Expedition on the North-West Coast. The value of Mr. Gallatin's "Synopsis of the Indian Tribes of North America," with a "Comparative Vocabulary of fifty-three Nations" (in the Transactions of the American Antiquarian Society, vol. ii., 1836), supplemented by his Introduction to Hale's "Indians of North West America" (in Transactions of the American Ethnological Society, vol. ii., 1848), can hardly be over-estimated. These works opened a way to the intelligent study and discussion of what had previously been a chaotic mass of materials. All that Mr. Gallatin proposed to do he accomplished admirably, considering the disadvantages under which he labored. His method was well adapted to the end he had in view,—to determine the more obvious groupings of American languages and dialects. Its value is not yet exhausted. The standard vocabulary continues to be useful to inexperienced collectors and as a guide in provisional classification. Next to the satisfaction of learning a new language is that of learning something about it—of ascertaining by means of a comparative vocabulary that it is or is not like some other language which we know, at least by name, and that the two belong or do not belong to the same 'stock,' 'family,' 'class' or 'group,'—terms which are used with very uncertain apprehension of their meaning, when applied to North American tongues.

Duly recognizing the past and present usefulness of these vocabularies as stepping-stones to knowledge, we must at the same time be careful not to estimate their value too highly,—remembering that the real work of the linguistic scholar begins where the provisional labors of the word-collector end. Such lists of words give no insight to grammatical structure, contribute little or nothing to analysis, and even with respect to the relationships of languages they enable us to determine only the nearest and most obvious. Professor Whitney (*Language and the Study of Language*, pp. 246, 247) has shown us "upon how narrow and imperfect a basis those com-

parative philologists build who are content with a facile setting side by side of words; whose materials are simple vocabularies, longer or shorter, of terms representing common ideas," and that "surface collation without genetic analysis, as far-reaching as the attainable evidence allows, is but a travesty of the methods of comparative philology."

Now while this is true universally, it has special force when applied to the study of languages of the polysynthetic type. The American languages differ from the Indo-European both in grammatical structure and in their plan of thought. To inquire in what, precisely, these differences consist would lead me too far from my present purpose, but the inquiry may at least be so far prosecuted as to show how little value attaches to any list of Indian words set down as the equivalents of or as exactly translated by the English, French, or Spanish words of a previously-constructed vocabulary,—to show, in short, how nearly impossible is the translation of *any* Indian name or verb by an English name or verb, and the converse.

In the English language the *analytical* tendency has attained its highest results. By employing independent words to express grammatical relations, it has reduced a great part of its vocabulary to monosyllables. The very essence of the Indian languages on the contrary is *synthesis*, and their capacity for synthetical development is apparently unlimited. Their highest aim is to express in a single word, "not only all that modifies or relates to the same object, or action, but both the action and the object; thus concentrating in a single expression a complex idea, or several ideas among which there is a natural connection."* There is hardly any modification of which the action of a verb is susceptible which may not be effected by means of inseparable particles having the character of adverbs: "thus, the action may be intended, or be about to be done; it may be done well, better, ill, in a different manner, quickly, attentively, jointly, probably, rarely, repeatedly, habitually:† it may be affirmed, doubted, questioned, denied, prohibited.

* Gallatin, in *Trans. Am. Antiquarian Society*, vol. ii. p. 165.

† Gallatin, in *Trans. Am. Ethnological Society*, vol. ii. p. cxlii. .

A single example will illustrate this, and I select one which Mr. Bancroft (*History of the United States*, vol. iii. p. 259) has used for a similar purpose, in his observations on "the synthetic character of the American languages."

"The Indian never kneels; so, when Eliot translated *kneeling* [Mark i. 40], the word which he was compelled to form fills a line, and numbers eleven syllables."

As an instance of extreme synthesis this word — *wut-ap-pe-sit-tuk-qus'-sun-no-weht-unk'-quoh** — is well taken, but its significance is by no means limited, as Mr. Bancroft supposed it to be, by that of the English participle 'kneeling.' In the verse cited it stands as the translation of the words "kneeling down to him" of the English text or, more exactly, for "he kneeled down to him" — Eliot having substituted the indicative mood for the participle, as Indian syntax requires. We have thus *five* English words represented by the Indian synthesis. But the denotation of the latter is not yet exhausted. Eliot might have found, in the Massachusetts or any other Algonkin dialect, an equivalent for the verb 'to kneel', in its literal and primary signification — 'to rest on the bended knees' or (active-intransitive) 'to assume the position of kneeling.' In 2 Chron. vi. 13, Daniel vi. 10, Acts xx. 36, he translated "he kneeled down" by *ap-pe-sit-tuk-qus'-sin*; but in the verse first cited, something more than the mere *act* of bending the knees or resting on them is implied. The verb here connotes supplication, submission, and worship, and all this is expressed in the eighth and ninth syllables (*-no-weht-*) of the Indian synthesis, the whole of which may be translated, literally: "he, falling down upon his knees, worshipped [or, made supplication to] him." Thus the *one* Indian word of *eleven* syllables requires for its accurate interpretation *eight* or *ten* English words and at least eleven syllables.

* Duponceau pointed out this word as the longest he had met with in any Indian language, except the Chippeway (of Schoolcraft) in which "there were some verbal forms of thirteen and fourteen syllables." (*Mémoire sur le Système Grammatical* etc., p. 143). A more remarkable illustration of "the Indian way of compounding words" was given by the Rev. Experience Mayhew, preacher to the Indians on Martha's Vineyard, — in a synthesis of *twenty-two* syllables, signifying, "our well-skilled looking-glass makers" — *Nup-pahk-nuh-tó-pe-pe-nau-wut-chut-chuh-quó-ka-neh-cha-e-nin-nu-mun-nó-nok!* (MS. Letter, 1722.)

This tendency to synthesis is not manifested only in the grammatical structure. It may be traced far back to the roots of the language, and characterizes the primary verbs as truly as it does the many-syllabled cluster-words of later growth. Father Le Jeune, a Jesuit missionary in Canada in 1634, mentions as a peculiarity of the language of the Montagnars, "the infinite number of words which signify many things together" and which yet had no etymological affinity with any of the words which signify those things severally: and he gave as an example the Montagnais verb *piouan*, meaning "the wind drives the snow," but in which no trace appears of the words for 'wind,' 'snow,' or 'to drive.'* This synthesis which precedes grammar and concentrates complex ideas—thought-clusters—in a single word or syllable, is found in all the American languages of which we have any knowledge. The primary verb affirms conditioned or modified existence, specific and restricted action. There is—I speak now only of that group of languages to which my studies have been chiefly directed, the Algonkin,—there is no independent substantive verb; but there are verbs of *being* under every conceivable condition of time, place, and circumstance. "He is" cannot be exactly translated by any Algonkin verb, but every dialect has verbs signifying 'he is well,—or ill,' 'he lives,' 'he was (and *is not*),' 'he was (and *continues* to be),' 'he has himself,' 'he abides,' 'he remains,' 'he is the same as,' 'he is of the kind of,' '*il y a*,' etc.

Every standard vocabulary includes the verb 'to eat,' yet this verb has not, so far as I can discover, its equivalent in any American language. The Algonkin has four or five primary and a great many composite verbs of eating, but none of these expresses the simple act of taking food, without reference to the manner, mode, subject or object. One verb, for example, signifies 'to eat animal food' (or that which has or has had life); another, 'to eat vegetable food;' another, 'to eat *soft* food' (that which may be *dipped up*, spoon-victuals, such as samp, succotash, and the like); others, 'to eat ravenously, to devour like beasts of prey,'—'to graze,' or take food from the

* *Relation de la Nouvelle France en l'année 1634* (repr. Quebec, 1858, p. 50.)

ground as cattle do,—and so on. Others again, by the insertion of a particle or by receiving a characteristic affix are made to express the act of eating *in company* with others, of eating *enough* or satisfying one's self with food, of eating *all* that is provided, of feasting, etc.

No Indian language, probably, has any verb which exactly corresponds to the English verb 'to go', yet the Indian verbs of motion are almost numberless. There are verbs of going by land,—by water,—by paddle,—by sail; of going *from* the speaker,—from the place of the action narrated,—and from a place other than that of the speaker or the action; of going *to* a person,—place,—inanimate object; of going by running,—jumping,—flying,—swimming, etc., (and these are not to be confounded with the verbs which express the *acts* of running, jumping, flying and swimming); of going fast, slow, before, after, aslant, in a straight course, by a devious path; and scores of others. A special vocabulary of the verbs of motion in any Indian language, giving an analysis of each and its precise signification, would be of some real value to philologists. But what is to be gained by entering against the English infinitive 'to go,' in a standard vocabulary, some one or another of these Indian verbs of going,—the entry carrying its own evidence of inaccuracy?

The defects of the vocabulary method are still more obvious when we consider the nature of Indian *names*. A peculiar strength of the English language lies in its concrete general names, and in the facility with which these names are made to pass from the concrete to the abstract. The peculiar excellence of the Indian languages is in the nice machinery by which *definitions* or *descriptions* of individual objects are made to stand for names, and by means of which, names which in English are general or abstract become individual or concrete. The English abounds with predicates of a class or genus: but the Indian noun—*verbum nominale*—itself predicates a *differentia* or an *accidens*, occasionally a genus or a species. I say, the Indian noun *predicates*,—for I can find no less objectionable form of expression, though this conveys only half the truth. Strictly regarded *the Indian noun is not separable, as a part of*

speech, from the verb. Every name is not merely descriptive but *predicative*, — not as in Indo-European languages by implication or suggestion, or by reason of remote derivation from a predicative root, but it retains the verb-form unchanged; is varied by *conjugation*, not by declension; has *tenses*, not cases; may become active, passive, reciprocal, frequentative, like other verbs. In short, every Indian name is in fact a verb, — is formed as a *participial* immediately from a verb, — or *contains within itself* a verb.

Without pursuing this branch of the subject further at present or multiplying examples, I repeat, that in view of the fundamental differences in grammatical structure and in plan of thought between the American and the Indo-European languages, it is nearly impossible to find an Indian name or verb which admits of exact translation by an English name or verb. But the standard vocabularies which have been most largely used in the collection and exhibition of materials are framed on the hypothesis that such translation *is* generally possible. They assume that equivalents of English *generic* names may be found among Indian *specific* and *individual* names, — that English analysis may be adequately represented, word for word, by Indian synthesis. Such vocabularies, as has been remarked, have their uses, but to linguistic science or to comparative philology they contribute nothing which is worth the cost of obtaining. When a collector or an editor has acquired a thorough knowledge of the grammatical structure of a language and has learned how to resolve synthesis by analysis, he may undertake the arrangement of his materials in the form of a vocabulary with some probability of imparting to the result real and permanent value. Without such preparation for his work — no matter how cautiously or with what ability he prosecutes it — he must not hope for great success.

It is easier to discover the defects of the old method than to point out a new and a better one. The details of such a method could not be discussed without exceeding the limits of this paper. Nor is such discussion called for. The way to a more thorough and exact knowledge of the Indian languages

is not unknown or untried. There are laborers already in the field who have not only proved that higher results than the compilation of brief vocabularies are attainable, but have shown how to attain them: and for the study of a considerable number of languages and dialects of the north, the south, the valleys of the Mississippi and Missouri and the far west, scholars are no longer restricted in materials to *quasi-translations* of lists of untranslatable English words.

The suggestions I shall offer have to some extent been anticipated by the drift of the foregoing remarks. The first is—

That a constant aim of the student of any of the American languages should be *the resolution of synthesis by analysis*. What the Indian has so skillfully put together—‘agglutinated’ or ‘incorporated’—must be carefully taken to pieces, and the materials of the structure be examined separately. Every Indian cluster-word is a sentence,—a description, definition, or affirmation. Mere translation will not exhibit its construction or afford a trustworthy basis of comparison with word-groups in other languages. Something is gained, it is true, by *exact* translation, but this cannot be had if the translation must be shaped to the requirements of an English vocabulary. A single chapter of the Bible or a dozen sentences of familiar conversation accurately translated into any Indian language or a few selected words and phrases translated *from* it to English will give a better insight to its structure and do more to determine its relationship to other American languages than long lists of concrete names or verb-forms compiled on the usual plan. But something more than translation, however accurate, is wanted. These languages must be studied in their *roots*,—for these are the elements of synthesis. The possible forms of synthesis are infinite, but the radicals or primaries are, in any language, few. The forms, both inflectional and syntactic, are subject to change from year to year and in passing from tribe to tribe; and these changes, it is said, have in some instances been surprisingly rapid and extensive. We are told of a vocabulary compiled by missionaries to a Central-American tribe in 1823 which had become useless

in 1833, so greatly had the language changed in the ten years which intervened.* With better knowledge of the structure of these languages such changes would probably have been found to be for the most part only superficial, — the *synthesis* being differently constructed while its elements, the predicative and demonstrative roots, remained the same. Of such changes some further notice will be taken, in another part of this paper.

To single out and fix the primary meanings of the *verbal roots* should be the ultimate aim in the study of every Indian language. What excessive synthesis has done, searching analysis must undo. The task is not so difficult as at first sight it may seem to be. As I have before remarked, the roots or primaries are few and constant, or nearly so, in all

* S. F. Waldeck, *Lettre à M. Jomard des environs de Palenqué*, — cited by Max Müller, *Lectures on the Science of Language*, 1st Series, p. 62 (Am. ed.). I confess that, without other explanation than appears, I find this statement hardly credible, and suspect that the worthlessness of the vocabulary should not have been attributed solely to the inconstancy of the language. Professor Müller (l. c.) refers also to Sagard's *Grand Voyage du Pays des Hurons* (Paris, 1632), for the statement "that among these North American tribes hardly one village speaks the same language as another; nay, that two families of the same village do not speak exactly the same language. And he adds what is important, that their language is changing every day, and is already so much changed that the ancient Huron language is almost entirely different from the present." But Sagard's statement must not be received without the qualification he himself gave it. He did not intimate that the differences of dialect were greater or the tendency to change more apparent in the Huron language than in the French. What he says — in the introduction to the *Dictionnaire de la langue Huronne* printed with his *Grand Voyage* — is in substance this: that there was the same diversity of accent, pronunciation and in the use of words, in provinces, towns and villages in the Huron country as in France; that the same words might be differently pronounced or the same object called by different names even by inmates of the same cabin; one person would say 'etseignon, and another 'etcheignon,' one 'ochahenna,' another 'ochakenda,' &c.; and that, as in France (comme par deçà) new words were invented or brought in fashion and the pronunciation of the court had almost superseded (presque ensévelé) the ancient Gallic, so "our Hurons and, generally, all other nations, have the same instability of language, and change their words so that in process of time the old Huron becomes almost entirely different from the modern." The change, as he conjectured, was still going on; — and yet, Sagard's very imperfect dictionary of this unstable language, two hundred years or more after it was compiled, enabled Duponceau to make himself understood without apparent difficulty by the Wyandots, a remnant of the lost nation of the Hurons. (Duponceau's *Mémoire*, p. 110.)

dialects and languages of the same family, — allowance being made for recognized differences of pronunciation and accent. They preserve their independent signification, however combined. They enter into composition without undergoing change of form, while their affixes and formatives obey laws of harmonious sequence of vowels as nicely adjusted as in Turkish. The five, ten, or more syllables of a verbal-synthesis do not grow out of or coalesce with one another, but each is *built on*: so that when the key is once found the word-puzzle may be taken in pieces as easily as it was put together. Indeed, it is a requirement of the Indian languages that every word *shall* be so framed as to admit of immediate resolution to its significant elements by the hearer. It must be thoroughly *self-defining*, for (as Max Müller has expressed it) “it requires tradition, society, and literature, to maintain words which can no longer be analyzed at once.” In the ever-shifting state of a nomadic society no debased coin can be tolerated in language, no obscure legend accepted on trust. The metal must be pure and the legend distinct.* The more cumbersome and unwieldy the structure, the greater is the necessity for exact adjustment of its parts: and the laws of verbal composition are well-established, admitting *no exceptions*.

How far such an analysis as I have suggested can be successfully carried need not now be inquired. Every step taken in that direction will be something gained, will lead to more exact knowledge and to positive results. To determine and classify the *primary verbs* in any one language would be to bring a larger contribution to linguistic science than has often been made by students of the American tongues. Back of these verbs and of the primary demonstratives are the ultimate roots. These may not now be — possibly, they never will be attainable: yet I do not hesitate to express my belief that through the study of the American languages scholars may *as nearly* arrive at a solution of the great problem of the genesis of speech, in determining the character and office of its germs, as by any other avenue of approach. All attempts to establish relationship between the several great linguistic families by

* Lectures on the Science of Language, 1st Series, pp. 292, 293.

the identification of roots, may indeed be regarded as hopeless; for few will be disposed to question Professor Whitney's conclusion (*Language and the Study of Language*, p. 392) that "the difficulties in the way of a fruitful comparison of roots are altogether overwhelming": and probably no one is yet "so sanguine as to expect to discover, amid the blind confusion of the American languages, where there are scores of groups which seem to be totally diverse in constituent material, the radical elements which have lain at the basis of their common development." But if order is ever to be brought out of this blind confusion,—if any satisfactory classification of the hundreds of languages and dialects now so loosely grouped is to be established,—if the genetic relation of one of these to another is to be demonstrated even in those cases where, on grounds independent of language, the probability of such relation is greatest,—analysis must first do its work, until, at least, it shall have determined and classified the earliest traceable constituents of speech, though compelled to stop short of the discovery of ultimate roots.

If the method I have indicated is the true one, the collection of materials for the critical study of an American language should begin, not with the translation into it of a given number of English names, but by looking out its simplest i. e. least composite words, and fixing their meanings,—by detaching from the constant roots or themes terminations and formatives which are merely grammatical,—and by translating from the Indian to the English, provisionally and subject to correction by more rigid analysis, the syntheses which discharge the office of concrete names, by conveying concise definitions or specific descriptions of the objects to which they are severally appropriated.

Among the words and elements of words which claim earliest attention, may be mentioned —

1. The *Pronouns*, separable and inseparable, and pronominal suffixes: with which may be included the *demonstratives*.

2. *Particles*, which serve as prepositions and post-positions, conjunctions and, occasionally, adverbs. Nearly all of these appear to be remnants of verbs and for the most part are

susceptible of conjugation as verbs. Their verbal origin may be matter of subsequent investigation, but a careful study of them in their present forms is essential, at the very outset, to thorough knowledge of a language: for they have much to do with the construction of syntheses and exert great influence in the modification of verbal roots.

3. The *Numerals*, cardinal, ordinal, and distributive. For the collection and analysis of these, some suggestions are given in "Instructions for research relative to the Ethnology and Philology of America," prepared for the Smithsonian Institution by Col. George Gibbs.* As the numerals are always significant, it should be a special aim of the collector to ascertain the precise meaning of each. Does the word used for *one* signify 'a small thing,' 'a beginning,' 'the little one' (i. e. finger), 'undivided,' or 'that which is left behind, or passed by'? Does *three* mean 'the middle finger? Is *five* 'the hand,' 'the closed fist,' or 'all' the fingers? Is *six* 'five-one,' 'one more,' or 'one held up' (i. e. one of the fingers which had been doubled down)? Is *nine* 'one left,' or 'one less than,' or 'one wanting'? Is *eleven* 'one again' or 'ten more one'? Is *twenty*, as in the Eskimo, 'one man' (i. e. all the fingers and toes)? Every such question that is answered throws some light on the structure and method of synthesis and may help establish the relationship of the language.

4. *Primary Verbs*. Of these and of the tendency to the concentration of complex ideas in a single word, which is characteristic of the American languages, I have already spoken. Recollect that the Indian verb is almost always *holophrastic*. It affirms—not action or existence *generally*, but—some special and limited act or conditioned existence: consequently, it can seldom, if ever, be adequately translated by an English verb without adverbial qualification.

5. *Concrete Nouns*. We have seen that these are not, as in the inflectional languages so many names have come to be, mere unmeaning marks. They are descriptive and definitive; specific, not general; and each retains the verb form or embodies a verb. Every synthesis is so framed as to differentiate

* Smithsonian Miscellaneous Collections, 160 (vol. vii. art. xi.).

the object it serves to name from every other object known to the speaker, and this so explicitly as to be intelligible to every hearer. The English word *horse* tells us nothing about the animal it names. Etymologists who can establish its connection with the Sanskrit *hr̥sh* may find a reason for its appropriation to 'the neigher,' but we use it without having a consciousness of any such intrinsic significance, recognizing it, only because we have been taught to do so, as the distinguishing mark which has been set upon a species, just as — regardless of etymological suggestions — we recognize 'Charles' or 'William' as the distinguishing mark of an individual. The American languages permit the use of no such names without meaning. The native of Massachusetts who saw a horse for the first time distinguished it from all animals he had previously known, as "the beast that carries on his back a living burden," and this name once heard enabled every Indian of the tribe, or who understood the language, to identify the animal whenever it came in his way. So the Chippeway could recognize by its name alone the creature "whose hoofs are all solid," and so the Dakota knew at sight the "wonderful domestic animal" introduced by the white man.

With this understanding of the nature of Indian names, we see how tribes speaking dialects of the same language and not widely separated may come to have different names for the same object, — as many names, possibly, as there can be framed definitions or descriptions sufficiently exact for its differentiation. One Algonkin tribe calls the beaver a "feller of trees"; another describes him as "putting his head out of the water," i. e. air-breathing water-animal. The Chippeways and some other tribes of the same family name the humming-bird by the cumbrous synthesis *no no no'k' aus eé*; the Shyennes, a western offshoot of the same Algonkin stock, call it *ma ká i tai wi kis*. The two names have no apparent affinity. Standing side by side in a comparative vocabulary, their testimony would go to show the unlikeness of the languages to which they respectively belong. Yet both names would, probably, be alike intelligible to a Chippeway and a Shyenne. When we have learned that the one means "an exceedingly slight (or, deli-

cate) little creature," and the other, "the iron bird," we shall be less likely to draw a wrong inference from their external non-resemblance.

Where such latitude is allowed in name-giving and where a name is necessarily discarded when the description it gives of an object is no longer sufficient to distinguish it from every other, we must not expect to find the same constancy in the vocabulary as in languages like our own, in which names hold their places not by virtue of their inherent significance but by prescription. And here we have the reason of some of the changes which have been remarked in the languages of certain tribes, of which something was said in another place (p. 65). Such changes are likely to be most considerable and most rapid soon after the opening of intercourse with a civilized race. The significance of old names is lost, in the changed condition of the tribe. One synthesis displaces another which has no longer any distinguishing force: one object after another is divested of the characteristic quality which had given it a name. When Europeans first came to New England, the Algonkin name of a pot or kettle (*aukuk*) described it as 'made of earth'; but this name — still in use among the western Algonkins — could not long maintain its place in the language of Indians of the Atlantic coast after vessels of copper and iron were generally substituted for pots of clay or steatite. The introduction of fire-arms, — of dogs and horses, — of trading cloth and blankets, — not only called for the invention of a dozen new names but made nearly as many old ones useless.

6. *Characteristic particles* found in composition with verbs, designating specific modifications of the action or special relations of the action to the subject or object of the verb. These are prefixed, added as terminations, or inserted between the root and the inflection proper.

7. *Generic formatives* which, in grammatical synthesis, discharge the office of appellatives or general names.

These two classes — characteristic particles and generic formatives — present the most formidable obstacles which are to be encountered in acquiring thorough knowledge of any American language. One or the other or both have place in

nearly every synthesis. Both must be eliminated by analysis, before the primary signification of the verbs with which they are associated can be ascertained. Biliteral or uniliteral — syllables or mere fragments of syllables — they probably all represent, as many of them are known to do, independent words, some of which still maintain their places in the vocabulary while others have yielded to phonetic decay. The critical investigation of these particles will compensate the student for all the pains it may cost him, for in it he will be brought very near the ultimate roots of the language.

To the former class — characteristic particles — belong all the grammatical machinery for *energizing* and *individualizing* the activity of the verb, making it intensive, frequentative, causative, possessive, reciprocal, dubitative, simulative, representative, etc., — for designating the *manner* of acting or of being, and sometimes the *instrument* or *agency* by which the act is performed.

The nature and office of these characteristics may be shown by a few examples, from the Massachusetts-Algonkin, the Sioux-Dakota and the Choctaw:* but of their number and variety in any language no adequate conception can be had without study of the language itself.

In the Massachusetts (as written by Eliot), *-uhk* or *-ohk* interposed between the root and the formative, denotes continued and *progressive* action — ‘to go on’ doing: *pet-äü*, ‘he puts (or, is put) into,’ *petUHk-äü*, ‘he goes into;’ *assa-mäü*, ‘he gives food to,’ *assaUHk-amäü* (contracted to *sôHKamäü*, El.), ‘he keeps on giving food to,’ continues to feed (e. g., a domestic animal); *amd-eu*, ‘he absents himself, departs;’ *amaUHk-au* ‘he drives away’ (goes-after him-going); *wêk-eau* ‘he houses himself, provides a dwelling place,’ *wêkUHk-au* ‘he builds or constructs a dwelling place,’ goes on housing himself.

When the action is performed *with the hand*, the characteristic is *-nn* before the formative: *kenunnum* ‘he carries it *in his*

* The Massachusetts forms are taken from Eliot’s version of the Bible, the Dakota from the Rev. S. R. Riggs’s excellent Grammar and Dictionary of that language (Washington, 1852), and the Choctaw from the Rev. C. Byington’s Choctaw Grammar (edited by Dr. D. G. Brinton, Philadelphia, 1870).

hand; *tohqunnum* 'he holds it fast *with his hand*' [comp. Cree *tákwánum*, 'he holds it with his hand,' *tákwátum* 'he holds it *in his mouth*']. If the action is performed *by cutting* or *with a knife*, *-ss* takes the place of *-un*: *sohqu-i* 'it is in small pieces', 'broken fine'; *sohqunnum* 'he breaks or pulls it to pieces, *with his hand*,' *sohqussum* 'he *cuts* it in small pieces.' The act of *tying* or making fast by a cord or thong is denoted by *-pi* or *-pin* after the root; *kishpinnum* 'he ties it firmly, *with his hand*' (the characteristic is double, here); *assepinnum* 'he ties them together'; *togkupinnau* 'he holds him fast *by bonds*,' &c. *Sudden, violent, or disastrous* action is denoted by the insertion of *-sh*; *petaiü* 'he puts (or goes) into' becomes *petshaiü* 'he falls into' (e. g. a pit, or a snare); *pohqui* 'it parts asunder,' *pokshau* 'it breaks, by violence, or suddenly'; *togkun*, 'it strikes,' *togkushin* 'it strikes with violence,' etc.

In the Dakota group, the instrumentive or modal characteristic is *prefixed* to the verb: *ba-* shows that the action is done *by cutting* or *sawing*; *bo-* that it is done *by shooting* (lit. by *blowing*), or by some missile; *ya-* that it is performed *with the mouth*; *pa-* that it is done *by pushing, drawing, pressing, or rubbing* with the hand e. g.: *Baksa* 'to cut off,' *Bamda* 'to cut in slices', *Bapta* 'to cut off a piece', *Bapako* 'to cut or saw crooked' (from *pako* 'crooked'); *bohóho* 'to loosen by shooting' (from *hohó* 'loose'), *Boi'yowaza* 'to make an echo by shooting' (from *yai'wowaza* 'to make an echo'); *Yáchocho* 'to chew fine' (from *chocho* 'soft'); *Yáhóho* 'to make loose, with the mouth' (from *hóho* 'loose'); *Padopa* 'to push into the mud' (from *dópa* 'to mire'), *Pabu* 'to make a noise with drumming with the fingers' (from *bu* 'to make a noise'), *Pahmíyan* 'to make round like a ball, with the hands' (from *hmi-yan* 'round'), etc.

In the Choctaw, Mr. Byington (Grammar, p. 36) gives some of these forms for the verb *takchi* 'to tie': *ta'kchi* 'to be tying', *taiyakchi* 'to tie firmly', *tana'kchi* 'to keep tying', *tan'kchi* 'to tie instantly' or suddenly, *takshichi* 'to cause to tie', etc.

In some of the Algonkin languages there is a special form of the verb for denoting a *pretence* of doing or being, 'feigning

to do'. In the Cree, this form has the characteristic *-ka's*: from *nipp'ow* 'he sleeps' comes *nippaKA'soo* 'he pretends to sleep'; *muskowissu* 'he is strong', *muskowisseKA'soo* 'he pretends to be strong', etc. (Howse's Cree Grammar, pp. 20, 84.)

What I have called *generic formatives* have been regarded by some writers on the American languages, especially by Mr. Schoolcraft, as "primitive nouns never disjunctively used." All, however, which are found in the Algonkin languages, may be shown to belong to one of two classes: verbals and participials regularly formed from primary verbs some of which still retain their independent places in the language, — and inflections, with a characteristic particle prefixed to each. They may be described, generally, as terminations which denote the class or kind to which the object designated by the synthesis belongs. Examples of these formatives may be observed in many geographical and local names. In the parts of the country where Algonkin dialects were spoken, *-paug* or *-pág* final (or followed by the locative sign *-ut*, *-it*, *-ing*,) denotes 'water at rest,' 'standing water,' and is the substantial component of many names of lakes and ponds: *-hanne* or *-han* 'flowing' distinguishes a 'rapid stream' or 'current'; *-tuk* (Abnaki *-tegwé*, Delaware *-ittuk*) 'driven in waves,' from a root signifying 'to strike,' is found in names of tidal rivers and estuaries and of broad deep streams: *-ompsk*, contracted to *-psk* or *-msk*, (Abnaki *-peskoo*, Cree *-pisk*, Chippeway *-bik*) denotes 'hard or flint-like rock.'*

-Minne or its contraction *-min* is the generic affix of names of berries, nuts and other fruits which may be eaten. It is never used independently, though a nearly-related word *meen*, pl. *meenun*, is found, in the Chippeway and some other dialects, specially appropriated to a single species (the blue berry), and in the Cree the diminutives *menis* and *menissis* are used for 'berry' generally. The cranberry was called by the Narragansetts *sasé-min* 'very sour berry,' by the Chippeways

* Since the above was written a more extended notice of this class of generic formatives, has been given in a paper "On the Composition of Indian Geographical Names," printed in the second volume of the Collections of the Connecticut Historical Society.

muskegé-min 'swamp berry'; the strawberry is (Chip.) *odéi-min* 'heart berry'; Indian corn, in Massachusetts, *ewáchi-min* or *weatchi-min*, but among the western Algonkins, *monda-min* 'manito (i. e. supernatural or wonderful) fruit.'

-*Pin* denotes an esculent tuber, or tuberous root; as in (Chip.) *o-pin*, potato, *wütü-pin*, wild potato, *muskode-pin* 'prairie root,' *wawbeze-pin* 'swan root' (a species of *Sagittaria*), etc.

-*Asq* in the Massachusetts and Narragansett dialects was the generic formative of the names of fruits which might be eaten 'raw' or when 'green,' — particularly, of melons and edible gourds. In the plural *-asq* makes *-asqwash*, — whence our name 'squash' for several varieties of *Cucurbitaceæ*.*

In the Chippeway language, *-gan* and *-jigan* (*-gun* and *-jeegun*, Schoolcraft; Cree, *-gun*, *-chéggun*, Howse; Delaware, *-can*, *-schican*, Zeisberger;) are the formations of many names of *instruments*. Mr. Schoolcraft regarded these names as "based upon the word *Jeegun*, one of the primitive nouns, which, although never disjunctively used, denotes, in its modified forms, the various senses implied by our words instrument, contrivance, machine, &c." Sometimes, he says, it is shortened to *-gun*.† These generics, however, are not primitive words, but the formatives of participles, and *-jigan* is never shortened to *-gan*, but is formed by the insertion of the characteristic of energetic action, *-ji*, between *-gan* and the verbal root. Participials in *-gan* (or *-gun*) serve as names of what may be distinguished as *passive instruments*, — things 'used for' some purpose by an animate agent: e. g. *niba-gan* 'a bed'

* The primary meaning of *asq* or *ask* seems to have been 'before-time', 'immature', 'unfinished,' or the like. As an adverbial *prefix* to verbs it denotes that the action is *not yet* performed. Hence, *ask-i* and *ask-un* 'it is raw', i. e. not yet prepared to be eaten, or 'it is green' i. e. not yet matured. *Eskimo* is the Algonkin name of one who 'eats fish or flesh raw', — Abnaki '*ski-moohoo*, Mass. *aski-moowhas*. The Dakota *sak* corresponds to the Algonkin *asq*: *sa'ka* 'raw'; dimin. *sa'ka-da* 'green, immature'; *sa'ka-yutapi* 'something eaten raw', melons, cucumbers, &c.

† Lectures on the Odjibwa Substantive. — Gallatin in Trans. Am. Antiq. Soc., vol. ii. p. 228, adopts from Schoolcraft the statement that "a numerous class of compounds is derived from *jeegun* or *gun*, meaning 'instrument', words never used alone."

(‘used for sleeping’), *opwá-gan* ‘a pipe (‘used for smoking’), *wassúlshkie-gan* ‘a window’ (‘used for lighting’), &c. Participials in *-jigan* (*-jeegun*) or *-chéggun* denote inanimate agents, instruments ‘for doing’ something and which are regarded as exerting a degree of energy of their own. Of this class are all labor-saving machines and contrivances for *helping* the Indian do what he cannot do without them: e. g. Chippeway *kíshkíbo-jigan* ‘a hand saw’, i. e. used for cutting crosswise; *táshkíbo-jigan* ‘a saw-mill, or pit saw’, used for cutting lengthwise; *bissibo-jigan*, ‘a corn mill, or coffee mill’, used for making fine, reducing to powder. Delaware, *kínhan-schican* (Zeisb.), ‘a grindstone’, used for sharpening.*

The preceding examples have been taken from languages of the Algonkin family, in which the generic annex *follows* the qualificative. In other groups the order of synthesis is reversed and the generic is prefixed. The Dakota *cha* (*ch* as in *chin*) meaning ‘tree’ or ‘wood’, corresponds to the Algonkin *-takh*, for the designation of articles ‘made of wood’ or ‘belonging to a tree’, e. g. *cha-ha* ‘tree skin’, bark; *cha-ha-pi* ‘tree sap’, sugar, *cha-opiye* ‘wood to put into’, a box or wooden vessel; *cha-shi* ‘tree fat’, gum or resin; *cha-shu-shka* ‘good for nothing wood’, the box-elder, &c. *Ta* is a generic prefix of names of ruminating animals, but when used independently denotes the moose, *par excellence*. *Wa* limits certain names to the ‘bear’ species. *Ho* refers others to the class ‘fish’,—as in *ho-a-pe* ‘a fin’ (from *a-pe* ‘leaf’); *ho-wa-sapa* ‘all-black fish’, the cat-fish; *ho-ta-ka* ‘great fish’, the sturgeon, &c.

The number and variety of these characteristics—often represented by single consonants,—the presence of one or another of them in almost every synthesis, the fact that the modifications they effect in the action of the verb are some-

* This characteristic *-ji* is itself a compound or derivative, as we find by going back to simpler forms of the verb. In the Cree and Chippeway, *t* or *d* (Massachusetts, *tt* or *dt*) is the characteristic of verbs of action performed on inanimate objects; but if the object is *not expressed*, the verb takes a different inflection and its characteristic becomes *che* or *ji* (i. e. *t-she*, *d-zhe*). From this form of the verb comes the participial in *-jigan* or *chéggun*, which by its formative, *-an* or *-un* ascribes action to an *inanimate* subject employed to do an act, *generally*, or of which the object is not specified; “it cuts (something, or any thing) crosswise”, “it makes something sharp”, &c.

times so slight as to be lost sight of in translation to English, and the difficulty of separating them in all cases from the roots and inflections proper and of assigning to each its specific value — have contributed to give false notions of Indian word-making. One of these must be mentioned here, — for the error it involves is fundamental.

More than fifty years ago, Mr. Duponceau, relying on a statement of Hans Egede that “words are formed in the Greenland language by taking and joining together a *part of each of the radical words the ideas of which are to be joined together* in one compound locution,” and believing that he found something like this in the Delaware language, questioned his correspondent Mr. Heckewelder on the subject. Mr. Heckewelder replied, that in the Delaware and other languages that he was acquainted with, “parts or parcels of different words, sometimes a single sound or letter, are compounded together, in an artificial manner, so as to avoid the meeting of harsh or disagreeable sounds, and make the whole word fall in a pleasant manner on the ear”; and he gave two or three illustrations — or what he supposed to be such — of this process. It was further explained by Mr. Duponceau, in the Preface to his translation of Zeisberger’s Delaware Grammar, in 1827, as “consisting in putting together portions of different words, so as to awaken at the same time in the mind of the hearer the various ideas which they separately express.” Dr. Pickering lent his high authority to this statement by incorporating it with his excellent paper on Indian Languages in the *Encyclopædia Americana* (vol. vi., appendix), and Mr. Gallatin adopted it in his *Synopsis* (*Trans. Am. Antiq. Society*, ii. p. 201), where “this manner of compounding words, by uniting in a single one *the abbreviations, sometimes a single syllable, or even letter, of five, six or more words*”, is said to “belong equally to the Eskimau and to the Algonkin,” &c. It attracted the attention of W. von Humboldt, whose observations on the Delaware Language in the introduction to his great work (*Ueber die Kawi-Sprache auf der Insel Java*, vol. i. pp. cccxxxii.) were founded on Duponceau’s Correspondence with Heckewelder and translation of Zeisberger’s Grammar. From these authorities he

inferred, "das es von dem Redenden abhängt, solche [neue] Wörter oder vielmehr ganze zu Wörtern gestempelte Phrasen gleichsam aus Bruchstücken einfacher Wörter zusammenzufügen": but he came nearer than had Mr. Duponceau to the true explanation of the process, in the suggestion that "man müsste aber eine tiefere Kenntniss der Delaware-Sprache und der Verwandtschaft ihrer Wörter besitzen, um zu entscheiden, ob wirklich in den abgekürzten Wörtern *die Stammsylben vernichtet, oder nicht vielmehr gerade erhalten werden*" (p. cccxxxiii.).

The publication in Paris of Duponceau's *Mémoire*, in 1838, brought his theory of Indian synthesis, or 'agglutination' as he preferred to call it, to the notice of European scholars, and since then it has been the common property of writers on language. Mr. Schoolcraft had already adopted it. In his Lectures on the Chippeway Substantive, first printed in 1834, he had contrasted the language "viewed in its original, elementary state — in a vocabulary, for instance, of its primitive words," with its "oral, amalgamated form", whose "transpositions may be likened to a picture, in which the opal, the carmine and the white lead are no longer recognized as distinct substances," — while "*it is the painter only who possesses the principle* by which one element has been curtailed, another augmented, and all, however seemingly discordant, made to coalesce": and "so completely transpositive do the words appear, that like chessmen on a board *their elementary syllables can be changed at the will of the player*, to form new combinations to meet new contingencies, so long as they are changed in accordance with certain general principles and conventional rules; in the application of which, however, *much depends upon the will or skill of the player.*"

Now it is certainly true that the elements of every new word in an Indian language may be found also in older words of the same language; but in regarding these elements in their new combination as the representatives or as "abbreviations" of the old words, selected not because of their inherent significance but "at the will of the player" and merely as mnemonic symbols, — Mr. Duponceau's theory is not only unsupported

by facts, but it involves a doctrine of Indian synthesis which is directly opposed to the true one. If it be accepted, neither the analytical method I have suggested nor any other could lead to positive results, and mere guess-work must be substituted for critical investigation. The actual derivation of the components of a phrase-word could never be known with certainty, and we could do no more than assign possible values to the several unknown quantities.

As I have said before, the Indian aimed at *extreme precision*. His words were so constructed as to be thoroughly self-defining and immediately intelligible to the hearer. In the construction of his synthesis, he was controlled by established and universally recognized laws; in the selection and arrangement of its elements, he admitted nothing ambiguous, left nothing to conjecture. What may be called the frame-work of an Algonkin polysynthesis, or phrase-word, is composed of two or more monosyllabic *roots*, each having its own substantial meaning. These are not to be regarded as "abbreviations" or fractions of words because they do not bring with them all the pronominal or other affixes, characteristics and inflectional forms they have received in other relations: and they "combine in one" *not* "all the various ideas contained in the several older words" in which they are found, but only the ideas which are inherent in or inseparable from themselves.

Mr. Duponceau's theory was adopted on slight examination and mistaken evidence. It appears to have been suggested to him by the statement of Hans Egede respecting the composition of words in the Eskimo language. In his correspondence with Heckewelder, before mentioned (p. 76), and again in his *Mémoire* (p. 92), he gives analyses of Eskimo words taken from Egede's Description of Greenland (Det gamle Grönlands nye Perlustration, Kiöbenhavn, 1741), perhaps in its German or English translation. But Paul Egede (in his Grammatica Grönlandica, Havniæ, 1760,) and Otho Fabricius (Forsög til en forbedret Grönlandsk Grammatica, 1791 and 1801,) supplied more full and clear explanations of the method of compounding Eskimo words, and showed how the meaning of the verb is modified by characteristic particles (see before, p. 71)

which are to be construed as auxiliary verbs but which have no independent meaning.* Fabricius (pp. 214–343) enumerates 287 of the inseparable characteristics (“Verbalske Endelser,” and gives examples of their use. Neither of these writers affords the least countenance to Duponceau’s assumption that such particles are abbreviations or reminders of words which retain independent places in the language, — whatever may have been their remote origin.

In Mr. Schoolcraft’s glowing description of Indian word-making as a process the secret of which is known only to the word-maker, in which the laws of composition are subordinated, and vocal pawns are moved about “at the will of the player,” — this theory receives its *reductio ad absurdum*.

Dr. R. G. Latham, in his *Elements of Comparative Philology*, published in 1862, (p. 520), gave a concise exposition of the true doctrine of grammatical synthesis in the American languages. He dissented explicitly from the view which, since the appearance of Duponceau’s *Mémoire* in 1838, had been taken by American and European philologists. Admitting “that there are in these languages certain very long words expressive of what in Europe is expressed by short ones, and that out of these long words compounds may be made which are no longer than either of the single elements,” and that “this looks as if each were picked to pieces, and a part only taken,” he remarks, that “in respect to the phenomenon of a composition with a decomposition to precede it — it would be important if proven. The fact, however, of the decomposition is more than doubtful. *It is not out of the full-formed pair of primary compounds that the secondary compound is made, but out of the original parts which existed while they — the apparent primary compounds — were merely compounds in posse.*”

* “Certæ cum Verbis simplicibus componuntur Particulæ, loco Auxiliorum usurpandæ, quæ nullius, extra illam compositionem, sunt significationis” (Egede, *Gram. Grönl.*, p. 145); and again, of adverbs (p. 199): “partim e separatis vocibus aut particulis, partim e particulis encliticis, nulla, extra compositionem cum aliis vocibus, significatione gaudentibus, constant.”

V.—*On the German Vernacular of Pennsylvania.*

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Pennsylvania German—improperly called “Pennsylvania Dutch” is not normal German corrupted after its arrival in America, but a fusion of the South German dialects brought from the region of the upper Rhine, including Switzerland. To these localities we must look for its characteristics, except the infusion of English, and in adopting more or less of this foreign element, it follows the natural law of all languages, in taking up new or convenient terms for new objects, so that a word like *clearing* (land cleared by the destruction of a forest) comes into American German as naturally as *prairie* came into English.

Nor is this English element confined to Pennsylvania German, for the advertisements of High German newspapers in the cities of New York, Buffalo, Chicago, Little Rock, Des Moines, Philadelphia, Galveston, and others, cannot be read by a German unacquainted with English. Here we find —

Ein prachtvolles 2stöck. und Basement Brickhaus in 10. Ward, volles Lot . . . Ein großes Country Hotel . . . Eine schöne Farm . . . Barn und allen Geräthschaften . . . Mortgages werden als Zahlung angenommen . . . Wird vertauscht gegen Brooklyn Property. — Verlangt: Mädchen, die Ostreich und Vultures nähen können . . . Topfloor, Room 16 . . . Operators und Waifers . . . Ein Front- und Rearhaus . . . durchaus gepaintet . . . ein 2stöck. und Basement Framehaus . . . gute Gegend für eine Grocery-Store — Ein Grocerystore mit Stock und Fixtures . . . Lagerbier-Salon mit Boardinghaus — Ein Drygoods-Store . . . an einem Corner — Ein Butchershop — Ein Kaffee-Salon verbunden mit Candy, Soda-Wasser, Rootbier, Eiscream, etc.— (*New-Yorker Staats-Zeitung*, 8 Aug., 1870.)

In Pennsylvania German the *a* is sounded as in *what*, *fall*, the nominative form ‘*der*’ replaces the accusative *den*, the imperfect tense is avoided, both as in Swiss, and the perfect is used instead, so that for *ich sagte* (I said), *ich hatte* (I had), *ich kam* (I came), we have ‘*ich hab ksaat*, *ich hab kat*, *ich bin kummə*.’ The nominative neuter article *das* becomes ‘*des*,’

infinitive *n* is dropped, and many other finals replace it with nasality — which are features common to Suabian, as well as the almost exclusive use of *-li* as a diminutival. To the German strong verbs the weak inflection is given, so that, instead of *er isst he eats*, *er fällt he falls*, *er fragt he asks*, we have (*æ* in *fat*) ‘*ær esst, ær fallt, ær frookt.*’

The three following detached stanzas are from Harbaugh’s *Harfe* (Poems in this dialect, 1870), to which I add translations.

“Der Mond is[iss] uf — er is juscht voll —
 The moon is up — so full and fair,
 'R piept zum Fenschter rei[herein] — guck mol — ²²
 It peeps into the window there,
 Un scheint uf's Bett un Floor.
 And shines on bed and floor:
 Was regt sich an der Wand? ich glaab,
 What plays upon the wall? I b'lieve
 'S is Schattenschpiel von Babbelaab:
 The shadow of a poplar leaf, —
 So hab ich's g'seh' zuvor. p. 33.
 As I have seen before.

Ei guck, wie schnell der Mond nuf[hinauf] eilt;
 But see! the moon has upward gone;
 Wie lang hab ich mich doch verweilt!
 How long indeed I've linger'd on —
 Ich muss mich widder geh'.
 Again I must now go;
 Gut Nacht, klee'[flein] Stübche'! halt, ich meen
 Good night my bedroom! stay — I feel
 'S wär Ebbes in mei'm Aag — 'n Dhreen!
 A something in my eye — a tear!
 Der Abschied, der dhut weh!
 Departure — this is woe! p. 35.

'S is Alles schtill! Die Kinner schtecke
 All is still! the children nestle
 Schnock im Bett un draame schee';
 Snug in bed, with pleasant dreams;
 Santa Claus werd sie net wecke,
 Santaclaus will not awake them,
 Er dhut all sei' Sach allee';
 He does all his work alone;
 Hengt d'r Baam mit Scheene Sache,
 Decks the tree with pretty trifles,
 Schleicht herum im ganze Haus,
 Slips about th' entire house,
 Legt sei' Gabe 'raus mit Lache,
 Scatters gifts around with laughing,
 Un dann — Ho! — zum Schornschtee' naus!' p. 40.
 And then up the flue departs.

The next example, by Tobias Witmer of Buffalo, has certain 'Sunday Concerts' in view. I add a translation and notes, and retain the not quite uniform spelling of the original:

"DIE FRESCHLIN.

THE FROGS.

Die freschlin hen¹ e² grosze jacht,³
The frogs have always quite a din
Si peiffe⁴ schiir die ganze nacht,
For half the night, and toads strike in
Die krotte dun 'ne⁵ helfe;
To aid (perhaps outvie) them;
Doch wann ebmol der reife⁶ kummt,
Tow'rd midnight, if the frost appears
So is⁷ ir' liedle glei⁸ verstummt,
Their voices cease to reach our ears,
Si geen ins bet am zwelfe.
And then to bed they hie them.
Wan's nord⁹ e bissel wermer werd,
If t were a little warmer now
Es grosse dreckloch ausgederrt,
To desiccate that muddy slough
So mitte in dem juuli,
As usual in mid July,
Nord⁹ fange d' grosze bullfraags an¹⁰
Then giant bullfrogs would begin
Un bloose, das mer¹¹'s heere kaa,
To let us hear their vocal din
So weit wie unser muuli.¹²
As far as our mooley.
Wan ich jetz¹³ weer e musikand,⁷
Could I instruct in tune and dance
Un keem juscht vom Franzooseland,
And were I just arrived from France
Dart woo sich d' kaiser mache;
Where kings are self-elected,
Ich greecht¹⁴ e musik⁷ schuul in gang
A school I d soon get under way
Di fresch zu lerne, 's nehm net lang,
To teach the frogs to sing and play—
Ja gwisz, du brauchscht net lache.
Do n't laugh, ye disaffected!
E dutzet bullfraags miszte nei,¹⁵
A dozen bullfrogs I would get,
E hundert gleene¹⁶ fresch derbei,
A hundred little ones I d pet—
Die krotte far der tenor;
The toads should sing the minor,
E' groszes loch voll laager biir,
A puddle full of lager beer
Des miich¹⁷ de fresch di hels recht kliir¹⁸
Would make their raucous throats quite clear—
Du weescht,¹⁹ — was weer jetz schener?
What could indeed be finer.

Nord⁹ kriigt¹⁴ ich miir en groosse saal
 Then would I get a stately hall
 Un advertreis⁷ en sunntaags baal
 And advertise a Sunday Ball,
 Mit meine musikante;⁷
 With music-frogs a million;
 Dii veegel miszte all derzau,
 I d have as guests the various fowl —
 Dr Condor un dr Uhu-huu
 The condor and the graceful owl
 Dii tantze mit enander.²⁰
 Would start a grave cotillion.

Des weer der human familii
 'T would be to man's proud family
 En pattern of gentilitii
 A pattern of gentility
 Si kente sich impruufe,
 With which I could delight them;
 Si hen¹ e fact schun ardlich²¹ glernt,
 They have in fact begun to learn —
 Es gebt e mol²² e groose erndt —
 The ball would yield a fair return —
 Der Guckuk werd si ruufe."
 The cuckoo shall invite them.

¹ For *haben* *have*, as in South German; — *han* of the Minnesingers. A dative form of the pronoun is used in 'm'r hen' (Swiss *mer hend*) *we have*; 'd'r hent' (Swiss *der hend*) *you have*.

² The German article *ein*, *eine* reduced, like English *a*, and pronounced indistinctly.

³ The common Penn. Germ. word for *noise*, *Lärm*. ⁴ *Sie pfeiffen* *they pipe*.

⁵ For the dative *ihnen*; or possibly, a regular plural of *ihn*.

⁶ German *der Reif* *rime-frost*. About midnight the cold causes them to cease.

⁷ The *s* is not used as English *z*. ⁸ *gleich* *presently, directly*.

⁹ *Then*, a metathesis of *Darnauf*.

¹⁰ This word is the vowel of *fall* nasalised, and the word below rhymes with it.

¹¹ The German plural dative *mir* used impersonally in the singular, for *man*, *one*, as in Swiss, &c. See note ¹.

¹² English *mooey* a hornless cow. From the Irish and Gaelic.

¹³ For *jetzt*, but *nau* (Eng. *now*) is more used. In a funeral sermon lately heard (1870) in the dialect, although the speaker endeavored to use *jets*, he often fell into *nau*, and he used but one other English word, in saying that 'salvation depends upon certain *conditions*' — pronouncing the word as in English, but with a pure hissing final.

¹⁴ *Grecht*, also *griecht* and *kriigt* *I would get*; Ger. *triegen* *to seize, get*.

¹⁵ *müßten hinein* *would have to be in*. ¹⁶ Plural of *klein* *little*.

¹⁷ *Des miich* *this would make*. *Des miich alles recht* *this would make all right*.

¹⁸ The English word *clear*. ¹⁹ *Du weißt* *thou knowest*.

²⁰ *Enanner* is usually without the *d*.

²¹ *Tolerably*; from *ordentlich* *orderly*. ²² *e mol*, *ein mal* *once*.

VI.— *On the Present Condition of the Question as to the Origin of Language.*

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It is far from being my purpose in this paper to enter seriously into the discussion of the origin of language, in the way either of putting forward a theory of my own, or of controverting those which have been put forward by others. I do not wish to open at this time before the Association so vast and uncontrollable a subject. No theme in linguistic science is more often and more voluminously treated than this, and by scholars of every grade and tendency; nor any, it may be added, with less profitable result in proportion to the labor expended; the greater part of what is said and written upon it is mere windy talk, the assertion of subjective views which commend themselves to no mind save the one that produces them, and which are apt to be offered with a confidence, and defended with a tenacity, that are in inverse ratio to their acceptableness. This has given the whole question a bad repute among sober-minded philologists—insomuch that, for example, the recently established French association of kindred object with our own (the Société de Linguistique) forbids by its fundamental law any introduction of the origin of language into its transactions and debates. The prohibition, however, has not worked unexceptionably well; for there is no similar society a larger part of whose members have rushed into print upon the subject before the general public; so that one may conjecture that if they had been permitted to fight the fight out more among themselves, the community outside would have been the gainer: and hence, we need not feel bound by their example.

The reason of this irreconcilable discordance and regrettable waste of activity appears to be that no common basis of discussion is yet established. The question of the origin of language is not one of facts, to be settled by direct evidence, like the question of relationship of a dialect, or of the

genesis of a form; it does not belong to comparative philology, but to linguistic philosophy, all whose fundamental doctrines are involved in its solution. And it will be readily settled (so far as it is capable of being settled at all) when the grand principles of linguistic philosophy are placed upon a firm basis, when it is no longer the case that even scholars of the highest rank are disagreed as to such points as the nature of language and its relations to the mind and to thought (the old dispute as to *φύσει* or *βίσει*), and the relation of human expression to that of the lower animals.

My intention here, then, is merely to review briefly the present aspects of the discussion, and to endeavor to straiten its field a little, by directing attention to points that deserve to be regarded as settled, and pointing out directions in which further effort will be likely to lead soonest to valuable result.

And, in the first place, it may be premised that the question of the origin of language is a purely scientific question, and a legitimate one, and that its investigation is to be carried on by strictly scientific means and methods. There ought to be no need of putting forth this claim, still less of insisting upon it; yet, as things are, it requires to be made and urged. A scientific treatment implies that the known and recorded facts of human language, in combination with known and observable characteristics of human nature, be made the sole basis of the inquiry, and be examined with thoroughness and without prejudice, till they have been forced to yield the utmost result that they are capable of furnishing. This, on the one hand, excludes the admission as co-ordinate evidence of all opinion, by whomsoever and at whatsoever time expressed; of all statement, traditional or other, and on whatsoever authority reported. Nothing but harm and confusion can come from attempting to combine the hints of the Genesis, for example, with the deductions of science, in order to yield a joint conclusion; or from suffering the one to govern or regulate the other. The student of language should not ask whether the course of inference and deduction which he is pursuing is going to bring him to conclusions in accordance with views heretofore held by any, or not. His business is solely to see

what language itself has to say of its own origin, and how plainly and unequivocally; whether it gives him a solution of the problem that is certain and must be maintained against all attack, or only furnishes probabilities and limits the range of possible hypotheses. When the scientific work is done, then is the time for comparison with views derived from any other quarter, balancing their respective merit and claim to credence, abandoning the one for the other, or trying how they may be reconciled.

The scientific method requires, on the other hand, that no assumption of a different human nature from that which we see and know be made a factor in the inquiry — that no special faculty, or instinct, either in particular individuals, or races, or generations, be postulated, and charged with the beginnings of intelligent and intelligible utterance. To make such an assumption is equivalent to abandoning the scientific ground entirely, and is no better than the admission of a miraculous or superhuman agency. If human capacities as they actually are be found, in the last analysis, unequal to the task of producing the germs of a method of communication like ours, then that will be the scientific result of the investigation, and the field of conjecture will be thrown open to whoever may desire to enter it; but he is no scientific inquirer who uses such materials in his investigation itself.*

* I need hardly explain that I allude here to the assumption which F. M. Müller has made a part of his so-called "ding-dong theory" of the origin of language — his assumption of "an instinct, an instinct of the mind as irresistible as any other instinct," which, after it had given "to each conception, as it thrilled for the first time through the brain, a phonetic expression, became extinct when its purpose was fulfilled." It is, indeed, possible to put this doctrine in such a form as shall give it a scientific *status*. If the claim were made that a faculty and disposition to direct expression of thought and the production of "phonetic types" forms a part of universal human nature, and would show itself and work its legitimate results in every individual if its action were not anticipated by the learning from others of already formed and developed speech — that, indeed, would be worth discussing and testing by careful inductive processes, by examination of the facts of human history and the history of speech. But Müller, with his followers (if in this particular doctrine he has any followers), does not explain himself thus, or show any indications of meaning thus; in his view, that this faculty was "peculiar to man in his primitive state" "must be accepted as an ultimate fact"; no other reason is alleged than that "that faculty must have existed in man, because its effects continue to exist" — which is a palpable begging of the question, a

In the second place, if we would make our contributions to this discussion tell upon its result, we need to draw the line distinctly between the historical and the theoretical sides of the question—or, what is nearly the same thing, between what has already been done and what yet remains to do. Historical investigation takes us from the present condition of language a long way back toward the beginning, but it does not and never can take us the whole way. In the very nature of things, it cannot show us why the first speakers used this and that sign for this and that idea; and practically, it cannot show us that they did use this and that sign at all. There is no prospect that we shall ever be able to say “*these* are the very first utterances of speaking men; now let us see how they originated.” We come nearest to such a result, doubtless, in the Indo-European family; yet, even there, we can only assert the use of certain elements in certain senses before the break-up of the family into its independent branches; of the absolute primitiveness of any of these elements we have and can have no assurance. In most or all of the other families we cannot even go so far as this—whence the worthlessness of the attempted comparisons of roots between the different families. The grand conclusion, however, at which historical study has surely and incontrovertibly arrived, is that all the grammatical apparatus of languages is of secondary growth; that the endings of declension and conjugation, the prefixes and suffixes of derivation, were originally independent elements, words, which were first collocated with other words, and then entered into combination and were more or less thoroughly fused with the latter, losing their primitive form and meaning, and becoming mere signs of modification and relation; hence, that the historically traceable beginnings of speech were simple roots; not parts of speech, even, and still less forms. That these roots, moreover, signified external, sensible, physical acts and qualities; precisely what ones, we cannot yet tell, and shall perhaps never be able to tell; but this, in its bearing on the question of origin, is of no great consequence. All that there

taking for granted, without argument, that language is its effect and could have been the effect of nothing else: that is to say, it must have existed because it must have existed.

is left to explain, then, is, how such roots as these should have come into being and use. And this amounts to a wonderful simplification of the question of origin; did we not see that primitive speech was thus widely different from the developed discourse of historical epochs, we should give up our inquiries in despair, and acknowledge that only miraculous power could have been equal to the origination of language.

It would be unfair to claim that the accordance of students of language in this doctrine is absolute. There is here and there an ultra-conservative, who will believe only so far as he is forced by unequivocal testimony, and, while he confesses the later formative elements of speech to be wrought out of independent words, refuses to infer that the older are of the same character, preferring to hold that there was some mysterious and inscrutable difference between the ancient and modern tongues as regards their principle of growth: and we even meet occasionally with a man who has done good service and won repute in some department of philology, and who yet commits the anachronism of believing that endings and suffixes sprouted out of roots by an internal force. But these are men with whom it is vain to reason; they must be left to their idiosyncrasies, and not counted in as bearing a share in the progress of modern linguistic science. There are also, of course, many whose studies in language have not gone far enough to show them the logical necessity of the views we have described; but they, too, are to be reckoned as in the rear of the present movement. He who sets himself seriously to examine or to demonstrate the theory of roots as the historical germs of speech will be accounted as one who threshes straw; he who does not make that theory the basis of his farther inquiries into the origin of language must not expect even to obtain a hearing from scholars.

Upon this basis of historically determined fact whatever farther truths are raised must be won by processes of another sort. Strict induction from determinate items of knowledge is no longer applicable; its place is taken by inference from general views and theoretical conditions—these views and conditions being themselves, of course, not arbitrarily assumed,

but derived by inductive process from the known facts of language and human history. It is here, accordingly; that there begins to be wide discordance among even the best scholars and deepest reasoners; a discordance that is sometimes implicit and unacknowledged, sometimes clear and outspoken. And it is highly desirable that the efforts of those who would advance the science of language be brought to bear directly upon some of these points of discordance, whose settlement ought to be already within reach, and would be of decisive influence upon that of the ultimate question which we are considering.

Thus, what difference can reach deeper, or be of wider bearing, than that which prevails with reference to the nature of the relation between language and thought? One party contends, either impliedly or formally, that there is an actual identity between speech, on the one hand, and thought, mind, reason, on the other; that language is not only a sign of reason, but its very substance; that thought without expression is an impossibility; that the formation of an abstract idea depends entirely upon its name—and so on. This doctrine finds probably its extreme expression in the assertion that a deaf mute is destitute of reason, and does not become possessed of it until he learns a mode of expression from the reasonable beings about him. The other side maintains that language is only the assistant of reason and the instrument of thought; that reason is the indefeasible endowment of humanity, and thought the action of human minds; that they need, in order to their full development and proper working, an auxiliary like speech, and have proved able to provide themselves with it; that, even had men been deprived of voice, they would have made available some other instrumentality for the same purpose; that he whose want of hearing cuts him off from this particular mode of expression is still a man, with all the essential characteristics of humanity, which merely require to be developed and educated by a less usual and less convenient instrumentality; that, were a generation of infants to grow up untaught to speak, they would from the beginning be possessed of reason no less than ourselves, and that their reason would

at once begin a course of training analogous with that through which the human race has already passed, one of the essential steps in this course being the production and use of speech. When we come down to smaller details, the one side hold that the idea without the word is an impossibility, and that no conception can exist till there is provided a name for it; the other, that the idea or conception always precedes in time, and must precede, the name; that signs are made in order to be applied to ideas which the mind has formed and seeks to express; that the whole process of language-making, from the beginning of time, has been only a process of names-giving which has followed close upon the growth of knowledge and conscious thought, mastering and making manageable and communicable whatever bit of valuable mental wealth has been wrought out by experience.

Men who hold these two so diverse sets of opinions cannot be expected to agree with one another in their views of the origin of speech. And he who should address himself successfully to this one subject, should point out the errors and misapprehensions involved in the one or the other theory, or in both, in a convincing manner, so as to lead the way to a mutual understanding and agreement, would, in my opinion, render the very greatest service that can be rendered to the question of origin. Most of those who undertake the latter directly do not treat the other with fullness, or at all; they simply let their discordant views upon it appear, as if the matter were too plain and elementary to call for discussion; or they dispose of the opposing opinion with an absurd misrepresentation or unfair fling. Thus, nothing is more common than that those who hold the former of the two sets of opinions described above should make easy work of vanquishing their opponents by simply assuming the latter to maintain that men work out a whole series of new ideas, and then, by an afterthought, set themselves at work to devise and apply appellations for them; or, they attempt to confute the idea of the "conventionality" of spoken signs for thought by showing the laughable absurdity of a gathering or "convention" of speechless men, discussing and voting the adoption of spoken

designations—as if the term “conventional”, in any of its uses, ever implied any such convention! Indeed, so customary is this sort of unfairness, that I may truly say I have never seen the controversy conducted otherwise by the party referred to, or the opposing views squarely met and argued against, in the form in which their present supporters would put them.

Another point of first-rate importance, whose solution is to a great extent bound up in the result of the controversy which we just have been considering, is this: should the first impulse to speech have come from within, or from without? were words pushed out by a longing after expression, for the sake of the benefit and relief afforded thereby to the individual's own mind, or were they drawn forth by the desire to communicate, to make known to another what lay in the utterer's thought? were they framed as the means of expression pure and simple, or of communication? This also is a point which is apt either to be overlooked altogether by inquirers into the origin of language, or to be carelessly and insufficiently treated by them. Yet its decisive bearing upon the question is evident. Its settlement one way or the other involves a complete diversity in the essential character of the first utterances, the germs of after development. On the one hand, we should have to seek in these some internal and necessary tie between the conception and its sign, naturally inherent in the latter, and determining its assignment to its office. On the other, no such tie would be implied, any more than between idea and sign in the later stages of language, and the only adaptedness in the sign would be its adaptedness to be readily understood by the being to whom it was addressed. The first framers of speech would be regarded as standing toward one another in a position essentially the same with that of two persons of wholly different language who should meet at the present time and desire to hold communication together: all the resources of imitative expression would be laid under requisition by them—grimace, gesture, posture, imitative utterance, whether onomatopœic or exclamatory, symbolical utterance, so far as in this there was power of suggesting an intended meaning.

The process of mutual understanding would be a tentative one, every imagined expedient being tried, and adopted if it proved successful; and ere long a foundation would be laid which would admit of rapid and indefinite expansion. We must not overlook, of course, the great differences between this imagined case and that of the primitive language-makers: where two beings with developed powers of thought and expression, and with formed habits of speech, came together, their progress would be indefinitely greater, and the process would soon become one of learning one another's speech, and framing a common dialect out of the mixture of the two (doubtless with great preponderance of the one over the other); but where the two were before speechless, and that command of the mental powers and dexterity in wielding them which language gives had to be acquired step by step along with and by the production of language, the process would be laboriously slow, and generations instead of days or weeks would be needed to mark the stages of its advance. And yet, in both cases the initial steps would be parallel and essentially alike. That is to say, the recognition of communication as the primary and ultimate object of speech involves as its necessary consequence an acceptance of the "imitative" theory of the origin of speech;* nor, on the other hand, can this theory be established independently of such recognition; the two doctrines must stand or fall together. Into any detailed discussion of their truth, it is not the purpose of this paper to enter. I would only point out one or two difficult implications which seem to be made in the opposing view.

One of these is, that the solitary man would have the same inducement to produce a language as the member of a family or a society. If words are made because the individual feels or knows that the possession and use of such signs will help his consciousness to gain command of the processes of mental action, will render orderly and consecutive thought possible to him, will be to his reason what the tools he invents are to

* The theory, namely, which some have unauthorizedly divided into an onomatopœtic and an interjectional theory, but which in fact includes both these, and more beside. See Wedgwood's *Origin of Language*, and the writer's *Language and Study of Language*, eleventh lecture.

his hands, then the whole efficient force and its occasion of action are within the individual, and society adds only a means of perpetuating what he originates for his private benefit. And it needs to be inquired whether what we know of solitary human beings, or of those who by some special local deficiency are cut off from the usual avenues of communication with their fellows, and whether what we see of the relation of society to language during the recorded history of its growth and employment, are in accordance with this view.

Again, a questionable degree of forecast, of comprehension of what would make for his advantage in the development of his capacities, is thus attributed to primitive man. That human beings at even the lowest stage of existence are accessible to inducements founded in their social nature, no one will think of denying; but that they are capable of anticipative pleasure in the "projection of their thought outside of themselves," in setting it forth as an object of contemplation by themselves, is vastly more doubtful. Experience, and only experience, it would seem, is capable of making the individual realize the advantage and take pleasure in the exercise — if, indeed, the realization comes at all until a considerable degree of culture is reached, and if, in all the early stages of development, men do not, so far as they themselves know and are conscious, talk solely for the sake of intercourse with others. Thus it was with the history of writing, an art that stands only second to that of speaking in its bearing upon the culture of the individual and the advancement of the race; it was not devised as a means of culture and advancement, but as a means of communication merely; and all the advantages which it has in the former respect also have been attained unconsciously, without being anticipated or aimed at.* Thus it has been, too, with the invention of instruments. The instinct to devise and use such aids to his physical powers is not a whit less distinctively characteristic of man than the instinct of speech; but the earliest human beings did not sit down to satisfy that instinct by ex-

* The analogy in this respect between speaking and writing, an analogy pregnant with meaning and instruction, has been more fully set forth in the author's *Language and the Study of Language*, lecture twelfth.

exercising their inventive capacity; they provided for each special practical exigency that arose, by such means as were readiest at hand, and could best be made available; and so they have advanced from clubs and stones to power-looms, steam-engines, and telegraphs, as in language from the rudest signs of thought to such intricate and perfected instrumentalities as Sanskrit, Greek, and English. This is the usual and normal way in which the latent and unsuspected capacities of human nature are drawn out by the pressure of external circumstances and trained by experience; and if the history of language has been different, the burden of proving it so devolves upon those who hold the doctrine.

These are, if I am not mistaken, the most effective tests by which the work of every investigator of the origin of language may be tried. If he mingles authoritative statements, from whatever quarter, with his inductive reasonings, or fails to recognize the results of historical linguistics in the establishment of the initial radical stage of language, he is out of harmony with the whole present condition and spirit of linguistic science, and cannot expect to command the attention of scholars. If respecting the relation of language to thought, the order of genesis of the conception and its sign, and the nature of the primary impulse to utterance, he does not hold definite opinions and defend them by solid arguments, or if he passes lightly over these questions as of subordinate consequence, he will add little or nothing that is valuable to the enormous and constantly increasing mass of disquisition and discussion of the subject — and, in conclusion, it may be claimed that, if he takes the wrong side of these questions, he will never reach a sound and defensible theory. A theory, what we hold respecting the origin of language must always remain, since (as has been already pointed out) direct inductive reasoning cannot reach so far back in the history of language; but the elements of uncertainty in it may, with right views and a sound method, be reduced within very narrow limits.

VII.— *On Certain Forms of the English Verb which were used in the Sixteenth and Seventeenth Centuries.*

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It is a well known fact that Early English has three methods of forming the present indicative of the verb: that of the South of England in which the Anglo-Saxon declension was closely followed; that of the North in which the original termination *-th* was changed into *-s*, and that of the Midland counties from which the modern forms have been derived. For a long period all these may be said to have existed side by side, though after the time of Chaucer at least, the supremacy of the last cannot be disputed. Still, the occasional use in the sixteenth century of forms belonging to the two first has been observed by several writers, and in particular has been pointed out in detail by Maetzner, who (in his *Englische Grammatik*, vol. i. p. 220. ff.) shows that third persons plurals in *-th* and *-s*, as *they loveth* and *they loves*, and second persons singular in *-s*, as *thou loves*, can be found even late in the seventeenth century. Maetzner calls attention to the fact that these plural forms seem to have escaped the notice of most commentators upon Shakespeare, who either silently change them into the singular or else explain them upon high scientific grounds. Thus in the edition of King Richard II. (Oxford, 1869), prepared by W. G. Clark and W. A. Wright for the Clarendon Press series of text-books, the plurals *draws* and *makes* contained in the following lines found in Act ii. Sc. 3,—

“ These high wild hills and rough uneven ways
Draws out our miles and makes them wearisome,”—

are explained in the following manner: This is, say the editors, “ a construction which the Greeks called a σχῆμα πρὸς τὸ σμυλαινόμενον. These wild hills and rough ways blend, as it were, into one idea in the speaker’s mind, and he proceeds as if he had said ‘journeying over these hills and ways’ &c.”

The bearing of this whole question on several disputed passages of Shakespeare is so direct, that it becomes a matter of some importance to know how general was the use of these forms during the period in which he flourished; to ascertain to how great an extent they were employed, not only by that writer himself but by other authors of his time and of the time immediately preceding. Investigations of this kind are attended in this country with considerable embarrassment and trouble, from the perpetually recurring difficulty, not to say impossibility, of obtaining either copies of editions which appeared in the life time of the author, or exact reprints of the same, preserving every peculiarity of the original orthography, etymology, and syntax. Occasionally, indeed, some of these ancient forms are retained in editions, published in our own time, where the language has been modernized. Especially is this the case in poetry, as there the demands of rhyme or metre are frequently imperative. But necessarily no conclusion can safely be drawn from such occurrences save the fact that such forms were used by the authors in whose works they are found: the extent or peculiarity of use can only be inferred and even that with little certainty.

In the preparation of this paper I have examined the following works or parts of works: the poems of Wyatt and Surrey; Ascham's *Toxophilus* (1545) and Scholemaster (1570); Bishop Latimer's *Seven Sermons before Edward VI.* (1549); Bishop Bale's *Play of Kynge Johan* (about 1550); Udall's *Comedy of Roister Doister* (before 1553); More's *Utopia*, translation of Robinson (2d edition, 1556); Sackville's *Induction to Mirror for Magistrates*, and *Complaint of Henry, Duke of Buckingham*; Gascoigne's *Steele Glas* (1576) and *Complaynt of Philomene* (1576); Whetstone's *Remembrance of Gascoigne* (1577); Gosson's *School of Abuse* (1579), and a short poem entitled *Speculum Humanum* (1576); Sidney's *Apologie for Poetrie* (1595); Correspondence of Robert Dudley, Earl of Leicester, during his government of the Low Countries in the years 1585-6; Spenser's *Shepherd's Calendar* (1580), *Fairy Queen* (1590-6), and *Virgil's Gnat* (1591); Bacon's *Advancement of Learning* (1605); Mar-

lowe's Tamburlaine the Great, Dido Queen of Carthage, Hero and Leander, and minor poems; five of Ben Jonson's plays contained in the folio of 1616; forty-four of the fifty-two plays of Beaumont and Fletcher; and the whole of the Shakespeare folio of 1623. For some of the works here cited I rely on the excellent reprints of Mr. Arber; but the works of Wyatt, Surrey, Sackville, Bacon, Marlowe, and Beaumont and Fletcher, have been consulted in modernized editions, and all statements in regard to their usage are necessarily lacking in completeness and accuracy, so far as original editions are concerned.

Obviously in a discussion of this kind, the argument can only be weakened, at least it will not be strengthened, by the citing of illustrations at all doubtful. It has accordingly been made a point to discard all forms in which there should fail to be a strong preponderant probability, if not an actual certainty, that the author designed to make use of the number and person ascribed to him. This has necessarily led to the rejection of all such passages — and they are exceedingly numerous — as the following: "Whom God and man does hate." (Spenser's Fairy Queen, book i. canto i. 13): "My mistress and her sister stays for you," (Shakespeare, Comedy of Errors, act i. sc. i.): "The priest and his wife sitteth with the Siphogrant," (More's Utopia). For the rule so constantly and confidently set forth in English grammar that two or more subjects in the singular connected by *and* require a verb in the plural has never been observed by English writers, at least down to the close of the seventeenth century. On the other hand the verb in phrases like "There hath been men," or "There has been men," is treated as a plural, though the frequency in later writers, of the singular form after *there* with a plural subject renders this a matter of doubt.

With this restriction an examination of the works above-named show in the case of the third person plural the following results, though it has not been deemed important, except in the case of Shakespeare, to specify the passages. The poems of Wyatt show six plurals in *-s* and four in *-th*; those of Surrey, four in *-s* and none in *-th*; Ascham's Toxophilus, twelve in *-s* and thirty-six in *-th*; his Scholemaster, none in *-s*

and four in *-th*; Latimer's Sermons show nine in *-s* and sixteen in *-th*; Bale's *Kynge Johan*, four in *-s* and twenty-six in *-th*; Udall's *Roister Doister*, two of each; Sackville's poems, five in *-s* and none in *-th*; Robinson's translation of More's *Utopia*, none in *-s* and five in *-th*; Whetstone's *Remembrance of Gascoigne*, shows four in *-s* and one in *-th*; while Gascoigne himself has none of either; Gosson, has four in *-s* and one in *-th*; Sidney's *Apologie for Poetrie*, none in *-s* and one in *-th*; Marlowe, three of each; Spenser, two in *-s* and three in *-th*; the Leicester Correspondence shows none in *-s* and thirty-six in *-th*; Bacon's *Advancement of Learning*, one in *-s* and six in *-th*; Ben Jonson, four in *-s* and one in *-th*; Beaumont and Fletcher, seventeen in *-s* and eight in *-th*; and the Shakespeare folio of 1623, one hundred and sixty-eight in *-s* and forty-six in *-th*.

There are some peculiarities about this list. Thus the *Toxophilus* of Ascham, published during his life, abounds in both the Northern and Southern forms, while his *Scholemaster*, a posthumous publication, contains no plural in *-s* and four only in *-th*. Robinson in his translation of the *Utopia* never employs the ending in *-s*, not even in the third person singular, though that was then in very general use. It is hardly necessary to say that in all these works the modern forms are much the most numerous.

The following are the instances in which these forms appear in the Shakespeare folio of 1623. On account of the great number of them, only the verb and subject will be given, beginning with the third person plural in *-s*:—

Tempest. Cares . . . roarers, a. i. sc. 1; Bones aches, a. iii. sc. 3; Wraths . . . which . . . falls, *ibid.*; Lies . . . enemies, a. iv. sc. 1; Tears runs, a. v. sc. 1.—*Two Gentlemen of Verona*. Comes . . . praises, a. ii. sc. 4.—*Merry Wives of Windsor*. There has been knights, a. ii. sc. 2. There has been earls, *ibid.* Swine eats, a. iv. sc. 2.—*Measure for Measure*. Doubts . . . makes, a. i. sc. 5; Knows . . . laws, a. ii. sc. 1.—*Comedy of Errors*. Ships puts, a. iv. sc. 3; Bones bears, a. iv. sc. 4; Clamors . . . poisons, a. v. sc. 1.—*Much Ado about Nothing*. Events stamps, a. i. sc. 2; Comes . . . reckonings, a. v. sc. 4.—*Love's Labor Lost*. Appears . . .

tears, a. v. sc. 2; Wits makes, *ibid.*; Contents dies, *ibid.*; Parts . . . forms, *ibid.*—*Midsummer Night's Dream*. Sighs . . . that . . . costs, a. iii. sc. 2; Lions roars, a. v. sc. 2.—*Merchant of Venice*. Dealings teaches, a. i. sc. 3; Times puts, a. iii. sc. 2; Locks which makes, *ibid.*—*As You Like It*. Destinies decrees, a. i. sc. 2; Likelihoods depends, a. i. sc. 3; Fools . . . that makes, a. iii. sc. 5.—*Taming of the Shrew*. Winds that shakes, a. ii. sc. 1. Things that belongs, *ibid.*; Wants . . . junkets, a. iii. sc. 2; Stars allots, a. iv. sc. 5.—*All's Well that Ends Well*. Dispositions . . . which . . . makes, a. i. sc. 1; Bones looks, *ibid.*; Bloods . . . stands, a. ii. sc. 3; Additions swell's, *ibid.*; Twigs that threatens, a. iii. sc. 5; Oaths that makes, a. iv. sc. 2; Desires who . . . recovers, *ibid.*; Letters which makes, *ibid.*; Letters . . . that sets, a. v. sc. 3.—*Twelfth Night*. Does . . . lives, a. ii. sc. 3; Some achieves, a. ii. sc. 5; Goes . . . grieves, a. iii. sc. 4; Feet hits, a. iii. sc. 4.—*Winter's Tale*. Needs . . . hands, a. ii. sc. 3; Seas hides, a. iv. sc. 3; Lies . . . secrets, *ibid.*—*King John*. Spirits . . . craves, a. ii. sc. 1; Wrongs . . . draws, *ibid.*; Reasons makes, a. iii. sc. 4; Tidings comes, a. iv. sc. 2.—*King Richard II*. Hills and . . . ways . . . draws . . . and makes, a. ii. sc. 3; Lies two kinsmen, a. iii. sc. 3; Comes . . . gardeners, a. iii. sc. 4.—*King Henry IV. Part I*. Lives . . . men, a. ii. sc. 4. *Part II*. Comes . . . swaggerers, (occurs twice) a. ii. sc. 4; Comes none, *ibid.*—*King Henry V*. Wrongs . . . gives, a. i. sc. 2; Comes the English, a. ii. sc. 4; Lips blows, a. ii. sc. 6.—*King Henry VI. Part I*. Stands lords, a. i. sc. 4; Commendations as becomes, a. v. sc. 3. *Part II*. Humors fits, a. i. sc. 1; Them . . . that enjoys, a. ii. sc. 4; Curses . . . turns, a. iii. sc. 2; Enters . . . citizens, (stage direction) a. iv. sc. 5; Them . . . that knows, a. v. sc. 1; Intends . . . forces, *ibid.* *Part III*. Sands . . . that makes, a. i. sc. 4; Passions moves, *ibid.*; Strokes . . . hews down and fells, a. ii. sc. 1; Coals that fires . . . and burns, a. ii. sc. 5; Minutes . . . makes, *ibid.*; Hours brings, *ibid.*; Wounds that kills, *ibid.*; Commixtures melts, a. ii. sc. 6; Who shines, *ibid.*; The scatter'd foe that hopes, *ibid.*; Means that keeps, a. iii. sc. 2; Riddles sorts, a. v. sc. 5; Shows, such as

befits, a. v. sc. 7. — *King Richard III.* Deeds . . . provokes, a. i. sc. 2; Sorrows bids, a. iv. sc. 1; After-hours gives, a. iv. sc. 3; Children quits, a. v. sc. 3. — *King Henry VIII.* Women . . . makes, a. i. sc. 4; Points . . . drives, a. ii. sc. 4. — *Troilus and Cressida.* Knots . . . infects . . . and diverts, a. i. sc. 3; They . . . that speaks, a. iii. sc. 2; Rhymes . . . wants, a. iii. sc. 2; Farewells goes, a. iii. sc. 3; Trumpets sounds, a. v. sc. 9; Armies separates, *ibid.* — *Coriolanus.* They . . . follows, a. i. sc. 4; Blows . . . craves, a. iv. sc. 1; Bosoms seems, a. iv. sc. 4; Places yields, a. iv. sc. 7; Conspirators . . . kills, a. v. sc. 5 (stage direction). — *Titus Andronicus.* Sons speaks, a. i. sc. 2 (stage direction); Years wants, a. ii. sc. 1; Horse . . . runs, a. ii. sc. 2; Parcel . . . which dreads, a. ii. sc. 3; Begins . . . sorrows, a. v. sc. 4; Letters . . . which signifies, a. v. sc. 1. — *Romeo and Juliet.* Masks . . . puts, a. i. sc. 1; Remedies . . . lies, a. ii. sc. 3; Wits faints, a. ii. sc. 4; Thoughts which . . . glides, a. ii. sc. 5; Legs excels, *ibid.*; Gossamers that idles, a. ii. sc. 5; Comes the Capulets, a. iii. sc. 1; Eyes . . . that makes, a. iii. sc. 2; Howlings attends, a. iii. sc. 3; Fears comes, a. v. sc. 3. — *Timon.* Instruments . . . that keeps, a. i. sc. 2; Needs . . . feasts, *ibid.*; These owes, a. iii. sc. 3; Drops pays, a. iii. sc. 4; Laws ha's, a. iv. sc. 3; Gods ha's, *ibid.* — *Julius Cæsar.* Affairs . . . rests, a. v. sc. 1. — *Macbeth.* Natures lies, a. i. sc. 7; Words . . . gives, a. ii. sc. 1; Heavens . . . threatens, a. ii. sc. 4; The times has been, a. iii. sc. 4; Means that makes, a. iv. sc. 3. — *Hamlet.* Some says, a. i. sc. 1; All that lives, a. i. sc. 2; Seems . . . uses, *ibid.*; Thanks as fits, a. ii. sc. 2; Brains . . . puts, a. iii. sc. 1; Depends and rests . . . lives, a. iii. sc. 3; Sorrows comes, a. iv. sc. 5; Houses . . . lasts, a. v. sc. 1; Griefs bears, *ibid.* — *King Lear.* Regards that stands, a. i. sc. 1; Faces . . . stands, a. ii. sc. 2; Germens . . . that makes, a. iii. sc. 2; Means . . . graces, a. iii. sc. 7; Manners urges, a. v. sc. 3. — *Othello.* Wars which . . . stands, a. i. sc. 1; Minerals that wakens, a. i. sc. 2; The young affects, a. i. sc. 3; Do's . . . acquaintance, a. ii. sc. 2; Wars that makes, a. iii. sc. 3; Words that shakes, a. iv. sc. 1; They . . . that wins, a. iv. sc. 1; Messengers . . . stays, a. iv. sc. 2; Eyes . . . drops, a. v. sc. 2. — *Antony and*

Cleopatra. Knaves that smells, a. i. sc. 4; Menacrates and Menas, famous pirates, makes, a. i. sc. 4; Needs . . . words, a. ii. sc. 7; The people knows, a. iii. sc. 6; Friends that does, a. iii. sc. 6; Rhymers ballads, a. v. sc. 2. — *Cymbeline.* Graces . . . that charms, a. i. sc. 7; Springs . . . that lies, a. ii. sc. 3; Testimonies . . . lies, a. iii. sc. 4; Seas breeds, a. iv. sc. 2; Follows the two young Leonati, (stage direction) a. v. sc. 4; Comes . . . staggers, a. v. sc. 5.

The following are the third person plurals in *-th* :—

Comedy of Errors. Fits hath, a. v. sc. 1. — *Merry Wives of Windsor.* Successors . . . hath, a. i. sc. 1. — *Much Ado about Nothing.* Wrongs doth, a. v. sc. 1. — *Love's Labor Lost.* Hairs . . . hath, a. iv. sc. 3; Inches doth, a. v. sc. 2. — *Midsummer Night's Dream.* Fogs which . . . hath, a. ii. sc. 1; Kindred hath, a. iii. sc. 1; Eyes doth, a. iv. sc. 1; Minds . . . witnesseth (?), a. v. sc. 1. — *Merchant of Venice.* Men . . . doth, a. iii. sc. 2. — *All's Well that Ends Well.* Wars hath, a. i. sc. 1. — *Winter's Tale.* Encounters hath, a. i. sc. 1; Changes hath, a. i. sc. 2; One three . . . hath, a. iv. sc. 3. — *King John.* Stones that . . . doth, a. ii. sc. 1; Arms . . . hath, *ibid.*; Affections . . . doth, a. v. sc. 2. — *King Richard II.* Wars hath, a. ii. sc. 1; Them . . . that . . . hath, a. iii. sc. 2; Hours hath, a. iii. sc. 4. — *King Henry IV. Part I.* Beds of sweat hath, a. ii. sc. 3. *Part II.* Examples . . . hath, a. iv. sc. 1. — *King Henry V.* Spirits that hath, Prologue. — *King Henry VI. Part I.* Hath . . . Frenchmen, a. ii. sc. 2; Reasons bindeth, a. v. sc. 5. *Part II.* Dreams . . . doth, a. i. sc. 2; Traitors hateth, a. iv. sc. 4. *Part III.* Cheeks . . . presenteth, a. ii. sc. 5; Looks doth, a. iii. sc. 2; Words doth, *ibid.*; Dislikes . . . doth, a. iv. sc. 1. — *King Richard III.* These . . . hath moved, a. i. sc. 1. — *Troilus and Cressida.* Contents . . . doth, a. i. sc. 2; Wounds doth, a. v. sc. 3. — *Coriolanus.* There hath . . . men, a. ii. sc. 2; Ministers that doth, a. iii. sc. 3; There hath . . . insurrections, a. iv. sc. 3; Examples . . . hath, a. iv. sc. 6; Spoils . . . doth, a. v. sc. 5. — *Titus Andronicus.* Hands hath, a. ii. sc. 5. — *Romeo and Juliet.* Griefs . . . doth, a. iv. sc. 5. — *Macbeth.* Blows and buffets . . . hath, a. iii. sc. 1; Evils . . . hath, a. iv. sc. 3. —

King Lear. The best and soundest . . . hath, a. i. sc. 1. —
Othello. Such things . . . as doth, a. i. sc. 3. — *Antony and
 Cleopatra*. Contempts doth, a. i. sc. 2.

It is not impossible that some examples existing in the folio and in the other works examined may have been overlooked; that in some instances the examples here given may have been misprints; that a few may be susceptible of a different explanation from that which implies the continued use of a plural in *-s* or *-th*. But conceding this, the number of illustrations will be little affected by any one of these possibilities or by all of them combined. The examination of the literature of the time is of course only partial. But assuming that a fuller investigation will show results not materially different, it seems fair to draw the following conclusions:

First. That while some writers doubtless never made use of either the third person plural in *-s* or in *-th*, both were nevertheless considered legitimate and proper, just as at the present time the third person singular in *-th*, though never under any circumstances used by many, is admitted to be correct by all.

Secondly. That the plural in *-th* was much more common about the middle of the sixteenth century than towards its close: that during the latter half of that century it was dying out, and at the beginning of the seventeenth was almost entirely confined to the present tense of the verbs *do* and *have*. In connection with this point it is important to observe that in Shakespeare, with the exception of a possible plural in the *Midsummer Night's Dream*, which is probably a singular, there are no plurals in *-th* but *hath* and *doth*, with the exception of *King Henry VI*. where the plurals *bindeth*, *hateth*, and *presenteth* are found. There is only one case of this plural to be found in Ben Jonson, so far as his works have been examined. This is seen in the line, "The choicest brain the times hath sent us forth," taken from the first act of 'Every man in his Humor,' as it appears in the folio of 1616. In Gifford's edition the *hath* is changed to *have*. The most marked exceptions to the general conclusion that has been drawn occur in 'The Leicester Correspondence,' as published by the Camden Society, in which letters appear from the Earl of Leicester, and

Thomas Dudley, and from the Queen's ministers, Walsingham and Burghley. In this, besides *doth* and *hath* which are very frequently met with, are also found as plurals, *continuet* (Let. xvi.), *keepeth* (Let. xxi.), *commeth*, *hopeth*, *writeth*, *falleth* (Let. xl.), *pleaseth* (Let. lxxv.), *goeth* (Let. xcix.), *groweth* (Let. ciii.), *keepeth* (Let. cxi.), *termeth* (Let. cxvi.), and *impeacheth* (Let. cxxxiv).

Thirdly. That there is no proof of the decay of the plural form in *-s* during the period under examination. Indeed, if there were any change at all the evidence of the facts so far collected seems to show that the use of it rather increased than diminished. Yet as it is most prevalent in the drama, and as the drama represents more fully and accurately the speech of common life than any other kind of writing, there is little doubt that the plural in *-s*, while much employed at this time in conversation, was disappearing from use in the literary language. Its infrequency in a work so carefully edited as the Ben Jonson folio of 1616, with its constant recurrence in one so carelessly edited as the Shakespeare folio of 1623, seems to bear out this conclusion.

In the second person singular the northern form in *-s*, as *thou loves*, maintained its ground during this period along with the regular form in *-st*. Though the examples of this usage are far from being as numerous as in the case of the third person plural, there are still enough of them to justify the assertion that this form was regarded as allowable at least, if not perfectly proper. Some of the writers above referred to furnish no instances of this usage. Of those that do, Wyatt has the form twice; Latimer, three times; Gosson, four times; Spenser, six times; Ben Jonson, once; Beaumont and Fletcher, five times; and the following twenty-eight examples occur in the Shakespeare folio:—Likes, *Two Gentlemen of Verona*, a. ii. sc. 7; Splits, *Measure for Measure*, a. ii. sc. 2; Exists, *ibid.*, a. iii. sc. 1; Calls, *Taming of the Shrew*, a. iv. sc. 1; Affects, *Winter's Tale*, a. iv. sc. 3; Disputes, *Love's Labor Lost*, a. v. sc. 1; Requests, *ibid.*, a. v. sc. 2; Torments, *King Richard II.*, a. iv. sc. 2; Thinks, *King Henry V.*, a. iv. sc. 1; Got's, *King Henry VI. Part I.*, a. i. sc. 4; Lends, *ibid.*, *Part II.*, a. i. sc. 1; Starts, *ibid.*, a. iv. sc. 1; Mistakes, *ibid.*, a. v. sc. 1;

Requests, *King Richard III.*, a. ii. sc. 1; Loves, *Romeo and Juliet*, a. i. sc. 2; Woulds, *ibid.*, a. iii. sc. 1; Expects, *ibid.*, a. iii. sc. 5; Counterfeits, *ibid.*; Girdles, *Timon*, a. iv. sc. 1; Puts, a. iv. sc. 3; Comforts, a. v. sc. 2; Revisits, *Hamlet*, a. i. sc. 4; Ha's practised, *King Lear*, a. iii. sc. 2; Lusts, *ibid.*, a. iv. sc. 5; Looks, *Othello*, a. ii. sc. 3; Dafts, *ibid.*, a. iv. sc. 2; Makes, a. v. sc. 2; Refts, *Cymbeline*, a. iii. sc. 3; Makes, *ibid.*, a. iii. sc. 4.

There are a number of instances in the Shakespeare folio, in which the first person singular ends in *-s*, as it does to this day in the language of low life. They may possibly be misprints, but this is hardly probable. Still there are not enough of them to enable us to draw from them alone any satisfactory conclusion. It has, however, been deemed best to give the passages in which they occur, which are the following:—Make him proud to make me proud that jests, *Love's Labor Lost*, a. v. sc. 2; Nor God nor I delights in perjured men, *ibid.*; I beseech you, hear me who professes Myself your loyal servant, . . . yet that dares Less appear so, *Winter's Tale*, a. ii. sc. 3; So I does, *Troilus and Cressida*, a. i. sc. 2; My name is Thomas Mowbray, Duke of Norfolk, Who hither comes, engaged by my oath, *King Richard II.*, a. i. sc. 3; On me that halts and am misshapen thus, *King Richard III.*, a. i. sc. 2; I for a Clar-
 once weeps, so doth not she, *ibid.*, a. ii. sc. 2. Such forms are common enough in later dramatic writers, where the language of uneducated men is represented; but this is not a peculiarity belonging to any of the above examples. *Myself* and *thysel*f are also found sometimes as the subjects of verbs ending in *-s*: but in this case it may be that *self* is looked upon as a substantive.

There is no more singular characteristic of the inflection of the verb during the sixteenth century than the occasional extension of the ending *-th* to the first and second persons singular of the present tense, as, for illustration, in the following lines from Wyatt and Shakespeare:

" But I that truth
 Hath always meant
 Doth still proceed to serve in vain."

" Cassio hath beaten thee,
 And thou by that small hurt hath cashier'd Cassio."

There are several instances of this usage, and it may, perhaps, be regarded as an indication of a tendency then existing to discard all the distinctive endings of the verb. Still little stress can be laid upon these examples. They are at present too few in number, and many of them too doubtful in character, to be regarded as justifying the formation of any theory. Closer examination and wider investigation may enable us to state with certainty what is the actual fact in regard to these forms; but such a statement it is not safe to make with our present knowledge.

VIII.— *On some Mistaken Notions of Algonkin Grammar, and on Mistranslations of Words from Eliot's Bible, &c.*

BY J. HAMMOND TRUMBULL.

John Eliot's version of the Bible in the language of the Indians of Massachusetts has been characterized as "a rich mine of Indian philology," from which "a complete grammar and valuable dictionary might, with labor and perseverance, be extracted."* Scholars like Pickering and Gallatin have now and then really worked a vein or two of this mine, with moderate success; but for every such one there have been fifty who were content to glean a few surface-specimens and spare themselves all trouble of assay or analysis. The richness of the mine considered, it is surprising that so much worthless ore has been brought out of it and that so much which was intrinsically good has been made worthless in the smelting process to which it was subjected to prepare it for filling the molds of comparative vocabularies, for bracing up an unsound hypothesis, or for pinning together some linguistic structure which was not quite strong enough to stand alone. If an Algonkin place-name is to be mis-interpreted, the mis-interpretation is usually made on the supposed authority of Eliot. When his version is referred to for the purpose

* Duponceau's Notes to Eliot's "Indian Grammar Begun," in Massachusetts Hist. Collections, 2d Ser., vol ix. p. ix.

of finding an Algonkin word corresponding to one in the English text, the chances are that an affix or formative is mistaken for the root.

There are few writers on American languages who have not somewhere been led into error by relying on statements made on the alleged authority of Eliot's Bible or of Zeisberger's Grammar of the Lenni Lenápe (Delaware) language. It is not surprising that distinguished European philologists, who could consult these authorities only at second-hand, have been thus misled. They are excusable for adopting and giving currency to the false notions of Indian synthesis, the worthless etymologies, and the mis-translations, which had received the endorsement of American scholars of high repute and passed unquestioned from this side of the Atlantic.

I propose in the present paper to call attention to a few of these errors, and to show that some of the best accredited dicta concerning the Algonkin languages rest on very slight foundations—or have no foundation whatever. They may be divided in two classes,—as they belong to the *grammar*, or to the *vocabulary*. Of the former, I mention first,—

The alleged existence of a *definite article*, in certain Algonkin languages, especially in the Massachusetts and the Lenni Lenápe.

Mr. Duponceau was the first to announce the discovery, in the Natick (Massachusetts) dialect, of “a part of speech which had not been noticed by grammarians in the Indian languages”. In a note appended to Pickering's edition of Eliot's Indian Grammar Begun (1821), he wrote as follows:—

“It is remarkable, that this language appears to possess a definite article, although no mention is made of it in this Grammar. This article is *mo*, contracted from *monko*, and properly signifies *it*. . . . This pronoun when used as an article is still further contracted into *m*, which, when followed by a consonant, Eliot connects with it by the English short *u*, according to his method, and sometimes by short *e*. Thus he writes *metah*, “the heart,” which should be pronounced *m'tah*. It is evident, that the *m* stands here for an *article*, because the personal affixes ‘my’, ‘thy’, ‘his’, are *n*, *k*, and *w*; *nuttah* or *n'tah*, ‘my heart’, *kuttah* or *k'tah*, ‘thy heart’, *wuttah* or *w'tah*, ‘his or her heart’. . . . In the translation of the Bible,

this article frequently appears: *Kesteah pahke* МѢТѢН "Create in me a clean heart". Ps. li. 10. — *Pohqui kah tannogki* МѢТѢН "A broken and contrite heart." Ibid. 17. Several words are also found in his [Eliot's] Grammar, in which this article is prefixed, though not noticed as such. . . . This article exists in several of the Indian languages," &c. (pp. xiv. xv.)

To this note was appended the copy of a letter received from Mr. Heckewelder, assuring Mr. Duponceau that "the article 'mo' for 'a' or 'the', which he had discovered in the language of the Naticks is the same in the language of the Lenape."

In the translation of Zeisberger's Delaware Grammar, published in 1826, the statement that "there is an article in the Delaware language" is repeated; and reference is made (p. 36,) to the translator's discovery of this article "in the Massachusetts language."

Again, in the well known *Mémoire sur le Système Grammatical des Langues de quelques Nations Indiennes* (Paris, 1838), Mr. Duponceau asserts that "les langues Algonquines ont l'article. . . . Les grammairiens Eliot et Zeisberger ne l'ont pas même aperçu, c'est pourquoi ils n'en ont pas parlé"; but, "des Indianologues plus récents ont enfin découvert son existence", etc. (p. 148).

In Mr. Gallatin's "Synopsis of the Indian Tribes" (1836), Mr. Duponceau is credited with "the discovery of an article *mo*; as *m'hittuk* 'a tree' or 'the tree'," (p. 220) and allusion is made (p. 163) to "the initial *m* often prefixed to the noun in the Knisteneaux and the Chippeway" languages, as "seeming to corroborate the existence of a definite article *mo*, discovered by Mr. Duponceau in Eliot's translation of the Bible."

And so the definite article, — unknown to Eliot and Zeisberger, disbelieved in by "M. Heckewelder lui-même . . . jusqu'à ce qu'il fût convaincu du contraire par les recherches des philologues", — took its established place among the parts of Algonkin speech.

Yet it may easily be shown that the *m'* prefixed to certain classes of Algonkin nouns is *not* a definite article, — that it does *not* stand for *mo*, — that *mo* is *not* a contraction of *monko*, — and that *monko* does *not* signify 'it', in Eliot's Bible or elsewhere.

Mô or *mo* is put by Eliot (Ind. Grammar, 21) among “ad-verbs of denying”, “sometimes signifying *not*”. Thus he writes *mo teag* and *mo'teag* ‘nothing’ (Isaiah xl. 17; xli. 17): *mo teag ohtôôu* ‘he hath nothing’ (Prov. xiii. 4), and *mo teagwas ohtôôu* (Prov. xx. 4). But he more frequently uses this particle as the *sign of the preterit*, to denote completed and terminated action or being, — that which *was* and *is not*, — or as a substitute for the past tense of the substantive verb. It has this meaning in the verses cited from Eliot’s version by Mr. Duponceau, and in many others. *'Nnih* or *unnih* means ‘it is so’, and *mo nnih* (Genesis i. 15) ‘it *was* so’; *wunnegen* ‘it is good’ (Ps. lii. 9), and *mo ahche wunnegen* ‘it *was* very good’ (Gen. i. 31); *na maw pharisaë' wosketomp* ‘there *was* a Pharisee man’ (John iii. 1), and *matta mo wosketomp* ‘there *was* not a man’, literally, ‘not was man’ (Gen. ii. 5); *wequai* [there is] ‘light’, and *mô wequai* ‘there was light’ (Gen. i. 3), *ne mo wequai* ‘that *was* [the] light’ (John i. 9); *ken mo wutinneumin* ‘thou wast a servant’ (Deut. v. 17); *na mo kesukod* ‘there was a day’ (Matt. viii. 26). In a very few instances — nearly all of which occur in the first chapter of Genesis, at the beginning of Eliot’s work of translation — he employed the questionable synthesis *mônko nnih* for ‘it was so’ (vv. 7, 9, 11, 24, 30): *mônko* having been formed, apparently, from *mô* and *kô*, to signify ‘was and continues to be’.*

Mr. Duponceau having mistaken the sign of the past tense for a *pronoun* transformed the supposed pronoun into a *definite article*. But the office of the prefixed *m'* (as in Mass. *m'tah* ‘heart’) was just the reverse of that of a definite article. Primarily a negative or a privative — always indefinite — it was used not with all nouns but with a few only, — with the names of the body and its members, of articles belonging to or generally associated with the person, of terms expressing rela-

* The particle *kô* or *koh* denotes continuance or progression. As an auxiliary, it refers to a past time action or being not yet completed or terminated, — when what *now is* ‘began to be’ or ‘once was’ — or affirms *present* as related to *prior* action or being. Eliot occasionally employs it for the verb substantive, as in Job xiv. 10, *kah uttoh kô wutapin?* ‘and where *is* he’; *noh koh mô, noh koh, kah noh paont* ‘who *was*, and *is*, and *is to come*’ (Rev. iv. 8); and *ken nukoh* [= *noh koh*], *kah ken nukoh mô, kah ken padan*, ‘thou who *wast*, and *art*, and *art to come*’ (Rev. xi. 17).

tionship, and some others: and it served to divest these of all personal and individual relation or appropriation. For example, when an Indian spoke of 'body' or 'person' he usually employed a possessive pronominal prefix, — 'my body', 'thy body', 'his body' (Mass. *n'hog*, *k'hog*, *w'hog*): but if he found it necessary to speak of 'body' or 'heart' in the abstract, or divested of its natural associations, he substituted for the possessive and personal the *negative* and *impersonal* prefix, *m'*. *M'hog* (*mūhhog*, Eliot,) denotes 'body *not* mine, yours or his' — *some* body, regarded as without appropriation or personal relation: *m'tay* (*mētah*, El., *mtee*, Zeisberger,) 'heart', *not* my heart (*n'tay*), nor yours (*k'tay*), &c.*

Another modern discovery in Algonkin grammar was that of a *vocative case* of nouns. Eliot had stated (in his *Indian Grammar Begun*, p. 8) that nouns in the Massachusetts language are "not varied by cases, cadencies and endings," — except that "there seemeth to be one cadency or case" of *animale* nouns, corresponding to the Latin accusative. But Zeisberger found terminations in the Delaware which "express the vocative". He gave several examples of these in his *Grammar of that language* (p. 37), and Mr. Duponceau, in his *Notes to Eliot's Grammar* (p. xiv), pointed out "different terminations of the same word, in various parts of Eliot's translation of the Bible", — of which "the termination *in* in the vocative singular and *unk* in the vocative plural" could not, he thought, be accounted for consistently with Eliot's "positive statement that substantives are not distinguished by cases." He cited Zeisberger's authority for the fact that "the Delaware has a vocative case, which generally ends in *an*." Mr. Gallatin (*Synopsis*, p. 173) repeats: "There is a vocative case in some at least of the Algonkin-Lenape languages, terminating, in the singular of the Delaware, in *an*, and of the

* Howse (*Cree Grammar*, p. 245) has pointed out the mistake of "some writers who have considered the element of *me-* (and *w-* or *wə-*) prefixed to certain nouns, as equivalent to the European Article." This element, he says, is found in the Cree "only in the names of the body and its parts, . . . in those expressing relationship, as *ne-gduwee* 'my mother', *me-gduwee* 'a mother' &c., — with a very few others."

Massachusetts in *in*; in the plural Delaware, in *enk*, "when coupled with the pronoun *our*." (Zeisberger, p. 99.) The same termination *eunk* is used generally for the second person plural in the Massachusetts." Dr. Pickering in his paper on "Indian Languages," in the *Encyclopædia Americana*, adopted Zeisberger's statement that "in the Delaware, in two cases, the vocative and ablative, there is an inflection," — the former being "expressed by the termination *an*", &c. On so excellent authority the Delaware vocative in *an* and the Massachusetts vocative in *in* and *eunk* have been received, without question, into the Algonkin grammatical system.

Without affirming or denying the existence of a vocative form in some Algonkin languages, but considering only the evidence on which it has been engrafted on the dialects of Massachusetts and Delaware, — I assert that Eliot's Bible will be searched in vain for a vocative singular in *in* or for a "termination *eunk* used generally for the second plural plural", and that among the examples given by Zeisberger there is not one of a noun in the vocative case ending in *an* or *enk*, but that all these examples are verbs or participles of the suffix-animate form or, as Heckewelder (in his *Correspondence with Duponceau*, p. 416) termed it, the "participial-pronominal-vocative form." The supposed Delaware vocative in *an* is a verb in the conditional (subjunctive) mood, 2d pers. singular of the subject with 1st pers. singular of the object, and the form is nearly the same in the Massachusetts language as in the Delaware. Zeisberger's "*Nihillalian*, O thou my Lord!" is, literally translated, 'Thou who ownest (or, art master of) me', i. e. 'Thou *as owning* me'; "*Pemauchsohalian*, O my Saviour!" is 'Thou *as giving life to* me', &c.* Eliot has *nawaan* 'thou that sayest' (thou *as saying*), and *máskowdan* 'thou that makest thy boast of', Rom. ii. 23; *ken wadohkean* 'thou that dwellest', Ps. lxxx. 1, &c. The supposed vocative in *-enk*, in the Delaware, is the 2d person singular of the subject with the 1st person plural of the object; "*Nihillaliyenk*, O thou our Lord!" (Zeisb. Gram. 116) is 'Thou who ownest

* Howse, *Cree Grammar*, pp. 310, 311, has shown that Zeisberger's vocatives "have verbal endings" and are all "in the Subjunctive or Subordinate mood."

(or, *as owning*) us.* When the subject is *plural*, and the object in the 3d person or the verb intransitive, Eliot uses a participle or verbal formed from the second person plural of the subjunctive by adding *-ish*: e. g. *kenaaun wonkanógish ahtomp* 'ye that bend the bow', Jerem. l. 29; *kenaaun quoshó-gish* 'ye that fear', Ps. cxv. 11; *kenaaun kókobsoógish* 'ye deaf' (i. e. ye as not-hearing), *kenaaun pogkenumógish* 'ye blind', Is. xlii. 18. But this form is not distinctively vocative, for it is found with the pronoun of the first person, as in I. Thess. iv. 15, 17, *nēnawun pamontamógish kah apetógish* 'we which are alive and remain', and Hebr. iv. 3, *nenawun wanamptamagish* 'we who believe.'

In his search for vocatives in the Massachusetts language, Mr. Duponceau was "surprised to find different terminations of the same word, in various parts of Eliot's translation of the Bible", some of which he was at a loss how to explain, "otherwise than by the conjecture that our author might have had recourse to different Indian dialects in translating." (Notes on Eliot's Grammar, xiv.) He gave the following examples:—

Wuttaunoh Zion, 'Daughter of Zion'. Lament. ii. 8. *Woi Jerusalemme wuttaunin*, 'O daughter of Jerusalem', v. 13.

Woi kēnaau Jerusalemme wuttaun eunk, 'O ye daughters of Jerusalem', Solom. Song, ii. 7.

Kah ompetak wuttōneu, 'And she bare a daughter',—as Mr. Duponceau translated it, but which in the verse cited (Gen. xxx. 21) stands for the words "and afterwards she bare a daughter". He mistook the adverb *ompetak* 'afterwards' for a verb meaning 'to bear', and *wuttōneu* (misprinted, *wuttaneu*)—a verb in the 3d pers. sing. indicative present (aorist), meaning 'she bare a daughter', for a noun; remarking that the termination "*eu* in the accusative governed

* When Duponceau wrote his *Mémoire sur le Système Grammatical &c.*, published in 1838, he had learned that the terminations which Zeisberger regarded as belonging to the vocative were verbal forms; but he was still persuaded that the words receiving these forms were *nouns* not *verbs*. "Au lieu du vocatif"—he says (*Mémoire*, p. 159)—on emploie une forme verbale qu'on applique au nom substantif; elle varie selon les nombres. Ces formes, qu'il est inutile de préciser davantage, tiennent la place du verbe être: ainsi, lorsqu'on dit: *Ó mon dieu!* c'est comme si on disait: *O toi qui es mon dieu!*" &c.

by an active verb" "cannot be accounted for",—which is quite true.

Of the three forms *Wuttaunoh*, *Wuttaunin*, and *Wuttauneunk*, he remarked that "the first is correct." So it is,—but not for the reason he assigns, that "it is a proper nominative of this word." If it were a nominative, it would stand in apposition with *Zion*, and the translation must be 'his (or her) daughter Zion.' But the termination *-oh*, with the pronominal prefix *wu'*, marks the governing noun (as in the Hebrew *construct form*),—'the daughter of.'

Wuttaun-in is a proper nominative, its termination marking it as a noun-animate *indefinite*, 'a daughter' or 'any daughter.' That this termination *-in* is not "in the vocative singular" may be shown by reference to other verses in which the same form of the word occurs,—as a nominative, in Micah vii. 6, *wuttaunin ayeuhkonittué ohkasoh* 'the daughter, against her mother', and in Numbers, xxxvi. 8, *nishnoh wuttaunin noh ahtunk ohtóonk* 'every daughter that possesseth an inheritance',—and after a governing preposition, Levit. xii. 6, *wutch wunnaumondin asuh wuttaunin* 'for a son or a daughter.'

The termination of *Wuttauneunk*,—"unk in the vocative plural", as Mr. Duponceau regarded it,—is that of a *collective noun*, without reference to case or person. *Wuttaun-eünk*, in the verse cited, means 'the daughters' collectively, *the daughterhood*; so, in Judges xxi. 21, we find *Shiloe wuttauneunk* 'the daughters of Shiloh', the Shiloh daughterhood. Nouns of this form are of frequent occurrence in Eliot's version. Thus we have *wómonok aweemattinneunk* 'love ye the brotherhood', I. Peter, ii. 17; *wutashinneunk* 'the fathers' or the *fatherhood*, Numb. xxxi. 26; I. John, ii. 13; *wunnaumonainneunk* 'the children' collectively, Luke, xvi. 8.*

We are now in a position to sum up the evidence on which

* Molina (History of Chili, American translation, vol. ii. p. 303) mentions similar nouns collective in the Araucanian language, and classes them with abstract terms formed by adding *gen* (representing the verb 'to be') to adjectives or verbs. Thus, "instead of saying *pu Huinca* 'the Spaniards', they commonly say, *Huincagen* 'the Spaniolity',—*tamén cuiagèn* 'your trio', that is, you other three," &c. See Pickering's notes on Edwards's Observations &c., in Mass. Hist. Coll., 2d S., x. 120.

philologists have agreed to recognize a vocative case-ending of nouns in the Massachusetts language. We have only Mr. Duponceau's misinterpretation of two words employed by Eliot. He mistook the termination of a noun indefinite for that of the vocative singular, and made a vocative plural out of a noun collective.

The fact that no Algonkin language has an independent verb-substantive—a fact denied by Cass and Schoolcraft, and which has been questioned by many writers on American languages,—may now be regarded as established. Much of the discussion on this subject has turned on the precise meaning of the phrase by which Eliot translated “I am that I am”, in Exodus, iii. 14,—*Nen nuttinniin nen nuttinniin*.

Heckewelder, in reply to a question from Duponceau, could only say that this “could never be a literal translation of the text,” and that “if it means anything, it must be *either* “I am a man, I am a man,” *or* “I do so, I do so.” Duponceau, “after much consideration and study of the subject, inclined to the opinion that Mr. Heckewelder is right in his last conjecture” (Notes on Eliot's Grammar, xlii.); and in his *Mémoire* (p. 195) he unhesitatingly accepts this translation, as deciding the question of the existence of the verb ‘to be’ in Algonkin languages. “On a trouvé”—he writes,—“le moyen de la décider d'une manière qui ne laisse plus de doute. On a cherché dans la Bible indienne d'Eliot, la traduction du célèbre passage: *ego sum qui sum* (Exod. iii. 14), et on a trouvé *nen nuttinniin nen nuttinniin*; on a cherché aussi dans le même livre, la traduction du passage *ego [sum] sicut vos*, dans l'épître de saint Paul aux Galates, ch. iv., v. 12, et on a trouvé *nen neyane kenaau*; on a envoyé ces deux passages ainsi traduits aux missionnaires les plus instruits dans les langues Algonquines, et ils ont trouvé que le premier signifiait: *je fais, je fais*; et le second: *nous nous ressemblons ou je vous ressemble.*”

Duponceau's dictum—founded, as we have seen, on a guess of Heckewelder's—was authoritative. Since the publication of the *Mémoire*, “I do, I do,” has been the accepted translation of Eliot's *nen nuttinniin nen nuttinniin*,—and has been

pointed to as a proof of the poverty of American languages.* No one apparently has taken the trouble to re-examine the text or to analyze the synthesis Eliot employed, — though this might easily have been done without other help than his version of the Bible itself affords.

To supply the want of a verb-substantive every Algonkin dialect has several verbs to express the *where* and the *how* of being, — modal and conditioned existence. Those which most frequently occur in Eliot's version are, —

1. *Ohteau* 'it has itself', the intransitive form of *ohtau*, 'he has', 'owns', 'possesses'. Used only when the subject is inanimate: e. g., *ayeuonk ohteau* 'the place is', Judg. xviii. 12; *pish ohteau* 'it will be', Gen. xvii. 13; suppositive or conjunctive, *ohtag*, 'if (or, when) it is', Matt. v. 14. Chippeway, "até, there is of it; it is" (Baraga); "atta, to be" (Schoolcraft).

2. *Appu* (Chip. *abi*, Baragá; Cree, *apú*, *abú*, Howse;) 'he sits', 'is at rest', — hence 'he remains', 'abides'; and so, 'he is' or 'continues to be' — in a state of rest or inactivity is implied. With an adverb of place, *wutappin*; as *na wutappin* 'he sat down there', Ruth, iv. 1, 'he was there', John, v. 5; *yeu wutappin* 'he is here', John, vi. 9; *toh kutappin?* 'where art thou?' Gen. iii. 9.

3. *Ayeu* (Chip. *ahyah*, Jones; *iau* 'he is', Schoolcraft — who has given a paradigm of it, as the Chip. verb 'to be',) 'he is in some place' designated; 'he is there', John, xi. 30; hence, 'he dwells' or 'inhabits'. *Noh ayeu kah appu* 'he dwells and abides', Job, xxxix. 28: imperfect, *nut-ai-up* 'I was there', Acts, xi. 5: conjunctive, *áyit*, *aíyit* (Chip. *ahyod*, Jones), *noh áyit machemotagit* 'he that inhabiteth (i. e. as inhabiting) eternity', Is. lvii. 15. The 2d person conjunctive (*áyeam*, Eliot,) of this verb is found in various Algonkin versions of the Lord's prayer; "who art in Heaven", Moheg. *ne spumuck oieon* (Edwards); Old Abnaki, *spemtik aiián*; Old Passamaquoddy, *spemkik éhine* (Vetromile, from Rasles?), Ma-

* Mr. Farrar introduces it (Chapters on Language, p. 54), to illustrate the "primordial and unbroken barbarism of the North American Indians", etc., — and again, in his Lectures on Families of Speech, p. 183, to show the "almost imbecile deficiency of abstraction," which characterizes American languages.

reschit, — *eyane* (Ib.); Chip. *ishpimingk eaiün* (Testament), &c. Eliot's version *omits* the verb; "Our Father in Heaven."

4. 'N *nih*, *Unnih*, 'it is so' or (aorist) 'it was so', Gen. i. 7, 9, 15. Eliot uses this word for the phrase 'it came to pass' or 'comes to pass'. Imperat. 3d pers. sing., *ne naj*, *ne natch*, 'be it so.'

5. *Neane*, *Neyane*, 'it is like' or 'the same as'; as in the passage cited by Mr. Duponceau, Galatians, iv. 12, *nen neyane kenaau* 'I [am] as ye [are]'. The imperative 2d pers. plural (with 1st person sing. object) and the adverbial form are found in the same verse: *unniyegk neyanië* 'be ye as I [am]'. The conjunctive participle *neáunak* (or *-nag*) used as a noun, 'that which is like' or 'being like', stands for 'likeness', 'appearance', 'color', 'fashion' of, &c.: *neáunag yeu muttaok* 'the fashion of this world', I. Cor. vii. 31.

6. *Wuttinniin* 'he is of the kind of' or 'is such as'. This verb cannot be exactly translated in English. It expresses the relation of an individual to a species or a class, the *appropriation* of its subject to an object expressed or understood, a *belonging-to*, — not merely external likeness or relation. It is conjugated in the present indicative as follows:

nuttinniin, I am of the kind of, I am such as,
kuttinniin, Thou art of the kind of, — such as,
wuttinniin, He is of the kind of, — such as.

It occurs not unfrequently in Eliot's version; e. g., Prov. xxiii. 7, *nedne unnantog ut wuttahhut, ne wuttinniin* 'as he thinketh in his-heart so is he', i. e., of that kind is he; I. Sam. xxvii. 11, *ne pish wuttinniin* 'so will be his manner', i. e., that will he-be-of-the-kind-of; and Is. xxiv. 2, *neaniit wuttinneumin, ne wuttinniin wussontimomun* 'as with the servant, so [of that kind is] his master.' In Exodus, iii. 14, *nen nuttinniin nen nuttinniin* means, literally, 'I myself am of the kind of I myself am of the kind of' or 'I am such as I am such as' — *Ego sum talis qualis ego sum*, for the "Ego qui sum" of the Vulgate and the "I am that I am" of the English text. Marked emphasis is given to the pronoun of the first person by using both its forms (independent and prefixed) with each verb, — *nen n'*, 'ego ipse'.

In the first edition of Eliot's Bible (1663), *ne* 'that' stands in the place of the second *nen*. This was corrected on revision, because *ne*, the inanimate demonstrative, cannot properly be employed to denote the subject or object of a verb animate.

The very general use of *transitional* forms of conjugation, in which the pronoun of the object as well as of the subject is combined with the verb, has led some distinguished writers on American languages to infer that the Indian verb cannot be divested of its pronominal suffix. Edwards (Observations on the Muhhekaneew Language, p. 13) states, that the Mohegans "never use a verb transitive without expressing both the agent and the object, correspondent to the nominative and accusative cases in Latin. Thus they cannot say, 'I love', 'thou givest', &c. But they can say, 'I love thee', 'thou givest him', &c. viz. *Nduhwhunuw* 'I love him or her'; *nduhwhuntamin* 'I love it,' &c. Mr. Cass, in an article on the Indian Languages, in the North American Review (for January, 1826; vol. xxii. p. 80) made a similar statement; "The pronouns, actor and subject, are associated with the verb. One is prefixed, and the other is suffixed; and the latter is generally inseparable in its form. The active verbs cannot be used without this personal association. An Indian cannot say *I love*, *I hate*, *I fear*, abstracted from the operation of the verb upon the object." Mr. Bancroft repeats this, substantially, in his observations on the synthetic character of the American languages (Hist. of the U. States, vol. iii., 12th ed., p. 261): "An Algonkin cannot say *I love*, *I hate*; he must also, and simultaneously, express the object of the love or hatred. . . . Each active verb includes in one and the same word one pronoun representing its subject, and another representing its object also."

Dr. Edwards was wrong—as the very examples he used for illustration show: but his error is less apparent because it is restricted to a denial of the use, by the Stockbridge Mohegans, of *transitive* verbs without a pronoun-objective. Mr. Cass's denial extends to all *active* verbs and to all Algonkin languages. Nothing can be farther from the fact. There is no Algonkin dialect in which an Indian may not say 'I love' or

'I hate', without denoting by a pronominal suffix the object loved or hated. He has for this the choice of three or four verbs; (1) strictly intransitive, affirming the existence of affection, 'I am in love' or 'I feel lovingly'; (2) animate-active intransitive (the adjective-verb form, as some grammarians term it) —affirming the exercise of affection,—'I am loving' or 'I am a lover'; (3) active-transitive absolute,—the forms of which vary (but *not by a pronominal suffix*) as the implied object of affection belongs to one or the other of the two great classes of Indian nouns, animate and inanimate, the former class including not only all living beings but many *inanimate* objects held in special regard by the Indians. These forms serve, respectively, for the affirmations 'I love some person, animal or object of the class animate' (a bow, a kettle, or tobacco, it may be,) or 'I love something' not of that class. Either may receive in addition to the formative proper a pronominal suffix,—but each is complete without it.

It is true that a savage's conception of 'love', subjective or objective, differs from that of a Christian, and missionaries by whom the Algonkin languages have one after another been reduced to writing have not all agreed in the selection of the word which comes nearest to the meaning of the English verb *to love* or the French *aimer*. Eliot in Massachusetts and Roger Williams in Narragansett employed a verb the precise meaning of whose root (*wóm, waum*) is not ascertained. The Roman Catholic missionaries have generally adopted another, more common among the northern and western Algonkins, from the root *ság, saug*, 'to cling' or 'hold fast'. With this explanation, the following examples are enough to show how 'I love' may be expressed in the principal languages of this family:

Massachusetts: *no-womantam*, v. i., 'I love; am love-minded.' To verbs of this form, "expressing a disposition, situation, or operation of the mind", Zeisberger assigns a special conjugation (the third) in his Delaware Grammar (pp. 50, 89). In the Chippeway, they end in *-endam* (Baraga, p. 154). Examples may be found on almost every page of Eliot's version; e. g. *musquantam* 'he is angry', literally 'bloody-

minded'; *nut-jishantam* 'I hate', 'I feel hatred or abhorrence'; *na-wabesuontam* 'I fear'; *nut-cheפשontam* 'I am frightened', &c. All these verbs may be used, with the appropriate suffix, as transitive *inanimate*, 'he loves it', 'he hates it,' &c.

Chippeway: *nin ságia* (Baraga), *ne saugeau* 'I love a person' (Schoolcraft),—but Baraga, more exactly, translates 'I love him, her, or it', remarking that, in this form, "the object upon which acts the subject of these verbs, is always contained in the verb itself." (Otchipwe Grammar, 200.) With the pronoun: *o ságian* (Bar.), *oo záhgeahn* (Jones), 'he loves him'.

Cree: *ne-sákehewán* 'I love some one' (indeterminate); *ne sákechegan* 'I love something' (indefinite); *ne-sákehewádywíssin* (adj.-verb, active-intransitive.) 'I am loving' or, as Howse analyzes it, "I am love-someone-ing". Cree Grammar, 105, 114.

Northern Algonkin of Canada: *ni sakidjike* 'I love'. This form is "sans régime, exprimant un sentiment"; *ne sakiton* means 'I love it'; *ni sakiha*, 'I love him'.*

Micmac: "*kejalœei*, j'aime," is placed by Maillard (Gram. Mikmaque, p. 56) among verbs "qui ne reçoivent aucun régime dans leur acception",—"verbes sans régime".

Passing now to the consideration of another class of errors,—those which concern the *vocabulary*, including mistranslations, false analyses, and mistakes in the identification of words in Eliot's version corresponding to those in the English text,—our first example shall be taken from that "immense monument of historical research," the *Mithridates* of Adelung and Vater. In the third part of this work Professor Vater gave (3te Abth., p. 388) a list of words in the language of the "Naticks, from Eliot". One of these words is "*Chequikompuk*", standing as the Natick name of the 'Sun'. Balbi, borrowing these words from the *Mithridates* reproduced them in his *Atlas Ethnographique* (Tab. xli.), where *Chequikompuk* appears as "Massachusetts or Natick" for 'Sun'. Now the Massachusetts name of the Sun—*nepduz* (Narr. *nippáwus*, R. Williams,) occurs at least a hundred times in Eliot's version. In Joshua,

* Études philologiques sur quelques Langues Sauvages de l'Amérique (Montreal, 1866), pp. 50, 55, 60.

x. 13, for the words: "the sun stood still", of the English text, we have "*nepdúz chequnikompau.*" Mistaking the order of the words, Prof. Vater sets the (mutilated) *verb* instead of the *noun* against the word '*Sonne*' of his vocabulary.

In the same volume of *Mithridates* (2te Abth., p. 349), the learned author notes the resemblance of "*cone*", as a New England word for 'Sun', to the Tatar *kun*. Unfortunately, *cone* (as Roger Williams wrote it; *kon* of Eliot and Cotton) means 'snow', not 'sun'. The same error is found in an earlier work of Vater's, (*Untersuchungen über Amerika's Bevölkerung*, Leipzig, 1810, p. 51), whence more than one comparative philologist has taken it as evidence of the relationship of American and Asiatic languages.

A similar mistake was made by Mr. Duponceau, in a list of words "selected from Eliot's translation of the Bible," and incorporated by Dr. Pickering with the verbal index to his edition of Eliot's Indian Grammar Begun.* Among these we find *Sohsúmbónk*, as the Massachusetts word for "Forest." Eliot's version has for 'forest', *touhkomuk*, (literally, 'desert place', 'wilderness',) from which was formed the adjective *touhkomukque*. *Sohsúmbónk*, a verbal from *sohsúmwá* 'it shines forth', was employed for the translation of the word 'glory',—literally, 'a forth-shining'. In Isaiah, x. 18, for 'the glory of his forest' we find *wut-touhkomukque sohsumbónk* 'his forest glory', the English order of words being inverted, in accordance with the laws of Algonkin synthesis. Hence, doubtless, Mr. Duponceau's mistake.

Of all explorers of Eliot's 'rich mine' Mr. Schoolcraft was perhaps least successful. In the first volume of his *magnum opus*, "Information respecting the History &c. of the Indian Tribes," he gave (pp. 288–299) a vocabulary of nearly 300 words "extracted from Eliot's translation." How the extraction was effected, and what is the real value of the vocabulary as a contribution to comparative philology, a few specimens will show.

The first word is *Manítoo*, for 'God', with a reference to Gen. xxiv. 26 (by misprint probably, for 27). This should

* Massachusetts Historical Collections, 2d Series, vol. ix. p. liii.

be *Manit*, and should have been accompanied by the remark that it was not usually employed by Eliot as a name of the Supreme Being. Mr. Schoolcraft was wrong in saying (p. 287) that in Eliot's version "the words God and Jehovah appear as synonymes of *Manito*" or *Manit*. Those names were generally—'Jehovah' was *always* transferred to the Indian text; not translated by *Manit*. The form *Manito* (or *-to*) combines with the noun the representative of the verb-substantive, and means 'Manit is'. The plural, *manittaog* (or *-töog*), is used for 'gods' of the English version; as in I. Cor. viii. 5, *manitaog monaog* 'gods many.'

"12. Husband, *Munúmayenok*",—for which Gen. xxx. 15 is cited. In that verse, *keneemunúmayeuonk nahsuk* stands for "thou hast taken away my husband". Mr. Schoolcraft mistook the verb for the noun; and rejecting the pronominal prefix—and something more, for *nee* belongs to the root,—he made, by help of a misprint, *munúmayenok*!

"13. *Nunaumonittumwos*. Wife. Job, xxxi. 10." For 'wife' Eliot has *mittamwussis* or *mittamwas*. *Nun-naumon* is 'my son', which Mr. Schoolcraft somehow contrived to mix up with *nummittamwos*, 'my wife', in the verse cited.

"47. *Kon*, Bone." The references are to Job, xxx. 30, xxxi. 22. In the former verse, *nuskonash* stands for 'my bones'; in the latter, *wutch wuskonit* for 'from its bone.' The root *uskon* 'bone' cannot be used without a prefix; *nuskon* 'my bone', *wuskon* 'his bone', or (indefinite) *muskon* 'any bone'. There is no such word as *Kon*.

"77. *Noonshoonum*, Boat. Acts, xvii. 16,"—an error for Acts, xxvii. 16, where *namshanun*—a verb in the first person plural (with its prefix)—means, "we came by boat". The noun *m'shon* (*mushon*, *mishon*) 'a boat' is used in John vi. 22, Acts, xxvii. 30, &c.

"79. *Omoquash*, Sail. Acts, xvii. 17,"—another misprint, for Acts, xxvii. 17,—where *pungwómuhquash* 'quicksands' happens to stand next to *nákakinnumvog* 'they strake sail' (lit. 'they let it down'). The word for 'sail' is *sepdghunk* 'that which is stretched out.'

"81. *Hunkaueehetaeaug*, Oar. Ezek. xxvii. 6." The man-

gled remains of *wuttuhhunkanéhteaog*, 'they made thy oars',— a causative verb formed from *wuttuhhunk* 'oar' or 'paddle'.

"172. *Taskookau*, Thistle." No reference is given; but as *taskuhkau* is the 3d pers. sing. indic. present, of a verb meaning 'to tread upon', and as in 2 Chron. xxv. 18, *taskuhkauau kôgkôumogkohquohhouh* stands for "he trode down *the thistle*", we may infer that Mr. Schoolcraft again mistook verb for noun.

"225. *Nunneem*, Pigeon. Levit. xv. 6." The word 'pigeon' (Mass. *wuskuhwan*) does not occur in the verse cited, but it may be found in vv. 14 and 29 of the same chapter, as the object of the trans. anim. verb *neemunau* 'he takes'. This verb also occurs in v. 6 of ch. xiv. in the form *wunneemunoh* ('he takes it'). "*Nunneem*" is, I suspect, a misprint for *Wunneem*— the first two syllables of *wunneemunoh*.

And so on,—through the whole vocabulary. Prefixed to it are some observations on the "Massachusetts Indians" and their language, in which we find a curious mistake, — unsurpassed by any in the vocabulary itself. The language of Eliot's version is said (p. 287) to be "a well characterized dialect of the Algonkin", but Eliot found in it, "it appears, no term for the verb *to love*, and introduced the word '*womon*' as an equivalent, adding the Indian suffixes and inflexions, for person, number, and tense."

Mr. Schoolcraft ought to have known that this word was not of Eliot's invention or introduction. The intransitive, *womantam* 'he loves', the animate-active intrans. (or adjective, verb) *womauseu* 'he is loving' or 'a lover', and the trans. animate *womonau* 'he loves (some one)', with their derivatives, are much used in Eliot's version; but forms from the same root may be found in Roger Williams's Indian 'Key', printed in 1643, twenty years earlier: e. g., *wawmaisu* 'loving' (p. 140); *cowammaunsh* [in Eliot's orthography, *kw-womon-sh*] 'I love you'; *cowammaunuck* 'he loves you'; *cowammaus* 'you are loving' (p. 8), &c. Earlier yet, in Wood's rude "Nomenclator" (appended to *New England's Prospect*, 1634), we have "*wawmauseu*, an honest man" (for 'a kindly disposed' or a 'loving' man), and "*noewammauseu*, I love you."

This story of Eliot's manufacture of an Indian verb 'to love' from the English word 'woman' will always find believers. It belongs to the same class with that of the mistake made in the translation of Judges, v. 28, "The mother of Sisera looked out at a window and cried through the lattice",—where, it is said, for 'lattice' Eliot used an Indian word which really means 'eel-pot'. This story has been printed scores of times, — and will continue to be printed, for it is 'too good to be lost'. There are only two exceptions to be taken to it: (1) that the Indian eel-pot was of 'lattice work' and that its name would not be a *mistranslation* of 'lattice,' though hardly a *sufficient* translation; and (2) that in the verse in question Eliot *did not translate the word 'lattice' at all*, but transferred it from the English to the Indian text, adding only the locative suffix: "*papáshpe lattice-ut*, through the lattice."

Eliot's work has not been appreciated, even by scholars, as highly as it deserves to be. Mr. Howse—the author of a valuable "Grammar of the Cree Language" (London, 1844,)—remarks in his Introduction, that "from the circumstance of Eliot's having translated the Bible into the language of the Massachusetts Indians, or rather *from his being the reputed translator, (which is a very different thing,)* it has been *erroneously supposed* that he was thoroughly versed in their language:" Mr. Howse was "much inclined to think, however, that grammatically considered, it is an imperfect performance," and that, "if *correct*, it was formed only by the assistance of a half-breed interpreter." A *half-breed* interpreter co-operating with the good Apostle to the Indians, in Bible-work, in puritan Massachusetts, and before 1660!

But "the most unkindest cut of all" at the *Wunneetupana-tamwee Up-Biblum* was given by a chip thrown from Max Müller's German workshop. This eminent scholar, in a paper (first published in 1862) on the Abbé Brasseur de Bourbourg's translation of the Quiché *Popul Vuh*,* mentions "the translation of the Bible in the Massachusetts language" as a specimen of *picture-writing*, and informs his readers that "the verses from

* Chips from a German Workshop, vol. i. (1867), p. 320. The list of symbols stands between quotation marks, but Prof. Müller does not give his authority for the statement.

25 to 32 in the thirtieth chapter of Proverbs are expressed by 'an ant, a coney, a locust, a spider, a river (symbol of motion), a lion, a greyhound, a he-goat and king, a man foolishly lifting himself to take hold of the heavens'. No doubt these symbols would help the reader to remember the proper order of the verses, but" — observes Prof. Müller, and I shall not venture to differ with him on this point, — "they would be perfectly useless without a commentary or without a previous knowledge of the text."

IX. — *Contributions to Creole Grammar.*

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The Creole dialects which have grown out of different European languages grafted on African stock, though inferior in general interest to even the rudest languages of native growth, are in some respects well worth attention. The changes which they have passed through are not essentially different in kind, and hardly greater in extent than those, for instance, which separate the French from the Latin, but from the greater violence of the forces at work they have been far more rapid, and, what constitutes the peculiar interest of the case, the languages from which they have sprung are still living and are spoken side by side with them. Under ordinary conditions these changes proceed at so slow a pace as to become appreciable only at considerable intervals of time, but here two or three generations have sufficed for a complete transformation. The process has to be sure been mainly, but not altogether, one of decay; the extent of the loss has made some compensation necessary, and we find, if not many new formations, numerous instances of old material put to new uses. It is scarcely necessary to remark that these languages are not of mixed blood, half African and half European, for languages

do not mingle so readily as races. Even in the Creole vocabularies, the proportion of African words is very small. They have borrowed in general less from this source than from other foreign sources; less, for example, than the Creole French from the Spanish, a fact sufficiently accounted for by the great confusion of dialects among the imported slaves. Redpath enumerates in Hayti no less than thirty different tribes, and Oldendorp found in the Danish islands representatives of an almost equal number. Still more remote must be the influence of African on Creole grammar. It is rather in the phonetic structure of the Creole, in the dislike of an accumulation of consonants, the preference, especially marked in the Negro English of Surinam, for a final vowel, that such influence may with more likelihood be traced. The simplification of grammatical structure, on the other hand, which is characteristic of the Creole, arises rather from the general conditions of its growth than from the nationality of those who speak it.

Of the causes which have contributed to the formation of these dialects the chief are: first, the mature age of the slaves, who were brought from Africa at a time of life when the vocal organs are no longer flexible, and when the intellectual effort necessary for the mastery of a new language is even under the most favorable circumstances very considerable, and here quite out of the question; secondly, the fact that they constituted the great body of the population, the whites being in a minority seldom as large as one-fourth. The language spoken by the first generation of blacks was a broken French or Spanish, as the case might be, which, in the course of time, developed into a well defined Creole. It is a matter of surprise at first view that while the French Creole is so widely spread, in the Spanish islands, Cuba, San Domingo, Porto Rico, and Margarita, we find no Creole; but the difference in the relative numbers of the two races, the African and the European, affords a ready explanation; the blacks are here outnumbered by the whites. Pichardo, in the preface of his *Diccionario provincial de voces Cubanas*, 2 ed., Habana, 1849, makes the following statement: "A corrupt dialect is spoken in all parts of the island (Cuba) by the Negroes born in Africa,

which is uniform, no matter what the difference of race, and is retained through life, unless they came very young." He describes it as "a distorted and mutilated Spanish, without concord, number, declension, or conjugation, without strong *r*, final *s* or *d*, frequently exchanging *ll* for *ñ*, *e* for *i*, *g* for *v*, &c.; in fine, a jargon the more confused the more recent the arrival. It can nevertheless be understood by any Spaniard, apart from a few words, common to all, which require translation." This description accords nearly enough with the Creole Spanish of Curaçoa to show that we have here the beginning of proper Creole, but, for the reason given above, it has failed of development. Pichardo adds that the Creole Negroes, i. e., those born on the island, all speak the Spanish.

While these are the general conditions under which the Creole dialects have been formed, there seems to have been a difference in the readiness with which the several languages have taken on the Creole character. The French has taken root most easily, and is found not only in all the West India islands either now or formerly in the possession of France, but in some, e. g., Nevis and Montserrat, where its presence cannot be thus accounted for. The Spanish Creole is found only in the island of Curaçoa and its dependencies, Aruba and Bonaire, which were colonized by Spain, but for more than two centuries have been in the possession of the Dutch. This isolation from the influence of the mother tongue has not unlikely had a favorable influence on the growth of the Creole, since we find in Surinam, under circumstances somewhat similar, the only English Creole which deserves the name. The greater number and fullness of the vowels in Spanish, as compared with the French, which give the syllables a structure more nearly resembling that of the African languages, by making the Spanish easier to acquire, may have been less favorable to the Creole tendency, just as the fact that the English is already so thoroughly *creolized* in its grammar has undoubtedly been an obstacle to further progress in that direction.

The better to exhibit the nature of the Creole tendencies, and to show the working of them under a change of circum-

stances and upon different material, I have attempted to sketch very briefly the principal features of Creole grammar. The survey includes five dialects of the French Creole and the Spanish, to which I have added for the sake of comparison brief notices of the Dutch Creole, and the Negro English of Surinam. For the study of the Portuguese Creole, spoken by one tribe of Bush Negroes on the Upper Surinam, no printed materials exist. At this distance from the field in which the languages are spoken, very small addition to the stock of positive knowledge concerning them could be expected, and I have not been successful in all cases in obtaining the material which has been already collected. The more important part of the printed works I have perhaps had, and also in the case of three of the French dialects, the Spanish, and the Dutch Creole, the opportunity of gathering, from one or more individuals who spoke them, new material, so that though necessarily very incomplete the results reached may not be altogether without value.

FRENCH CREOLE.

This is not only the most widely spoken, but also in a philological point of view the most interesting of the dialects. "It is spoken not only by the Negroes and the colored people, but also by most of the white natives of Hayti, St. Bartholomew, Guadaloupe, Deseada, Dominica, Martinique, St. Lucia, St. Vincent, the Grenadines, Grenada, Tobago (in one district only), and Trinidad." (Mr. J. J. Thomas, in Trübner's Lit. Record, Dec. 31, 1870.) To this list should be added Montserrat, Nevis, part of St. Martin's, and a considerable portion of the city population in St. Thomas. Besides this central territory it occupies in the east Mauritius, and in the west a part of Louisiana. The wider geographical limits of this dialect have given room for the growth of some varieties which are not without interest. The following is a list of the dialects included in the present sketch, with the authorities for each, printed and oral.

1. Hayti. *Manuel des habitans de Saint-Domingue, par S. J. Ducaeur-Joly*, Paris, 1802. Tome ii. (pp. 282-355) contains a *Vocabulaire Français et Créole*, according to the author the

first ever published, followed (pp. 357–391) by *Conversations Créoles*. This work is of especial interest as it furnishes in some sort a measure of the more recent progress of the Creole.

Guide to Hayti, edited by James Redpath, Boston, 1861, contains (pp. 131–135) a scheme of the Creole conjugation, and some general statements.

I have had also the opportunity of repeated conversations with a young man, who between the age of seven and fourteen (he is now eighteen) lived in Hayti, and has a good command of the Creole.

2. Trinidad. *Theory and Practice of Creole Grammar*, by J. J. Thomas, Port of Spain (Trinidad), 1869, 8vo, pp. 134; the most extended and valuable work on the grammar of the language.

3. Martinique. *Les Bambous: Fables de La Fontaine, travesties en patois Créole* (by M. Marbot). *Nouv. éd. Fort-de-France (Martinique)*, 1869. 8vo, pp. 144.

Victor Schœlcher, in *Des Colonies Françaises, Paris, 1842*, gives (pp. 417–434) a collection of *proverbes et locutions nègres*, which represent the dialect either of Martinique or Gaudaloupe, or perhaps both, not taking account of minor differences. Mr. Thomas also, in his grammar, makes an occasional observation on these two dialects.

4. St. Thomas. For this dialect my authority has been a young man, Frederico Antonio Camps, recently from St. Thomas. He was born in Havana, but since his sixth year has lived in St. Thomas, and speaks, besides the French, also the Dutch and Spanish Creole, all three with great readiness. He has also visited nearly all the West India islands, and can speak from personal observation of the limits of the several dialects.

5. Louisiana. Here my materials have been gathered mainly from three individuals. Two of them until the recent war were slaves, one in the parish of St. Charles, about thirty miles west of New Orleans, the other about the same distance east, while the third had lived mostly in New Orleans. Of the first two the Creole was the native language, and one of them, up to the time when he left the South, spoke only that.

For a few facts respecting the Mauritius Creole I am indebted to a notice of that dialect by Mr. Walter Besant, in the *Athenæum* of Dec. 31, 1870.

While the Creole of each dialect approximates to a uniform standard, there is, as we should expect, far more of variation than in languages which have had a more natural growth. Especially the contact with the French, which has never entirely ceased, has been a disturbing influence and a source of corruption, for the standard of Creole purity is to be sought at the farthest remove from the French, where the Creole tendencies are most fully developed. From the presence of these intermediate forms, representing different stages in the Creole progress, a brief outline like the present must necessarily be a very incomplete statement of the forms actually in use.

In the matter of orthography, there being no settled usage among the few writers of Creole, I have tried to keep in view the fact that the Creole is purely a spoken language, and final consonants which have become silent I have usually not written, especially where they convey to the eye (like the plural *s*) distinctions which no longer exist. I have also taken the liberty of modifying the orthography of the authorities used, in order not to separate by a difference of spelling, forms which are identical in sound; but in doing this, there has been, I hope, no loss of accuracy. Apart from the use of *ch* and *j* to represent the English sounds of *ch* and *j* in *choose*, *join*, the occasional use of *k*, and of *ð* for the open sound of *o* (like *ou* in *ought*, but somewhat shorter), only the ordinary resources of French orthography have been employed.

PHONETIC CHANGES.

1. Vowel Changes, of which the following are the more important. The Creole has a special dislike of the indistinct *e muet*, and where the syllable is not dropped altogether, substitutes for it usually *i*; thus *dimain* (*demain*). Not unfrequently it suffers attraction from the vowel of the following syllable; thus *lévé* (*lever*), *soucouré* (*secourer*); sometimes the dialects follow a different course; thus Mart., Trin., *dou-boute* (*debout*), elsewhere *diboute*; Mart. *bousouin*, elsewhere

bisoïn. Before *v* it may pass into *ou*; thus *douvant* (*devant*), *chouval* (*cheval*) Louis. *çoil*.

U and *ui* usually become *i*; thus *pli* (*plus*), *ri* (*rue*), *li* (*lui*), *dibri* (*du bruit*); but *touyé* (*tuer*), Trin. *choulé* (*reculer*), elsewhere *kilé*; Trin. *jiré* (*juré*), Mart. *jouré*, Louis. *zouré*; Hayti *couzine* (*cuisine*), elsewhere *kizine*; *louïle* (*huile*).

Eu and its orthographic variation *œu* at the end of a syllable become *é*; thus *difé* (*du feu*), *pé* (*peut*); but where a following *r* has become silent, *è*; thus *pè* (*peur*). Before a consonant it is *è* or *e*; as *nèf* (*neuf*), *bef* (*bœuf*).

Oi sometimes retains its French sound; as in *dibois* (*du bois*), but more commonly becomes *ouè* or *oué*; thus *douette* (*doigt*), *chouési* (*choisir*); sometimes *e*, as *drette* and *drouette* (*droit*).

A final vowel preceded by a nasal consonant, *n* or *m*, frequently becomes itself nasal. This tendency is strongest in Trinidad; thus *aimèn*, *mènèn* (*aimer*, *mener*); it appears also in Mart., as *mennein* (*mener*), *nein* (*nez*), and in Louis. after *n mouillé* (which is not heard as a consonant, but only makes the preceding vowel nasal); thus *ganien* (*gagner*), *conien* (*cogner*), *peinien* (*peigner*), *panien* (*panier*), and a faint nasalization in some other cases, as *limein* and *laimé* (*aimer*). Even in Hayti, it is found, as in most of the dialects, in the pers. pron. *moïn* (*moi*). In this tendency to nasalization we may perhaps recognize an African trait, since it has found its way into the Spanish, English and Dutch Creole, where a final *n* or *m* frequently has lost its consonant power, making the preceding vowel nasal. In one class of words, however, the vowel has lost the nasal character which it possessed in French, namely, in most French verbs in *-ndre*, thus *vanne* (*vendre*).

Consonant Changes. French *ch* and *j*, and *g* before *e* and *i*, in Louisiana, especially in the parish of St. Charles, and in Mauritius, frequently exchange the sounds *sh* and *zh* for *s* and *z*; thus, St. Charles, *çappé* (*échapper*), *çose* (*chose*), *cimin* (*chemin*); Mauritius, *civé* (*cheveux*), *çaque* (*chaque*). Before an *a* or *o* vowel the change does not always take place; thus *chaud*, *chien*, *charbon*; some words, as *çapeau* (also pronounced *chapeau*), appear to be in a state of transition. The change of *j*

and *g* (before *e* and *i*) to *z* is more uniform; thus, St. Charles *zôrdi* (*aujourd'hui*), *fromaze* (*fromage*); Maur. *zardin* (*jar-din*). In Hayti and Trinidad, *g* of the termination *age* passes into the vowel *i*; thus *fromai*, *baggai* (*fromage*, *baggage*). Only one of my Louisiana authorities made the above changes at all regularly, the others only in individual words.

S before an *i* vowel (*i*, *u*, &c.) passes occasionally, in Louisiana into *sh* (Fr. *ch*); thus *dichic* (*sucré*); in *chongé* (*songer*) the change is produced by assimilation to *g* (*zh*) in the following syllable. English *ch* (*tsh*) and *j* (*dzh*) appear in the Creole, developed out of a palatal (and in some cases a dental) mute followed by an *i* vowel. This change is most frequent in Trinidad, where it is found in *chuite* (*cuite*), *chwinze* (*quinze*), *chéchin* (*quelqu'un*), and other words which elsewhere are free from it. In Louisiana but a few words are thus affected; thus *chiré* (*tirer*), *chué* (*tuer*), *chilotte* (*culotte*). It is found in all the dialects in one word *chumbo* or *chémbé* (from *tiens bon* or *tiens bien*), and in St. Thomas this is the only instance of its occurrence that I have detected. In the remaining dialects also the examples are few. The corresponding sonant *j* appears in all the dialects in *jôle* (*gueule*), and in some other words less uniformly.

These sounds, *ch* and *j*, we shall distinguish in the present paper from the French *ch* and *j* by the use of a heavy-faced type. In the Spanish Creole also the same sound of *j* will be similarly represented.

R is a weak letter which suffers more or less change and loss in all the dialects, but on the whole shows most weakness in Trinidad, and least in Louisiana and St. Thomas. As a final it is heard faintly in some words in Louisiana, but apparently in none of the other dialects. In Trinidad when it follows a labial and is itself followed by any other vowel than *o* it passes into *ou*; if followed by *o* it may be lost altogether; thus *pouï* (*prix*), *foté* (*frotter*). In Hayti and Martinique it shows very nearly the same weakness. *R* sometimes suffers transposition; thus *dromi* (*dormir*), *crobeau* (*corbeau*), Louis.; *rade* (*hardes*), Hayti and Mart.; *radi* (*hardi*); *derô* (*dehors*), Mart.

Contrary to the general tendency of the Creole as well as of the French to cast off final consonants, the Creole has in some cases recovered a final consonant, especially *t*, which in French is heard only when the following word begins with a vowel; thus, *ratte* (*rat*, the *t* of which does not regularly pass to the following vowel), Hayti, Mart., St. Th.; *lette* (*lait*), Louis., Hayti; *douette* (*doigt*), Trin., Hayti, Louis.; *diboute*, Louis., *douboute*, Mart. (*debout*); *canote*, Hayti; *valette*, Mart. In Mart. we find also *trope* (*trop*). To this same preference for a stronger ending is due the choice of the feminine instead of the masculine form of several adjectives; thus *coute* (*court*), *drette* or *douette* (*droit*).

The Creole has an apparent dislike of an initial vowel, and in nouns almost always avoids it by prefixing some form of the article. In verbs the same tendency sometimes shows itself; thus, *aimer* is in Louisiana *laimé* or *limein*, in Hayti (Ducœur-Joly) *haimé*; *ouvrir* in Hayti is *louvoui*.

In compound words, especially in verbs of three or more syllables, a prefix preposition frequently falls away; thus *reté* (*arreter*), *touné* (*retourner*), *mandé* (*demander*).

GRAMMATICAL FORMS.

ARTICLES. The French definite article has entirely lost its force in the Creole, though it remains attached to many nouns as an inseparable prefix. In its place the Creole has made of the demonstrative adverb *là* (from Lat. *illac*, as *le* from *ille*), a postpositive article, which however retains somewhat more of the original demonstrative force than *le*, and is therefore not used in all cases where the French employs the definite article. To this prevailing usage the dialect of Mauritius forms an exception. Here the French definite article, though an inseparable prefix of many nouns as in the other dialects, has also retained its position and force, but has only a single form *li* (*le*) for both genders and numbers.

The indefinite article, also less used than in French, is *yon* in Trin., Mart. and St. Th.; *ein* (with the sound of *ein* in *hein* or of *in* in *vin*) in Louis. and Mauritius; *youne* (Ducœur-Joly, *nion*) in Hayti. The numeral 'one' is in Trin., Mart., St. Th.,

yone; in Louis. and Hayti it is not distinguished from the indefinite article.

Both the indefinite and definite articles are invariable in respect to gender, but the latter, in some of the dialects, by composition with the personal pronoun third plural forms a plural which will be considered hereafter.

NOUNS. With the loss of gender in the article, grammatical gender has disappeared also in the noun. Difference of sex is expressed in some cases by independent words, though the number of such words employed is much smaller than in French, and less in some dialects than in others; thus *nomme* (*homme*), *femme*, a few words denoting human relationships, as *frè*, *sè* (*frère*, *sœur*), and a few names of animals. In the case of most animals a word denoting sex is prefixed, usually *male*, *fmelle*, but sometimes a more specific word; thus *boucabouite* 'he-goat' (Trin.), *macou-chatte* 'tom-cat' (Trin., St. Thos.). In Trinidad, where the female has borne young, *maman* is used in place of *fmelle*; as *maman-chatte* 'she-cat'. In Hayti, besides *vache*, we have *bef-lette* (*bœuf à lait*) 'cow'. Feminine terminations have preserved their vitality only in a few nouns; thus *nègue*, *nègresse*; *milate*, *milatresse*; *cousin*, *cousine*, in all the dialects; *dansè* (*danseur*), fem. *dansèse* in Trinidad; but in Hayti and St. Thomas, *dansèse*, and in Louisiana, *dansè*, are each of common gender, and we must distinguish by prefix, *nomme dansèse*, *femme dansèse*. This ending *èse* has in Trinidad supplanted in two or three cases the ending *ière*; thus *lavandèse* (*lavandière*), which is found also in St. Thomas. Somewhat similar is Trin. *amise* (*amie*). In Hayti from *codenne* 'turkey-cock' (*coq-d'inde*) we have a feminine *codine* 'turkey-hen.'

Plural inflections have disappeared from the Creole as they have in great measure from the French, where the ordinary plural ending *s* is heard only when the following word begins with a vowel. In the Spanish Creole also, and in the Negro English of Surinam, the plural has been lost, although neither the Spanish nor the English ending *s* shares the weakness of the French. Practically the *spoken* French, which alone has influenced the Creole, distinguishes the plural by the article

les when definite, *des* when indefinite. The Creole gives up the distinction in the case of indefinite nouns, and for definite nouns employs in Trinidad and Martinique a construction which is purely French; it places, namely, the weak demonstrative *ces* before and *la* after the noun; thus, *nomme la* 'the man', *ces nomme la* 'the men.' But in Hayti, St. Thomas, and Louisiana, we have a more original method; the pers. pron. 3. plur. (*eux*) is added to *la*, giving in St. Thomas *yo la*, in Hayti *layo*, and in Louisiana *layé* or *lāi*; thus *nomme layé* 'the men'. It is a very interesting fact that in the Spanish and English Creole, and for the most part in the Dutch Creole also, we have the definite plural formed in a similar way, by means of the personal pronoun.

Among the most curious features of the Creole are the numerous cases of agglutination of the French article with a following noun, the same which we have in Fr. *lierre* from Lat. *hedera*. Nouns having an initial vowel offer the readiest attachment to such a prefix, and very few such nouns are without it. The desire to escape the initial vowel-sound seems in fact to have been one of the chief motives of it. We find thus employed both the indefinite and definite article, and the latter both in the masculine and feminine, singular and plural. The choice is of course mainly determined by the frequency with which one or other form has occurred in connection with the noun, but partly also by phonetic considerations. The different dialects also have individual peculiarities. Instances of such a union of the indefinite article with the noun are not common; *nomme* (*homme*) is found in all the dialects; *nanné* (*année*) in Trinidad and Louisiana (but Hayti, Mart., *lanné*); *name* (*âme*) Trin., Mart., St. Th.; *ninime* (*énigme*) Trin.; *namé* (*armée*) Mart.; *nouvrier* (*ouvrier*), *nab* (*arbre*), *népingue* (*épingle*), *néjuî* (*aiguille*) Louis. (elsewhere usually *zépingue*, *zégui* or *zéjuî*). Ducœur-Joly gives in several cases two forms, as *nomme*, *zomme*; *népron*, *zépron* (*éperon*); and in one case three, *lain*, *nain*, *zain* (*ain*). In *nonc* (*oncle*), for which in Trin. we have *mounonc*, as in Eng. *nuncle*, *n* comes from the poss. pronom. adjective, *mon oncle*.

In the case of the singular definite article the distinction

between the masculine and the feminine vanishes before an initial vowel, and the Creole in these composite forms shows no preference for one gender above the other; thus *largent* (*argent*), *louse* (*ours*), *lidé* (*idée*), *louile* (*huile*). Before an initial consonant the case is different, and here, while the feminine *la* is very frequent and found in all the dialects, the masculine *li* (*le*) appears only in Mauritius; thus *lapli* (*pluie*), *laline* (*lune*), *latè* (*terre*), and (Maur.) *lichien* (*chien*). The masculine article is avoided here doubtless because it would coincide in form with the pers. pron. 3. sing. *li* (*lui*). Mr. Thomas gives a list of seven masculine nouns which in Trinidad have the fem. article prefixed; as, *la restant* 'remainder'. In the partitive form *du*, the masc. article appears in the following words in most if not all the dialects; *divin* (*vin*), *dithé* (*thé*), *difé* (*feu*), *diri*, *douri* (*riz*); and in Louisiana in quite a number of others; as, *disic* or *dichic* (*sucre*), *dichou* (*chou*), *dibri* (*bruit*), &c. Of the fem. sing. partitive the only instances observed are *dlo* or *dolo* (*eau*), and (in Louis.) *dilouile* (*huile*); before a consonant the additional syllable required, *dila* (*de la*), would be too burdensome.

The plural article is of frequent occurrence before an initial vowel, to which the final consonant only of the article attaches itself; thus *zami* (*amis*); *zombi* (*ombres*) 'ghost'; Louis., Maur., *zozo*, Hayti, St. Th., Mart., *zouézo* (*oiseaux*); *zhé* (*yeux*). So far as the Creole form is concerned the *z* might be referred equally well to *les* or to *des*; in most cases we may admit a joint influence, with some words *les*, with others *des* being oftener used. We must also add doubtless in some cases the pronominal adjectives *mes*, *ses*, so that *zami*, for example, represents *les amis*, *des amis*, *mes amis*, &c. In Louisiana a few nouns take the full prefix *des*; thus *dézef* (*œuf*); *dézo* (*os*); *dézoï* (*oie*); *déra* (*rat*). Two or three examples will illustrate the difference of form which in the case of some words prevails in the different dialects and sometimes within the same dialect. Thus we have for Fr. *étoile*, in Louis. *latuelle* and *létoile*, in Hayti and St. Th. *zétuelle*; for Fr. *œuf*, in Hayti *zef*, *zé*, in Mart. *zé*, (Schœlcher, *zef*), in Louis. *dézef*, *zé*; for Fr. *rat*, in Louis. *déra*, in Mart., St. Th., Hayti, *ratte*; for Fr. *os*,

in Louis. *dezo* and *zos*, elsewhere *zo*. Nouns having an initial vowel show in some dialects a preference for the plural, in others for the singular article. The following enumeration is only approximatively correct, and an examination of the entire vocabularies of the dialects might give a quite different result. The preference for the plural is most strongly marked in Hayti. In Duceœur-Joly they outnumber the singulars in the ratio of 10 to 1 (40 and 4), but additions obtained orally reduce the ratio to that of 4 to 1; in Thomas's Grammar (Trinidad) the ratio is 2 to 1 (30 and 15), and about the same in St. Thomas; in Louisiana I have observed about an equal number of singulars and plurals, and in "Les Bambous" (Martinique) the singulars are in excess, 35 to 20. A comparison however of a definite list of words found in all the dialects would show less divergence. The instances in which the fem. sing. *la* is attached to an initial consonant are most numerous in Martinique (40 in "Les Bambous") and Louisiana, fewest in Hayti and St. Thomas.

The French article when it has thus become a constant element of the Creole noun loses, of course, not simply its definite force but also its power of marking number and gender; thus, in Louis. *déra*, when indefinite, is either 'rat' or 'rats'; *ein déra*, *dé déra*, 'one rat', 'two rats'; but *déra la*, 'the rat', *déra layé*, 'the rats.'

ADJECTIVES. "There is," says Mr. Thomas, "a distinct though ill sustained attempt at gender inflection, especially in the case of adjectives describing the qualities of human beings." The number of such inflected adjectives is however exceedingly small and confined apparently to certain derivatives in which the force of the termination is still felt. Mr. Thomas instances: (a) French gentilics in *-ais*, *-aise*, Creole *é*, *èse*; thus *anglé*, *anglèse*, *fouancé*, *fouancèse*; but *pôtijé écosseé*, *ilandé*, are not usually inflected in Trinidad, evidently because they are less used and the distinction is less important. In St. Thomas these are all inflected, but not the less strongly marked feminines of *americain*, *italien*, &c.: (b) Adjectives in *-eur*, *-euse*, Creole *è*, *èse*; thus, *flattè*, *flattèse*: (c) Adjectives in *-in*, *-ine*; thus *cochin*, *cochine*, (*coquin*, *coquine*): (d) Adjectives in *-x*, *-se*; thus *malhéré*, *malhèrèse*.

In one or two cases I have found parallel forms elsewhere, e. g. *coquin*, *coquanne*, in St. Thomas, but in general the distinction is lost, and the adjective practically without inflection.

Where the French has distinct forms for both the masculine and feminine adjective the Creole has chosen sometimes the one, sometimes the other as the common representative. The following appear in all the dialects in the masculine form; *bon*, *fô* (*fort*), *grand*, *gros*, Trin. *gouô*, *gras*, *gris*, *lou* (*lourd*), *nèf* (*neuf*). The following are uniformly in the feminine: *belle*, *coute* (*courte*), *drette*, *douette* (*droite*), *frette*, *fouette* (*froide*), *laide*, *nette*, *soude* (*sourde*). Others are divided in form; thus, *blanc* in all the dialects except that of Hayti, where *blanc* is 'white man' and the adj. 'white' is *blanche*; *pouése* (*épais*) only in Hayti, elsewhere *épé*; *dou* and *douce* in Martinique, elsewhere only *dou*; *molle*, Trin. and St. Th., *mou*, Hayti and Louis.; *frai*, Trin. and St. Th., *fraiche*, Hayti and Louis.; *toute*, Trin., Hayti, *tu*, Louis., in Mart. and St. Th., both forms; *longue*, Trin. and St. Th., *long*, Hayti and Louis. In the following cases a different meaning is assigned to each of the two forms occurring in the same dialect; Trin. *fin* 'fine', *fine* 'slender', in Hayti and Louis. both forms are used indifferently, in St. Th. and Mart. *fin*; Trin. *sec* 'curt, crisp', *chèce* 'dry' (not wet), St. Th. *sec* 'dry', *chèce* 'dry chips', Hayti *chèce* 'thirsty', Mart. *chesse* 'thirsty', Louis. *sec* 'dry'; *piti*, frequently shortened to *ti*, is 'small', but in St. Thomas we have also *pitile* 'child'.

Mr. Thomas observes that where a noun and adjective have been taken from the French not separately but in combination, the adjective may retain its French form, and instances *tabe ouönde* 'round table', *chandelle ouömaine* 'Roman candle', the adjectives having elsewhere the form *ouönd*, *ouömain*.

COMPARISON OF ADJECTIVES. The comparative is formed as in French by *pli* (*plus*) and *moënce* (*moins*), the latter not often used. The objects compared are connected generally by *passé*, sometimes by *qui* or *qué* (*que*). Where *passé* is employed the positive alone is sufficient; thus, *pli grand passé ça* or *grand passé ça*, in all the dialects. In place of *passé*

we may have in Hayti and Louis. *qui*, in St. Th. *qué* (*que*). The comparative of *bon* is in Trin. *mèiè* or *pli bon*; in Mart. we have more commonly the double comparative *pli mié*, in St. Th. *pli mèiè*, in Louis. *pli bon*, *pli mèiè*, in Hayti *miyòr*, *pli miyòr*, *pli bon*. The superlative is either not distinguished from the comparative or is expressed by some such method as the following: (St. Th.) *ça c'est pli mèiè passé toute*, or *qué toute*.

PERSONAL PRONOUNS. 1. sing. Trin., Mart. *moin*; St. Th., Maurit., *mo*; elsewhere two forms are employed, one for the subject when not emphatic, the other for the emphatic subject and the object; in Hayti (Ducœur-Joly) *mo*, emphat. *moué*, (Redpath) *mon*, *m'*, emphat. *moué*, (oral) *moin*, *m'*; in Louisiana *mo*, emphat. *moin*. The final vowel is made nasal through the influence of the preceding *m*.

2. sing. Trin. *ou*; Mart. *to* or *ou*; St. Th. *ou*; Hayti (Duc.-Joly) *to*, emphat. *toué*, present usage *ou*; Louis. *to*, emphat. *toi*, or *ou*; Maurit. *to*, *vou*.

3. sing. (both masc. and fem.) *li*, Trin. also *'i*.

1. plur. *nou*.

2. plur. Trin., Mart. *zòt*; Hayti *ou*; St. Th. *ou* or *zòt*; Louis. *vou*, *vouzòt*.

3. plur. Louis. *yé*, elsewhere *yo*.

These are derived from Fr. *moi*, *toi*, *lui*, *nous*, *vous*, *vous autres*, *eux*.

The choice of the accusative instead of the nominative forms of the personal pronoun is characteristic also to a great extent of the other Creole dialects. In the French itself we have the beginning of this usage in the employment of *moi*, *toi*, *lui*, *eux*, in the emphatic repetition of the subject. The motive for this change lies in the fact that the subject pronoun came gradually to be regarded as a necessary adjunct of the verb, and with the loss of independence was also weakened in form. The process has recommenced in the Creole, where *moi*, *toi*, are, when they stand before the verb, shortened to *mo*, *to*, and before a vowel to *m'*, *t'*.

Instead of the possessive pronominal adjectives, the Creole, except in Louisiana, and perhaps Mauritius, employs the per-

sonal pronouns. When used attributively, they are in Trin., Mart., St. Thomas, simply placed, like any other attributive case, after the noun; thus, *liv li* 'his book'. This is also the present usage in Hayti, but Duceœur-Joly inserts the preposition *à*; thus *zami à li yo* 'his friends'. This latter method is employed also, according to Mr. Thomas, in Guadeloupe; in Schœlcher we find both forms; thus, *bouche à ou* 'your mouth', *daite ou* 'your finger'. In Louisiana, however, the French pronom. adjectives have kept their place, though hardly distinguished in form, except in the 3. sing., from the pronouns. They are *mo, to, son* or *so, no, vo, yè*; thus, *mo liv*, 'my book'.

The predicate form is in Trin. *cela-moin*, in Mart. *Guadal. ta-moin* (abbreviated from *c'est à moi*); in Hayti, *pa moin* and *pou moin*; in St. Thomas, *pa mo* and *cela mo*; in Louis. *pou moin*. *Pou* is the preposition *pour*; *pa* is perhaps *part*, since we find in Duceœur-Joly *avla part ayo* 'theirs'. He uses also another form of the predicate, which he writes both *tien à toué* and *quien à toué*, probably to represent the sound *chien*, evidently the last syllable of *appartient*, as *pa* used above may possibly be the second; thus, *mal à vou li arien coté tien à li* 'your suffering is nothing in comparison with his'.

Demonstrative pronouns and adjectives. The distinction between the nearer and more remote demonstrative, between 'this' and 'that', is not in general clearly marked in Creole. In Trin. we have for the first, *cela-la* or *çala* following the noun, and for the plural the same preceded by *ces*; thus, *zombi cela-la* 'this ghost', *ces zombi cela-la* 'these ghosts'; for the second, only the weak demonstrative which serves also as the definite article; thus, *nomme la* 'that man', *ces jou la* 'those days'. In Hayti (Duceœur-Joly) we have for the adjective 'this' and 'that' *la*, plur. *layo*, for the pronoun *ça* or *cila-la*, plur. *cila-yo*; I have found also *ça* or *cela*, plur. *cela-yo*, used for the adjective. In St. Th. we have *cé liv* 'this book', *cé liv yo* 'these books', *liv la* 'that book', *liv yo la* 'those books'; in Louis. *liv ça* and *liv cila-la* 'this' or 'that book', *liv layé* 'these' or 'those books'. In Martinique we find *tala* 'that' (abbreviated from *l'aut la?*) and the plural as in Trinidad; thus, *ces gens la* 'those persons.'

Relative and Interrogative Pronouns. The relative 'who' is commonly *qui*; 'he who', *ça qui*; 'which', *ça* or *qui*; 'that which', 'what', *ça, ça qui*, and in St. Th. also *qui ça*. The passing of a demonstrative into a relative is of common occurrence in other languages, and is seen, for example, in Germ. *der*, Dutch *die*, Eng. *that*. In the case of *ça* it arose probably from the use of the compound form *qui ça*, the *qui* being afterwards dropped.

The forms of the interrogatives are not usually distinct from the relatives, but *qui moun* (*monde*) is very generally used for 'who'? *quilece* (*quel est-ce*) Trin., Mart., St. Th., for 'which'? *Ça* is also interrogative 'what?'; thus, *ça ça yé* 'what is that?' (Mart.).

For the reflexive pronoun *corps* is frequently employed in place of *même*; thus, *jidé* (*aider*) *corps-ou épis lôte 'a jidé ou* 'help yourself and others will help you', (Hayti). *Même* is still employed to add emphasis to the subject; thus, *li même fai li* 'he did it himself', and in Louis. and St. Th. is preferred also for the reflexive.

VERBS. The verb offers the best field for the development of the Creole tendencies because the French verb as compared with the other parts of speech has preserved a large number of inflections. The destructive, and by way of compensation, the constructive power of the Creole is therefore here best seen. In general it may be said that the verb has lost all inflections and is reduced to a single form. The distinction of person and number is left to the subject, that of tense and mode is expressed solely by means of auxiliaries. The choice of this form has been determined of course not by any abstract consideration of the fitness of one form above another, e. g. the infinitive, to represent the idea of the verb without limitation, but simply by the frequency of its occurrence and the strength of the impression it has made on the ear. The usual statement, which Mr. Thomas also adopts, is that the Creole verb is the French infinitive, but though more weight is doubtless to be ascribed to this than to any other one form of the verb it is hardly correct to claim for it the whole influence. In the most numerous class

of French verbs, those in *er*, the past participle, one of the forms of most frequent occurrence from its use in the compound tenses, coincides with the infinitive, as would also in the Creole pronunciation certain parts of the imperfect and past definite. In the regular verbs in *ir* the case is very much the same. Final *r* has become silent generally in Creole (just as in French infinitives in *er*), and here also the infinitive, participle, and past definite would be identical in form. In verbs in *re*, whether regular or irregular, the infinitive and past participle are somewhat widely separated, and here the Creole has chosen sometimes the latter, but commonly the former, a choice determined in part perhaps by the general agreement between the present indicative and the infinitive in these verbs. To these considerations must be added another of more positive character, the fact that the simple tense of the Creole verb is, with a few exceptions, not a present but a past; *moïn mangé* is not 'I am eating' but 'I ate.' These appear to be sufficient reasons for assigning to the participle a considerable influence upon the Creole verb, and apart from phonetic considerations it is better to write *mangé* rather than *manger* because the former may more fitly represent both infinitive and participle.

Verbs of the first French conjugation, in *er*, present scarcely any irregularities. Mr. Thomas gives two instances of what he calls conversions of an indicative into an infinitive, in verbs of this class, viz. in *bailler* 'give', which except in Louisiana has taken the place of *donner*, and *travailler* 'work', the Creole forms of which are *ba* or *baï* and *travaï*. But the shortening is here evidently caused by the *l mouillé*, just as in the Spanish Creole *cavallo* becomes *cabai*. From *aller*, besides the regular form *allé* we have *va* and *'a* as auxiliaries of the future, and the imperative *annon*, *anno* (*allons*), shortened sometimes to *an*; thus, *an nou fai ça* 'let us do this.' Expressions like *tempouï* (*je t'en prie*), which the speakers no longer analyze, are hardly to be considered exceptions. In the specimens of Mauritius Creole given by Mr. Besant, however, such forms as *pouss'*, *guett'*, occur along with *guetté*, but these specimens are

hardly to be received as pure Creole according to the definition of the term before given.

Verbs of the remaining French conjugations in *re*, *oir*, and *ir*, the majority of which are strong, or irregular, especially in the participle, receive a less uniform treatment. We have sometimes two forms in use in the same dialect, and between the different dialects there is frequent want of agreement. The following are uniform in all the dialects, i. e. they are everywhere derived from the same part of the French verb, and differ, if at all, only in the minor phonetic peculiarities which belong to one or the other dialect.

a. Forms which combine the infinitive and participle, and, in some cases, still other parts of the French verb: *dî* (*dire*), *écri* (*écrire*), *li* (*lire*), *ri* (*rire*), *bouilli* (*bouillir*), *couri*, *cououï* (*courir*), *dômi*, *dromi* (*dormir*), *menti* (*mentir*), *parti* (*partir*), *senti* (*sentir*), *servi* (*servir*), *sorti* (*sortir*), *vini* (*venir*).

b. Forms in which the French infinitive and certain parts of the indicative present are united: *atlanne* (*attendre*), *craine* (*craindre*), *fanne* (*fendre*), *fône* (*fondre*), *joêne* (*joindre*), *plaine* (*plaindre*), *pône* (*pondre*), *ranne* (*rendre*), *repône* (*repondre*), *batte* (*battre*), *coude* (*coudre*), *boi*, *bouè* (*boire*), *coi*, *couè* (*croire*) (Ducœur Joly gives the form *crére*), *ouè*, *vouè*, *oua* (*voir*). The above verbs in *ndre* lose both *d* and *r*; the *n* however recovers its consonant power. But in *pren* (*prendre*) the vowel remains nasal, unless perhaps in Trinidad. (Thomas writes both *pouende* and *pouend*.)

c. Indicative forms: *fau* (*faut*), *vau* (*vaut*), *vlé*, Louis. *woulé* (*voulez*), *pé* (*peut*), *doé* (*doit*).

The following table exhibits most of the important variations found in the form of individual verbs. In the dialects of Martinique and Hayti, where Schœlcher and Ducœur-Joly use a second form along with that given by the other authorities, it is marked by *s* or *D*; where they use only a different form it is enclosed in a parenthesis.

| | TRIN. | MART. | HAYTI. | ST. THOS. | LOUIS. | MAURIT. |
|-----------|----------|--------------------------|-------------------|-----------|------------------|---------|
| connaître | connaite | connaite (S. connaît) | coné | connaite | connaite | conné |
| cuire | chuite | cuite | couite D. coui | couite | choui chouite | |

| | | | | | | |
|-----------|----------------------|----------------------|------------------------------------|-------------------|------------------|-------|
| faire | fè, faite | fè, falte | fè | fè | fè | fè |
| défaire | défaite | difaite | | difaite | difaite | |
| entendre | tanne | tanne | tendé | tanne | tendé | tendé |
| frise | foui | fri | foui | friyé | friyé fri | |
| mettre | métté | metté mette | mété | mette metté | mété | |
| promettre | promette | promette | promi (D. promette prometté) | premetta | promi promé | |
| commettre | commi | commette | | | | |
| démettre | dèmi dèmi | | | démette | démétté | |
| mordre | môdé mode | môdé S. môde | modé | môdé | môdé | |
| moudre | | | | moulé | moulé | |
| peindre | | | peinti | peintiré | peintiré | |
| perdre | pèdi | pèdi S. pède | pèdi (D. perde) | pède | perdi | |
| suivre | souive | | | sivé | sivé souive | |
| s'asseoir | assise | assise (S. chita) | chita (D. sitta, synta) | assise sizé | assise assite | sizé |
| savoir | sa save | save sa | savé | save savé, sai | | |
| couvrir | couvè | couvè (couvouï) | couvouï | couvè | couvri | |
| ouvrir | ouvè | ouvè (ouvouï) | louvouï | ouvè | ouvri | |
| souffrir | souffè souffouï | souffri | souffouï | souffri | souffri | |
| mourir | mò | mouri mò | mouri mò | mouri mò | mouri | |
| tenir | tini, tni, tienne | tini, ni, tienne | tini | tini tien | | |

Where two forms are found in the same dialect there is sometimes, though not usually, a distinction in the use; thus in Trin., Mart., St. Th., *tini* is 'to have' while *tienne* preserves the proper signification of *tenir* 'to hold or to keep'. In Hayti and St. Th. *mò* has hardly more than an adjective force, 'dead'. In St. Th. *tendé* is present (probably from the frequent use of the phrase *entendez-vous?*), while *tanne* is past.

Such forms as *môdé*, *metté*, *soucouré*, which are found in the dialect of Trinidad, and which correspond neither to infinitives or to participles, Mr. Thomas regards as imperatives (*mordez*, &c.), but when we add other similar forms from the preceding table, as *friyé*, *moulé*, *promé*, *peintiré*, *sivé*, *sizé*,

and still others, as *choisé*, *conténé* (St. Th.), *rompé* (Louis.), *couyé* (*cueillir*) (Hayti), *chiré* (*traire*) which has in Louis. become identical in form with *chiré* (*tirer*), the explanation, though admissible perhaps in some cases, does not meet all. These forms are for the most part due rather to attraction on the part of the more numerous class of verbs in *é* (first Fr. conjugation, in *er*), a change similar to that of the strong to the weak conjugation, of Lat. *cedere* and *corrigere* to Fr. *céder* and *corriger*.

In the foregoing table we find regular participial forms; as *commi*, *démi*, *couvè* (*couvert*), *ouvè*, *souffè*, *pèdi* (*perdu*), *mò* (*mort*); a few feminine participles, as *assize*, *cuite*, *faite*, *difaite* (the two last are possibly imperatives).

Peinti and *peintiré* are perhaps to be referred to *peinture* rather than *peindre*. A similar form *confiti* 'to preserve' (*confiture*), is used in St. Thomas. *Chita* and *assite* are apparently *assieds-toi* fused into one word. Another curious verb, similarly formed, runs through all the dialects. *Chumbo* in Louis. and Maurit., elsewhere *chembé*, 'to catch hold, hold fast', is the imperative *tiens bon*.

The simple form of the Creole verb performs the duty of a preterit or perfect and an imperative. The other tenses are formed by auxiliaries. *Apé*, the auxiliary of the present in Hayti and Louisiana, is the preposition *après*, not in its ordinary signification 'after', but in the more etymological sense 'at' (Lat. *ad pressum*, Ital. *appresso*), as in the phrase *elle est après sa toilette*, and the vulgarism *il est après lire*. This tense corresponds closely with our English progressive present; thus, *l'apé li* 'he is reading'. Prefixing *té* (*été*, *était*), we have an imperfect; thus, *li t'apé li* 'he was reading'. In Mauritius, according to the statement of Mr. Besant, *après* forms only the imperfect; thus, *quand mo après faire ça* 'while I was doing that'.

In Trin., Mart., St. Th. we have, instead of *apé*, the auxiliary *ca*, which has also a somewhat wider use, expressing repeated and habitual as well as progressive action. It is used not only where a present or imperfect is required but in the statement of general truths, proverbs and the like; thus, *malhè pa*

ca chagé con lapli 'accidents do not threaten like rain', (Trin.). So far as I have observed *apé* has a more limited, a strictly progressive or continuative force. In his Grammar Mr. Thomas did not venture an explanation of *ca*, but more recently, in Trübner's Record for Dec. 31, 1870, he has expressed the opinion that *ca* and *da*, which performs a similar office in the Negro English of the West Indies, are of African origin, and from the same root. It is however extremely improbable that while the African element, even in the Creole vocabulary, is so small, a word having such an important *grammatical* use should have been borrowed from this source. The Creole auxiliaries in general, Spanish and Dutch as well as French, from their less independent character, have suffered more than usual change, and the original form is not always easily recognizable. Thus in Hayti and Louisiana the connection of *apé* with *après* is no longer felt, and other etymologies have been assigned to it. *Après* in the sense of 'after' is pronounced in Louisiana as in French, in Hayti *apoué*, though Ducœur-Joly writes the auxiliary *après*, from which we may perhaps conclude that in his day the two forms had not yet separated. Sooner than abandon the attempt to explain *ca* from the French, we should be disposed to accept one of the following etymologies, no one of which we freely admit is very obvious, and which are offered simply as conjectures. They are, *quand*, or *comme* (Creole *con*), the use of which in clauses expressing contemporaneous action, as *comme il faisait ça* 'just as he was doing this', may possibly have furnished a starting point for the auxiliary. The change required will perhaps seem less improbable when we consider that the Creole has converted the conjunction *et puis* 'and then' into an instrumental preposition 'with'; thus, *li talé (étalé) lôte la à tè épis you coude bouique* 'he felled the other to the ground by a blow with a brick' (Trin.). *Courir* is another possible etymology, supported by the analogy of the Dutch Creole, where *lo*, from *loopen* 'to run or go', is the auxiliary of the present.

The simple form of the Creole verb serves as a preterit and perfect, and an imperative. The pluperfect is formed, just as the imperfect from the present, by prefixing *té* to the preterit.

Mr. Thomas makes, quite unnecessarily it seems to us, two Creole conjugations, one with, the other without *ca*. The latter, a small class, comprises such verbs as *aimein* (*aimer*), *connaité*, *tini* (*tenir*) 'to have,' *vlé* 'to wish,' and the like, all of them naturally continuative in meaning, and therefore not needing *ca*. The corresponding words in English do not take the progressive form, 'I am loving,' &c. In such cases *aimein* is the present, *té aimein* the preterit.

The auxiliary of the future is *va*, frequently shortened to 'a. In place of this, *callé* (*ca allé*) is frequently used in Trin., Mart., St. Th.; *apé allé* in Hayti; *allé*, *couri* in Louis.

The auxiliaries of the conditional present and past are the following: Trin., *sé*, past *sé va* and *té va*; Mart., *sré*, past *sré té*; (Schœlcher, *té*, past *ta*); St. Th., *sé*, past *té va* and *sé va*; Hayti, *ta*, past *té va* and *ta va* (Ducœur-Joly, *seré*, past *seré te* and *té seré*); Louis., *té* and *sé*, past *ta*. *Sé* is contracted from *serait*, *ta* from *té va*, so that in *ta va* (Hayti) *va* is repeated.

'Can' is expressed in Trin. by *sa* (*savoir*) and *pé* (*peut*), in Mart. usually by *pé* (Schœlcher also uses *sa*), in Hayti by *capabe* (*capable*) (Ducœur-Joly also *savé*), in St. Th. by *pé* and *capabe*; in Louis. by *connai* and *capave*. The past, 'could,' is formed in each case by prefixing *té*. In Trinidad *capabe* in an affirmative sentence has a bad sense, like the Eng. 'capable of', e. g. *capabe menti* 'capable of lying,' but in the negative sentence this shade of meaning disappears. 'Must', 'ought', are variously expressed by *faut*, *doué* (*doit*), *pou* (*pour*) etc.; thus, *pou li gagné sentiment* 'he ought to be ashamed,' (St. Th.).

Of *être* the parts in use (not including the auxiliaries *té* and *sé*.) are, pres. *cé* or *yé*, pret. *cété*, *té* and occasionally the infinitive *ête*. The copula is however sparingly used and especially when the predicate is an adjective, the present *cé* is regularly omitted. In Ducœur-Joly we find instead of *cété*, the compound form *té yé*.

Avoir not only as an auxiliary, but also in the sense 'to have' has disappeared from the Creole. It is found however in *davoè* (*d'avoir*), used in Trin. as a conjunction, 'because,'

after *blamé* and words of similar meaning; also in *napoènt* (*il n'y a point*). Its place has been supplied in Trin. and Mart. by *tini* (*tenir*), in Hayti and Louis. by *gagné*; in St. Th. both *gagné* and *tini* are in use. These verbs are also used for the French idiom *y avoir*; thus, *pa gagné moune là* 'there was nobody there' (Hayti).

By the loss of *avoir* and *être*, French nouns and adjectives are converted sometimes into Creole verbs; thus, *pè* 'to fear' (*avoir peur de*), *bisoïn* 'to need' (*avoir besoin de*), *content* 'to like' (*être content de*). Others pass directly into verbs; thus, *marron* 'to run away,' *plein* 'to fill.' Still other anomalous verbs are *vaumié*, *simié* 'to prefer' (*vaut mieux, serait mieux*), found in Trinidad, to which may be added from Hayti *pito* (*plutôt*), with the same signification.

The Creole relative and interrogative adverbs of time and place are especially interesting, the latter being in some cases distinguished by an interrogative prefix.

The relative 'when' is in Trin. *temps, là* (*l'heure*), interrogative not given; Mart. rel. *quand*, interrog. *qui temps*; St. Th. rel. *temps, quand*, interrog. *qui temps*; Hayti rel. *là* (*l'heure*), interrog. *qui là*; Louis. rel. *quand*, interrog. *équand* (*est-ce quand*).

'Where' rel. is in Trin. *ôti* (*où est-il*), interrog. *ôti, côté, qui côté*; Mart. rel. *ôti, qui côté*, interrog. not given; St. Th. rel. *ôti, côté*, interrog. *ôti*; Hayti, rel. *côté*, interrog. *côté*; Louis. rel. *où* interrog. *é-ou, côté, ou-ce-qué*.

Mr. Thomas explains *ôti* as a contraction of *où es-tu*; so *péti*, used in questions with the force 'can possibly,' for *peux-tu*; *vienti-vati* 'a gadder about,' for *viens-tu, vas-tu*; but in all these cases the pronoun is doubtless *il*, not *tu*.

The Creole is simplified in syntax quite as much as in grammatical forms. The loss of inflections has narrowed the freedom of position, just as for a similar reason the French order is more rigid than the Latin. Little is in fact left besides position, to determine the relation of words in Creole. Thus the subject must always precede the verb, and the sentence cannot be made interrogative by inversion. Where there is no interrogative pronoun or adverb, the question is in-

dictated by the tone of voice, or introduced by *êce* (Trin.), *êcequié* (Louis.), *êcequi* (St. Th.), Fr. *est-ce que*. The prepositions *à* and *de*, which play so important a part in French syntax, are very sparingly used in Creole and mostly in certain phrases having the fixed character of compounds. In most cases they have simply dropped away and the gap has been left unfilled. Thus the attributive relation is expressed simply by placing the dependent after the governing noun; e. g. *chapeau papa tî fî là* 'the hat of the father of the girl' (Trin.) Verbs which in French take in addition to a direct object an indirect object with *à*, in Creole generally omit the preposition, the indirect object preceding the direct; thus, *moin di zami moïn ça*, 'I told my friend so;' but in Mart. we have also *di pou* 'say to' (*pour*).

Verbs which in French have only the indirect object either dispense with the preposition or exchange the weak *à* or *de* for a stronger; thus, *li ri moïn*, or *li ri après moïn*, 'he laughed at me' (Louis.), Fr. *de moi*. So also where the complement is an infinitive; thus, *yo fouémi pou ouè*, 'they shuddered to see' (Trin.); *moi connai comment pou fai ça*, 'I can do it' (Louis.) Reflexive verbs sometimes give up the pronoun without change of meaning; thus, *li sauvé*, 'he ran away' (Hayti); *mo voulé servi li*, 'I wish to use it' (Louis.)

In Trinidad the verb *ba* or *baï* (*bailler*) 'to give,' may be used to mark the dative; thus, *li pôté toument baï famîe* 'i' 'he brought trouble to his family.' In the Negro English of Surinam *gi* 'give' is used in a similar way.

The Creole not unfrequently combines prepositions for greater strength, or forms new ones; thus Mart. *quant à pou moïn* 'as for me,' Louis. *en haut laterre* 'on the ground,' for which we have in Trinidad the equivalents *en-lair* and *la sou* (*dessus*); but these combinations are simple in comparison with Fr. *au dessus de*.

For the conjunction *et* when used to connect individual words we have in Louis. *avé* (*avec*), in Hayti *acqué* (*avec*), in Mauritius *semb* (*ensemble*). In Trinidad *épis* (*et puis*) has passed through the opposite process. Employed first to connect clauses, then individual words, it passed into a pre-

position denoting accompaniment, and finally the instrument, and is used interchangeably with *évec* (*avec*).

After *sôti* (*sortir*) 'to go out' and *pren* (*prendre*) 'to take away' we have the preposition *nans* (*dans*) employed; thus, *li sôti nans cabane li* 'he has just left his bed;' *li pren li nans main moin* 'he took it away from me.' A similar idiom is found in the Negro English; thus, *komoto na ini hosò*, literally 'come out to-in (within) house,' i. e., to come out of the house. *Sôti* answers to Fr. *venir de*; thus, *moin sôti contré* 'I have just met' (*Trin*).

The adverbs *atò* 'at once' (*Mart.*) and *ôni* 'only' (*Trin.*) furnish a good illustration of the amount of change which it is possible for a Creole word to undergo. *Atò*, as the intermediate forms *ator*, *astor* (*Duceur-Joly*) and *astère* (*Louis.*) show, is for *à l'instant*. For *ôni* we have in *Mart.* *ani*, *anique*, in *Hayti* (*Duc.-Joly*) *necque*, in *St. Thomas* *ennique*, from which to *unique* is not a difficult step.

A few examples, in conclusion, of the power of the Creole to modify the meaning as well as the form of words:

(a.) Creole of Hayti. *Bougé* 'to dwell.' This change to a meaning opposite to that of Fr. *bouger* is explained perhaps by the circumstance that in such phrases as *il ne bouge pas des spectacles*, *pas* or *point* is not usually expressed (*Dict. de l'Acad.*), and the Creole negative being *pas*, not *ne ... pas* as in French, the weak *ne* goes for nothing.

Délagué, 'to untie, loosen;' the prefix *de* repeats the negative idea which is already in the simple verb *larguer*.

Chonger (*songer*) 'to remember' (also in Louisiana).

Campé 'to stand' (also in Louisiana).

Miel 'honey-bee,' 'honey' being *siwo miel* (*sirop*).

Touni (*tout nu*) 'naked;' thus, *pié touni* 'barefoot.'

Grand gout 'hungry.'

Èin pé (*un peu*) 'a little;' *grand pé* 'a great deal.'

(b.) Creole of Louisiana.

Senti 'to smell' (also *Mart.*); compare Eng. *scent*.

Couri 'to go' and *galopé* 'to run' show the influence of slavery in quickening the natural pace.

Taillé 'to whip.'

Rompé (rompre) 'to beat soundly.'

Désert 'field.'

Bitin 'thing' Fr. *butin* 'plunder,' used also in St. Thomas and Guadeloupe; in Hayti and Trinidad, *baggai* (*baggage*).

Cabane, which in the West Indies has the significant 'bed', in Louisiana has the usual French meaning 'hut.'

SPANISH CREOLE.

Of this dialect there exists so far as I have been able to learn no published grammar or dictionary. The materials for the present sketch have been drawn from two sources: 1, a brief Dutch grammar in the Creole dialect, published in 1849, by J. J. Putman, a Roman Catholic clergyman in Curaçoa, followed in 1853 by a second part containing Creole and Dutch conversations;* 2, the oral testimony of Camps, who had excellent opportunities for acquiring the language and speaks it with great readiness. The master-workman with whom he served a six years' apprenticeship in St. Thomas and his fellow workmen were natives of Curaçoa and made constant use of the language, and Camps has himself also spent a little time in Curaçoa. Between the language as written by Putman and as spoken by Camps there is a substantial agreement, not only in general structure but also in the form of individual words. There are minor points of difference in which uniformly the Creole of Camps shows a progress in the natural direction of the language, towards phonetic decay, and since the variation is not towards but away from the Spanish, his native language, I have not hesitated to accept it as a genuine variety.

Putman employs in writing the Creole the Dutch orthography; for this the Spanish has here been substituted with a few modifications mentioned below.

* *Proeve eener Hollandsche spraakkunst ten gebruike der algemeene armenschool in de gemeente van de h. Rosa op Curaçao. Eerste stukje. Santa Rosa, 1849, 16mo, pp. 48. Tweede stukje, gemeensame zamenspraken. 1853, pp. 64. Putman has published at least one other little work in the Creole: Bida di Heos Kriestos. (Life of Jesus Christ.) Santa Rosa, 1852.*

PHONETIC CHANGES.

The principal phonetic changes from Spanish to Creole are the following:

1. VOWELS. *Accented* vowels are subject to few changes. The diphthongs *ie* and *ue* usually return to *e* and *o* their Latin originals; thus, *seru* (*sierra*), *bon* (*bueno*), *soño* (*sueño*); but *bientu* (*viento*).

Unaccented vowels are more variable but the changes cannot be reduced to rule. Very frequent is the change of final *o* to *u*; thus, *malu* (*malo*), *pretu* (*prieto*), the derivative suffix *mentu* (*mento*). Some changes are apparently due to attraction by an accented vowel in a preceding or following syllable; thus, *aña* (*año*), *caya* (*calle*), *bichi* (*bicho*), *biní* (*venir*).

2. CONSONANTS. The peculiarities which distinguish the Cuban from the Castilian pronunciation are shared by the Creole, i. e. *ll* has the sound of *y*, *v* the sound of *b*, and *z* the sound of *s*, as has also *c* before *e*, but before *i* like *s* in the same position it passes into the English *sh*; thus, *yama* (*llamar*), *biña* (*vino*), *serebes* (*cerveza*), *shelu* (*cielo*), *dushi* (*dulce*), *shete* (*siete*).

Other changes are peculiar to the Creole. A final *n* frequently loses its consonant power and only makes the preceding vowel nasal, a characteristic feature of all the Creole dialects; thus, *nan*, *tin*, *shon*. So also the Creole *ñ* is not resolvable like the Spanish *ñ* into *n* followed by *y* consonant, but with the preceding vowel (like *gn* in the French Creole,) it makes a nasal vowel followed by *y* consonant. *N* between two vowels sometimes becomes *ñ*; thus, *bisiña* (*vecino*), *gaña* (*gana*). It is sometimes inserted before a dental; thus, *cominda* (*comida*), *landa* (*nadar*). In *hunga* (*jugar*), *nenga* (*negar*) the palatal mute is changed to the corresponding nasal.

A mute followed by a liquid is a combination which in the middle of a word after an accented vowel the Creole avoids; *l* and *r* in this situation are transposed with the following vowel; thus, *homber* (*hombre*), *cuater* (*cuatro*), *milager* (*milagro*), *culpabel* (*culpable*). Sometimes, but not usually, an

initial mute and liquid are thus separated; thus, *purba* (*prabar*). In *drumi* (*dormir*) the change is in the opposite direction. Instead of transposition we have sometimes an inserted vowel; thus, *tabula* (*tabla*), *temperan* (*temprano*), *cologa* (*colgar*). *R* is transposed to avoid hiatus in *hari* (*reir*), *kere* (*creer*). *L* and *r* are occasionally interchanged; thus, *carson* (*calzon*), *lastra* (*arrastrar*).

T in the middle of a word passes sometimes to *d*, the regular change from Latin to Spanish; thus, *hende* (*gente*), *mondi* (*monte*); but in *putri* (*puer*) we have the opposite change.

Di before *e* becomes *j*, (*dzh*), as in *jes* (*dies*), *jente* (*diente*).

Final *d*, with *d* which has become final by the loss of a following vowel, either passes into *r* or is dropped. Thus, *tur* (*todo*), *mitar* (*mitad*) are found both in Putman and Camps; *salur* (*salud*), *criar* (*criado*), and many participles in *ar*, *er*, *ir* (Sp. *ado*, *ido*), e. g. *habrir* (*abrido*), *pisar* (*pesado*), are given by Putman, but Camps drops the final syllable altogether and pronounces *salú*, *criá*, *habrí*, *pisá*. *Merdia* (*medio dia*) has the sanction of both.

Gu before *a* and *o* loses the *g*; e. g. *awa* (*agua*), *warda* (*guardar*).

J initial and in the middle of a word before an accented vowel retains its aspirate sound; after an accented vowel it is lost or passes into *y*; thus, *abáu* (*abajo*), *cangréo* (*cangrejo*), *conséyo* (*consejo*), but *fica* (*figar*).

Initial *h* is dealt with quite after the cockney fashion. Before the diphthong *ue*, where in Spanish it is strongly aspirated, in Creole, as also in the Cuban, it is silent; thus *webu* (*huevo*), *wesu* (*hueso*), *werfanu* (*huerfano*). Before other vowels it is silent in Spanish but generally aspirated in the Creole. In the following words (an incomplete list), it is aspirate; *heru* (*hierro*), *huma* (*humo*), *hostia* (*hostia*), *higra* (*higado*), *homber* (*hombre*), *hílu* (*hilo*), *humilda* (*humilde*), *hortu* (*hurtar*), *hasi* (*hacer*), *herebe* (*hervir*), *haya* (*hallar*), *hala* (*helar*), *hereda* (*heredar*). In *ora* (*hora*), *onor* (*honor*), *yu* (*hijo*), *awe* (*hoy*) and some others it is silent.

H is also prefixed to some words beginning with a vowel; thus, *haltu* (*alto*), *hanchu* (*ancho*), *haraña* (*araña*), *huña* (*uña*), *habri* (*abrir*), *hisa* (*izar*), *hole* (*ole*), *hunta* (*untar*).

More striking are the changes occasioned by the loss of entire syllables, initial, medial, or final, not protected by the accent, a loss caused in part no doubt by the increased strength of the accent in Creole. As in the French Creole, prefix prepositions fall away very readily; thus, *bisd* (*avisar*) *sifá*, (*enseñar*), *derá* (*enterrar*), *splicá* (*explicar*). The *e* which the Spanish prefixes to *s* followed by another consonant, is also dropped; thus, *spiritu* (*espíritu*.)

The loss of a medial syllable is less common, e. g. *puntrá* (*preguntar*), *dirtí* (*derretir*), *drechi* (*derecho*), *hermentu* (*herramienta*), *trahá* 'to make' (*trabajar*), but *trabádu* 'work' (*trabajo*); so *camná* 'to walk' (*caminar*), but *camína* 'road' (*camino*).

The decay is naturally greatest at the end of the word, and the extent of this in the Creole is shown by the entire loss of verbal inflections. Instances in other parts of speech are, *sombre* (*sombrero*), *pida* (*pedazo*), *cabái* (*caballo*), *cachó*, Putman *cachor*, 'dog' (*cachorro*), *limpi* (*limpio*).

An initial and a final, or a medial and a final syllable may be lost in the same word; thus, *costuma* (*acostumbrado*), *cord*, Putman *coral* (*colorado*).

The only final consonants in use in the Creole are *l*, *m*, *n*, *r*, and *s*. The Spanish finals *d*, *z*, *x*, are not found; *m*, which does not appear in Spanish, becomes final by the mutilation of a word; thus, *bam* 'come!' (*vamos*), *com* 'how' (*como*).

A few words ending in a consonant add in the Creole a vowel; thus, *clina* (*clin* or *crin*), *reda* (*red*), *bigesa* (*vejes*), *solo* (*sol*), *ayera* (*ayer*).

Dutch words, which constitute a not very large, but doubtless increasing portion of the vocabulary, are subjected neither to the Creole, nor to any uniform laws of change. Verbs are sometimes shortened as in the Dutch Creole; thus, *stop* (Dutch *stoppen*), *fluit* (Dutch *fluiten*); sometimes they are made uniform with the Spanish; thus, *lezá* 'to read' (Dutch *lezen*), *konopá* 'to tie' (Dutch *knoopen*.) Dutch nouns are frequently

adopted in the diminutive form, in some cases apparently for the sake of the softer vowel-ending; thus, *buki* 'book', *brifi* 'letter', *stulchi* 'chair'; or a vowel may be assumed; thus *santu*, (Dutch *zand*.)

INFLECTIONS. These have gone the way of all Creole inflections. The article, adjective, and noun are invariable in respect to both gender and number.

Gender, which can no longer be expressed by termination, is marked, wherever necessary, by adding *homber*, 'man' and *muhé* (*mujer*), 'woman'; thus, '*ruman homber*' 'brother,' *ruman muhé* 'sister' (*hermano,-na*); *mucha homber* 'boy'; *mucha muhé* 'girl' (*muchaco,-cha*); *patu homber* 'drake' (*pato*). *Homber* and *muhé* may, however, be omitted when it is already sufficiently clear which of the sexes is referred to, and *ruman*, *mucha* are then used indifferently for both. *Yu* 'child' is the representative of both *hijo* and *hija*. In the place of *padrino,-na* 'godfather', 'godmother', we have only *padrina* 'godfather'; 'godmother' is *madrina*, as in Spanish. For *abuelo,-la* 'grandfather', 'grandmother', the Creole has *swela* 'grandfather' and *wela* 'grandmother'.

The idea of plurality is expressed only when the noun is definite, and then, as in the other Creole dialects, by adding the personal pronoun 3. plural *nan*; thus, *cas* (*casa*) 'house' or 'houses', *cuater cas* 'four houses'; but *e cas nan* 'the houses', *e cas grandi nan* 'the large houses.' The only instance which I have discovered of the Spanish plural ending *s* is in the adjective *barios* 'various', (*vario*), where the prevailing use of the plural has left its impress on the form. No corresponding singular *bario* is in use.

Adjectives, as has been already remarked, are indeclinable. The comparative is formed as in Spanish by *mas*, and according to Camps the superlative by *e mas*, but Putman gives *di mas*; thus, *grandi*, comp. *mas grandi*, superl. *e mas grandi* or *di mas grandi*. *Bon* (*bueno*) and *malu* (*malo*) are thus compared; *bon*, *miyon*, *mas miyon*; *malu*, *piyo*, *mas piyo*. For *miyon* (*mejor*) Putman writes *mehor*; the final vowel is made nasal by the initial *m*. *Mens* (*menos*) 'less' forms a superla-

tive *mas mens* 'least'. The termination *isimo*, used as in Spanish only in an absolute sense, occurs in *muchisimu*.

The numerals from eleven to fifteen differ from the Spanish in employing the separate forms *jes un*, *jes dos*, &c. instead of *once*, *doce*, &c. *Dos* and *tres*, according to Camps, retain the final *s* only when they stand alone; before a noun they become *do*, *tre*. Only the first four of the ordinals are in use; the cardinals take the place of the others.

PRONOUNS. The following table exhibits the personal pronouns.

| Singular, | Plural, |
|-----------|------------------|
| 1. mi | 1. nos |
| 2. bo | 2. boso, bosonan |
| 3. el, e. | 3. nan. |

The objective forms are less numerous here than in the other dialects; the 1. sing. *mi* is the only unmistakable one. The 2. sing. *bo* is for *vos*; *boso* for *vosotros*, *vosotras*. Putman employs only *boso*, Camps only *bosonan*, a plural similar to that of nouns, literally 'you-others-they'. In the 3. sing. Putman uniformly gives *el*, while with Camps the regular form is *e*, *el* appearing only before the auxiliary of the preterit *a*; thus, *e bisa* 'he says', but *el a bisa* he 'said.' The following vowel accounts here for the preservation of the final *l*, which has elsewhere disappeared. Of the origin of the 3. plur. *nan* I can give no satisfactory explanation.

The possessive pronominal adjectives are in the 1. 2. sing., 1. 3. plural the same as the personal pronouns; the 3. sing. is *su* (*suyo*); the 2. plural is like the 2. singular *bo*. When used attributively they precede the substantive, and they are made predicative by the preposition *di*, as *di mi* 'mine', &c. After *ta* 'is', the *d* is elided and we have *tai mi* for *ta di mi*, &c., but in the 3. sing. *di* before *e* passes as usual into *j*, in spite of which we have not *ta je* but *tai je*, i. e. *ta di di e*. The possessive becomes substantive when the definite article, or demonstrative *e* (Putman *es*), is prefixed to the predicate form; thus, *e di mi*, to which corresponds the Spanish *el de él* 'his'. Both the definite and indefinite articles are invariable. Camps employs for the definite article *e*, which is prob-

ably to be referred to the Span. demonstrative *ese* rather than to the article *el*. Putman uses no form distinct from the weak demonstrative *es*, which is however stronger than the *e* of Camps. *Es* is both the nearer and the more remote demonstrative, both 'this' and 'that', but it may be made more definite, as in Spanish, by *aquí* 'here', and *aí* or *ayá* (*ahí* or *allá*) 'there'; thus, *es liber aquí* 'this book,' *es liber nan ayá* 'those books'.

The indefinite article is *un*.

The Span. article *el*, *la*, appears in two or three cases inseparably joined to the noun; thus, *laire* (Putman *laria*) (*el aire*); *lama* (Putman *lamar*) 'sea', *e lama* 'the sea'; *alafin* 'finally'.

The reflexive is formed by means of *curpa* (*cuerpo*); thus, *nu curpa* 'himself'; while *mes* (*mismo*) is employed to give emphasis to the subject; e. g. *el a hasi e mes*, 'he did it himself'. This corresponds with the prevailing usage in the French Creole.

The relatives and interrogatives, as in Spanish, have the same form;

Who, *queng* (*quien*), *quende* (*que gente*).

What, *qui* (*que*), *quico* (*que cosa*).

Which? *qui*, *cual*.

THE VERB. Putman distinguishes two forms of the verb, one corresponding to the Span. infinitive, but without the final *r*; the other with *r*, which has come however from *d* of the participial ending *do*; thus *pasá*, *pasár*; *conosé*, *conostr* (*pasar*, *pasado*; *conocer*, *conocido*). *Skirbi* and *pone*, however, which in Spanish have strong participles, *escrito* and *puesto*, in the Creole are weak, *skirbir* and *poner*, — the latter also retaining the vowel of the infinitive, *e*, instead of the *i*, which we should expect (*ponido*). This form in *r* is not used, like the Spanish participle, in the compound tenses of the active voice, but has only a passive sense; thus, *nos mester pone* 'we must put', but *es mester ta poner* 'it must be put'. I have found in Camps no trace of the above distinction; the verb is reduced as in the other Creole dialects to a single form, — the first of those given. The final *r*, always a weak letter

except where it becomes final by transposition as in *hombor* (*hombre*), if once sounded has now disappeared.

The verb *estar* which in Spanish has largely taken the place of *ser*, in the Creole has quite supplanted it. The only trace of *ser* which I have observed is in *podese* 'perhaps' (*puede ser*). *Ta* 'to be', the Creole form of *estar*, is conjugated as follows:

| | |
|-----------------------------------|------------------------------------|
| Pres. sing. 1. <i>mi ta</i> I am, | Plur. 1. <i>nos ta</i> we are, &c. |
| 2. <i>bo ta</i> thou art, | 2. <i>boso ta</i> |
| 3. <i>e ta</i> he, she, it is. | (<i>bosonan ta</i> , Camps.) |
| (<i>el ta</i> , Putnam.) | 3. <i>nan ta</i> . |

Past (imperf., perf., plupf.), *mi tabata* (Camps, often, *mé taba*).

Fut. (and pres. conditional), *lo mi ta*.

Past conditional, *lo mi tabata* or *lo mi taba*.

Ta is, of course, Sp. *esta*; *taba*, Sp. *estaba*; so that in *tabata* we have the verb doubled. The position of *lo* before the subject would seem to indicate that it is not of verbal origin; it is probably the Span. *luego* 'presently', the final syllable being lost and the first suffering the regular change of vowel, *ue* to *o*. In the past tense, only *tabata* is found in Putman, but the examples are too few to establish a rule; Camps' usage is not uniform, but apparently while *tabata* is both pluperfect and imperfect, *taba* is only imperfect.

Tin 'to have' (and also, like *tini* in the French Creole, 'there is') (*tenir*), which has supplanted *haber*, is similarly conjugated; pres. *tin*, pret. *tabatin*, fut. *lo (mi) tin*. In the signification 'to hold', the fuller form *tini* is used.

The conjugation of the regular verb is illustrated in the following paradigm of *duna* (Sp. *donar*) 'give':—

| | | |
|--------------------|-----------------------|-----------------------|
| Pres. | <i>mi ta duna</i> | I give, or am giving, |
| Impf. | <i>mi tabata duna</i> | I was giving, |
| Pret. | <i>mi a duna</i> | I gave, |
| Plupf. | <i>mi a caba duna</i> | I had given, |
| Fut. | <i>lo mi duna</i> | I shall give, |
| Conditional (past) | <i>lo mi a duna</i> | I should have given, |
| Immed. Fut. | <i>mi ta bai duna</i> | I am going to give, |
| Imper. | <i>duna</i> | Give. |

A few verbs, as in the French Creole, form the present without an auxiliary, e. g. *mi sabi* 'I know'; the imperfect is in this case naturally wanting. The auxiliary of the preterit, *a*, is the only relic of *haber* which the Creole retains. *Caba* is the Sp. *acabar*, and is in use both as a verb, 'to finish', and an adverb, 'already'; thus, *mi a caba hasi e caba*, 'I had done it already'. The following sentence will illustrate the use of the conditional; *si bo bis' esai' atrobe (otra vez) mi ta dal bo*, or *lo mi dal bo* 'if you say that again I shall strike you'; *si el a bis' esai' atrobe, lo mi a dal e* 'if he had said that again I should have struck him'.

'Can' is expressed by *por* (Camps, except before a vowel, *po*) Sp. *poder*; 'could' by *por a*; thus, *mi por hasi e* 'I can do it', *mi por a hasi e* 'I could have done it'.

'Must' is variously expressed; thus, *mi tin pa (para) bai* 'I must go'; *pa mi hasi e* or *mi debi hasi e* 'I must do it'.

Laga (Putman *larga*) Sp. *largar* is the causative, as well as the hortatory 'let'; thus, *laga hasi e* 'let it be done', *laga nos hasi e* 'let us do it'.

The three Spanish conjugations are generally traceable in the Creole verbs; the final vowel being protected by the accent has only in a few cases suffered change. Most common is the change of *e* to *i*, of which the following are all the cases observed: *hasi* (*hacer*), *sabi* (*saber*), *bari* (*barrer*), *debi* (*deber*), *esai* (*caer*), *priminti* (*prometer*), *gradisi* (*agradecer*). So, also, when Latin verbs pass in Spanish to a different conjugation, the change is usually from *er* to *ir*; e. g. *battuere* (*batir*), *fervere* (*hervir*), which in the Creole *herebe* 'boil' returns to the Latin vowel *e*. In *biba* (*vivir*), *prefera* (*preferir*), *sambuaya* (*zabullir*) we have the change from *i* to *a*; in *mula* (*moler*), from *e* to *a*.

The Spanish verbs have nearly all become weak, and as a natural consequence we find among the Creole verbs but few irregular forms. Besides those among the auxiliaries, already considered, there are the following:—

Dal 'to strike' (*dar*, which in the sense 'to give' has been replaced by *donar*). The *l* which here appears belongs possibly to the suffix pronoun, Sp. *darle*.

Que, before a vowel *quer*, (Putman *quier*), Sp. *querer*, 'wish', 'will': e. g. *e quer a bai na cas* 'he wished to go home'; *bo quier ta asina bon di bisa mi* 'will you be so good as to tell me'.

Bai 'to go' and *bam*, in exhortations, 'come!' from *vaya* and *vamos*, parts of the defective *ir*.

Duel, in the phrase *ta duel mi* 'I am sorry', may perhaps be the pres. indic. 3. sing. of *doler*, but more probably the noun *duelo* used as a verb.

When immediately followed by the pronoun or article *e*, the final *a* and *e* of verbs of the first and second conjugation are lost; thus, *el a bis'e* 'he told him'; *el a hal' e cabuya*, (this last is a word of Indian origin; v. Pichardo s. v.). 'he pulled the rope.'

The negative *no* is generally so closely attached to the preceding word as to lose its vowel; thus, *en tin e* 'he has'nt it.'

Reflexive verbs give up the pronoun without change of meaning: thus, *parse* (*parecerse*) 'to resemble'. As has been already observed, in Putman the past participle has preserved a distinct form, and the verb can be conjugated passively, but Camps makes no such distinction. The usual resource is to turn the construction into an active form, but in some cases the verb is used intransitively in the *preterit* in place of a *present* passive; thus, *e cas a caba* 'the house is finished; *e palo ta kibra* 'the tree is breaking', but *e palo a kibra* 'the tree is broken'.

The only derivative suffixes which retain vitality enough for new formations are the diminutive endings *-icu*, *-itu* (*-ico*, *-ito*) and *-mentu* (*-mento*); thus from the irregular verb *dal* 'to strike' we have *dalmentu* 'a blow.'

The prepositions in most common use are the following: *di* (*de*) marks, as in Spanish, the genitive relation, *na* (Dutch *na*, *naar*) which has taken the place of *a*, the dative; the stronger *den* (*dentro*) has supplanted *en* 'in'; *con* retains its full form before *e*; thus *cone* 'with him',—but is elsewhere *cu*; 'under' is *bau di* (*debajo de*), 'above', *ariba di*.

'When' interrogative is *quitem* (*d que tiempo*), sometimes *cuando*; relative, *ora*.

'Where', both interrogative and relative is *unda* (*en donde*); thus, *unda bo a sali* 'where have you been?'

A few of the more peculiar, either in form or meaning, of the Creole words are the following:—

(a.) Peculiar in form. *Cuminda* 'to greet' (*cumplimentar*); *drinta* 'to enter' (*entrar* modified by the preposition *den* Sp. *dentro*); *grabata* 'to scratch' and also 'to itch', (*garrapatear* 'to scribble'); *hiba* 'to carry' (Camps *yeba*, the regular form) Sp. *llevar*; *lubida* 'to forget' (*olvidar*); *lamantar* 'to rise' (*levantarse*); *trese* 'to bring', used along with the regular form *trae* (*traer*); *papia* 'to talk', whence the name *papia-mento* given by the Spaniards to the Creole dialect, possibly from *hablar*; *até, atá* 'there it is!' for *allá ta e* (?); *feneta* 'pin' (*alfiler*); *shon* Sp. *señor, señora*, (*shon mosa* (*moza*) is used for *señorita*); *numa* 'only' (*no mas*); *anto* 'then' (*entonces*); *pasoba* 'because'.

(b.) Peculiar in meaning. *Fariña* 'corn meal' and *harina* 'flour', both from Sp. *harina*; *pretu* 'black', Sp. *prieto* 'of a dark color' (*negro* being the distinctive name of the black race another word for 'black' was found necessary); *misa* 'church', properly 'mass'; *dia domingo* 'Sunday', Sp. *domingo*; *buta* 'to put' (*botar* 'to throw'); *bringa* 'to fight' (*brincar* 'to jump' 'fret'); *masha* 'very', 'greatly' Sp. *demasiado* 'too much' (in the Negro English of Surinam, we have *too mooshi* and in the negro dialect of our Southern States *too much*, used in a similar way to express only a high degree of a quality); *tata* 'father' (used also in the Dutch Creole, *vader* being in ordinary use applied only to God,) probably of African origin. *Tata* in some of the Italian dialects is used, especially by children, for 'father', but in Spanish we have *tato, tata* 'younger brother', 'younger sister'. In several of the Western African dialects *tata* is 'father.'

DUTCH CREOLE.

This dialect, spoken in the Danish West Indies, St. Thomas, St. Croix, and St. John, is confined mostly to the plantations. Until within a few years the Moravian missionaries have

preached in this language to the blacks, but they have now abandoned it for a broken English. English is in St. Thomas the language of the public schools.

My authorities have been the Creole New Testament published at Barby, in 1802; the *Psalm-Boek*, Barby, 1784; a grammatical sketch in Oldendorp's *Geschiede der Mission der evangelischen Brüder auf den Inseln S. Thomas, S. Croix and S. Jan*, Barby, 1777 (pp. 424-436), but more especially the oral testimony of Camps. That the language of the New Testament and Psalm-book is in great measure artificial, and no fair representation of the spoken language, one who has studied the other Creole dialects would easily discover, even without Oldendorp's statement that the missionaries were compelled to borrow from the Dutch and German, not only many words for the expression of ideas wanting in the Creole, but also a passive conjugation. The hope which he entertained that the spoken language would gradually be elevated to this level, has not been realized. Oldendorp approaches much nearer the spoken idiom of the present day. The Dutch Creole is more fortunate than its sisters, in preserving in nouns a plural inflection. Both the Dutch plural endings, *en* and *s* are found, the former quite frequently, the latter but seldom; e. g. *berg*, pl. *bergen*; *broeder*, pl. *broederen*; *neger*, pl. *negers*. But in a majority of cases these endings have been replaced by the pers. pron. 3. plur., *sende*, which, however, like the corresponding plurals in the other Creole dialects, can only be employed when the noun is definite; thus, *boom*, definite plur. *die boom sende*. Certain words which are apparently in process of transition add the pronoun to the plural termination; thus, *vrouw*, pl. *vrouwen* and *vrouwen sende*; *schip*, pl. *skepen* and *schepen sende*.

The noun has no case endings, and the article and adjective (except when used substantively, e. g. *die dooden*) are entirely without inflections either of number, gender, or case. The genitive when it follows the governing noun is connected with it by the prep. *va* (*van*); when it precedes, the possessive pronoun *shi* is inserted; thus, *die boek va Jan*, or *Jan shi boek* 'John's book.'

The personal pronouns are :

| Singular. | Plural. |
|----------------------------------|---------------------------------------------------|
| 1. <i>mi</i> | 1. <i>ons</i> |
| 2. <i>joe</i> | 2. <i>jende, jen</i> (Oldp. <i>jender, jen</i>) |
| 3. <i>am</i> (Oldp. <i>em</i>). | 3. <i>sende, sen</i> (Oldp. <i>sender, sen</i>). |

All these except the 3. plur. are objective forms, corresponding to the Dutch *mij, u, hem, ons, u andere, zij andere*. The 2. and 3. plur. correspond precisely with the Creole Fr. *zôt, (vous autres)*, whereas the Dutch adds *lieden* to the singular pronoun where it is necessary to distinguish the plural, though more often the distinction is not marked; thus 2. sing. *gij*, 2. pl. *gij*, or *gij lieden*; 3. sing. fem. *zij*, 3. pl. fem. *zij* or *zij lieden*. The forms of the personal pronouns also serve for the possessive pronom. adjectives, except in the 3. sing. where *shi (zijn)* is employed. When attributive they either precede the noun, or follow it with the preposition *va (van)*; thus *mi boek* or *die boek va mi*; with *sende* the latter form is preferred. *Va mi, va joe*, etc., are the predicate forms.

In Oldendorp's time, both the comparative and superlative endings *er, st* were retained in a few adjectives, though most were compared by means of *meer, meest*; thus, *groot, grooter, grootste*. But now only the superlative ending is preserved, the weaker comparative having disappeared; thus, *groot, mee groot, grootste*. The only instance observed of the comparative ending *er* is in *beter*, of which the positive in use is *fraai* and the superlative *beste* or *mee beter*. On the other hand the superlative can no longer be formed by *meest*, and such adjectives as have not the ending *ste* do not distinguish the superlative from the comparative; thus, *lee (laag)*, comp. and super. *mee lee*. *Mee kleentje*, the comparative of *kleen*, shows the diminutive ending *tje* curiously attached to an adjective. The substantive *beetje* 'a little,' forms a comparative *mee beetje*, 'less,' 'a smaller quantity.'

The Creole definite article *die* is to be referred to the Dutch demonstrative *die* rather than to the article *de*. *Die* retains also in the Creole its demonstrative use and is, moreover, as in Dutch, frequently relative.

The Creole verb is, according to the statement of Olden-

dorp, the Dutch infinitive deprived of the termination *en*; a better statement is that it is the verb stem, stripped of all terminations and frequently of a portion of the root in addition. Thus from *staan*, where a *n* belongs to the root of the verb, we have the Creole *stan*, but from *slaan*, root *slag*, Creole *sla*. The final consonants of the root are, in almost all cases, written by Oldendorp and found in the Creole New Testament, but are, now at least, frequently not heard; thus, *lo* (*loopen*) 'to go,' *ki* (*kijken*) 'to see,' are written by Oldendorp *loop*, *kik*.

In the case of the irregular or strong verbs, where the vowel of the preterit or participle differs from that which appears in the present, the infinitive, and the imperative, the Creole chooses the latter. The only exception noticed is *vlo* 'to lose' (*verliezen*, *verloor*, *verloren*).

As an illustration of the Creole conjugation, we take *val* (*vallen*) 'to fall.'

Pres. *mi lo val*. I am falling.

Impf. *mi a lo val*. I was falling.

Pres. *mi a val*. I fell.

Perf. *mi ka val*. I have fallen.

Plupf. *mi a ka val*. I had fallen.

Fut. *mi sa val*. I shall fall.

Past Condit. *mi a sa val*. I should have fallen.

The auxiliary of the present *lo* (Oldp. *le*) is apparently the same with the verb *lo* (*loopen*), 'to go', to which it is prefixed to form the immediate future tense; thus, *mi lo lo val* 'I am going to fall.' The preterit *a* is a weakened form of *hebben* 'have' (Creole *ha*), and *sa* future, is from *zal*. *Ka* is not so readily explained. It is perhaps for *gehad*, *g* being made surd by the following *h*; possibly from *kom* (*kommen*), the Creole representative of *worden*, or from *kaba* (Spanish *acabar*) which, both as a verb 'to finish' and an adverb 'already,' has found its way into all the Creole dialects.

The verb 'to be' (Dutch *zijn*, *wezen*) is conjugated as follows: Pres. *bin*, *mi*, *na*; Pret. *a wees*; Fut. *sa wees*. *Mi* and *na* are apparently corruptions of *bin*, arising from rapid and indistinct pronunciation, but the three forms are not used in-

differently; thus, to the question, *Wie die bin da?* 'who is there?' the answer is, *Na mi* 'it is I;' *mi mi fraai* 'I am well,' &c. Oldendorp remarks that *ka*, the auxil. of the perfect, is often used in place of *ben*; thus, *mi ka moe* 'I am tired,' but it appears in such cases to denote always a resultant state, 'I have become tired.'

The passive conjugation found in the Creole New Testament as has been already remarked, is purely artificial; such forms as *sal word genammt* 'shall be called,' have no trace of Creole character. The Creole, however, makes limited use of a passive formed by means of *kom* or *ka*; thus, *die hoes ka bouw* 'the house is built.'

Curious changes in the form or meaning of words are less common in the Dutch than in the other Creole dialects. The following are examples: *Lestan* (*laat staan*), Creole 'leave,' is also used in exhortations; thus, *lestan ons lo* 'let us go.' The separable prepositions *op* and *toe* are used as verbs, the former for *opstaan*, the latter for *toemaken*; thus, *wat tit you hopo voevroe?* 'at what time do you get up in the morning?' *toe joe mon* 'shut your mouth.' *Voevroe* is a case of reduplication, so common in the Negro English of Surinam; another is *pat-pat* (Spanish *pato*) 'duck.'

THE NEGRO ENGLISH OF SURINAM.

To complete the survey we add the more important characteristics of this dialect as it appears in Wullschlägel's *Neger-englisches Wörterbuch*, Löbau, 1850, and in the *Negro English New Testament* of the British and Foreign Bible Society, Lond., 1829.

The grammar and the chief part of the vocabulary are of English origin, but the long Dutch possession of the country has introduced, as in the case of the Spanish Creole, a strong Dutch element, and the additions now made to the vocabulary are from this source, while many English words are falling into disuse. From former contact with the Portuguese Creole it has taken up also many words from this source, and we not unfrequently find synonyms from two or even from the three languages; thus for 'nothing' we have Eng. *noti*, Dutch *niksi*,

Port. *nada*. In outward appearance the language has undergone more change, become more Africanized in the structure of its syllables, than either of the other Creole dialects, but the grammatical changes are less important. Very seldom are any finals except a vowel or a nasal, *m* or *n*, tolerated, and as a consequence a vowel is very frequently assumed. The following proverb from Wullschlägel will serve as an illustration: *Te Gado wani pai Dagoe, a gi hem wan soro na mindri hede; fa a sa doe kisi hem vo lekki?* literally 'Time God want pay dog he give him one sore in middle head; fashion he shall do catch him for lick?' i. e. 'When God wants to punish a dog he gives him a sore on the back of his head; how will he contrive to lick it?' (We retain the established Dutch orthography, but to bring it into correspondence with the English it will be generally sufficient to bear in mind that the vowels have the Italian sound, except that *oe* is used for *u*, *ie* for long *i*, *ee* for long *e*, and that *j*, *tj*, *dj* and *v* are used for Eng. *y* consonant, *ch*, *j* and *f* respectively). Combinations of consonants are frequently reduced, by the dropping of one or more, to a simpler form; thus, *tan* (*stand*), *pori* (*spoil*). *R* and *l* are often interchanged; thus, *srefi* (*self*), *ripi* and *lepi* (*ripe*). Final *m* and *n* after any vowel but *i* frequently make the vowel nasal. *D* is the usual Creole, as it is the Dutch equivalent of *th*, both surd and sonant, but the change is not without exceptions; thus *trowei* (*throw away*), *tifi* (*teeth*).

The definite article is *da* (*that*), the indefinite *wan*.

The personal pronouns are,

| | |
|----------------------------|--------------------------------|
| Singular, 1. <i>mi</i> . | Plural, 1. <i>wi</i> . |
| 2. <i>joe</i> . | 2. <i>oenoe</i> , <i>oen</i> . |
| 3. <i>a</i> , <i>hem</i> . | 3. <i>dem</i> . |

In the 3. sing. *a* is the unemphatic subject, *hem* both subject and object. The 2. plur. *oenoe*, which I am not able to explain, appears in the dialect of the Port Royal islands (Prof. W. F. Allen, in the introduction to *Slave Songs of the United States*), in the form *oona* or *ona*, used for both singular and plural, but only between friends. Mr. Thomas gives for the Negro English of the West Indies the following pronouns; *me*, *you*, 'e, *awe*, *ayou* (*all you?*), *dem*. The personal pronouns

serve also for possessives, when used attributively either preceding the noun or following it with the preposition *va* or *vo* (Dutch *van*); thus, *mi hoso* or *da hoso vo mi* 'my house.' The predicate form is, as in the Dutch Creole, *di vo mi*, 'mine.'

Nouns have lost the plural ending and are made plural when definite, by prefixing the 3. plur. pronoun *dem*; thus, *dem hoso*, 'the houses,' Only the connection determines whether *dem* has a plural or a possessive force, whether *dem hoso* is 'the houses' or 'their houses.' In the Port Royal dialect *dem* is similarly employed, though possibly with more of a demonstrative force; thus, sing. *that cow*, plur. *dem cow*. In a few cases the Creole has adopted a noun in the plural form, using it however equally for the singular; thus, *jesi* (ears), *eksi* (eggs), *tifi* (teeth), *leden* 'limb' (Dutch *lid*, pl. *leden*). In *didiebri* 'the devil,' the article has become a permanent prefix; pl. *dem didiebri* 'the devils.'

Gender is expressed usually by the prefixes *man*, *oeman*; thus, *man-hasi* 'horse,' *oeman-hasi* 'mare.' As a suffix *man* is sometimes of common gender; thus, *dansi-man*, 'dancer' whether male or female.

The comparative and superlative are formed by *moro*, thus *oeree* 'old', comp. *moro oeroe*, super. *da moro oeroe*. *Boen* 'good' forms the comp. *betre*, *moro betre*, or *moro boen*; superl. *beste*, *moro beste*, or *moro boen*.

The numerals from eleven to one hundred (except *twinti*, 20), differ from the English form; thus, *tin-na-wan*, 'eleven' (*ten to one*); *dritemtin*, (*three-times-ten*) 'thirty.' The iteratives are formed by the suffix *tron* (*turn*); as *toetron* 'twice'; the reduplicatives by *doblo* (*double*); as *dri dobro*, 'three-fold.'

Of the verb 'to be' the present is *de*, the past *den be*, the fut. *sa de*. *De* is apparently the adverb there, the use of which in the combinations 'there is,' 'there are,' etc., furnishes possibly a link of connection between the adverb and the verb. The usual Creole form for 'there' is *dapee*, (*that place*) or *dédapee* (*there that place*), but *de* is also used; thus, *a de* 'he is there,' the copula being omitted, or included in the predicate.

The verb is reduced to one invariable form, which in the case of the irregular verbs is that of the present infinitive and imperative, seldom that of the preterit or participle, as in *lasi* 'to lose' (*lost*). In the Port Royal dialect, where there is the breaking up of English forms and constructions without the settling down into a uniform usage, which is the second stage in Creole development, the different parts of the verb are employed in a confused way.

The auxiliary of the progressive present is *de*, which is perhaps the same with *de*, 'to be.' The analogy of the English 'he is reading,' and of the Spanish Creole where the progressive tense is formed by the aid of *ta*, 'is' favor this view. *De* may however be a corruption of *do*, the use of which in the emphatic and interrogative forms of the English verb would furnish a point of departure for the Creole progressive. In the Negro English of the West Indies the auxiliary is *da*, in the Port Royal dialect, *da* or *do*. *Ben* is the auxiliary of the preterit, *sa* of the future; *de go* forms an immediate future; thus, *areen de go fadóm*, 'it is going to rain.'

Among the most interesting of the new forms of the Creole are the reduplications. These abound, and are either formed for the occasion, when emphasis is required, as *njoe-njoe* 'brand new,' or are standing forms, as *soesoe* 'shoe,' *poesi-poesi* 'cat,' *wawan* 'alone' (*wan* 'one').

There are some curious cases of composition. *Dasnoti* (*that's nothing*) 'pardon' is a good Creole noun, and may stand as the object of a verb; thus, *gi hem dasnoti*, 'grant him pardon.' So also *odi* (*how d'ye?*) and in the Port Royal dialect *huddy*; thus, *mi takki odi gi Urbanus*, 'I salute Urbanus,' literally 'talk how d'ye to Urbanus.' *Gi* (*give*) is here, like *ba* in the French Creole the sign of the dative. *Fadóm*, *sidóm*, *lidóm* are the Creole representatives of the simple verbs, *fall*, *sit*, *lie*. *Tra* 'other' prefixed to *tamara* 'to-morrow,' gives *trátamara* 'day after to-morrow.'

Njam 'to eat,' *njam-njam* 'food,' are perhaps from *yam*, Sp. *igname*, the tuber which forms a chief article of food. *Njam zondei* is 'to keep Sunday.' *Krin* (*clean*) is 'light' used both as a noun and adjective; thus, *krin moe kom!* 'let

there be light!' (literally 'light must come'); *posloe dati moro krin gi wi* 'explain (pull more clean) that to us.' So in Port Royal *day-clean* is used for 'day-break.' For 'heaven' the usual Creole word is *tapo* (*top*), for 'earth' *gron-tapo* (*ground top*).

As in the other Creole dialects, with verbs of motion the direction of the motion is indicated rather by the verb than by the preposition; thus, *komoto na hemel fadóm* 'to fall from the sky;' *hopo na gron* 'to rise up from the ground,' (*hopo* from *up*, or Dutch *op*; it is also the Creole for 'open,' and in the Dutch Creole it unites these two meanings).

The relative and interrogative pronouns and adverbs exhibit some of the same peculiarities noticed in the French Creole. The demonstratives *disi* (*this*) and *di* (Dutch *die* demonstr. and rel.) are also the relative pronouns, but are frequently omitted; thus, *da soema disi*, 'he who', *sani disi* 'that which' are frequently shortened to *disoema*, *sani*; *soema* (*some one?*) being the Creole for 'person' and *sani*, for 'thing.' The interrogative 'who?' is *hoesoma*, *'osoema* or simply *soema*; 'what?' *hoesani* or *sani*; 'where?' *hoepee* or *pee* (*place*); 'when?' *hoetem* or *tem*.

PROCEEDINGS.



AMERICAN PHILOLOGICAL ASSOCIATION.

PRELIMINARY MEETING.

As the need has been felt for some years of frequent meetings among the professors, friends, and patrons of linguistic science in America, to give opportunity for mutual exchange of views, for forming more intimate personal acquaintance, and for the general promotion of philological studies, a correspondence was opened during the summer of 1868, with reference to the organization of a permanent national philological association.

This correspondence resulted in the issuing of an informal call for a preliminary meeting of the friends of philological studies who reside in New-York City and vicinity, for the purpose of discussing the desirableness and feasibility of forming such an association. This preliminary meeting was held on November 13th, 1868, in the chapel of the University of New-York. Over fifty of the prominent linguists, educators, and literary gentlemen of New-York and the adjacent cities were present. Rev. Dr. Ferris, President of the New-York University, was elected President, and Professor Harkness, of Brown University, was elected Secretary. Dr. Ferris, upon taking the chair, welcomed the members of the meeting to the university, and expressed his strongest sympathy with the purpose for which the meeting was convened. He then called upon Professor Comfort to state more at length the objects of the meeting.

“Professor Comfort commenced his remarks by alluding to the important results which are accomplished in Europe, in every branch of learning, by the many societies and associations of both local and national character, which have now been formed in almost every European nation. He spoke especially of the many societies for the promotion of linguistic studies, specific and general, local and national, which exist in the different cities and states of Germany, and of the important influence these societies have exercised in making Germany the home and centre of modern philology.

“From the uniform tenor of the correspondence which had been conducted, he believed there exists a very general desire to have an association formed in America, which shall give opportunity and occasion for those interested in

philological studies and investigations to meet together at stated periods. Of all the European societies, the '*Sammlung der deutschen Philologen und Schulmänner*' seems, more nearly than any other, to offer a model for us to follow. This association was organized in the year 1837, upon the occasion of the celebration of the hundredth anniversary of the University of Göttingen. It holds yearly sessions during the long summer vacation of the educational year, and is attended by several hundred of the professors of language and philology in the universities and gymnasiums of Germany and Switzerland. The papers that have been read at the sessions, and published in the journals of this association have contributed greatly to the promotion of philological science, and the discussions upon linguistic pedagogy have exercised a great influence in elevating in Germany gymnasial and university instruction in the ancient and modern languages and literatures to their present high standard. In France, a somewhat similar society, but confined to one single department of philology, the '*Association pour l'Encouragement des Études Grecques*,' though founded but two years ago, gives good promise, both from the large number of distinguished classical scholars who form its membership, and from the high order of its publications, of exercising a powerful influence upon classical education in that country.

"In our own country, a similar work has been accomplished in some other branches of learning by the *American Association for the Advancement of Science*, which has devoted its labors to the promotion of the natural sciences and mathematics.

"What seems to be adapted to the present wants of America in regard to philological science, is an association which shall be open for membership to all professors of language of respectable standing in our colleges, universities, theological seminaries, and other schools of high education, and to others interested in the promotion of philological studies; which shall hold its sessions annually during the long summer vacation, so that all may be in attendance without being forced to leave the duties of their chairs; and which shall hold its sessions in such different cities in different parts of the country as may, from time to time, be found convenient.

"The association should embrace in its scope the whole field of philological investigation and instruction. This would necessitate eventually the separation of the work into a number of sections, of which the following might serve as a schedule:

- "1. The science of language, and history of philology.
- "2. Oriental languages and literatures.
- "3. Classical (Latin and Greek) languages and literatures.
- "4. Modern European languages and literatures.
- "5. English language and literature.
- "6. American aboriginal languages.
- "7. Linguistic pedagogy.

"At first, in all probability, one general session would suffice for all the work that would come before the association. The division into sections would take place as the extension of the work of the association may from time to time demand. So broad is the domain of philology that in America, as in Europe, the general association would never remove the necessity, nor could it accomplish the work, of local and specific societies. Indeed, the

American Oriental Society has already by its proceedings and publications gained an honorable reputation in Europe as well as in America. It would be desirable, if possible, to have the first regular session of the association during the coming summer.

“ Professor Comfort closed by reading some of the letters which had been sent by persons who could not be present at the meeting, as Dr. Barnard, Professor of Columbia College ; Dr. Cattell, President of Lafayette College ; Professor De Vere, of the University of Virginia ; Professor Evans, of the University of Michigan ; Prof. Tyler, of Amherst College ; Rev. Dr. Peabody, of Harvard College ; Prof. Thatcher, of Yale College, and others, in all of which letters was expressed a strong approval of the project to found a national philological association, and a confidence in its success if conducted with wisdom and energy.”

A general discussion followed, in which Rev. Dr. Crosby, of New-York ; Professor Whitney, of Yale College ; Hon. J. H. Trumbull, of Hartford ; Dr. J. Hart, of Trenton ; Rev. Dr. Prime, of New-York ; Rev. Dr. Brown, of New-York, and others took part.

Upon the motion of Rev. Dr. Crosby, it was resolved that Professor Comfort be appointed chairman of a committee of arrangements, with authority to add such persons to the committee as he might think advisable, for the purpose of making the necessary preparations and arrangements for holding the first annual meeting of a philological association during the summer of 1869.

The meeting then adjourned.

CONVENTION OF AMERICAN PHILOLOGISTS.

POUGHKEEPSIE, N. Y., July 27, 1869.

THE convention met in the Mill street Congregational church, at three P.M., and was called to order by Professor Comfort. Professor J. R. Boise, of Chicago University, was elected Temporary Chairman, and Prof. Silber, of the College of New-York, was elected Temporary Secretary.

Hon. J. H. Trumbull, of Hartford, Ct.; Professor L. Kistler, of the North-Western University, Evanston, Ill.; and Professor A. H. Mixer, of Rochester University, Rochester, N. Y., were appointed a committee to nominate the permanent officers of the convention, and also to nominate a business committee.

When the committee had retired for deliberation, Professor Comfort was called upon to make some remarks concerning the organization and workings of philological societies in Europe, and especially in Germany.

Rev. Dr. Crosby was requested to read a paper which was sent by Professor Joseph Henry, Secretary of the Smithsonian Institution, upon "The Operations of the Smithsonian Institution in regard to Philology," of which the following is an abstract:

"About one fourth of the publications of the Institution have been with reference to ethnology. In the department of ethnology which relates to language, the Institution has published a dictionary and grammar of the Dakota or Sioux language, and a dictionary and grammar of the Yoruba, one of the languages of Western Africa.

"The Institution has also published: (1) A History of the Archæology of the United States, containing a digest of what had been done previous to 1854, relative to the Philology of North-America; (2) Instructions relative to Ethnology and Philology of America; (3) Vocabularies and dialects of different Indian languages and dialects; (4) Library of American Linguistics; (5) Grammars, vocabularies, and phrase-books of languages in New-Mexico; (6) the Institution is proposing to publish a dictionary of the Nisqually language of Washington Territory."

President Samson, of Columbian College, Washington, followed in some happy remarks, in which he characterized the paper as an olive branch held out by Professor Henry from natural science to language.

The committee upon nominations reported for the business committee Professor George F. Comfort, of Alleghany College, Pa., Rev. Howard Crosby, D.D., of New-York, and Professor Oscar Howes, of Shurtleff College, Illinois.

During the retirement of the business committee, an interesting but informal discussion was carried on with reference to many philological questions, especially with reference to the pronunciation of certain common and proper names in the English, French, and German languages.

Upon the recommendation of the business committee, the convention adjourned, to meet at eight o'clock in the evening.

EVENING SESSION, JULY 27.

The committee upon business reported, as the order of sessions of the convention, that there will be three sessions daily: from 9 A.M. to 12.30 P.M.; from 3 to 6 P.M.; and from 8 to 9.30 P.M.

The report of the committee upon permanent officers for the convention, which was read, accepted, and adopted, presented the following officers:

President, Professor William D. Whitney, of Yale College.

Vice-Presidents, Professor A. Harkness, of Brown University, and Dr. B. W. Dwight, of Clinton, N. Y.

Secretary, Professor George F. Comfort, of Alleghany College.

Prof. W. B. Silber, of New-York College, was appointed Assistant Secretary.

As the chairman of the local committee, C. J. Buckingham, Esq., was unable through temporary illness to be present, his address, welcoming the convention to the hospitalities of the city of Poughkeepsie, was read by Benjamin J. Lossing, Esq., the historian. Mr. Buckingham spoke of Poughkeepsie, with its more than two thousand students from abroad in its various institutions of learning, as the Athens of the Hudson. He assured the members that the citizens of Poughkeepsie would spare no pains to make the session of the convention in the city agreeable and pleasant. Poughkeepsie will feel itself honored in receiving as guests so many of the distinguished philologists of America. We are glad also to see in your number representatives from other countries, as Germany, Russia, France, and also Americans, whose labors in investigating the languages of the Indians have been an honor to our country. Mr. Lossing added some interesting re-

marks with reference to the historical associations connected with Poughkeepsie and vicinity.

Professor Whitney, the President of the convention, replied to the address of Mr. Buckingham, acknowledging the kindness with which the convention had been welcomed, congratulating it upon the happy circumstances amid which it had assembled, and expressing the hope that its sessions and transactions would result in advantage to the interests of sound learning and education.

Short speeches were then made by a number of the members of the convention.

Dr. S. H. Taylor, of Andover, Mass., spoke of the desire he had felt for many years of conventions and associations among the teachers of linguistic science. He gave an account of some meetings which have been held by the professors of language in Massachusetts, and closed by expressing his great gratification at now seeing face to face so many professors of national reputation whom he had never before had an opportunity of meeting, adding the hope that this would be the first of a regular series of annual meetings, and that the influence of these meetings might extend to all the schools in which language is taught,

Honorable E. G. Squier, of New-York, gave an interesting sketch of the character, grammatical structure, and richness in vocabulary of the language of the ancient Incas in Peru.

Mr. P. C. Bliss, late of the American Embassy to Paraguay, gave an account of the Indian languages in Paraguay, and the northern part of the Argentine Confederation.

Mr. B. J. Lossing spoke upon the variety in the ways of spelling and pronouncing the name of Poughkeepsie, and upon which of these is correct.

Speeches were also made by Rev. C. H. Brigham, of Ann Arbor, Mich., Professor J. R. Boise, of Chicago University, Professor L. Kistler, of the North-Western University, Dr. H. von Holst, of Heidelberg, Germany, and Dr. Crosby, of New-York.

Letters were read from Dr. Tayler Lewis, of Union College; Dr. W. S. Tyler, of Amherst College; Hon. Charles Sumner, of U. S. Senate; Gen. Garfield, M.C.; Col. W. T. Higginson, of Newport, R. I.; Rev. Dr. E. O. Haven, of Michigan University, and others, expressing regret at not being able to be present, and a desire to coöperate in the promotion of the objects of a philological association, should one be formed.

Upon motion of Rev. Mr. Wheeler, of Poughkeepsie, resolutions

were passed of condolence with Professor S. F. B. Morse, of this city, who was prevented by a severe and serious accident from attending the sessions of the convention, as had been his intention and desire.

MORNING SESSION, WEDNESDAY, JULY 28.

Professor C. M. Mead, of Andover Theological Seminary, was appointed additional secretary.

Upon the motion of Professor Comfort, a committee, consisting of Hon. J. H. Trumbull, Rev. Dr. Crosby, and Professor Hadley, was appointed to prepare a plan for organization of a permanent society.

The business committee announced that the morning session of the day would be devoted to subjects connected with instruction in the ancient classical languages, and the afternoon session to the modern languages.

The first paper of the morning was read by Professor J. B. Feuling, of the University of Wisconsin. It treated of "The Best Method of Pronouncing the Latin and Greek Languages."

"Professor Feuling considered the main point in pronouncing Latin and Greek to be the quality of the vowels, whether they are long or short. The methods in use in different countries differ; and especially, so various are the methods followed in America, that it will be difficult to establish any arbitrary rules. In addition to the so-called English and continental methods, he spoke of another which might be termed the American method, being a mixture of elements taken from both of the others. He urged the continental method as the least open to objection. He advocated also very strongly the observance of the written accent in pronouncing Greek, and that the quantity of the vowel should be observed in both Latin and Greek."

Professor S. S. Haldemann, of St. John's College, Maryland, followed with an essay upon the same subject.

"He agreed with many of the views presented by Professor Feuling. Under the influence of the increased facilities for travel, modern opinion favors the pronouncing of proper names of persons and places in accordance with the rules of the language to which the names belong to an extent which would have been considered some years ago to smack of affectation. We are thus becoming acquainted with various ways of pronouncing the same letter, and it will not seem so strange and unnatural as formerly to adopt another than English mode of pronouncing the vowels in Latin and Greek. He criticised at great length the ordinary method of explaining long and short vowels, as the terms are used by English grammarians, showing that the terms *open*

and *closed* should frequently be used where now *long* and *short* are employed, and that the length of a vowel should refer only to the duration of the sound. He illustrated the distinction between these terms by many examples drawn from the English, French, German, Latin, and Greek languages. He insisted upon giving distinct vowel sounds to both vowels in diphthongs, in the Latin and Greek languages. He objected to the claim which is made by many of the advocates of the continental system of pronunciation, that this system contains the original vowel sounds of those languages. The most important advantage which would come from adopting that system would be that it would secure uniformity in the different schools of the country."

Professor Whitney then read a paper which had been prepared by Charles Astor Bristed, upon the same subject.

"Mr. Bristed treated at length of the pronunciation of certain vowels. He was persuaded that, as it is now impossible to ascertain the original pronunciation of Latin and Greek vowels, it will be useless and unimportant to attempt to establish any uniform method. He criticised the neglect of the study of prosody, which is so general in American schools and colleges. The written accent he regarded as having no binding force upon pronunciation, and as never having had any such significance."

After reading the paper, Professor Whitney remarked that it would without doubt be much more imperative to adopt a uniform system, if we could be sure that we understood the sounds of the Greek and Latin languages, so that a Greek or Roman could understand us when reading or speaking either of those languages. But, upon the other hand, students and professors will the more willingly yield any system which they may have been following, in order to secure uniformity, from the fact that all the systems are in reality arbitrary. He objected to Mr. Bristed's views about Greek accent, believing that it should be observed in pronunciation. He held it also to be very important to give the proper quantity to the vowels.

Dr. A. N. Arnold, of Madison University, Hamilton, N. Y., read a translation of a treatise by Mr. Rangabè, the late representative of the Greek government to the United States, upon the pronunciation of classical Greek, and treating especially upon the conflict of prosody and accent.

"Dr. Arnold then made an earnest argument in favor of pronouncing classical Greek in the same way as modern Greek is pronounced. He argued that, as the Greek has never ceased to be a living language, there is every probability that the pronunciation of the vowels in modern Greek is much nearer that in classical Greek than any other system we can adopt. Again, many educated Americans are constantly visiting Greece, and many Greek

merchants are establishing themselves in our chief commercial cities. Thus it is becoming more and more easy for the modern Greek pronunciation to become diffused through America. He alluded to the fact that Mr. Rangabè attended the commencement of an American college, where speeches were made in English, French, German, Latin, and Greek, all of which speeches Mr. Rangabè could understand, except the one in Greek."

Dr. Crosby opposed the views advanced by Dr. Arnold, on the ground that it is impossible to read ancient Greek rhythmically by the system of modern Greek pronunciation.

Professor Feuling remarked that the Greek professors at Athens were anxious to introduce the system which is followed in the German universities, and which is essentially the same as that which is termed in America the continental system.

Rev. H. M. Colton, of New-York, expressed the hope that some uniform system would be agreed upon, as the teachers in academies and preparatory schools felt the embarrassments extremely while preparing students for different colleges, in which different systems of pronunciation are followed.

Dr. Dwight alluded to the fact that in every nation Latin is pronounced according to the system of pronunciation of its own language. He sympathized strongly, however, with the desire to have some one uniform system adopted in all the colleges and classical schools of America. He moved, therefore, that a committee of five be appointed to take the subject into consideration, and to present a report expressive of the sense of the convention.

This motion was discussed at length by Rev. Mr. Anderson, of Danbury, Ct.; Professor Mixer, of Rochester University; Messrs. Bisbee, Weston, Gallup, and Raymond, of Poughkeepsie; Professor Boise, of Chicago; Dr. Taylor, of Andover; Professor Magill, of Swathmore College. Before a vote was taken, the convention adjourned.

AFTERNOON SESSION, JULY 28.

The discussion was resumed by Rev. Dr. Brown, of New-York, President Samson, of Washington, and others. An amendment offered by Professor Harkness was adopted, authorizing the committee to defer making their report till next year. The motion to appoint the committee was then carried. The president then appointed the following persons upon the committee: Dr. Dwight, of Clinton, N. Y.; Dr. Taylor, of Andover, Mass., Pro-

fessor Feuling, of the University of Wisconsin; Dr. Arnold, of Madison University, and Professor Hadley, of Yale College.

Professor Harkness, of Brown University, then read a paper upon "The Best Method of Instruction in the Classical Languages."

"After tracing the characteristic features of the various methods in vogue of teaching the classical languages, Professor Harkness pointed out the excellences and deficiencies of many of them, and then spoke of an ideal system of instruction, of which the following are the salient points:

"The study of the classical languages should, like all other studies, be conducted in such a way as to develop the intellect of the student in the most profitable way. In America, regard must be had to the peculiar bent and habits of the American mind; hence the folly of introducing the German, or any other foreign system of studying the classics. It is impossible for a student, at the age when scholars begin the study of the classics, to learn Latin or Greek in the same way in which they learn their mother tongue. Upon the other hand, it is not wise for the student to begin by crowding the mind with all the details of grammatical rules. The knowledge of grammar and of words must progress in equal proportion. Instead of training the student to make translations, and make references mechanically to the grammatical rules, the teacher should initiate the student into the spirit and general structure of the languages, and into the principles upon which the grammatical rules are based. As to words, the student should not only learn their meanings, but also the modification of signification which the word receives in the particular passage. The former is inherent in the word; the latter depends upon the context. It is an invaluable exercise to read Latin or Greek passages through understandingly, without going through the formality of translating them. It is also useful to commit to memory choice passages from the classical authors. Composing in Latin and Greek may be useful to a certain extent; but this exercise should be regarded as a means and not as an end. In the study of the classic authors, it is doubtful whether any important change can be made to advantage in the selection of works to be read, as they now stand in the college curriculum. To study the work of an author successfully, the student must acquire a thorough knowledge of the language, geography, history, and mythology of the country. He must also have a delicate appreciation of beauty of form and expression of language. In taking up a new author, the student should acquaint himself with the chief facts connected with the life of the author, with the contemporary history of the country, and the relation of the author to this history. Much of this preparatory knowledge will necessarily have to be given by the professor in lectures. The professor can also suggest side courses of reading, as may be appropriate to the particular subject, and the attainments of the particular class of students. Attention should be specially paid to grammatical analysis, to the study of words, and to the logical scope of thought in the mind of the author. Much insight can be given into the nature of the classical languages by explaining the meaning and use of such words as have no synonyms in the English language, and by drawing the attention of the student to points of simi-

larity and difference in the grammatical structure of the ancient and the English languages. One of the most beneficial exercises in the study of the classical languages is to make elegant and precise translations into English.'

Rev. H. M. Colton, of New-York, then read a paper upon the same subject.

"He spoke of the importance of clear views as to method of instruction in language in general, as to the method peculiarly applicable to the study of the classical languages, and, finally, of the discretion which every teacher must exercise with reference to the modification of his method with particular classes."

Professor E. H. Magill, of Swarthmore College, Pa., read a paper upon "The True Foundation for a Course of Linguistic Studies."

"Professor Magill argued that the first study of language should be of one's own native tongue; that the child should receive practical—not theoretical—instruction in some one modern language at as early an age as when five years old, beginning a second modern language two years later; that the formal study of language should begin at ten years of age, when the child should begin the study of Latin, commencing Greek about two years later; that the formal study of the modern languages should be commenced after the child has made some progress and proficiency in the study of the ancient languages. This he considered the most natural, practical, philosophical, and effective method of studying language."

The subject was then thrown open for general discussion.

Professor Haldeman illustrated by many striking and entertaining examples his theory of the usefulness of learning the meaning and derivation of words in the classical languages, by associating them etymologically with words in the English language.

Professor Feuling described at length the method of instruction in the classical and modern languages which is followed in the German gymnasia, and strongly recommended its adoption in the colleges and academies of America.

Professor Boise urged the importance of written exercises in the study of Latin and Greek.

After further remarks by several other members, Dr. Crosby, chairman of the committee which was appointed to draught a plan of organization for a permanent national philological society, announced that the committee was prepared to report a constitution for the society. The following is the text of the constitution, which, after a short discussion, was adopted unanimously:

CONSTITUTION
OF THE
AMERICAN PHILOLOGICAL ASSOCIATION.

ARTICLE I.—NAME AND OBJECT.

1. This society shall be known as "The American Philological Association."
2. Its object shall be the advancement and diffusion of philological knowledge.

ARTICLE II.—OFFICERS.

1. The officers shall be a president, two vice-presidents, a secretary and curator, and a treasurer.
2. There shall be an executive committee of ten, composed of the above officers and five other members of the association.
3. All the above officers shall be elected at the first session of each annual meeting.

ARTICLE III.—MEETINGS.

1. There shall be an annual meeting of the association in the city of New-York, or at such other place as at a preceding annual meeting shall be determined upon.
2. At the annual meeting, the executive committee shall present an annual report of the progress of the association.
3. The general arrangements of the proceedings of the annual meeting shall be directed by the executive committee.
4. Special meetings may be held at the call of the executive committee, when and where they may decide.

ARTICLE IV.—MEMBERS.

1. Any lover of philological studies may become a member of the association by a vote of the executive committee and the payment of five dollars as initiation fee, which initiation fee shall be considered the first regular annual fee.
2. There shall be an annual fee of five dollars from each member, failure in payment of which for two years shall *ipso facto* cause the membership to cease.
3. Any person may become a life-member of the association by the payment of fifty dollars to its treasury, and by vote of the executive committee.

ARTICLE V.—SUNDRIES.

1. All papers intended to be read before the association must be submitted to the executive committee before reading, and their decision regarding such papers shall be final.

2. Publications of the association, of whatever kind, shall be made only under the authorization of the executive committee.

ARTICLE VI.—AMENDMENTS.

Amendments to this constitution may be made by a vote of two thirds of those present at any regular meeting subsequent to that in which they have been proposed.

Upon motion, it was resolved that at twelve o'clock on Thursday, July 29th, the convention should adjourn *sine die*, and that the members should meet immediately thereafter, and form the American Philological Association.

It was voted that all members of this convention who shall subscribe their names to the above constitution, and who shall pay five dollars before twelve o'clock on Thursday, shall be *ipso facto* the founders and first members of the new association.

Professor Kistler was appointed to receive the fees of membership until a treasurer shall be elected.

EVENING SESSION, JULY 28.

Dr. Dwight, of Clinton, N. Y., read a paper upon "The Desirableness of thorough Classical Study to the Attainment of the Ends of the Higher Education."

"He stated the claims of 'The New Education,' and characterized them as assumptive. The people at large should be furnished with the best education for their circumstances. The great question is, What kind of education shall be given to the favored few, whose advantages, time, and circumstances give them the position of leaders in the intellectual movements of the world? He held that there are three kinds of training which demand our attention—the practical, scientific, and classical. The American college system is the outgrowth of our own social state, and is better adapted to our wants than any European system can be. There is a great popular demand for a modification of the college course. If the course of college study could include an additional preparatory year, and also be extended another year in the higher studies, many modifications for the better might be made. Our democratic institutions require especially a high standard of national education, or we shall degenerate as a people; and the colleges must continue in the future, as they have done in the past, to furnish the leaders in society and in the state. Two questions force themselves upon us: the true end to be sought for in the higher education, and in what way our classical institutions shall secure these ends. These ends are found in the development of intellectual power, securing the best using of this power, and the capacity of patient, persevering labor, directed to worthy objects. The culture which will produce

this discipline requires time and a varied course of training. The scientific course, Dr. Dwight held, can not produce this. On the other hand, the classical course has done so in the past, and can do so in the future. He considered scientific and elective studies useful adjuncts, but poor substitutes for classical studies."

The reading of the paper was followed by an animated discussion, in which Rev. Mr. Maury, Professor Feuling, Doctor Von Holst, Rev. Mr. Brigham, Professor Kistler, and others took part.

Doctor Crosby offered the following resolutions, which were passed:

"*Resolved*, That this convention tender its hearty thanks to the trustees of the Mill street Congregational church, of Poughkeepsie, for their generous offer of their beautiful and commodious edifice for the use of the convention; to the people of Poughkeepsie for their large-hearted hospitality; to the sexton of the church for his faithful attention and coöperation; and to the local committee, (and especially to its chairman, Mr. C. J. Buckingham,) for their elaborate and munificent preparations, which have contributed so largely to the comfort and success of the convention.

"*Resolved*, That we gratefully acknowledge the value of the labors of Professor Comfort, in initiating and maturing the design for the establishment of the Philological Association, fully aware of the perplexity and manifold details of such a work so thoroughly performed."

Professor Harkness offered a resolution, which was passed, returning the thanks of the convention to the publisher, Mr. Draper, of Andover, Mass., for his gift to each member of the convention of a copy of the *Poema Admonitorium* of Phocylides, edited by Professor Feuling; also that the thanks of the convention be tendered to Professor Feuling for dedicating the book to this convention.

MORNING SESSION, THURSDAY, JULY 29.

[As nearly all the members of the convention accepted the invitation of the trustees of Vassar College to visit that institution, the session did not commence till ten o'clock.]

Upon a motion being passed to that effect, the president appointed Doctor Raymond, Professor Harkness, and Mr. P. Bliss a committee to report upon a project with reference to philological investigation, which Mr. Leurio, the originator, had brought before the notice of the convention.

Doctor Crosby read a paper by Doctor Schliemann, of Paris, in which it was urged that at least one half of the time of the colle-

giate course should be devoted to the study of languages, and that but a single language, in addition to the student's mother tongue, should be studied at a time. Dr. Schliemann also recommended that a chair of the American Indian languages be added to the faculties of our universities.

Doctor Crosby then gave the substance of a paper sent by Rev. Mr. Burnham, of Minnesota, in which many of the common errors of grammarians and teachers of language were pointed out.

Professor Schele de Vere, of the University of Virginia, read a paper upon "The Critical Study of the English Language:"

"Professor De Vere began by speaking of classical education as the foundation of all true culture, even though it is in so many cases out of sight, like the foundations of buildings, although supporting the superstructure of later and practical culture and training. It is an oft-repeated error that we are to learn our mother tongue without effort from our parents and from those with whom we come in contact. There is then the utmost importance in educating the rising generation, who are to be the parents of the coming generation, so that they will give good models of language to their children. And in addition, we are receiving yearly half a million of people from Europe, who are but grown-up children as to their knowledge of the English language. And besides teaching our own young children, and our grown-up adopted children, we are called upon now and then to give a lesson to our ancestors across the water. It is an acknowledged fact that the English is spoken in greater purity in America than in England. What is there the privilege of the educated classes, is here the common heirloom of all. A certain spirit of fashion in the use of words also prevails in England, by which the language is much more often perverted than in America. Hence the strange result that the new country becomes the guardian of pure old English. Our authors, as Hawthorne, make good old English words once more familiar to English ears. We are then in a sense the conservators of the English language. We are to keep it pure and in a healthy growth by having intelligent ideas as to its nature, mechanism, structure, and growth, and also of its beauty, grace, and highly spiritual character. Professor De Vere then alluded to the circumstances which have led to the prominence of the Latin element in the English language. He drew the line between the Latin and the Germanic elements in the English language, and he urged that the student and child be taught to look with reverence upon his mother tongue, and that instructors give the language the prominence it deserves in our educational system."

Mr. J. Pierson, Principal of Belvidere Academy, N. J., read a paper upon "The Critical Study of the English Language in our Academies and High-Schools."

"Mr. Pierson alluded first to the increased attention that is now paid to the study of the English language and literature in our colleges. He then spoke at length concerning the necessity of a better method in those institutions

which are immediately below the college—the academies and high-schools. For it is in schools of this grade that the great mass of the population of the country get whatever they do acquire of a critical knowledge of their native language. Most especially is this true of the female part of the population, as they are not admitted to colleges. Mr. Pierson advocated the plan of taking up short extracts from authors, and examining them with the greatest minuteness, and elucidating all points connected with the history, geography, the customs, laws, and political condition of the country, and of the times in which the authors lived and wrote. There should also be a critical analysis of all the philological relations which are involved in the few passages that are read. The derivation and history of all the words should be carefully traced. This method of critically examining a few passages from an author, it was urged, would be found far more advantageous than to run rapidly through many pages, and simply parse the words. It was also urged that more should be made of the lecture system in academies and high-schools. The students should have opportunities to hear three or four lectures a week, upon branches which they are studying. This would best increase the value of their recitations."

Doctor H. N. Day, of New-Haven, indorsed most fully the views of the two previous speakers. The English language is in a "formative period" to-day, as are all living languages. For it is the nature of language to be ever changing. Changes are taking place in the meaning given to words in daily use. New words are constantly coming into use, and old words insensibly pass out of use. Our orthography is changing, in most cases for the better. The laws of syntax, though more permanent, are still also undergoing modification. It is a great mistake to have the English language taught, even to the young, as though it were permanent in form and unchangeable in laws, like mathematics or other abstract sciences.

Professor Haldemann made some very entertaining remarks, illustrative of the changes in pronunciation which have taken place within the last thirty years.

President Samson urged the importance of studying the English language, even in the academies and high-schools, in a strictly philological method, showing clearly what are the Saxon and what the Latin elements, both in the grammatical forms, the syntax, and the vocabulary.

Upon motion of Professor Harkness, resolutions of thanks were passed to the trustees, the treasurer, and the president of Vassar College, for the opportunity given the members of the convention to visit Vassar College.

The committee to which was referred the consideration of the

best method of pronouncing Latin and Greek announced that, after several sessions, they found themselves able to make a partial report at this meeting of the convention, and asked permission to present the report which they had prepared. Upon motion, such permission was voted unanimously.

The report was as follows :

“While the committee recognize the fact of wide diversities of opinion among American scholars concerning the mode of pronouncing the classical languages, and while among the members of the committee themselves there are considerable differences of judgment, they agree in stating that *they deem some uniform system of pronouncing the classical languages to be greatly to be desired, if possible to be obtained.*

“They would favor, as at least one feasible step toward such a result, *the adoption of the continental system of pronouncing the vowels in both Latin and Greek.*

“It is also their opinion that *it is desirable to observe the written accent in reading Greek, and also to mark the quantity of vowels in reading both Greek and Latin.*”

The report of the committee was greeted with loud and continued applause. Upon motion, the report of the committee was adopted as an official expression of the convention upon the question of how the classical languages should be pronounced.

The hour of twelve (noon) having arrived, at which time it was voted yesterday that the convention should be dissolved, upon the motion of Dr. Crosby, the convention adjourned *sine die*.

AMERICAN PHILOLOGICAL ASSOCIATION.

THURSDAY, JULY 29.

THE Association was called to order at twelve, (noon.) Dr. S. H. Taylor was elected Temporary Chairman, and Prof. William B. Silber was elected Temporary Secretary. Upon the motion of Professor Magill, it was resolved that the officers of the convention which had just adjourned be elected as the permanent officers of the association.

The officers were, therefore, as follows :

President, Professor W. D. Whitney.

Vice-Presidents, Dr. B. W. Dwight, Professor A. Harkness.

Secretary and Curator, Professor G. F. Comfort.

Honorable J. H. Trumbull was elected Treasurer.

Professor W. B. Silber and Professor C. M. Mead were elected additional secretaries for the present session.

A resolution of thanks was tendered to Hon. E. G. Squier, for the presentation to the Association of a printed bibliographical list of books upon South-American literature.

A resolution of thanks was also voted to Dr. Schliemann, of Paris, for a volume of the transactions of the "Association pour l'Encouragement des Études Grecques."

A committee of three, consisting of Doctor Samson, Professor Mead, and Professor Magill, was appointed to nominate the remainder of the executive committee.

Mr. J. E. Munson, of New-York, then read a paper upon "The Relation of Phonetics to Philology."

"He introduced the subject by tracing the progress of opinion in England and America in favor of phonetic spelling. He quoted especially from the writings of Mr. Max Müller, Dr. Latham, Mr. Pitman, Professor Whitney, and Professor Haldemann. Probably the study of other languages, especially of the Sanscrit language, has contributed largely to the change of sentiment among scholars upon this subject. Mr. Munson then compared the different phonetic alphabets. He gave the preference to the one employed by Mr. Alexander Melville Bell, in his system of 'visible speech.' By adopting this system, learning to read would be so simple that it would be acquired of

an ordinary child in a few days. Learning to spell would be robbed of its terrors, and the time that is now worse than wasted in learning absurd systems of spelling would be applied to gaining useful knowledge. Some of the greatest and earliest obstacles to acquiring an education would be removed. That this is no fancy picture is shown by the testimony of many travelers who have been in India, and have seen there the similar method of writing which is adopted by the Hindoos. The plan of teaching children to read first phonetically, and then to read by the ordinary method, has been frequently tried in England, and found to consume less time than to begin by the usual method. A system has also been invented whereby the phonetic form of the word is stamped upon the word as spelled by the ordinary method. Another of the most obvious results of learning first by the phonetic method is the check that this method would have upon the tendency to change the sound of words and letters. As it is now, changes are introduced by speakers; not being recorded, they go on increasing until the spelling of a word often gives no idea of its pronunciation. By the phonetic method, the first variation of a public speaker from the standard pronunciation would be recorded, and thus the history of changes could be traced."

The reading of the paper was followed by a discussion upon the possibility and desirability of adopting phonetic spelling in the English language.

The nominating committee reported the names of the following persons for filling the remaining number in the executive committee, all of whom were unanimously elected: Dr. S. H. Taylor, Dr. H. Crosby, Professor Schele De Vere, Professor J. R. Boise, C. J. Buckingham, Esq.

AFTERNOON SESSION, JULY 29.

Professor A. H. Mixer, of Rochester University, read a paper upon "The True Position of the Modern Languages in our College Curriculum."

"The chief struggle in systems of education for the last three centuries has been with reference to the position which should be accorded to the study of the classics. In England, the classics have so far retained their ground. In France, they have yielded to the demands of natural science and modern language to such an extent as to endanger the effectiveness of the national educational system. Germany alone has been little moved by the cry for reform. There the classical languages hold essentially the same prominence which they have held for the last two centuries. In America, the proportion of young men in our colleges to the whole population of the country is less than formerly. Some attribute this to the conservative spirit in the colleges. It is rather owing to the avenues of wealth that are opening to young men, calling them off from any system of study whatever. Still, some concession must be made to the sciences and the modern languages. But this must not

be done at the expense of the study of the classic languages. For the study of these languages is the real basis of all true education. After the mind has become trained to right habits of thought, it is prepared to receive the facts of natural science and training in the modern languages. There should be a unity of plan in all the instruction in language. In the study of Latin or Greek, words should be traced from their earliest appearance, down through the modern languages, to their entrance into the English language of to-day. In the study of the modern languages, words should be traced back to their most primitive radical forms, and forward to their latest modification of form and meaning. The modern languages, French and German especially, may be employed as the channel of communicating a knowledge of many branches of learning. French or German text-books may be employed in the higher mathematics, in science or history, especially in the history of literature. The student will thus be familiarized with these languages in connection with his other collegiate studies, and the modern languages will have a practical value which can not be realized in any other way. So great, indeed, is the quantity of literature upon every branch of knowledge in the French and German languages, that no man can call himself liberally educated to-day who has not a knowledge of these languages. As to the proportion of time, in a liberal system of education, which should be given to the study of language, the speaker thought that one half of all the work in academic and college curriculums should be thus employed. Of this half of the entire time, two thirds should be given to the ancient and one third to the modern languages. But an equally rigid philological method should be followed in the study of both these classes of languages."

Rev. Mr. Maury, of Cold Spring, N. Y., read a paper, in which he defended the classical languages, and the prominence which they now occupy in our educational system.

Professor Comfort spoke upon "The Importance of Post-Graduate Instruction in Language."

"We have four grades of schools—the primary, academic, collegiate, and post-graduate, (or the university.) In the post-graduate schools, only medicine, law, theology, and some branches of natural science are taught at present. In the universities of continental Europe, all branches of human learning are carried equally far. In the University of Berlin, there are fifteen professors of philology and language, who give over seventy courses of lectures each year upon language and literature. In America, we have no means of giving any higher instruction in language than that which is to be had in the colleges. The discussion with reference to the position of language in education can never be settled in our country until we provide means for post-graduate instruction in language and philology. This can be accomplished by establishing schools of philology in connection with existing colleges, like the School of Mines of Columbia College; by having separate institutions, like our medical and theological schools; or by having philology form one department of a great post-graduate university. Teachers for the common schools are usually educated in our academies; teachers for the academies are educated in the colleges; so we must have universities where professors for colleges can get

the education and training which are necessary for their position and duties. It would be very easy to select from our own number ten or fifteen professors who would man the philological faculty of a post-graduate university quite as successfully as do the professors in the faculties of our scientific schools. The cost of such a university in America would be very great, but it would not be incommensurate with the great present and prospective wealth of our country. The Duchy of Baden, in Germany, with one eighth the territory, one third the population, and probably less than one fourth the material wealth of the State of New-York, has two (post-graduate) universities, with a hundred and fifty professors and twelve hundred students. So great is the solidarity among nations to-day, that it is as impossible to keep the institutions of high culture which abound in every state of Europe from being soon established in America, as it is to keep telegraphs and railroads from being established in Japan. It may be a generation before such universities are founded in America, but they are needed to-day."

In the midst of the discussion which followed, and which was participated in by Dr. Crosby, Dr. Dwight, Dr. Samson, Professor Feuling, Dr. Raymond, and others, Dr. Dwight made a motion that a committee of five be appointed to consider the practicability and desirableness of securing somewhere in the land, at an early date, the establishment of a school of instruction of the highest and best kind in linguistic science, corresponding in grade and in the style of its advantages to the schools of science lately established in connection with several of our colleges. [In the evening session, the discussion was continued, and, upon motion of Dr. Raymond, the motion was laid upon the table till next year.]

The committee appointed to consider the proposition of Mr. Leurio made the following report, which was adopted: "That the raising of funds for such purposes does not fall within the province of this association."

EVENING SESSION.

Hon. J. H. Trumbull, of Hartford, Ct., read a paper on "The True Method of Studying the North American Languages."

"As preliminary to the consideration of the means and agencies to be employed 'to secure from destruction the languages of the Indians of America,' Mr. Trumbull offered some suggestions as to the *method* which should be observed in the collection and arrangement of materials for the study of these languages. He pointed out the disadvantages of exclusive reliance on the use of standard vocabularies of English words, for the most part concrete names, as the frame-work for collections and for the exhibition of results.

Comparative vocabularies are valuable for the classification of provisional languages by families or groups. The work of the linguistic scholar begins when this provisional and tentative process of the word-collector ends. It is desirable to know not merely what a language *is like*, but something of what *it is*.

"From fundamental differences in the grammatical structure and in the plan of thought of the American and the Indo-European languages, Mr. Trumbull argued that it is nearly if not absolutely impossible to find any Indian name or verb which can be exactly translated by an English name or verb. The standard vocabularies are framed on the mistaken idea that such translation *is* possible. They assume that English *analysis* may be adequately represented, word by word, by Indian *synthesis*.

"The aim of the collector and student should be to resolve synthesis by analysis. Every Indian bunch-word is a sentence, of which the translation should be sought, and such a translation can not often be cast in the mould of an English vocabulary. The Indian languages must be studied in their primary words and roots, not in their polysyntheses.

"To what extent such analysis can be prosecuted successfully, is not the question. Every step toward it is something gained, and without it no real advance can be made. In collecting materials, special attention should be given to the most simple forms, that is, generally, to the shortest words. Every concrete name should be analyzed and translated, not merely set in a prepared vocabulary against the English name of the same object, animate or inanimate.

"In closing, Mr. Trumbull protested against the generally received notion of the Indian process of word-making. Duponceau adopted the statement of Egede that words are formed 'by taking and joining together a part of the radical words which are to be combined.' Heckewelder and Schoolcraft helped to give this statement general currency, and the latter believed that the arrangement of the syllables depends largely 'on the will or the skill' of the word-maker. This is not only without foundation in fact, but it tends to establish a doctrine of Indian synthesis which is directly opposed to the true one."

The Rev. Thomas Hurlburt, of Caistorville, Canada, read a paper "On the Structure of the Indian Languages," which he introduced by an interesting account of his life and labors among the Cree and Ojibwa Indians.

"He had been for nearly forty years a missionary to these tribes, in British North-America; had preached in the Cree and Ojibwa languages for thirty years, and for some time had published an Ojibwa newspaper, setting the types himself, and doing the work of printer as well as editor. He had become so familiar with the language that he was accustomed to *dream* in it, and the Indians insisted that he was not really a white man, but 'an Indian in a white man's skin.'

"He spoke of the Indian languages as the most exquisite pieces of mechanism ever presented for human study. In their grammar we have a transparent structure, through which we can study the process of word-making, as we may

watch the building of cells within a glass bee-hive. The number of roots or primaries is small, but the number of words which may be formed from these by prefixes and suffixes, by combination, etc., is almost infinite. In the Ojibwa language, a single verbal root may receive 200,000 modifications, and each of these may again be conjugated as a verb, through mode and tense forms. He estimated the number of words possible to be formed from a single Ojibwa root as not less than 17,000,000. Some of the peculiarities of the grammar were illustrated by examples.

"Mr. Hurlburt presented to the association copies of the New Testament in the Cree and Ojibwa languages, and a manuscript Ojibwa grammar, on which he had been more than fifteen years at work. He proposed to revise and perfect this grammar for publication, and hoped to accomplish the task in about two years."

MORNING SESSION, FRIDAY, JULY 30.

Upon the recommendation of the executive committee, it was voted that the next meeting of the association be held at Rochester, New-York, on the 26th of July, 1870.

Upon the motion of Dr. Crosby, it was resolved that the association adjourn to-day at half-past eleven A.M.

Rev. H. M. Colton, of New-York, remarked that the text-books which are prepared for use in academies and preparatory schools are too difficult for the students to use profitably. He urged the general adoption of easier text-books in preparatory schools.

Professor Comfort gave an abstract of a paper which was sent by Dr. Roehrig, of New-York, upon the languages of the Dakota Indians.

Hon. Mr. Trumbull, of Hartford, read a paper by Mr. George Gibbs, of New-York, with reference to the question, "What more efficient measures can be taken to preserve from destruction the aboriginal languages?"

"The object of the paper was more particularly to point out the bearing of philology upon the classification of the Indian tribes, and the importance in an ethnological view in preserving their languages. After stating briefly what had already been done in this respect by different nations, and that with few exceptions the vocabularies of the languages north of Mexico were sufficient only to ascertain the most palpable relations among them, it suggested an enlarged standard of comparative philology, to comprise, first, a vocabulary of not less than fifteen hundred selected words, as nearly as possible radicals, arranged according to subjects, and having reference to geographical conditions; second, a large number of well-digested phrases based upon these words, calculated to draw out the different forms of speech, from which their grammatical structure could be deduced; and finally a succinct and popular state-

ment of the most striking grammatical peculiarities of languages already known, as a guide to the study of others. This work to be distributed widely as a hand-book. As a general thing, the collection of material would be the task of a different class of men from those who are ultimately to dissect and arrange it, and it is only by popularizing the subject that we can hope to accumulate that material. In the mean time, however, it is desirable that the general principles of these languages should become a part of our college studies as a branch of universal grammar. The paper closed by urging the adoption of the Roman alphabet, as recommended by Professor Whitney, and adopted by the Smithsonian Institution as the most suitable and intelligible form for writing."

Professor Haldemann read a second paper upon the same subject, by Hon. E. G. Squier, but referring more especially to the languages of Central and South-America :

"Under the Spanish conquest and dominion, in spite of the beneficent and humane efforts of the 'Council of the Indies,' many Indian tribes, and, indeed, entire Indian nations, were exterminated entirely, or were incorporated into other nationalities. The Roman Catholic missionaries gathered and sent to Spain and Rome lengthy and complete accounts of the customs, habits, and religions of the Indians. They also acquired their languages, and translated into them the Ave Maria, Pater Noster, and other prayers. The missionaries also gathered vocabularies, sometimes forming quite complete dictionaries, and also compiled quite complete grammars of the languages. They also developed a literature, almost entirely religious in its character. Several of the Indian languages were also taught in the colleges and universities in Central and South-America, a chair having existed in the University of Lima till within a few years. We have thus abundant material recorded for the study of many of the languages of Central and South-America. But there are many subordinate dialects which are either lost entirely, or which, being imperfectly recorded, have often been taken for parent languages. In the municipal libraries and archives, there are many documents in dialects which are now nearly or entirely extinct.

"Of the 'measures which should be taken to preserve from destruction the languages of the aborigines,' one of the first is to gather in some central and convenient place originals or copies of all existing documents, before indifference, neglect, or time shall have destroyed the records forever, so that they may be preserved, and also that they may be accessible to the American student of philology. Our ministers, consuls, merchants, travelers, and correspondents in Central and South-America can be enlisted to cooperate with the association in both gathering documents that are already printed or written, and in securing additional and valuable records with reference to languages which are not yet recorded. To illustrate what may be done, I will not affect a modesty in saying that in Central America alone I have collected, without assistance, more than four thousand pages of original vocabularies and grammars. One of these is a dictionary of twenty-seven thousand words, another is trilingual. Some of the languages, I have reason to believe, would have

been utterly lost, had I not secured these vocabularies and grammars. The following measures I would suggest:

"1. The designation of some safe and accessible depository of material relating to American aboriginal languages.

"2. The preparation and wide diffusion of circulars to travelers and others, indicating to them what is wanted and where it may probably be obtained, with instructions for transmitting all material that is gathered.

"3. To obtain copies of all unprinted original vocabularies, dictionaries, grammars, etc., of American languages, in cases where the original can not be secured.

"4. To obtain as rapidly as possible whatever is already printed that has a bearing upon these languages.

"The conservation of the material thus collected would, doubtless, be willingly undertaken by any one of several institutions which have library facilities; and patrons will doubtless be found to defray whatever expense is incurred in carrying out this project, so important in its bearings upon the philological study of the languages of America."

Mr. Porter C. Bliss, late U. S. Consul in Paraguay, offered some remarks on the languages of South-America.

"From a careful examination of eleven languages, he had become satisfied of the inaccuracy of much that has been written respecting them. He gave the outlines of what he regarded as a true classification of the Indian tribes of this region, and promised to prepare for a future meeting of the association a more elaborate paper on the subject. He stated that four fifths of the inhabitants of Peru and Bolivia are of unmixed Indian blood, who still speak the languages of the Incas of Peru. Mr. Bliss confirmed the positions presented in Mr. Trumbull's paper, and gave numerous illustrations in support of them."

The Rev. Joseph Anderson, of Waterbury, Ct., spoke of various localities in which the Indian languages are still spoken by remnants of tribes. He read a letter from Rev. Asher Wright, of the Seneca Mission, describing the present condition of the Iroquois nations, with remarks upon their languages. Mr. Anderson thought the best way to preserve from destruction the Indian languages was to do what is possible to preserve the Indians themselves.

Rev. Dr. McCosh, President of Princeton College, addressed the Association upon the "Relation of Language to Education."

"Language he regarded as an original endowment of the human mind from the Creator, quite as much as memory or imagination. Thought precedes language, but language is its most important instrument. Facility in learning language is much greater in childhood than in later years. A child should begin the study of some language other than its vernacular at the age of nine or ten years. Our college courses should be so arranged that stu-

dents can enter at fifteen and graduate at nineteen or twenty years of age. The proposition to found a post-graduate institution was well deserving of consideration. But till that was accomplished much could be done to promote high scholarship in language by establishing fellowships in connection with our colleges, whereby students could be supported while continuing their studies for one or two years after finishing their present college course. It is gratifying to see that the right spirit prevails in this body with reference to the study of the ancient and modern languages. They should go hand in hand, and thus mutually aid and supplement each other."

At half-past eleven A.M., the Association adjourned, to meet for the second annual session in Rochester, N. Y., on July 26th, 1870.

SECOND ANNUAL SESSION,

HELD AT ROCHESTER, N. Y.,

JULY, 1870.

The Association assembled agreeably to notification in the Brick Presbyterian church, at three P.M., with the President, Professor Whitney, in the chair. The Secretary having been detained by an accident on the Erie Railroad, Rev. Dr. Howard Crosby was appointed Secretary *pro tem*. The roll was then called and the following new members were received, according to the provisions of the constitution: Professor W. W. Goodwin, of Cambridge, Mass.; Dr. M. B. Anderson, Dr. R. J. Buckland, Dr. A. C. Kendrick, Professor J. H. Gilmore, Professor E. H. Wilson, and Professor N. W. Benedict, of Rochester, N. Y.; Mr. T. R. Lounsbury, of New-Haven, Ct.; Mr. T. H. Norton, of St. Catharine's, Canada; Mr. A. B. Evans, of Lockport, N. Y.; Mr. H. L. G. Brandt, of Clinton, N. Y.; Professor L. D. Hillmann, of Carlisle, Pa.; Professor F. A. March, of Easton, Pa.; Professor G. R. Bliss, of Lewisbury, Pa.; Miss M. B. Flint, of Monticello, N. Y.; Dr. E. G. Robinson, of Rochester, N. Y.; Dr. A. B. Hyde, of Meadville, Pa.; Prof. C. G. Hudson, of Lima, N. Y.; Professor J. C. Overheiser, of New-York; Professor B. P. Mackoom, of Cedarville, Ky.; Professor N. White, of Canton, N. Y.; Professor A. Winchell, of Ann Arbor, Mich.; Professor M. E. Gates, of Albany, N. Y.; Dr. H. G. Warner, of Rochester, N. Y.

The treasurer's report was read and was referred to an auditing committee consisting of Professor S. S. Haldemann and Pres. G. W. Samson.

Professors J. Hadley, A. H. Mixer, and A. B. Hyde were appointed a committee to nominate officers for the ensuing year.

After a short recess, the Association reassembled, and the Nominating Committee presented the following nominations:

Dr. Howard Crosby, New-York, *President*.

Professors J. R. Boise, Chicago, Ill., and W. W. Goodwin, Cambridge, Mass., *Vice-Presidents*.

Professor G. F. Comfort, New-York, *Secretary and Curator*.

Hon. J. Hammond Trumbull, Hartford, Ct., *Treasurer*.

Additional members of the Executive Committee: Dr. A. C. Kendrick, Rochester, N. Y.; Professor Louis Kistler, Evanston, Ill.; Professor A. C. March, Easton, Pa.; Professor C. D. Morris, Peekskill, N. Y.; Professor W. D. Whitney, New-Haven, Ct.

Upon motion, the nominees were unanimously elected by the Association.

Upon the motion of Professor Whitney, two additional secretaries were appointed by the chair, as follows: Professor A. Winchell and Professor J. C. Overheiser.

The Auditing Committee reported that they had examined the accounts of the treasurer and examined the vouchers, when the whole was found to be correct.

Upon motion, the members of the Executive Committee *ex-officio*, were constituted a business committee for the present session.

Professor Haldemann moved an amendment to Article II., Section 3, of the Constitution, as follows:

Instead of "All the above officers shall be elected at the *first* session of each annual meeting," substitute, "All the above officers shall be elected at the *last* session of each annual meeting."

The amendment was laid upon the table for action at the next meeting, as required by the constitution.

EVENING SESSION.

President Anderson, speaking in behalf of the local committee and of the citizens of Rochester, welcomed the members of the Association to the hospitalities of the city.

Dr. Crosby, the President-elect, returned the thanks of the members of the Association for the cordial welcome expressed by Pres. Anderson.

Professor Whitney, the retiring President of the Association, then gave the annual address:

Professor Whitney stated that he addressed the society by the request of the executive committee. He could not but begin by expressing the gratification felt by all at the successful organization of a national philological association—a thing which, a year or two ago, had seemed well-nigh imprac-

ticable to many, himself among the number. The real success of the enterprise, however, was yet to be assured by devoted and persistent labor. The scientists have long had a pleasant and useful organization of the same kind. The advantage popularly ascribed to them in the range of their subjects and the rapidly progressive character of their methods and results, is wont to be greatly overrated. Philological studies are bearing their full share in the progress of the age. The scientific study of language has opened innumerable new points of view, and multiplied the value of all linguistic material. The circle of classical languages, and of antiquities to be studied, has been indefinitely extended. Egyptian, ancient Persian, Mesopotamian, Chinese, Sanskrit, are branches newly opened or immeasurably developed. Even old-established studies, like Greek and Latin, have their methods revolutionized, in every part, till they seem almost a creation of the most recent time. The modern languages, the English itself, have for the first time taken their proper places in the philological field. These are the conditions which fill the philologist's mind with enthusiasm, and prompt him to more engaged effort, and which make the formation of an association like ours a necessity of the time.

Of the general objects which we seek to attain by association we are more fully conscious than of the means by which they are to be gained. Nor are too definite plans of action possible or desirable. The association is to be just what its members shall make it, and will not bear much managing or mastering. It must discuss the subjects that are interesting American philologists, and with such wisdom and knowledge as these have at command. The repressive powers invested in the executive committee must be sparingly wielded, and only as sustained by an overwhelming public opinion among the members. In every such free and democratic body, things are brought forward into public which might better have been kept back. We desire to discuss the living questions of the day, in a way to help their settlement—but our own living questions, and to their settlement among us, which may involve the spreading of light elsewhere won, as well as the bringing out of new light. Our best welcome, at any rate, will be reserved for actual additions to general knowledge, and such will receive first admission into our published transactions, while more popular and less original papers may be not less acceptable at our meetings. A working society, which we aim to be, is worth in the last analysis what it brings forth for universal use. The classics, of course, will occupy the leading place; that department will be most strongly represented, and will least need fostering, while it will call for most careful criticism. The philology of the American aboriginal languages—on the other hand, demands, as it has already begun to receive, the most hearty encouragement. Circumstances, and our duty toward the races whom we are dispossessing and destroying, make American philology and archæology our especial responsibility, and it is our disgrace as a nation that we have been unfaithful to it. Educational subjects are also closely bound up with philology, and will necessarily receive great attention; yet there should be a limit here; our special task is to advance the interests of philology only, confident that education will reap its share of the benefit. We shall need to consult brevity and point in papers and discussions, repressing the national disposition to too much talk, (sometimes wrongly attributed to the over-pur-

suit, instead of the under-pursuit of philology,) and frowning particularly on papers which undertake to grapple with subjects for which a volume would be insufficient, and which involve a host of debatable points. The character of the audience we address must be borne in mind, and popular and elementary explanation cut short. General exposition and defense of the merits of philology is also out of place before philologists. Not less offensive is the depreciation of any other department of study. The especial duty of philology is appreciation, full and generous, of every part and parcel of human knowledge.

Education is an exclusively human process. Its basis is the sum of human knowledge, accumulated and accumulating. This sum is much too vast for any individual to possess; acquisition of its most valuable part, and the being placed in apprehensive sympathy with the rest, is culture, the aim of general education; but not the sole aim of education, which has equally in view the advancement of knowledge, and the equipment of the individual for his special work in life. The process of education, which should last as long as life, is also divided in respect to time, the first part being chiefly preparatory, or "disciplinary." For discipline is, in its essence, preparation; that is a disciplinary study which prepares the way for something to follow. There is no discordance, but the closest connection, between discipline and the gaining of valuable knowledge; but the value of knowledge is relative; and the disciplinary method implies that the instructor, overlooking the whole body of knowledge, brings before the pupil's mind the right kind, at the right time, to secure the best final result. The process of education is a tentative one, necessarily involving much waste and failure, from the deficiency of human wisdom and foresight. No one system is to be rigidly held and imposed upon all. Not all minds will reap the essentials of culture off the same part of the great field. "What study is disciplinary?" is a false question; we should ask what kind of discipline each study affords; what preparation it requires, what it yields.

The acquisition of our mother-tongue is the first step in education. And a mother-tongue like English is itself a door to the chief treasures of human knowledge, a possible means of the highest culture. We have no right to look down upon the man who knows English only as necessarily half-educated; for he may have gained in and through it more than an equivalent for the more varied linguistic acquirements of others.

Sooner or later, the taste and choice of the pupil has to be consulted by his educators. Downright constraint answers only with children; a training which is felt mainly as drudgery throughout is a failure, as leading to the cessation of study when the constraint is removed. The pupil must leave the hands of his disciplinary instructors with a generous capital of valuable knowledge, of which he feels the value; realizing something of what there is in the world worth knowing, craving to know it, and trained in the ways in which it is to be learned. Mere intellectual gymnastics is to be ruled out entirely. The judgment is competent to deal only with matters in which it is actually versed. Information, positive knowledge, fact, is the sound basis of all fruitful intellectual activity.

These are the principles by which the study of philology, in general and in particular, is to be judged and its value determined. And it will stand every

test of usefulness, lower or higher. There was never a time when studies in language had such absolute claim upon the age as now. The same is true of the classical division of those studies; although its position is, of course, relatively other than at the revival of letters, when the classics were almost the sole sources of knowledge and means of discipline. We rejoice in the wonderful growth of other departments of knowledge, and acknowledge that, as we have more and more of human history behind us, the comparative importance of any one part of it is diminished. What we most need is the wisdom that consists in knowing how little we know, and, as its result, that humility and charity which shall lead us to estimate at its full value what is known by our fellow.

MORNING SESSION, WEDNESDAY, JULY 27.

After the transaction of some miscellaneous business, a paper by Professor James Hadley, of New-Haven, on "The Theory of the Greek Accent," was read:

Professor Hadley's paper, as he stated at the outset, had already been presented as a communication to the American Oriental Society. The following is a summary of its contents:

The Greeks distinguished one syllable in each word by sounding its vowel on a higher key; this higher key was represented by the acute accent. The ordinary lower key was not represented in writing. But when it followed the higher key on the same long vowel, it was represented by the grave accent, which then united with the acute to form the circumflex. And when a high-tone ultima, followed by other words in close connection, dropped down to a lower key, it was written with a grave accent instead of the acute. The melodic character of the Greek accent Professor Hadley illustrated from Dionysius Halic., (*De Comp. Verb.*, 12,) who calls the interval between the higher and lower keys a fifth, (three tones and a semi-tone.) That there was any difference in stress (or force of utterance) between accented and unaccented syllables, is not intimated by the ancient writers; that such difference, if it existed, can not have been great, is made probable by the total disregard of accent in ancient verse. The question has been raised whether any distinction was made among the lower tones; whether there was any middle tone intermediate between the highest and the lowest. Some ancient writers speak of a middle tone; but the statements are not so definite as could be wished. G. Hermann (*De Emend. Rat. Gramm. Græc.*) recognized a middle tone in the grave accent where it takes the place of an acute on the ultima. G. Curtius (*Jahn's Jahrb.*, vol. 72) recognized it also in the grave accent where it forms part of the circumflex. Recently, F. Misteli, (*Kuhn's Zeitsch.* vol. 17,) founding on the analogies of the Sanskrit accent, holds that the high tone, (acute accent,) where it was not final, was always followed by a middle tone. Professor Hadley set forth a theory based on that of Misteli, but with additions and modifications of his own. In the undivided Indo-European, as in Sanskrit, there was no restriction on the place of the accent; it might fall on any syllable of the longest word. Hence, the high tone with the follow-

ing middle tone might be separated from the end of the word by a succession of low-tone syllables. If, now, there came to be a prevailing dislike for such a succession, an unwillingness to hear more than one low-tone syllable at the end of a word, the result would be to confine the accent to the last three syllables. This result, as it is found both in Greek and in Latin, may be referred to the time of Græco-Italic unity. But for the Greek we have to assume also a subsequent restriction; the final low tone must not occupy the whole of a long syllable; if it came upon a long vowel, the first half of that vowel must be sounded with middle tone. Thus "high tone, middle tone, short low tone," became a prevailing cadence for Greek words, and was brought in wherever it could be attained without throwing back the accent. The leading rules of Greek accentuation—no accent allowed before the antepenult; only the acute used on that syllable, and not even this if the ultima is long; an accented penult must take the circumflex if it has a long vowel and the ultima a short one; an accented penult must take the acute in any other case;—all these are explained by this cadence, being all necessary to secure it. As for throwing back the accent to obtain this cadence, (or as much of it as possible,) one branch of the Greeks, the Æolians of Asia Minor, did so; whence Æolic forms like *χάλειπος*, *χάλειπῶς*, *λελύκοτες*, for which the common Greek has *χαλεπός*, *χαλεπῶς*, *λελυκότες*, with the primitive accent.

The Latin took a different though analogous course. It allowed the final low tone to have either quantity, but would not allow the middle tone before it to occupy the whole of a long syllable, whether long by nature or by position. Hence, the cadence, "high tone, short middle tone, low tone," which the Latin procured, or as much of it as possible, in all words, even by throwing back the accent like the Æolic Greek. In this way all the varieties of Latin accent—*légeres*, *légeret*, *monères*, *monéret*, *legéndus*, *vírit*, *rês*—may be easily accounted for.

In conclusion, Professor Hadley referred to the hypothetical character of this theory, pointing out the unproved assumptions contained in it; but remarked that these assumptions are so natural in themselves and furnish so simple an explanation for so many seemingly unconnected facts, that it is difficult to believe them wholly unfounded.

The next paper was by Professor Whitney upon "The Sanscrit Accent."

Professor Whitney stated briefly the main features of the system of Sanskrit accentuation, by way of analogy and support to the principles of Greek accent, as laid down in the preceding paper. Our sources of knowledge on the subject are the writings of the ancient Hindu grammarians themselves. They teach three accents, corresponding to the Greek—acute, circumflex, and grave; and give definitions of them which prove their identity in character with the Greek. The acute (*udátta*, "elevated") is described as uttered in a high tone; the grave, (*anudátta*, "not elevated,") as uttered in a low tone; the circumflex, (*svaríta*, precise meaning doubtful,) as combining the two tones of acute and grave. And all the phenomena of accentual change are such as to prove these definitions accurate. The range of use of the Sanskrit (independent) circumflex is very different from that of the Greek, and much

more restricted ; the accent is mostly found on syllables whose vowel is preceded by a *y* or *w* that represents an original acute *i* or *u*—thus, *kwá*, *nadyá*, for *kú-a*, *nadí-as* ; apart from these, only on long vowels, (by nature,) in certain special cases, where an acute and a grave vowel have been blended into one syllable. As to the place of the accented syllable in the word, the Sanskrit knows no restriction whatever ; no tendency to a particular cadence, or other general tendency, has hampered the freedom of position which we must suppose to have prevailed in the original Indo-European period.

The Hindu grammarians recognize a second, an enclitic, circumflex, as regularly following an acute syllable—implying that the voice, instead of passing directly from the raised tone of acute to the ordinary level of pitch, comes down in the course of the succeeding syllable. It is an open question, perhaps, whether they might not more correctly have apprehended this enclitic tone as a middle tone than as a slide ; but their authority, at any rate, is entirely in favor of the latter value : they completely identify, as regards essential character, the two kinds of circumflex.

After the discussion which followed these papers, Professor Comfort called attention to the fact that the Committee upon the Pronunciation of Latin and Greek had made but a partial report last year, and that two members of the committee were not present at this meeting. Professor Morris and Dr. Kendrick were appointed to fill the vacancies in the committee.

AFTERNOON SESSION.

Professor A. Ten Broeck, of Ann Arbor, Mich., Professor H. L. Baugher, of Gettysburg, Pa., Mrs. E. A. Weston, of Antioch, Ohio, were announced as new members by the Executive Committee.

Professor W. W. Goodwin read a paper upon "The Constructions allowed in Greek, after ὄπως, ὄπως μή, and the double negative Οὐ μή."

The so-called Canon Davesianus, in its later form, declares the first aorist subjunctive active or middle a solecism after all these words. What is true in this rule arises from the simple fact that, wherever the two constructions of the future indicative and subjunctive were allowed, an author naturally avoided those forms of the subjunctive which differed from the future indicative only by the quantity of a single vowel, (that is, the first aorist active and middle,) and when he wished to use the subjunctive at all, he would prefer the more decided form of the second aorist. But this can not be applied to constructions like pure final clauses, in which only the subjunctive was allowed in good Attic prose. Here, therefore, we can not expect the rule to hold, and examples like Thuc. II. 60 and VII. 39 ought to have the aorist subjunctive, as the mss. require. In the construction in which ὄπως or ὄπως μή is used with the future (as it is always printed) by an ellipsis of a verb meaning *see*

to *it*, or the like, there is a strong reason why the subjunctive (even the first aorist) should have been tolerated, even although it is rare (or even impossible, as some consider it) in the full form, when the leading verb is used. There the more familiar form of prohibition, *μη ποιήσης*, made *δπως μη ποιήσης* quite as natural as the future to Greeks who never thought of the ellipsis. So in the case of *ού μή*, the same familiar form of prohibition, *μη ποιήσης*, made *ού μη ποιήσης* perfectly natural; and where there is sufficient MS. authority for this, it should not be emended to suit a mere theory. The doctrine of Elmsley, that this construction of *ού μή* is always interrogative, (so that *ού μη τούτο ποιήσεις*; will mean, *Will you not not do this?* that is, *Do not do this*.) is one cause of the supposed necessity of insisting on distinct forms of expression in this and in the other more common construction. In the latter, there can be no doubt that *ού μη γενήται* (or *γενήσεται*) is a strong negative, meaning simply, *it will not happen*; and here all scholars allow both subjunctive and future indicative. The strongest reasons can be urged for explaining both on the same principle, and if it appears that both subjunctive and future indicative are used in the prohibitive construction, the strongest reason for Elmsley's distinction disappears.

A collation which the speaker had recently made of the passages containing *ού μή* and *δπως μή*, in the *Clouds* and *Frogs* of Aristophanes, in the two Venetian and in ten Paris MSS., shows that there is generally better authority for the first aorist subjunctive here than for the future, while the future stands in all modern editions. It seems, therefore, that the subjunctive ought to be restored in all cases in which it has the superior MS. authority; certainly where it has *all* the authority, as in vs. 293 of the *Clouds*. To meet the usual objection that copyists constantly confused *ει* and *η*, as well as *ε* and *η*, in the classic MSS., he inspected in all these MSS. passages of a different character, in which these letters could not have been interchanged without an obvious blunder, and in all these the copyists used consistently the correct form, with no more exceptional mistakes than twelve modern copyists would make in copying as many passages of English.

Mr. Porter C. Bliss, Secretary of the United States Legation in Mexico, gave an account of an Inscription in one of the native Indian languages, which has been discovered in Central America.

Mr. T. R. Lounsbury read a paper upon "Certain Forms of the English Verbs which were used in the Sixteenth and Seventeenth Centuries."

The object of this paper was to show that the forms of the present tense ending in *s*, belonging strictly to the Northern dialect, and the forms in *th*, belonging to the Southern, were in much more extensive use in the literary language during the sixteenth and seventeenth centuries than is generally supposed, at least in the second person singular and the third person plural. Proof of this was furnished by more than five hundred examples drawn from writers who flourished in the middle or latter half of the sixteenth and beginning of the seventeenth century. The quotations made seem to show clearly, first, that during that period, the forms both in *s* and *th*

for the third person plural were not simply met with occasionally, but were in constant and common use, and by authors in every style; secondly, that the same is true of the second person singular in *s*; thirdly, that the third person plural in *th* disappeared rapidly after the middle of the sixteenth century, and toward the end of it was confined almost entirely to the verbs *to do* and *to have*; fourthly, that of the forms in *s* of the same person and number, there is no evidence of decay within this period, and if there were any change whatever, the use of them seemed rather to increase than diminish; and finally, that forms in *th* for the first and second person plural, forms in *s*, for the first and second persons, both singular and plural, were occasionally to be met with, and that even forms in *th* for the first and second person singular are to be found, though under too doubtful circumstances to authorize the formation of any theory in regard to them.

Professor S. S. Haldemann read a paper upon what is termed "Pennsylvania Dutch," in which he traced the grammatical basis of this language back to native German dialects, especially those of Suabia and Switzerland.

The Association having accepted an invitation to attend a *soirée* given by the Hon. Freeman Clarke, no session was held in the evening.

MORNING SESSION, THURSDAY, JULY 28.

Professor Comfort, the Secretary, announced the donation to the Association of several books, as follows: From Dr. Heinrich Schliemann, of Paris, *Ithaka, der Peleponnes und Troja*; from Professor S. S. Haldemann, (1) *Investigation of the Greek ζ, by means of Phonetic Laws*; (2) Trevelyan Prize Essay, *Analytic Orthography—an Investigation of the Sounds of the Voice and their Alphabetic Notation, including the Mechanism of Speech and its Bearing upon Etymology*; (3) *Etymology as a Means of Education*; also the *Annuaire de l'Association pour l'Encouragement des Études Grecques en France, 4^e Année*, from the secretary of that Association.

Dr. Dwight moved that a committee of five be appointed to consider the subject of placing the Association upon a more permanent and effective basis, with a view to having corporate privileges. By motion, the subject was referred to the Executive Committee.

Upon the motion of Professor Whitney, the proposed amendment to Article II, Section 3, of the Constitution was taken from the table by unanimous consent and adopted by an unanimous vote.

Professor E. R. Ruggles, of Hanover, N. H.; Professor G. McMillan, of Hillsdale, Mich.; and Hiram W. Sibley, Esq., of Rochester, N. Y., were announced as elected members of the Association.

Professor Hyde, presented some points to illustrate "The Disuse of Passive Forms in Languages of the Aryan Family, and their Replacement by Reflexive Forms."

The first appearance of a passive in the Sanscrit is very noticeable, from its employment of the root *i*, or *ya*, for its expression. This means "to go," and the simple verb of existence, "to be," does not appear in the passive formation. This use of the verb, "to go," (so singularly repeated in the like usage of the negro dialect,) is very natural and reasonable. *Amatus sum*, "I was loved," express a condition very fully, an action very meagrely. The verb *go* conveys the sense of action. We have reason to think that in the mother Aryan, the genius of Schleicher would have decided for a similar form. Passing to the Greek, we recognize the Sanskrit root formative of the passive in the aorist ending $\eta\upsilon$, and the future $\eta\sigma\ \omicron\mu\alpha\iota$. These are thus the only true passives of the Greek. In the Latin verb, there are no true passive forms. The formative root occurs in few verbs, as *veneo*, compared with *vendo*, *pereo* with *perdo*.

All these deficiencies of the true passive are supplied by the increased use of the reflexive forms. Thus, "*λείπεται*," *amatur*, are shown by the root-analysis to be reflexive. The Greek gives the reflexives a somewhat regular classification, as middle; the Latin declares them passive, excepting the deponents. The modern languages of our family, with scarce an exception, have no semblance of a passive form. The passive idea is expressed adjectively by the verb *to be*, and the participle denoting finished action, as, "he is loved." Only the German expresses distinctly the idea of a state as separate from an action. These modern tongues make a very copious use of the reflexive form, which, however, has come to be periphrastic. Even the English, whose idiom inclines least to reflexives, tends to follow, as far as possible, the usage of its neighbors. In general, it may be said that proper passives have ceased to exist in our family of languages, and their place has been assumed by the reflexives.

One might reasonably inquire what feeling or fashion of the mind has caused this phenomenon. Language, in all its developments, is but the utterance of the inner conception, and takes its shape therefrom. If, now, we examine the use of the reflexive in the French, why may we not have a clue to its historic tendency from the beginning? The chief quality of the French reflexive is not so much its reflexiveness as its *indirectness*, its non-committalism. This may even be called its charm. This quality commends it to an expression aiming at cautiousness or politeness. In the French phrases, very beautifully does their reflexive guard or soften our blunter English talk. If this is the clear effect of the use of the reflexive to-day, it is not unreasonable to affirm that such it may ever have been, and in this the notable phenomenon of the loss of passive forms and the prevalence of reflexives may find its true explanation. Some features of the Semitic verbal forms indicate a similar tendency.

A paper upon "Contributions toward a Grammar of the Creole Dialects of Hayti and Louisiana," by Addison Van Name, was read, in the absence of the author, by Professor Whitney.

In this paper, suggested by Mr. Thomas's recent grammar of the Creole of Trinidad, a sketch was given of the more prominent characteristics of two dialects, the one of which is in common use in Hayti, among the uneducated classes, and the other spoken by a considerable portion of the former slave population of Louisiana. These dialects, like that of Trinidad, to which they are closely related, are descended from the French, with but a slight admixture of foreign elements, whether African or European. The process by which they have come to their present form is not unlike that by which the French itself grew out the Latin; the changes are not only of the same general nature, but often in the same direction, a tendency which appears in the French being carried still further in the Creole. There are not wanting also new formations which establish the claim of these dialects to be regarded as something more than mutilated French.

After noticing the phonetic differences between Creole and French, both the uniform changes which certain sounds undergo, and others of a more violent nature, the grammatical forms were considered. The French definite article has entirely lost its grammatical force, but remains attached, as an inseparable prefix, to many substantives. In its place, the Creole has converted the demonstrative adverb *là* into a post-positive article, and by composition with the personal pronoun *eux* has even formed a plural, *layo* or *layé*. Instead of the weaker forms of the personal pronouns, *je, tu, il, elle*, the stronger *moi, toi, lui, eux*, (Creole *moin, toi, li, yo* or *yé*) alone are used, and serve, at the same time, for the possessives. Nouns and adjectives have lost their few remaining inflections, and are invariable both for number and gender. The verb has suffered still more. The twenty or more inflections of *aimer* which are distinguishable by the ear are in Creole reduced to one, *aimé*, which may be considered the joint representative of the infinitive and participle, since in all regular and most irregular verbs these would, in the Creole pronunciation, be identical; where they differ, the infinitive is generally chosen. The different tenses are formed solely by means of auxiliaries, among which, however, *avoir* does not appear. The tendency of the strong or irregular verbs to become weak or regular, which has spread so widely in the Indo-European family, is noticeable here also. The syntax of the Creole is simplified in a corresponding degree. The genitive relation is indicated by placing the governed immediately after the governing noun. Many verbs which in French are reflexive, or which have the *régime indirect*, take, in Creole, the *régime direct*.

Hon. J. H. Trumbull read a paper upon "Some Mistakes concerning the Grammar, and in Vocabularies of the Algonkin Language."

This paper pointed out some of the errors that have resulted from cursory readings, or mis-readings, of Eliot's version of the Bible in the language of the Indians of Massachusetts. Some of these concern the grammatical structure of the Algonkin languages; others are found in the vocabularies. Of the former class, Mr. Trumbull mentioned:

1. The alleged discovery of a *definite article* in the languages of Massachusetts and Delaware. This discovery was announced by Mr. Duponceau, and on his authority has been affirmed by distinguished American and European philologists. It rests only on two or three mistranslations of verses from Eliot's Bible, and a false inference. Mistaking (*mo*) the *sign of the past tense* for a *pronoun*, Mr. Duponceau derived from this pronoun the prefix (*m'*) which he supposed to be the *definite article*, but which is in fact a *privative* and *indefinitive*, employed only before a few inanimate nouns.

2. The supposed *vocative case* of Indian nouns. In verses cited from Eliot, the terminations which Mr. Duponceau, Mr. Gallatin, and others regarded as belonging to the vocative singular and plural (*in* and *eunk*) are, respectively, those of *indefinite nouns-animate* and *collective* nouns, irrespective of case; as is shown by reference to other verses in which nouns of these forms were used by Eliot, as nominatives and accusatives.

3. Various false analyses of Eliot's translation of the name in Exodus 3 : 14, "*I am that I am*," as bearing on the question, whether a verb of simple existence can be found in any Algonkin language. Without entering into the discussion of that question, Mr. Trumbull showed that the Indian verb, used in the verse cited, affirms the relation of an individual to a species, or of like to like; "to be of the kind of," or "to be such as;" and that *nēn nuttinnīn nēn nūttinnīn* signifies, literally, "I myself am such as I myself am such as;" *Ego talis sum qualis ego sum*.

Errors of the second class—those that are found in the vocabularies—are more numerous. Many of these come from mistaking the order of words in the Indian text. Such was Professor Vater's, who put into his list of words in the language of the "Naticks, nach Eliot," (*Mithridates*, vol. iii., pt. 2, p. 338,) for the name of the *sun*, a verb meaning, "*he stood still*;" taking it, probably, instead of the noun which precedes it, from Joshua 10 : 13, "The sun stood still."

Twice, at least, the same distinguished scholar pointed out the resemblance between *cone*, another "New-England" name of the sun, and the Tatar *kun*, as an indication of the relationship of American and Tataric languages. Unfortunately, *cone* (*koon*, Eliot) means "*snow*," not "*sun*."

Dr. Pickering incorporated with his verbal index to Eliot's Grammar a few words selected by Mr. Duponceau from the translation of the Bible. Among these, *sohsumo'onk* stands for "*forest*." It means "*forth-shining*," and, as used by Eliot, "*glory*." Mr. Duponceau found it in Isaiah 10 : 18, and was misled by the position of words in the Indian text, where the order of the English—"glory of his forest"—is inverted.

Mistakes of this kind, and of all kinds, abound in a list of nearly three hundred words "extracted from Eliot," printed in the first volume of Dr. Schoolcraft's "Information, etc., respecting the Indian Tribes." For "*husband*," he gives, from Genesis 30 : 15, a mutilated fragment of a verb signifying, "*thou hast taken away*;" for "*boat*," stands the verb "*to come by boat*," from Acts 27 : 16; and so on through the whole vocabulary, which, to the comparative philologist, is worse than worthless.

AFTERNOON SESSION.

Dr. H. McCartee, of China, gave an account of the Languages and Dialects of China.

Dr. McCartee had observed, even in the writings of Max Müller, statements which allude to the Chinese as if it were one language, instead of being a collection of dialects. The written Chinese language differs also from the spoken language; it being uniform throughout the empire. Each word is represented by a character, which is capable of inflection or infiction. In reading these characters, a different pronunciation is employed in different parts of the country; just as the date of the present year, 1870, though represented by the same figures in English, German, and French, is pronounced differently in each of those languages. There are, indeed, as great differences between the dialects of China as between the languages of Europe. Many words, as some of the nouns and verbs, are common to the written and spoken languages. Other words, as the adjective "good," are nearly the same in all the dialects. But the word for "bad," for example, varies in every dialect and province; though a word which is an equivalent to "not good" would be everywhere understood. The pronouns differ in the various dialects, with the single exception of the first person singular of the personal pronoun.

There are two court or Mandarin dialects; one being spoken to the north, the other to the south of the Yangtse River.

What was the original dialect or language, it is impossible to say. The Chinese are not the aborigines of the country. Of these only a wild, savage remnant still exists. But since the emigrations of the Chinese into the country, (which took place in two directions; one by the way of Hoang-Ho, the other by the Yangtse-Kiang,) both the customs and the languages of the people have gone on diverging, until the empire is fitly represented to-day in its languages and customs by the continent of Europe. When summoned, a short time since, by the coroner in New-York, to act as interpreter between two Chinamen, he found that they could not talk together in their own language, though one was from Canton and the other from a place not a hundred miles distant from that city; but that they were holding a fragmentary conversation in broken Spanish.

In regard to the "pigeon-English," which is regularly taught in the schools of Canton, and which is often supposed by the English to be pretty good Chinese, and by the Chinese to be good English, this mongrel language is composed mostly of English words with Chinese endings, and which are used according to the grammatical and idiomatic construction of the Chinese language.

The written language is a sort of phonetic representation of the spoken. They have no alphabet, but use a character for each word. There are consequently many ten-thousands of these characters; but the acquisition of six thousand will give a person a good facility in using the language. One of the greatest difficulties in learning Chinese arises from their use of inflections in two words which are pronounced alike; a different inflection upon each giving to them altogether different meanings. The number of tones or in-

flections employed can be reduced to five. The spoken language is more syllabic than the written, the words of which are nearly all monosyllables. In the dialect of Ningpo are many words of three or more syllables, some of which are compound words, while others appear to be simple and incapable of analysis.

It has been said that it is impossible to print the spoken dialect in Roman characters. But this is really easier than to use the Chinese characters. The whole of the New Testament, and many other books, have been printed with Roman characters, and they are readily intelligible to the Chinese.

Hon. J. H. Trumbull read a paper "On Algonkin Names of the Dog and the Horse."

In every Algonkin language, we meet with two names for the dog: one of which belongs to that animal exclusively; the other is given him in common with other domestic animals.

The former, which may be called his proper name, seems to be derived from a primary verb signifying "to command," and in the passive, "to be commanded," hence, "to obey," "to serve," "to be a helper." Among the northern tribes, the dog was "the helper," not only in the chase, but as a draught-animal.

The other name describes him as "the belonging" or "the live property" of his owner—his *chattel*; *suum peculium*. The Indian had neither flocks nor herds. The dog was the only animal with which he associated the ideas of exclusive possession and of personal property; just as in the Aryan languages these ideas were associated with the cow and the ox.

When other species of domesticated animals were introduced, the Indian gave them also this *general* name, of "live property," or the like, in addition to the *specific* and *descriptive* name he invented for each. Sometimes this *specific* name was formed by prefixing a qualifying word to the general. The Chipewewa spoke of his horse and his dog alike, as *o'di-un*, "his domestic animal," "his live property;" but he had for the latter a *specific* name, *annimoosh*, and he described the horse by another, as *paipaizhikogazhi*, "the one-nailed," or "the beast having undivided hoofs."

In the Delaware, the *specific* name of the European dog marks him as "wolf like." The *specific* name of the horse is "the beast who is accustomed to carry upon his back a living burden." There was a *general* name for both—employed also as a prefix to the name of every other kind of domestic animal—meaning, as in other Algonkin languages, "live property," or "servant." The Wyandot name of the horse, though of different composition, has nearly the same meaning as the Delaware; "the slave-animal that carries upon his back."

The paper gave other examples of the names of domestic animals in several American languages, with an analysis of each. In conclusion, it suggested to the compilers of vocabularies the importance of ascertaining not merely what each animal is called, but the *meaning of the name*, and whether it is *specific* or (more largely) *appellative*. In spoken languages, the constancy of Indian roots, and the inviolability of the laws of verbal growth, make analysis comparatively easy. It is possible that a thorough investigation of the

composition of animal names used by any American tribe would give results not without value to philologists who are prosecuting similar investigations in other families of language, or are working their way toward the very origin of speech.

Dr. A. C. Kendrick spokē upon the "Translation into English of the Greek Aorist Participle:"

The Greek future and perfect participles correspond to the English, leaving only the English present participle to answer to the Greek present and aorist. The Greek present denoted continued action; the aorist, a simple act. The aorist naturally throws itself into the past, because a temporary act is ordinarily expected in the past rather than the present. Hence the statement that the aorist participle is to be translated by a form denoting a time anterior to that of the verb with which it is associated. In point of fact, however, the aorist participle in this connection has a logical rather than a temporal connection with the verb. The aorist does not *necessarily* express an act anterior in time to that of the finite verb with which it is associated; and when it does express a previous act, the fact of priority is never emphasized. Even though we may, in certain connections, find it impossible to translate the aorist participle by any thing else than the English perfect, we thereby inject into the Greek an idea which it does not contain. The English present participle, according to the speaker, had not only a present force, but an aoristic force in which it corresponds strictly to the Greek aorist. *Which* force the English present participle may have in any given case, must be determined by the context. One mode, then, of translating the Greek aorist participle is by the English present participle—not as a matter of accommodation, and because we can do nothing better, but because the English has the precise force of the Greek. Other modes of rendering are by a finite verb. Still other modes are by the English present participle—(Query? verbal noun)—in connection with an appropriate preposition. As a last resort, the English present participle may be used. As we have no aorist participle, *eo nomine*, in English, we have come to use our perfect participle in somewhat closer approximation to the Greek aoristic sense. As the Greeks seem to have had an especial fondness for the aoristic form, they may have used it where the perfect would have been more natural—especially since the perfect participle was longer and more awkward in form than the aorist. Of course in such cases the rendition of the aorist by the English perfect is desirable. The speaker wished to strike a blow at the current teaching that the Greek aorist participle should be uniformly rendered by the English perfect. Crosby's Grammar took this ground. Taylor's translation of Kühner took this ground. Hadley's Grammar—the author of which sat just before the speaker—was the only one which he knew that made a correct statement on this point.

EVENING SESSION.

Dr. Dwight, Chairman of the Committee upon the Pronunciation of Latin and Greek, presented the following report:

The committee see no middle ground between the general principles laid down in the report of last year and the taking up of the whole matter in

detail. They are not prepared, therefore, to recommend, in a formal way, any thing additional to the former report.

The members of the committee are unanimous, however, in stating that, individually, they prefer the pronunciation of the diphthongs (1), *au* (*av*) like *ow* in *now*; (2), *ou* (*ov*), like *oo* in *moon*; (3), *eu* (*ev*), like *u* in *duty*. They also prefer, in reading Greek verse as such, to regard the rhythmic instead of the written accent.

By a motion at a subsequent session, it was ordered that the report of the Committee on Pronunciation, which was adopted last year, be reprinted in connection with the above supplemental report. The report adopted last year was as follows:

While the committee recognize the fact of wide diversities of opinion among American scholars concerning the mode of pronouncing the classic languages, and while among the members of the committee themselves there are considerable differences of judgment, they agree in stating that *they deem some uniform system* of pronouncing the classic languages to be greatly to be desired, if possible to be obtained.

They would favor, as at least one feasible step toward such a result, the *adoption of the continental system of pronouncing the vowels in both Latin and Greek.*

It is also their opinion that *it is desirable to observe the written accent in reading Greek, and also to mark the quantity of the vowels in reading both Latin and Greek.*

Professor Whitney read a paper upon "The present State of the Discussion of the Origin of Language."

Professor Whitney said that he had no intention of discussing the vast and difficult question of the origin of language, but wished only to straiten the field of discussion a little, and to point out in what direction further labor would be likely to produce the most valuable result.

In the first place, he claimed that the question was a legitimate scientific one, and to be treated by purely scientific methods. This, on the one hand, excludes all traditional or historical evidence, since the period of origin incontestably lies far beyond the reach of tradition or history. It forbids the mingling together of scientific and scriptural argument; when scientific research has reached a result, then is the time to compare it with scriptural statements, and see how they agree or are to be reconciled. On the other hand, it excludes the assumption (such as has been made especially by one popular authority, M. Müller) of a different human nature, a special faculty or instinct. To make such an assumption is to quit entirely the scientific basis.

In the second place, we are to distinguish clearly between what is already done, and what remains to do. To a certain extent, the question is historical; we arrive by actual historical inquiry at roots, usually or always monosyllabic, not parts of speech, grammatically unformed, as the concrete beginnings of speech. All authorities, worthy of attention, agree in this; no further work is progressive that does not build on this as a foundation.

In the third place, the point of widest bearing and highest consequence next pressing for settlement is, whether the first inducement to speech was from within, an impulse toward expression, for the relief and benefit of the speaker, or whether it was from without, a desire to communicate with another—whether speech was pushed out or drawn out. On this, authorities are greatly at variance, and the one view or the other is commonly assumed without argument. If it were well settled, opinions would be vastly nearer accordance on the whole question.

One more point of prime consequence was noted: Does the conception precede the word, or the word the conception, or are the two inseparable in origin, so that the conception can not exist without the word? This, too, is one upon which opposite and apparently irreconcilable opinions are held by highly-esteemed authorities.

These are the four tests by which every investigator in this department may be tried. If he is not sound upon the first two, his work is out of harmony with the present condition and spirit of linguistic science, and will not be heeded; if he leaves out of sight the other two, or is unclear respecting them, his work will add nothing essential to what has been already done—and, it may be claimed in conclusion, if he takes the wrong side of them, he will never reach a valuable result.

President Samson read a paper upon "Embryological Method in the Study of Language."

The method called embryological, because it proposed the traces of organic development from the germ, has been employed only in modern times in physical science, since an instrument like the microscope is essential to minute observation. In metaphysical science, the tracing of spiritual development from the first manifestation of sensibility in the yet unconscious infant was pursued by the Brahmins of India as truly as by Leibnitz and Hamilton in recent days.

Human speech belongs to physical science, as Müller and the German writers argue, inasmuch as the law of its accumulated growth in languages long elaborated is beyond the control of the individual will. At the same time, on the lip of every master speaker, language is an instrument shaped as well as wielded; in its origin, it is an invention of human ingenuity: and hence its investigation belongs to metaphysical science.

For a double reason, then, the method of embryological study may be applied to the analysis of language. The first utterances of childhood, the infant-like effort to gain a foreign tongue, the fixed dialect of rude tribes, the vocabulary of technical artisans, the interjectional utterances of persons under strong excitement, and the elaborate periods of finished speakers as compared with the language of ordinary conversation, furnish so many distinct fields in which the germs of development in the linguistic communication of ideas may be traced.

Language is addressed to the eye in both sign and written symbols, and to the ear in vocal utterances. Sign-language, prominent in children and uncultured nations, an accompaniment of all speech, and in the master orators more expressive than vocal utterance, is now specially studied and elaborated

for the purpose of higher instruction given to deaf-mutes ; and hence its germinal development as a human invention can be readily traced.

In sign-language, there are three elements of address—mimic, tropic, and phonetic illustrations of thought. To represent plain or rolling land, smooth or agitated water, the deaf-mute moves his hands and arms in horizontal or undulating, smooth or notched lines ; thus employing mere imitation in expression. To picture the abstract ideas of fear or jealousy, of faith or charity, he gives the concrete expression always manifested in the features and movement of the person possessed by these emotions ; and thus, by tropes or symbols, communicates intellectual conceptions. Yet again, to indicate reference to a particular place or person, only to be recognized by his name uttered to the ear, or spelled in letters for the eye, the deaf-mute uses phonetic signs, representative of the letters of the alphabet.

This latter presupposes the existence in the mind of the deaf-mute of the forms of written language. In this element, now—the phonetic—a striking analogy is remarked between the principles of sign and written symbolism. Champollion's first clue to the system of Egyptian hieroglyphics was the observation that where, on the Greek inscription of the Rosetta stone, a proper name occurred, an oval inclosed certain figures ; indicating that a phonetic element entered into this mode of conveying thought. Future study, both of Clement, who, in the first century of our era, described the hieroglyphic system, and examination of the monuments of Egypt themselves, has developed classes of symbols, mimic and tropic, as well as phonetic. The hieroglyphic representations of water rippled, and of land undulating, is just the notched and waving line of deaf-mutes ; and as the great study of the deaf-mute teacher is now the invention of new tropical representations of conceptions, so the great effort of the decipherer of hieroglyphics is to divine the ancient inventor's art in tropical symbols.

The Chinese written characters are now classified into the same three divisions ; the mimic being gradually systematized into simpler tropic signs ; and the phonetic signs, quite distinct in both character and history, being used with a uniting bar to link them in forming proper names. The newly-discovered Moabite stone gives historic confirmation to the previously-existing inductive suggestion, that the old Phœnician alphabet, on which the Hebrew and Semitic and also the Greek and Indo-European alphabets were formed, was originally composed of the same three elements. This old and somewhat primitive specimen, as Colonel Rawlinson has shown, specially illustrates the mimic element.

As now sign-language accompanies and aids to illustrate all vocal utterance, the eye supplementing the ear, and as written language is an invention translating auricular into ocular signs, the suggestion is a natural one, that an analogy exists between the elements of vocal and written signs. Both seem alike to have been the invention of human genius ; and it is legitimate, in watching the first utterances of childhood and the exclamations of men essaying a new language or speaking under excitement, to seek in these germinal types of human speech the same analysis found to enter into written language.

A careful examination reveals the fact that the vocal elements are few in

number; the effort of written language being to find a symbol for each of them. The vowels, or *vocales* proper, are but about fifteen in number, being formed by fixed positions of the lips, teeth, palate, and larynx; while the *consonants*, which are, as their name indicates, but transitions between the sounds proper, do not exceed twenty-five in all the known tongues. A comprehensive study indicates that the lip-vowels and consonants, in which the movement of the organs is conspicuous, are found in all the rude and simple dialects; that the harsher sounds are heard among energetic and especially in warlike tribes; and that softened utterance grows up with culture. From the age of Grecian philosophy, an analogy between sounds addressing the ear and lines and angles agreeable in their proportions has been traced in varied arts. Plato, in his *Cratylus*, makes Socrates trace virtually the three classes of elements observed in sign and written symbols. Vocal signs, or uttered words, he argues, *succeeded* to sign-language; some of the earlier words were imitations of sound given forth by natural objects either animate or inanimate, but could not imitate forms or other conceptions. Other words, virtually tropes, suggested indirectly by their sound objects addressing the other senses, and also shadowed mental conceptions, outside of all representations, appealing to the mind through the senses. Yet, thirdly, in proper names, while some represented certain attributes or characteristics of the person bearing the designation, many also must have arisen in mere arbitrary phonetic signs invented to designate different persons in whom no special characteristic could be noted.

The paper presented numerous facts in the structure of aboriginal as contrasted with cultured tongues, illustrating the analogy hinted; and also traced the history of investigations made since the days of the Greeks, in the early ages of Christianity, in Charlemagne's era, and in yet later times; all of which indicate that the origin and development of vocal utterance can be philosophically studied, as truly as that of a plant, or as the growth of the useful and the fine arts developed by human genius.

MORNING SESSION, FRIDAY, JULY 29.

President Anderson invited the members of the Association to visit the University in the afternoon.

A motion was made and carried unanimously, that the next (third) annual meeting of the Association be held in New-Haven, Ct., to commence July 25th, 1871.

The following report from the Executive Committee was adopted:

With reference to the proposition for this Association to establish a Philological Institute, which was referred for consideration to the Executive Committee, this committee, after due discussion, passed the following resolution:

Resolved, That in the judgment of the Executive Committee, it is not expedient for the Association to commit itself at present to the project to establish a Philological Institute.

Messrs. Willis C. Gaylord and William F. Lush, of Rochester, were announced as members of the Association.

Prof. S. S. Haldemann, Mr. S. J. Buckingham, and Prof. Schele de Vere were appointed a committee to nominate officers for the ensuing year.

The following resolutions were offered by Prof. Schele de Vere, and were unanimously adopted :

Resolved, That the cordial thanks of the Association be tendered to Mrs. Freeman Clarke for her courteous attentions to the members, who have highly enjoyed and fully appreciate her hospitality.

Resolved, That the thanks of the Association be tendered to Messrs. Ellwanger & Barry, and Mr. James Vick, for the beautiful flowers with which they decorated the place of meeting of the Association.

Resolved, That the thanks of the Philological Association be tendered to the trustees of the Brick Presbyterian Church, of Rochester, for the use of their building and its numerous conveniences.

Resolved, That the thanks of the Association be tendered to the local committee for its very thorough preparation and liberal outlay ; also,

Resolved, That the local committee be respectfully requested to convey to the citizens of Rochester the high appreciation and cordial thanks of the Association for their generous hospitality extended to its members.

The report of the Committee upon Renominations, recommending the reelection, for the year 1871, of the officers of the present meeting, was unanimously adopted, and the officers were declared duly elected.

B. W. Dwight read a paper^e on "Considerations in favor of the thorough Reconstruction of Latin Grammar on Philological and Analytical Principles."

He expressed his surprise that Latin grammar had never yet been placed in England or America on its true historical and philosophical basis. Of the three forms of lingual analysis—morphological, verbal, and sentential—he stated that only the latter had received any adequate scientific treatment in Latin. Any analytic comprehension of the real genetic structure of Greek forms, nominal and verbal, was impossible to the grammarians at Alexandria in their day of rude beginnings in linguistic study. And the Latin scholars who copied their ideas and analyses had only such conceptions as they furnished them of the relational elements of human speech, and of the special forms of their own language. The idea on which they acted in arranging declension-forms and conjugation-forms was as much the military one as any other, of making a bold front, behind which all exceptional and doubtful matters could be easily stowed away from view, except as they were searched for.

It is as necessary to the higher ends and uses of thorough lingual study to comprehend the anatomical structure of verbal and grammatical forms, as it is, for accuracy and effect in drawing and painting, to understand well the in-

ward conformation, part by part, of the things represented. Not until within a very recent date have the materials existed for the proper and final readjustment of Latin grammatical forms on a completely scientific basis; and what has been done so well in Germany and America in respect to Greek grammar, ought now to be done in respect to the Latin.

The structural elements of the Latin verb are the verb-stem and tense-characteristic, (which, when associated, make a special tense-stem in each case;) with the personal or pronominal endings used for flexion; and the union-vowels, (*e*, *i*, and *u*,) employed to connect verb-stems and tense-stems with their personal terminations; and, in the forms of the passive, the passive voice-sign. In the structure of the Latin noun, there is the same arrangement of word-stem and flexion-ending as in the verb; and, in the case-form, the idea of its number is carried plainly in each case as a general fact. Both nouns and verbs should be classified according to their elemental substance, or *their actual stems*; and in separate divisions according to the original or changed forms of those stems. Contraction is a much more leading force in determining grammatical and verbal forms in Latin than in Greek; although this fact is so little hinted at in our best grammars and dictionaries.

Latin nouns are divisible into two great classes.

I. The consonantal declension, (the present third,) or those having a consonantal stem.

II. The vowel or contract declensions—all having vowel-stems, and all contract—five in number, A, E, I, O, U.

Exceptions, so named in our school grammars now, will disappear in large numbers under a right classification of Latin nouns, and a true presentation of their structural and pathological history. The reasons also for quite a number of prosodial rules will become manifest.

I. The consonantal typical or normal declension-form. It comprises all nouns that have a stem ending in a consonant.

Here the author gave, with references case by case to the corresponding Sanskrit-forms, the proper flexion-endings of this declension and as *the original norm of all Latin declension-forms*; arranging the cases according to their analytic relationship to each other as, nominative, vocative, accusative, genitive, dative, and ablative.

Under this declension he classified nouns as

1. Those having the pure unaltered stem in the nominative; (1.) With the gender-sign, *s*, affixed; (2.) Without it.

2. Those having an altered stem with or without the gender-sign.

1. Those of pure unaltered stems he subdivided into: (1) Labial stems; (2) Dental stems; (3) Liquid stems; with examples and remarks under each head.

2. Those of altered stems in the nominative comprise the great mass of nouns in this declension of labial, dental, liquid, and guttural stems.

(1) Nouns having labial stems altered in the nominative, (done always by affixing the gender sign, *s*, to them,) are few in number: (2) As to those of dental stems, the four following rules prevail: 1 §. They always drop a final dental before the gender-sign, as *lapis* for *lapids*, stem *lapid*: 2 §. They always (with the exception of *caput* and its compounds) drop a dental when

final without the gender-sign, as *poema*, stem *poemat*, and *lac*, stem *lact* : 3 §. They always drop one of two letters of the same kind, although radical, which would be final in the nominative, as in *os*, stem *oss* : 4 §. They sometimes lengthen the final vowel of the stem, or make a stronger vowel of it than before, as in *miles*, stem *milit*.

(3.) As to liquid stems,

1. They have a manifest tendency to assume a strong form in the nominative, as appears,

§ 1. In strengthening the short vowel *i* of the stem into *e* before *n* final, as in *flumen*, stem *flumin*.

§ 2. In taking the still stronger vowel *o* as a final vowel, when rejecting a radical *n* from the end of the nominative form, as in *imago*, stem *imagin*.

§ 3. In changing short *o* before *r* final in the nominative into *u*, as in *robur*, stem *robdr*. In *corpus*, stem *corpor*, we have, besides this change, the change also of final *r* into the stronger letter *s*. In such forms as *fœdus*, stem *fœder*, we have similar compound changes to those in *corpus*—only here it is *e* that is deepened into *u*.

2. Liquid stems reject, like dental, the final letter of the stem before the gender-sign, as in *pollis*, stem *pollin* ; *glis*, stem *glir* ; *mas*, stem *mar*.

3. In *fel*, *mel*, and *fur*—stems *fell*, *mell*, and *farr*—one of two repeated letters is dropped in the nominative, (as in the dentals *as* and *bes*.)

4. S final in the nominative of liquid stems is sometimes the gender-sign with the final letter of the stem absent, as in *cinis* and *pulvis*, stems *ciner* and *puloer* ; and is always to be so analyzed when the given word is of the masculine or feminine gender. But it is sometimes substituted, for greater ease of utterance for an original *r* radical, as in *aes* and *crus*, stem *aer* and *crur*. It is always to be so analyzed when the stem is neuter.

(4.) As to guttural stems : they are never found unattended by the gender-sign : they are never of the neuter gender.

Mr. Dwight then traced at length an analysis of the vowel or contract declensions.

1. The vowel A declension. It includes all nouns whose stems end in *a*. Here belong also a few Greek nouns ending in *a*, *as*, and *es*—the final *s* in each of these forms being the masculine gender-sign. The Greek *e* nouns, always placed here, should be contrarily placed with the *e* declension.

2. The vowel E declension, (the present fifth.) In Greek grammar, nouns having *e* stems are placed with those of *a* stems, because so much alike in both their full and contracted forms. They should be in Latin in juxtaposition. Here the present and earlier forms of this declension were presented together, and their contractions were explained.

3. The vowel I declension. This is a new declension-form and not arbitrarily chosen, but necessitated by the fact that nouns of the *i* stems can be properly placed nowhere but in an *i* declension. They are such as *amnis*, *avis*, *civis*, *finis*, *ignis*, *ovis*, *unguis*, etc., all whose stems end in *i*. Some nouns belonging to this declension have the stronger vowel *e* in the nominative, as in *ædes*, *nubes*, *rupes*, etc., stem *ædi*, *nubi*, etc.

4. The vowel O declension, (the present second.) It includes all nouns whose stems end in *o*. Either the final *o* of the stem is changed into *u* in the nominative before the gender-sign *s*, and before *m*, the sign of no-gender ; or

the *o* syllable is dropped from the word, which is thereby so much shortened in form, as in *gener*, (for *generus*, for *genero-s*), stem *genero*, and *vir* for *virus*, stem *viro*. In the Latin-Greek noun, *heros*, stem *hero*, (which should be placed under this declension,) the original mode of declining *o* nouns in Latin, appears but little changed from its typical form.

5. The vowel U declension. This includes all nouns whose stems end in *u*. The changes in this declension are less positive from the normal form than those of the other declension-forms.

How absurd appears the statement, in the light of these facts and principles, that nouns are to be divided into five declensions in Latin according to their various genitive endings; and that the stem itself is to be found by cutting off, in the first and second declensions, the last letter of the genitive, and in the fourth declension the syllable *us*, leaving only the fifth declension to be a vowel-declension.

The verb-forms of the language were analyzed by the author in the same way as those of the noun. The Latin verb was treated as if a wholly organic structure; and it was dissected and reconstructed according to the principles of its own organic constitution. Verbs were divided, like the nouns, into,

I. The consonantal, typical or normal conjugation-form.

II. The vowel conjugations.

1. The A conjugation. 2. The E conjugation. 3. The I conjugation. 4. The U conjugation, (a new conjugation, made necessary to include words of *u* stems, as *acuo*, *loquor*, *pluo*, *ruo*, *spuo*, etc.)

Our Latin grammars should be fashioned so as to present to the student all that is now known of the structure of the language, according to the most thorough morphological analysis. Latin grammar is, however, after almost two thousand years of the study of its elements in all civilized nations, in a crude, unscientific, and unartistic shape, like the agriculture of the eastern world, in respect to both its principles and its instruments; like the natural sciences in all countries at the beginning of this century; like all our dictionaries, Latin and Greek, and, within less than six years, English also.

Mr. H. M. Colton, of New-York, read a paper, in which he pointed out some of the difficulties which are practically met with in securing uniformity of pronunciation of the Latin and Greek languages. This paper was followed by a long discussion, at the close of which, upon the motion of Prof. Buttz, the members of the former Committee upon the Pronunciation of the Classic Languages were appointed a committee "to devise further means to secure uniformity in the pronunciation of the classic languages."

Prof. Comfort exhibited a folio volume, which was presented to the Association by Dr. McCartee, entitled, *The Monument of Yu*, and containing a reduced copy of an inscription upon a tablet at Si-ngarfufu, in the Province of Shensi, in China. An antiquity of over three thousand years is claimed for the inscription, and is

accepted as correct by Bunsen and some others. The monument is interesting as showing the *tadpole* character or form in which the ancient Chinese classics were written, before the present characters were adopted.

The minutes of the Association were read, and the Association adjourned at twelve M.

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Pres. M. B. Anderson, University of Rochester, Rochester, N. Y.
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TRANSACTIONS
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I. — *Studies in Cymric Philology.*

By E. W. EVANS,
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My object in this paper is to commence a series of notes on questions of Cymric philology, some of which are discussed or suggested and others left untouched in the great text-book on this subject, the *Grammatica Celtica* of Zeuss. My references will be to the second edition, in which some errors of the original work have been corrected, and some important additions made, by the learned Ebel. I shall also refer frequently (by the abbreviation Myv.) to a class of documents not much used by Zeuss or his editor, the old and early-middle Welsh poems, as they appear in the *Myvyrian Archaeology*, edition of 1801. Among other documents referred to will be the *Beiträge zur Sprachforschung* (Beitr.), Berlin, 1858–65,— the oldest copy of the Welsh Laws, known as the *Venedotian* (Leg. Ven.), referred to the twelfth century,— and the oldest copy of the first part of the *Annales Cambriæ*, known as the *Chronicum Cambriæ* (Chron. Camb.), and referred to the latter part of the tenth century.

I.

A few preliminary statements in regard to the history of consonant changes in Welsh may conduce to the better understanding of some things that follow.

In comparing old Welsh, as seen in the ancient glosses and fragments published by Zeuss and Stokes, with modern Welsh as seen in all compositions dating from the Reformation down, we perceive that there has been a general infection of consonants not initial, as follows: Old *p*, *t*, and *c* have become, respectively, *b*, *d*, and *g*; old *b* and *m* have become *f* (pronounced as English *v*); old *d* has become *dd* (pronounced as English *th* in *the*); while old *g* has in some cases passed into *i*, *y*, or close *e*, and in other cases disappeared. Exceptions regularly appear, however, in certain combinations, e. g. in *st*, *rt*, and *nt*.

Extant manuscripts of the twelfth century show that these changes in consonant sounds had already taken place, for the most part, in the transition from old to middle Welsh. The most prominent exception is, that in middle Welsh there was more or less fluctuation between final *p*, *t*, *c*, and *b*, *d*, *g*.

The changes above described I shall designate as the depression of consonants, in order to distinguish them from other kinds of infection, known as the aspirate and the nasal.

While initial consonants have, in passing from old to middle and modern Welsh, been persistent in the radical forms of words, the complex Welsh system of initial inflections (if we may so designate a system by which words undergo initial changes when placed in certain syntactical relations) received considerable increments during the middle period.

II.

There has been some room left for doubt as to when the change from old *d* to modern *dd* took place in pronunciation. Until about the year 1400 there was no distinctive notation for the latter sound; see Stephens' *Literature of the Kymry*, p. 453. I find the clue to it, however, in earlier documents, by comparing two modes of spelling. In some of them *d* is used to represent this, besides its more usual sound, while in others, strangely enough, the same secondary office is assigned to *t*. By observing what places occupied by *d* in the one class are regularly assigned to *t* in the other, it may be seen that even in early-middle Welsh (aside from such cases of initial

inflection as were not yet common) the subvocal *dd* sound generally obtained where it now does.

The nearest approach that I have seen to a recognition of this test is in the second edition of Zeuss, where it is stated that *t* when final sometimes represents the infected *d* (*dd*), but hardly when internal. Examples are given from the oldest copy of the Laws — where a mixed orthography prevails in this particular as in others. I therefore deem it important to call attention to the fact that in the majority of the poems of the twelfth century and the first half of the thirteenth, printed in middle Welsh orthography in the Myvyrian — including those taken from the Black Book of Caermarthen — the use of *t* to represent the *dd* sound is quite regular, not only when final but in other positions as well. As test examples I give the following words in which we cannot, consistently with what is known of their history or etymology, suppose a mute *t*: Old Welsh *Griphiud* (Chron. Camb.), modern *Gruffudd*, Griffith, in one class of middle Welsh documents is *Gruffud* (Myv. I. 365), in the other, *Gruffut* (ib. 290); old Welsh *bodin*, gl. “turma,” modern *byddin*, is in one class *bydin* (ib. 202), in the other *bytin* (ib. 387); modern *Dafydd*, David, is in one class *Dafyd* (ib. 198), in the other *Dauit* (ib. 336); modern *bardd*, bard, (compare the *βάρδοι* of Strabo,) is in one class *bard* (ib. 337), in the other *bart* (ib. 230); modern *Gwyddel*, Irishman, (compare old Irish *Gaedal*,) is in one class *Gwydel* (ib. 174), in the other *Gwitel* (ib. 80); modern *heddiw*, to-day, (from *diw* or *div*, day,) is in one class *hediw* (ib. 415), in the other *hetiw* (ib. 165); modern *ymddiddan*, conversation, (from *diddan*,) is in one class *ymdidan* (ib. 173), in the other *ymtitan* (ib. 265); so also *ymtial*, revenge (ib. 79), modern *ymddial*, from old Welsh *digal* (Chron. Camb.). The list might be extended indefinitely.

It detracts nothing from the force of the argument to say that there are exceptional instances of variable spelling in the same document. The evidence, then, goes to show, what we should expect from analogy, that as a general fact the infection of old *d* took place in the transition to middle Welsh.

But whether the *dd* sound was altogether unknown in old Welsh is a question which I do not at present discuss.

III.

Zeuss observes that since the quantity of vowels is not marked in British MSS. it must be "determined by comparison," that is, by comparison with Irish and Latin words, latinized British and Gallic names, etc. Doubtless the conclusions to which he is thus led are generally correct so far as old Welsh is concerned; but he often falls into error in assuming the persistence, in later Welsh, of original short vowels.

In considering the quantity of Welsh vowels I leave unaccented syllables out of the account, because the tendency of the modern language is to make them all short without regard to their origin — diphthongs, of course, excepted. The accent, it should be observed, is almost always on the penult. In regard to the quantity in accented syllables and monosyllables I have two general facts to state which do not seem to have been observed.

1. In monosyllables and accented syllables the vowel is regularly made short when followed by two (or more) consonants. This statement must be understood as referring to the inherent quantity of the vowel itself; for on account of the time required for the distinct utterance of two consonants the syllable may still be called long. When a long vowel is thrown into such a position, by composition, derivation or other grammatical process, it is shortened: thus *cryfder*, strength, from *crÿf*, strong; *undeb*, union, from *ün*, one; *porfa*, pasture, from *pōri*, to graze; etc. The rule holds good even when the second of the two consonants is *i* or *w*: thus *moliant*, praise, from *mōli*, to praise; *gweddwon*, widows, from *gwēddw*; etc. But we must avoid the error of treating *w* as a consonant in the diphthong *wy* (pronounced very much as French *oui* in *bouillon*); thus *gwēlwyd*, was seen, from *gwēled*, to see. The exceptions to the rule are very few, and arise from synæresis; thus *gwñant*, they do, older *gwnañnt*. We must ex-

clude from this rule, as properly belonging to the following, such words as *ofn*, *cwbl*, *gwobr*, and others ending in two consonants the last of which is *l*, *n*, or *r*; for they are really disyllables (formerly sometimes written *ofyn*, *cwbyl*, *gwobyr*, etc.), although on account of the very short quantity of the last syllable they are treated in verse as monosyllables.

2. Vowels followed by only one consonant (in monosyllables and accented syllables) are, as a very general rule, long, when the consonant is *b*, *d*, *g*, *f*, or *dd*,—that is to say, when it belongs to the class of depressed consonants, or those which have undergone the change before mentioned as marking the transition from old to middle Welsh. A very few words are excepted,—*ag* and *nag* when not emphasized, *rhag*, *ab*, and possibly one or two others, that have not occurred to me. All the examples given in Zeuss under the head of “*Vocales Britannicae Breves*” conform, in their modern forms, to the rule; that is, the original short quantity has been lengthened: thus, *māb*, son, old Welsh *map*; *cād*, battle, old Welsh *cat*; *llāfar*, speech, old Irish *labar*; *mēfl*, disgrace, Irish *mebul*; *gōf*, smith, Gallic *gob*; *ēbol*, colt, from primitive *ep*, horse; *cōg*, cook, old Welsh *coc*, Lat. *coquus*; *rhŷd*, ford, old Welsh *rit*; *llŷdan*, broad, old Welsh *litan*; *bŷd*, world, old Irish *bith*; *Dŷfed*, Demetia; etc.

That the depression of consonants and the lengthening of preceding short vowels were chronologically connected will appear evident when we consider, further, that before single consonants not depressed the vowel (in monosyllables and accented syllables) is very frequently short—always so in the cases where *p*, *t*, *c*, and *m* remain: thus *llac*, loose; *llyffant*, toad; *calon*, heart; *cyllell*, knife; *crwm*, bent; *gwan*, weak; *llong*, ship; *copa*, top, summit; *gyru*, to drive; *cusan*, a kiss; *cetyn*, a piece, a bit; *chwythu*, to blow; etc. But before *l* cases of short quantity are rare; *ch* regularly lengthens the preceding vowel; so also in monosyllables does *s*. The condition is here implied, of course, that the consonant is not followed by another. Formerly consonants not depressed, except *l* and those represented by two characters (*ll*, *th*, *ng*, etc.) were often doubled, to indicate the short quantity of the

preceding vowel; thus, *gwann*, *gyrru*, *cettyn*, etc. It should be added that *ng* — which generally represents an original *nc* — always shortens the preceding vowel, as if it were still two consonants.

Long words have a secondary accent, preceding the primary. It is subject to the two foregoing rules of quantity, except where it falls on the prefixes *cyd* and *di*; in that case the vowel remains long even before two consonants; thus, *cýdsyl-weddoldeb*, *didreftadu*.

IV.

In treating of the derivation of substantives and adjectives in Welsh, Zeuss makes no mention of the termination *-ing*, which in the early poets, (old and early-middle), occurs not infrequently. In the oldest Welsh MSS. *g* is used to represent (besides its more usual sound) the sound now represented by *ng*: thus in the Black Book of Caermarthen, *Freige*, modern *Efrainc*, the French, or France; *Tegigil*, modern *Tegeingl*, a local name (Myv. I. 578). Hence *-ing* is usually disguised as *-ig*; thus *Ergig*, modern *Erging*, a local name (ib.). In late-middle copies of the earlier writings the spelling *-ing* prevails.

This termination is often used with a patronymic force. It appears also in the names of certain districts, most of which are known to be derived from personal names.

Thus in Gwalchmai, a poet of the twelfth century (Myv. I. 194), *Cyman Coeling*, Cynan, of the race of Coel: in Cynddelw, also a poet of the twelfth century (ib. 232), *Kynverching werin*, the people of the race of *Cynvarch*; *o vonet Coelig*, of Coelian stock; *o Vaelgynig* (rhyming with *ig*, that is *ing*, distress), of the race, or country, of Maelgwn; *roted arduyant ar Dinodig*, honor has been bestowed on Dinoding, that is, on the country of Dunawd (the Dinoot of Beda). Of the old poets, Taliesin (ib. 71) has *Coeling*; Meigant (ib. 159) has *Cadelling*, of the race of Cadell, and *Dogfeiling*, of the race of *Dogmael*; Golyddan (ib. 157) has *Glywysyg*, which in a copy of Nennius referred to the tenth century is spelt *Glevising*. This is the ancient name of some district in South Wales,

derived from the personal name Glewys (see Stevenson's Nennius). Price, in his *Hanes Cymru*, erroneously retains the early-middle spelling, *Glewysig*.

Does *-ing* represent the *-incus*, *-inca*, *-incum* (Z. 807), of Gallic personal and local names?

V.

The Juvencus gloss, "*istlinit, profatur*," (Beitr. iv. 392) is mentioned in the second edition of Zeuss as if it were the only example of the preservation in Welsh of the third singular present indicative active in *-it*; compare Irish *-id* and Latin *-it*.

In the old Welsh poems, which although they come to us in a corrupt form — that of imperfect translations into middle Welsh — yet often preserve archaic features, I find frequent examples of the use of this termination, generally depressed, however, in the later copies, to *-id*. Thus in the Elegy of Cynddylan, by Llywarch Hên (Myv. I. 109):

Eyr Pengwern pell gelwid heno;
Ar wacl gwyr gwelid.

The eagle of Pengwern calls afar to-night;
Over the blood of men it watches.

In Llevoed Wyneblawr: *golut byt eyt dydau* (Myv. I. 154), worldly wealth goes, comes; *guae drut ny chretit* (ib. 155), woe to the presumptuous one that does not believe; *difrys guanec, diffustit traeth* (ib.), the wave hastens, it beats the shore.

In the "Englynion Cain Cynnwyre," of unknown authorship but undoubtedly old: *gorchwythid gwynt uwch aber*, strong blows the wind over the estuary; *cyrchid carw dan vrig derwen*, the stag seeks the shelter of the oak; *anrheithid rhywynt anial*, the tempest ravages the forest. (Myv. III. 142.)

Among the proverbs, which, it should be observed, often bear internal evidence of having been drawn from old Welsh sources, many examples in point occur, including the following: *anghwanecid mevl mawrair*, boasting adds to the disgrace (Myv. III. 147); *elid bryd yn ol breuddwyd*, the fancy goes

according to the dream (ib. 155); *gwnelid anghelfydd annerth*, weakness makes unskillful (ib. 161); *llyvid y ci y gwaew y brather ag ev*, the dog licks the spear wherewith he is wounded (ib. 163); *rhetid maen oni gafu wastad*, the stone rolls till it finds the plain (ib. 176).

Aside from the proverbs I have found no examples of the use of this termination in prose. It occurs two or three times (doubtless as an archaism) in the poetry of the twelfth century, and then disappears. None of the Welsh grammarians, so far as I know, have recognized it at all. Translators have generally confounded it with the imperative active *-it* or *-id*, which sometimes occurs, later, for the usual *-et* or *-ed*.

VI.

In treating of the Welsh passive conjugation, Zeuss gives the present (and future) indicative ending *-ir*; to which, in the second edition, the less frequent *-awr* is added. No mention is made in either edition of the very important forms *-ator*, *-etor*, *-itor* (sometimes, *-otor*, *-iator*, *-etawr*, *-itior*, *-itiawr*); compare Irish *-ithir*, *-ither*, in passives, and *-adar*, *-edar*, *-idir*, in deponents; also, Latin *-atur*, *-etur*, *-itur*.

These passive endings (occasionally depressed in our copies to *-ador*, *-idiawr*, etc.) occur frequently in the old Welsh poets, and sometimes in the earlier poets of the middle-Welsh period: e. g. in Llywarch Hên (Myv. I. 107), *cenau Cyndrwyn cwyn itor*, the offspring of Cyndrwyn is bewailed; in the Gododin, *gweinydiawr ysgwydawr yngweithen* (ib. 7), shields are pierced in the combat; in various old poems which have been attributed to Taliesin, *gwelattor arwyddion* (ib. 33), signs are seen; *golchettawr ei lestri, bid gloew ei vrecei* (ib. 39), his vessels are washed, his wort is clear; *hyd tra fwy fyw crybwylltor* (ib. 70), as long as I live he shall be commemorated; *cathl gwaecanhator cylch Prydain amgor* (ib. 75), the song of woe is sung round Britain's borders; in Llevoed Wynebglawr (ib. 154), *pob llyvur llemityor arnau*, every coward will be trampled upon; in Gwalchmai (ib. 197), *ef gwr gwelitor*, he is seen (appears as) a man; in Cynddelw (ib. 205), *arwygrain Owain cain*

cenitor, the praise of Owain is (or, will be) fitly sung. Again in the proverbs, *clywitor corn can ni weler* (ib. III. 151), a horn will be heard though it be not seen; *telitor gwedi halawglw* (ib. 177), there is paying (lit. it is paid) after false swearing. Besides the two last I have found no examples in prose.

Like *-ir*, these endings are present or future, singular or plural, according to the connection. But unlike *-ir* and the other passive endings, they are used only in the third person. At least I have failed to find a single example of their use in the first or second person, in the whole mass of documents published in the Myvyrian. Yet the pronouns of the first and second persons occur so frequently in the early poetry that we have a right to expect such examples, if they were not precluded by usage. I must therefore dispute the correctness of the statement made by Zeuss and others, that the Welsh language preserves no remnant of the personal conjugation in the passive voice.

Dr. Owen Pughe, who is a very unsafe guide in early Welsh, calls verbs in *-ator* or *-iator* gerunds, and verbs in *-itor* or *-etor* supines, translating thus: "*adeiliator*, in building," "*adeilitor*, to be building." It is to be regretted that these fictions are reproduced in the Welsh introduction to the second edition of the Myvyrian, lately issued. I am not aware, indeed, that the real character of these verb-endings has ever been pointed out.

VII.

Zeuss derives *Cymro*, Cambrian, from *cyn-*, synonymous with Latin *con-*, and *bro*, region, Gallic *brog*. The name would thus mean compatriot. The plural, *Cymry*, might come by umlaut from *Cymrq*, after the analogy of *ffyn*, staves, from *ffon*.

But the feminine of *Cymro* in middle and modern Welsh is *Cymraë's*. This points to *Cymra* as the earlier masculine form, which, again, might give *Cymry* as the plural by umlaut after the analogy of *bustych*, steers, from *bustach*.

An earlier *Cymra* is also indicated by the name of the language, *Cymraëg* (middle *Cymraëc*, Myv. I. 272); thus

Gwyddeleg, the Irish language, from *Gwyddel*, Irishman; *Gwenhwysseg*, the Gwentian dialect, from *Gwentwys*, etc.

It is *Cymra* (as opposed to *Cymro*) that is indicated, again, by the adjective *Cymrëig*, Cambricus; compare *Ffrenig*, Gallicus, from *Efranc*, Gallus; *gwyrenig*, from *gwyran*; *gwledig*, from *gwlad*, etc.

There are no analogies whatever for deriving any one of these words from the form *Cymro*; we should have, instead, *Cymroë's*, *Cymroëg* and *Cymroig*, which forms never occur.

In view of these facts I cannot but regard the etymology of the name *Cymry* as still unexplained. I do not discuss the theory of its identity with the Cimbri of the Romans, except so far as to say that any argument against that theory based on Zeuss's account of the origin of the word would be worthless.

We have an analogous case in middle Welsh *Cornaw*, Cornwall (Myv. II. 267). The more frequent form *Cernyw* (as a derivative whose ending begins with a slender vowel) indicates the root *Carn* (as opposed to *Corn*). This we accordingly find in the Latin *Carnabii*.

The orthographical distinction between *Cymry*, as the name of the people, and *Cymru*, as the name of the country, (pronounced alike,) is a late one. In early-middle writings both are spelt with a final *y*, usually *Cymry*; in the oldest copy of the Laws, referred, as already stated, to the twelfth century, the spelling is *Kemry* (Leg. Ven. 2); in the Black Book of Caermarthen, also referred to the twelfth century, *Kimry* (Myv. I. 578).

The following early readings are also worthy of notice: *Camaraë's*, a Welsh woman (Leg. Ven. 96); *Kymeraëc*, the Welsh language (Brut Gruffudd ab Arthur, Myv. II. 155). But however the early-middle scribes varied the spelling in other respects, they never doubled the *m* in *Cymro* or any of its derivatives. This shows that they had no idea of its being compounded of *cyn-* and *bro*. Dr. Owen Pughe adopted the spelling *Cymmro* in order to make it agree, as he supposed, with his theory of the etymology (*cyn*, first, and *bro*, which should really give us *cynfro*, however): and the remarkable

Cymmraeg of Zeuss must be another accommodation of the same sort, taken from some erratic modern writer; it is judiciously left out of the second edition.

Meilyr, a poet of the close of the eleventh century and the first half of the twelfth (Myv. I. 191), has *clas Cymreyt* (*Cymreydd*, as the rhyme shows), which Dr. Owen Pughe translates "the region of connected mountains," intending Wales, but assuming the name *Cymreydd* to be compounded of *cyn-*, and *bre*, height. I cannot doubt, however, that it is another plural of *Cymro* — indicating *Cymra* again as the earlier form; compare *glenydd*, banks, from *glan*; *gwledydd*, countries, from *gwlad*; *trigfeydd*, abodes, from *trigfa*, etc. I give the passage with a translation.

Edewis eurwas clas Cymreyt,
Canawon Mordai, mynogi ryt,
Dytwyreo Owain Eingl didudyt.

The illustrious one of the land of the Cymry (the race of Mordai, of lavish generosity) did promise that an Owain should arise, the expeller of the English.

Mordai was a country of the northern Cymry, celebrated in the Gododin. To the northern Cymric heroes, much lauded in the old poets for their generosity, the Welsh of the middle ages were fond of tracing their pedigrees. The reference in the passage is evidently to a reputed prophecy of Myrddin, still extant (Myv. I. 144), in which it was promised that an Owain should reconquer England as far as London. Meilyr would fain see this prophecy fulfilled in the fortunes of his young contemporary, Owain Gwynedd.

That Pughe has entirely misapprehended the meaning of the above lines appears, further, in his making the verb *edewis* govern an indirect object, thus: "promised the sons of Mordai that," etc. This, though good English, would be a gross solecism in Welsh; the preposition *i*, to, being required after the verb in such a case.

VIII.

Zeuss mentions the Armoric adverb *quet* (pronounced *ket*), used in negative sentences like the French *pas* or *point*, as of uncertain origin; and when it is used in affirmative sentences he seems to miss its precise force. Examples: *ne tardomp*

quet "ne tardemus;" *me carhe gouzout quet goude* "scire certe opto postea" (better, *scire paululum opto postea*); *heb quet anam* "sine ulla macula." The word should be explained by the Welsh *cat* (diminutive *cetyn*), a piece, a bit. The above examples would be literally translated thus: Let us not delay a bit,— I wish to know a bit, after this,— without a bit of stain.

The reader should understand that *qu* for *k* or *c* is to be accounted for by the use, in Armorica, of French modes of spelling.

IX.

In the second edition of Zeuss the following words are mentioned as exhibiting in old Welsh the Celtic infinitive in *-m* (compare Irish *-am*, *-em*), to wit: *dierchim*, ad poscendum (Cod. Lichf.), modern *i erchi*; *diprim*, gl. "essum", food, eating, Cornish *dibbry*, to eat; *molim*, laudare (Cb.), modern *moli*. It would thus appear that in infinitives middle and modern *-i* represents old *-im*.

Among the Luxemburg glosses is "*douhinnom*, austum," that is, haustus, draught, drawing. In the second edition of Zeuss, modern "*gwehyn*, exhaustio," is suggested in explanation of this gloss — with an unnecessary query, I think: compare *gwehynydd dwfr*, drawer of water (Bible); and as to the vowel-change compare *nouitiou*, gl. "nundinae," modern *newidiau*; *bodin*, gl. "turma," early-middle *bedin* (Myv. I. 85); *kegin*, "coquina" (Mah.); etc. Again, as to the change of *do-guohinn* to *do-uohinn*, here postulated, there are several other old Welsh glosses which show that initial depression, in composition, was already incipient (Z. xxvii). But what is *-om*? As *do-*, later *dy-* (ad) is usually a prefix to verbs, and the use of the infinitive as a verbal noun (like English verbal nouns in *-ing*) is very common in Welsh, I am led to consider *do-uohinn-om* (q. d. *dywehinno*), as exhibiting another old Welsh form of the infinitive in *-m*. Through *-aum* and *-om*, from an older *-am*, we may suppose the interchangeable infinitive endings *-aw* and *-o* of middle and modern Welsh to have come.

That *-aw* in infinitives represents an original *-am*, I pro-

pose to show by the rhymes in the Gododin. In our mediaeval copies of that poem the infinitive *-aw* rhymes with *llaw*, *taw*, *anaw*, *ffaw*, *gognaw* and *arnaw*; see the text of Williams ab Ithel.

Llaw, hand, was originally *lām*; compare old Irish *lām*, hand.

Taw, silent, quiet, was *tām*; compare Ir. *tāmh*, still, quiet.

Anaw, spirit, inspiration (not "harmony," as Pughe has it), was *anām*; compare Irish *anam*, life, soul, in which, however, the quantity differs. To justify my definition of *anaw* I could cite many early examples; let the following from Gwalchmai (Myv. I. 198) here suffice: *Owain anger-dawl*, *anaw anfeidrawl*, *aer-wrawl wrhydri*,— the ardent Owain, of unbounded spirit, of battle-braving heroism.

Efaw, glory, is the Lat. *fāma*.

Gognaw, which seems to be used in the Gododin as a proper name, I pass over, because I am ignorant of its origin; from analogy I would infer *guocnām* as the original form.

The compound *arnaw* or *arno*, on him, must be resolved into *ar-n-ām*; compare *em* (modern *ef*, he or him) in the Juvencus glosses; also compare the similarly compounded words *ynddaw* or *ynddo* (*yn-d-ām*), in him; *rhagddaw* or *rhagddo* (*rac-d-ām*), before or against him; *arnynt* (*ar-n-hwylt*), on them; *trwyddoch* (*trwy-d-awch*), through you; etc. That the *-aw* or *-o* of this class of compounds was *-am*, in some dialect, at a time at least two hundred years later than that assigned by critics to the composition of the Gododin, is shown by the example *racdam*, that is, *rhagddaw*, in the Juvencus glosses (Beitr. iv. 407), which are referred to the ninth century.

As *au* (*aw*) in those cases where it is interchangeable with *o*, regularly represents a primitive *ā* (Z. 94), we may infer that the quantity of the infinitive *-am* was long in Welsh, although it does not appear to have been long in Irish. The first change was doubtless to *-aum* or *-om*; in the Luxemburg glosses, *o* for the more usual *au* prevails; thus *-ol* for *-aul*, *-oc* for *-auc*, and *-om* for *-aum*. The next step was to *-auw* or *-ov*; thus *dauw*, that is *daww*, son-in-law, in the Oxford glosses, for primitive *dām* (Z. 1055), middle and modern *daw*; so also

llof, still preserved in the compound *llofrudd*, murderer, literally red-handed, for primitive *lām*, middle and modern *llaw*. The infection of the *m* in *-ām* took place, exceptionally, before the transition to middle Welsh; otherwise we should regularly find, in middle Welsh, *-awf* or *-of* instead of *-aw* or *-o*. As another indication that *-am* in infinitives was long (as well as in the other cases where it passed into middle Welsh *-aw*), it may be observed in the Gododin and the other old Welsh poems that it was never made to rhyme with the superlative ending *-am*, or with the verb-ending *-am* of the first person singular, both of which were short, and passed into middle Welsh *-av* (the modern *-af*). In Armoric the infinitive endings *-im* and *-am* passed, respectively, into *-if* and *-af*: thus *dibrif*, to eat, for *diprim*, and *guisquaf*, Welsh *guisgaw*, to clothe.

The *ām* postulated above, in *arnaw* and other compounds of that class, as another form for *ēm*, he or him, (*au* or *o* for *ef*), is preserved, regularly, in middle and modern *o*, he or him; thus *gwelais o*, I saw him, *gwelwyd o*, he was seen. In *efo*, he or him, we are to recognize *ef-o* (*ēm-ām*); so also *efe* is *ef-ef* (*ēm-ēm*); compare *hwyntwy* (*hwynt-hwy*), they or them; *hyhi* (*hi-hi*), she or her; *tydi* (*ti-ti*), thou or thee; etc. These doubled pronouns (analogous to Latin *sese*) are somewhat more emphatic than the simple forms, and are accented on the last syllable.

X.

One of the most important of the Ogmian inscriptions is that found at St. Dogmael's in Wales; see Stokes' Three Irish Glossaries. It is bilingual; the Ogmian being *Sagramni maqi Cunatami*, and the Latin, *Sagrani filii Cunotami*. The interpretation is (*The stone*) of *Sagranos the son of Cunatamos*; the old Celtic masculine declension, *-os*, *-i*, being well established by Gallic inscriptions. Of the variations here seen in the forms of the two proper names, I take those of which I have found the exact phonetic equivalents in middle Welsh.

Sagranos in middle Welsh would regularly be *Saeran*; com-

pare *Maelgwn* for Maglocunus. I find the name *Saeran* in the Genealogy of Welsh saints (Myv. II. 51).

In *magi* we are to recognize Irish *mac*, Welsh *map*, son. Stokes infers *makvos* as the primitive form. Notwithstanding the usual correspondence of British *p* to Irish *c*, the form *macwy*, youth, is found in old and middle Welsh writings; e. g. in *Llywarch Hēn* (Myv. I. 128) and in *Cynddelw* (ib. 252). There are several other words in which the Welsh has both the *c* form and the *p* form; e. g. in *talcen*, that is, *tal-pen*, front of the head, forehead. This is probably an admixture arising from some ancient contact of British with Irish tribes.

Cunatamos would regularly be *Cunadaf* in middle Welsh; and the name is found in precisely this form in the Triads of the War-horses (Myv. II. 21). The same name occurs also as *Cunedaf* and *Cyndaf*; compare the *Cuneglasus* of Gildas, which in middle Welsh is *Kynlas* (Myv. I. 85). In *Liber Landavensis*, which mixes old and middle forms, we find the name as *Conatam* (228) and as *Condaf* (132). In early Armoric it is *Conatam* (Z. 111).

As to the *cun* (*cuna-*, *cune-*, *cuno-*,) of this and other British names, e. g. Maglocunus, Cunobelinus, Zeuss compares Welsh *cwn*, summit; but in the early poets I often find the identical form *cun* in the sense of chief or captain: e. g. in *Cynddelw* (Myv. I. 210), *rybydwn bencerd ben cun*, I was the chief minstrel of the chief captain; also (ib. 233), *un katkun val katki Aeron*, one war-chief like the war-dog of Aeron. In a late-middle version of the "Officium B. Mariae" (ib. 559), occurs *Duw ben cun*, God the Supreme King.

If the *tam* in *Cunatam* were long, the name would mean, the silent chief; but in that case the middle Welsh form should be *Cunadaw*. Other evidence that it was short I find in the fact that in a poem attributed to Taliesin (certainly of old Welsh origin), the name rhymes with *-af* (old Welsh *-am*) of the first person singular of the verb; also with *haf*, summer (old Welsh *ham*, Cod. Lichf.), which is now long in consequence of the depression of the *m*, but was originally short (compare Irish *sam*). As to the meaning of *tām*, I have not yet satisfied myself; is it the Irish *team*, able?

The name *Cunadaf* or *Cunedaf*, as the equivalent of *Cunatam* should, for historical reasons, be carefully distinguished from *Cunedda*, which represents the *Cunedag* of Nennius. The latter means *the good chief*, from *cun*, and *dag*, good, modern *da*; compare Irish *deagh*. The person designated by the name in Nennius is he that is celebrated, later, as *Cunedda Wledig*. In the Triads of the Isle of Britain his name is written *Cunedda Wledig* (Myv. II. 10, 68). So also in later copies of the genealogies of Welsh Saints (ib. 34, 41); but in an early-middle copy, where the *dd* sound is regularly represented by *d*, it is *Kuneda Wledic* (ib. 23). In the transition from old to middle Welsh a final *g*, following a vowel, is dropped. Thus the descent of *Cunedda* from *Cunedag* is perfectly regular, and a final *f* is entirely foreign to it.

Owing to the failure to distinguish between *Cunedda* and *Cunedaf*, there has been a troublesome dispute, in which Mr. Stephens, author of the *Literature of the Kymry*, has joined, as to the time in which *Cunedda Wledig* lived. The legend is that he came, with his sons, from a district of the northern *Cymry* called *Manau Guotodin* (the *Gododin*, better *Gododdin*, of Aneurin), to North Wales, and expelled the Irish from some of his ancestral possessions in that region. Some writers, accepting the account in Nennius, in the genealogies of Welsh saints and other repositories of Welsh history and tradition, that he was the great-grandfather of *Maelgwn Gwynedd* (the *Maglocunus* of *Gildas*) who is known to have lived in the sixth century, naturally assign *Cunedda* to the fifth. Others, quoting the testimony of *Taliesin* in the poem above mentioned, that a chieftain named *Cunedaf* was his contemporary and patron, conclude, either that *Cunedda* should be assigned to the sixth century, or that the poem is spurious. It does not appear to have occurred to the disputants that *Cunedda* and *Cunedaf* might be very different names.

The confusion seems to have begun with the late-middle or early-modern scribe whose copy of the poem is printed in the *Myvyrian* (I. 71). For *Cunedaf* he erroneously writes *Cuneddaf*, and in one instance *Cunedda*, which destroys the rhyme, thus :

Cyn cymun Cunedda
Rym a fai biw blith yr haf.

Restore the rhyme by substituting *Cunedaf*, and for *cymun* read *cymyn*, then translate: —

Before the slaying of Cunedaf
I had milch cows in the summer.

Another fact that has contributed to the confusion is, that in some translations of an obscure passage of the poem, Cunedaf is called the son of Edern, while in the genealogies Cunedda is also called the son of Edern. Such a coincidence could have no great significance in its bearing on the question, in any case; it can have none whatever after it has been shown that *Cunedda* and *Cunedaf* (elsewhere *Cunadaf*, as we have seen,) represent two originals so different as *Cunedag* and *Cunatam*. There may have been many Ederns in the period of which we speak; indeed we read of two, namely, the father of Cunedda Wledig, and that one of the sons or grandsons of the latter from whom the Welsh district of Edeyrniawn is said to have been named; see Price, in *Hanes Cymru*. We might, without chronological difficulty, suppose the latter Edern to be the one mentioned in the poem of Taliesin.

I would not be understood to suppose that the *Cunatam* of Taliesin was the same person with the *Cunatam* of the inscription. Indeed it must be conceded that the preservation of the old Celtic genitive in the inscription indicates an antiquity far higher than the sixth century; unless we suppose, what is not very probable, that there was a learned class in the sixth century who understood, and still used for special purposes, a language much older than that which was spoken and sung in their day.

II.—On the so-called Attic Second Declension.

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THAT those nouns in $\omega\varsigma$ which form their genitive in ω are but a subdivision of those in $o\varsigma$, genitive ou , could not escape the notice even of the ancient grammarians, who in their classifications always had an eye to outward multiplicity more than to inner unity. The Alexandrine Theodosius assumed six and fifty declensions of nouns, of which the words in question form the seventeenth. But while he brings them under a separate *κατηγορίαν*, he says in the main quite correctly of them: “τὰ εἰς $o\varsigma$ ὀνόματα μεταποιῦντες Ἀττικοὶ εἰς $\omega\varsigma$ καὶ τὰ παραλήγοντα τῶν φωνηέντων εἰς ϵ μεταβάλλουσι, κλίνουσι δὲ πάντα κατὰ ἀποβολὴν τοῦ σ · ὁ λεώς, τοῦ λεώς,” and so on (Bekker's *Anec.* III. 984). Hence in our modern system of declensions this class of nouns has properly been assigned to the second, where in distinction from the common type it is called *Attic*. How far this designation is in place we shall hereafter inquire.

I have found neither in special Greek grammars nor in the manuals of comparative grammar any satisfactory exposition of the origin of this form of declension. Even the best of the Greek grammars content themselves with little more than setting forth the forms in actual use, without any attempt at explaining their genesis. The most definite statement is that of Kühner in the new edition of his *Ausführliche Grammatik*, 1869. The substance of his remark is, that these words are formed by contraction, but he adds very little by way of proof or illustration. We shall find that Kühner's notion is in the main well-grounded, though to one feature of his theory we shall be forced to take exception.

The first thing which strikes us in attempting the analysis of these words, is that in place of the o of the second declension stems, we have an ω . We have therefore to deal with ω -stems. But ω -stems of the second declension are at first view an anomaly. For the essential difference between the 1st and 2d declensions is one of *quantity*, not of *quality*,

of stem-vowel. If the ω is original, that is, descended from a pre-Grecian \acute{a} , then these stems belong properly to the first declension, and the words are but a phonetic variation of the masculines, in $\acute{\alpha}\varsigma$ and $\eta\varsigma$. Such a variation would not be inconceivable, and would mainly coincide with the existing form of the words; yet this view cannot for a moment be entertained. For, to say nothing of the feminines of the Attic 2d decl., which do not vary from the masculines, the close relationship of the whole class to the 2d decl. is conclusively shown by such duplicate forms as $\nu\acute{\alpha}\acute{\omicron}\varsigma$, $\nu\epsilon\acute{\omicron}\varsigma$. Accordingly we shall be prepared to find that these ω -stems, as such, are not of high antiquity, but are secondary formations in some way derived from \omicron -stems.

The explanation of this ω lies close at hand in a large class of these words, those namely in $\epsilon\omega\varsigma$. $\Lambda\epsilon\acute{\omicron}\varsigma$, $\nu\epsilon\acute{\omicron}\varsigma$ are evidently, as Theodosius recognized, secondary forms of $\lambda\acute{\alpha}\acute{\omicron}\varsigma$, $\nu\acute{\alpha}\acute{\omicron}\varsigma$. The short \omicron has been lengthened, and the long $\acute{\alpha}$ has been shortened and attenuated: in other words there has been an interchange of quantity between the two juxtaposed vowels. Such a shifting of quantity is a well-known phenomenon in Greek. It takes place only in hiatus, and always so as to turn a trochee into an iambus. Examples are the Attic genitive $\nu\epsilon\acute{\omicron}\varsigma$ for $\nu\acute{\alpha}\acute{\omicron}\varsigma$, Ionic Ἀτρείδew for $\text{Ἀτρείδ\acute{\alpha}\omicron}$, $\epsilon\omega\varsigma$ while for Doric $\acute{\alpha}\omicron\varsigma$, $\acute{\alpha}\varsigma$, Epic $\eta\omicron\varsigma$ (written $\epsilon\iota\omicron\varsigma$), $\pi\acute{\omicron}\lambda\epsilon\omega\varsigma$ for $\pi\acute{\omicron}\lambda\eta\omicron\varsigma$, and many others. The hiatus is uniformly the effect of a consonant dropped out; this consonant is either f or j . In compensation for its loss either the foregoing or the following vowel is lengthened; or what is more probable, the preceding vowel is in every case first lengthened, and this length may then, to facilitate pronunciation, be transferred to the following vowel.* The change of α into ϵ which accompanies its shortening before the \omicron -sound is a dissimilation for partial relief of hiatus. Precisely so are we to understand the change of $\lambda\acute{\alpha}\acute{\omicron}\varsigma$ into $\lambda\epsilon\acute{\omicron}\varsigma$. Kühner's explanation of these forms (Ausf. Gram., vol. i., p. 316) is

* Delbrück (*Ueber $\epsilon\omega\varsigma$ and $\tau\epsilon\omega\varsigma$* Curtius' Gram. Studien, vol. ii.) denies this transfer, and thinks that the ejected semi-vowel operates directly on the subsequent vowel. But he fails to explain satisfactorily cases like $\iota\acute{\epsilon}\tau\acute{\rho}\alpha\omicron$, $\iota\acute{\epsilon}\tau\acute{\rho}\epsilon\omega$, and $\nu\acute{\alpha}\acute{\omicron}\varsigma$ ($\nu\acute{\alpha}\nu\iota\varsigma$), $\nu\epsilon\acute{\omicron}\varsigma$, where the antecedent vowel is long by nature.

singularly perverse. His idea is that the vowels were first contracted into ω , and that this ω afterwards took, for some reason, an ϵ before itself; thus, $\lambda\acute{\alpha}\omega\varsigma$, $\lambda\acute{\omega}\varsigma$, $\lambda\epsilon\acute{\omega}\varsigma$. What could have led Kühner to this conclusion I am at a loss to conceive. Surely he could not have thought to explain the accent of Μενέλεως etc., on such a supposition. Μενέλεως simply follows the accent of the primitive Μενέλαος , just as πόλεως that of πόληος . As for the genitive Μενέλεω , its accent is in any case irregular (for Μενελάου would give us, treated according to K.'s process, Μενελεῶ) and must be explained by the influence of the nominative upon the other cases. But it is not simply in contract forms (περίπλους , περίπλου) that this influence is exerted; it may undeniably be assumed in forms with shifted quantity as well; in proof of which we need only call to mind the gen. plur. πόλεων . The reason of the accentuation Μενέλεω Theodosius comprehended perfectly: " $\kappa\acute{\alpha}\nu \phi\theta\acute{\alpha}\sigma\eta \text{προπαροξυ}\delta\eta\text{ναί η εὐθεΐα, πᾶσα πτώσις προπαροξύνεται.}$ " This very unlucky thought of Kühner scarcely needs refutation, and I should not have mentioned it, were it not that it emanates from so authoritative a source. The blunder is all the more surprising, since the author has elsewhere in the same volume (pp. 139, 180, 248) spoken with entire correctness of the shifting of quantity (which he calls *Vokalverschiebung*) in these and other words, of the synizesis frequent in them, and of their accent.

This premised, it will be well to pass in review all the words of the Attic second declension, and bring to light whatever we can respecting their formation. And to obtain as secure a foothold as possible, we shall begin with those which are easiest of analysis, that we may have the benefit of their analogy in treating of the more obscure.

We saw in the examples of shifted quantity cited above that the hiatus was due to an ejected semi-vowel. We might naturally infer that the same would prove true of nouns in $\acute{\alpha}\omega\varsigma$. For that in $\nu\acute{\alpha}\omega\varsigma$ the α and ω were together from the beginning no one will suppose. In this case we have not to look far for traces of the consonant. The Aeolic form $\nu\acute{\alpha}\omega\varsigma$, found not only in Grammarians but in a Lesbian inscription, shows that it was F . That $\nu\alpha\acute{F}\omega\varsigma$ furthermore stands for $\nu\alpha\sigma\text{-}F\omega\varsigma$ is

rendered very probable by Curtius (Etymol., p. 294) who compares the root *νες* or *νος*, found in *νέ-ομαι* and *νόσ-τος*. Thus the temple or dwelling-place is thought of as a place where we may *go home*, which is not surprising when we reflect that *οἶκος* is derived from a root *vik* 'enter.' If this supposition of Curtius be not true, then the root is *ναF*, and *ναίω* stands for *ναF-ιω* just as *καίω* for *καF-ιω*. *Λῆός* *people*, with its compounds *Μενέλαος*, etc., has also dropped a *F*, as is plain from the form given to the latter in certain Latin inscriptions, where we read *Menelavus*, *Archelavus*, and others. Moreover if Savelsberg is right in considering the proper name *Ἰόλαος*, *Ἰόλεως*, as a compound of *λαός*, and in translating it "qui populum coercet," then we have the *F* attested in Greek as well, for on an Aeginetan vase the name occurs in full, *Φιόλαφος*: Priscian too testifies to a form *Λαφοκόφων*. The root is *λαF* as the *u* in German *leu-te* indicates. Some find the same root in *βασιλεύς*, which they explain as "people-leader," like *herzog*.

A third well known word of the same form is the substantive *ἀνώγειον* *hull*, really only the neuter of an adjective *ἀνώγειος*, to which *εὔγειος*, *ισόγειος* and other compounds are analogous. Here we have the collateral form *ἀνώγαιον*. Even *γῆ* is but a shortened form of *γαῖα*. But *γαῖα* itself, as the comparison of other languages shows, has lost a *F* and was once *γαFja*. It is remarkable that the same original stem *gav* runs through several languages with the double meaning of *earth* and *ox*. The Sanscrit stem *gavja*, identical with ours in form, is an adjective meaning *bovine*, but the primitive from which it is derived, *gô* (i. e. *gau*, nom. *gâus*), means *earth* as well as *ox*. That the Gothic *gavi*, stem *gauja* (Germ. *gau*), corresponding exactly in form and meaning with the Greek *γαFja*, is a different word, I cannot bring myself to believe, despite the unaltered *g*.* The history of our word inside the Greek is at any rate *ἀνωγαFιον*, *ἀνώγαιον*, *ἀνώγαϊον*, *ἀνώγειον*.

But the language has more than one way of disposing of

* So Bopp, *Vergl. Gram. I.*, p. 258. In the other meaning the initial consonant has undergone the regular change, hence our *cow*.

the objectionable ending *αος*. Take for instance the adjectives *διμναῖος*, *τριμναῖος*, etc., derived from *μνᾶ*, that is, most probably, *μναῖα* (Ionic *μνεία*). The word is of Phœnician origin, but that makes no difference to us. Besides *δίμνεως*, *τρίμνεως*, we have also, without the *ε*, such forms as *δίμνω*, *τρίμνω*, well accredited.* Here instead of a transfer of quantity, contraction has taken place. Another example is *ἀεινως* *ever-flowing*, found in Attic poets instead the Herodotean *ἀεινᾶος*. The stem of this adjective is *ἀει-ναF-ο*, as the verb *νάω* with its Æolic form *ναῶ* testifies. *ΝάFω* stands for *σναF-ω*: the real root is *σnu*. *Ἀγήρω* *free from old age* is contracted from *ἀγήραος*. The consonant here ejected seems to have been *σ*, since the word is most naturally referred to the neuter substantive stem *γηρας*. At any rate the *α* was short, and so an *ἀγήρεως* was impossible.

In these two classes we have traced the Attic forms to stems in *αο*, and this for the most part to *αFο*. There are however others which point to a stem-form *οFο*. Such a one is the name of the island *Κῶς* with its uncontracted Homeric form *Κόως*. It is extremely probable that this name is identical with the Latin *cavus*. The root is *ku*, which means both *to be hollow* and *to swell*, significations by no means contradictory, since what is concave on the inside is convex on the outside. The Greek form of the adjective is *κοFος*, preserved in the forms *κόος* and *κῶος*, *cave*, *hollow*; this last by transfer of quantity gives us *Κόως* and by contraction *Κῶς*. It is an instructive fact that the short form *κῶς* was applied not only to the island, but also to a cave used as a prison in Corinth.† *Κόως* is related to *Κῶος* as Epic *ὀρόωντες* to *γελῶντες*. From *Κῶος* is derived the adjective *Κῶος*, *Κῶος*, *Coan*; compare the Homeric *φρησὶν ὄρεσ-κῶοισι*.

Similar to this is the word *γάλω* *sister-in-law*, which Homer has uncontracted, *γαλόω*. The suspicion which naturally arises, that a *F* has been lost here as in *Κόως*, and that *γαλόω* stands for *γαλοFος*, is confirmed by the Slavonic *zelva*; see Curtius, Etym. p. 164. The Greek word contains the suffix

* Also *δίμνος*, i. e. *δίμνος*. For all these forms see Lobeck's Phrynichus, p. 554

† On these words see Steph. Byz., s. v. *κῶ*. Compare also Hesychius, s. vv *κῶς* and *κῶοι*, and Strabo, VIII. 367.

Fo; whether the preceding *o* is, as Curtius thinks, a mere help-vowel or not, is indifferent to us. The Homeric adjective ζῶς *alive*, contracted from the vulgar ζῶός, belongs here. The Hesychian ζούιον ἢ ζούον shows that the earlier form was ζοφός. Ζῶον, that is ζόφιον, *animal*, is derived from this just as ἵππιος from ἵππος. The *F* in this word belongs, I am inclined to think, to the root, which in Sanscrit has the form *g'iv*. The accounts which I have seen of the origin of ζάω and ζῶός do not however satisfy me, and I am inclined to assume a fuller form of the original root *gjav*, Greek δja*F*, ζa*F*, and from it to explain ζά*F*ω, ζό*F*ω (ζῶω) and ζο*F*ός.*

Another word, which does not appear in the uncontracted form, but of the origin of which there can be no doubt, is the substantive πάτρως *uncle*. This word wavers between the 2d and 3d declensions. Which of the two forms was the original is seen from the Latin *patruus*, which stands for *patrovo*s just as *tuus*, *suus* for *to*vos, *so*vos (Curt. Etym. 532, Schleicher Comp. 219). *Patruvas* is therefore the Indogermanic form, derived from *patar* by the suffix *va*. The Sanscrit *pitrvjas* 'uncle' is a derivative of this, and corresponds in form precisely to Greek πατρώιος, that is πατρο*F*-ιος. There is therefore no question that πάτρως stands for πατρο*F*ος, and we may safely assign to μήτρως *mother's brother* a similar archetype ματρο*F*ος, and assume that it too once followed the second declension, although it has almost entirely passed over into the third.

The same change we see beginning in the feminine ἄλως *threshing-floor*, though here the best usage is still overwhelmingly in favor of the second declension. A corresponding first declension form of this word is ἀλώη. In this, Curtius (Etym., p. 524) recognizes, guided by the word ἄλευρον, (yet more decisive would be the Hesychian gloss ἀλουᾶ· κήπι, Κίπριοι,) a stem *FαλοF*-α. About ἄλως he does not speak so definitely, but the analogy of the above mentioned forms leaves no doubt that this stands for *FαλοF*-ος. The root *FαλοF* is that of the Latin *volv-o*: the *o* with which the *ε* in ἄλευρον is identical, is an inserted help-vowel.

* Since the above was publicly read, I have received the last number of Curtius' *Studien* (vol. iv., part 1), and am pleased to see that Brugman in his essay "de *Gr. linguae productione suppletoria*" has hit upon precisely the same idea.

So far our way has been tolerably clear. We have been able to trace a part of the ω -stems to primitives in $\sigma\phi\omicron$ and the rest to primitives in $\alpha\phi\omicron$, or at least to $\alpha\jmath\omicron$ or $\alpha\sigma\omicron$. Let us now see how far we may be justified in similar conclusions respecting the remaining words of this declension.

$\Lambda\gamma\acute{\omega}\varsigma$ *hare* has the collateral form $\lambda\alpha\gamma\acute{\omicron}\varsigma$, used by Herodotus and even by Sophocles, and generally in the *κοινή*.^{*} $\Lambda\gamma\acute{\omicron}\varsigma$ is the simplest possible formation. Whether the root $\lambda\alpha\gamma$ be identical with the Sanscrit *la'gh* (Gothic *laikan* would seem to point to a primitive *lag*) and the hare be thus termed the "leaper," or with $\lambda\alpha\gamma$ in $\lambda\alpha\gamma\alpha\rho\acute{\omicron}\varsigma$, and the word thus signify the "lank one" does not concern us. Here indeed it might seem as if the ω in $\lambda\alpha\gamma\acute{\omega}\varsigma$ were a mere lengthening of the \omicron . But the Homeric $\lambda\alpha\gamma\omega\acute{\omicron}\varsigma$ disproves this supposition. This form, which was not confined to the Epic language, but was a favorite one with prose writers from Aristotle on, cannot possibly be the same formation with $\lambda\alpha\gamma\acute{\omicron}\varsigma$. It contains certainly an amplified stem. That this is $\lambda\alpha\gamma\omicron\phi\omicron$ is suggested by the derived adjective $\lambda\alpha\gamma\bar{\omega}\varsigma$, which looks as if it were $\lambda\alpha\gamma\omicron\phi\jmath\omicron\varsigma$. $\Lambda\gamma\omega\acute{\omicron}\varsigma$ is to $\lambda\alpha\gamma\bar{\omega}\varsigma$ as $\zeta\omega\acute{\omicron}\varsigma$ to $\zeta\bar{\omega}\omicron\nu$. Of course we shall derive our Attic $\lambda\alpha\gamma\acute{\omega}\varsigma$ from $\lambda\alpha\gamma\omega\acute{\omicron}\varsigma$ rather than from $\lambda\alpha\gamma\acute{\omicron}\varsigma$.

$\Lambda\theta\omega\varsigma$, the name of the well known mountain, is in Homer uncontracted $\Lambda\theta\acute{\omega}\varsigma$. Here Etymology leaves us altogether in the lurch; we can only conjecture a primitive $\Lambda\theta\omicron\phi\omicron\varsigma$, of which an additional hint is perhaps furnished by the adjective $\Lambda\theta\bar{\omega}\varsigma$, Aesch. Agam., 276, the orthography according to Eustathius. Hardly more perspicuous is the proper name Μίνως , which like πάτρως and ἄλω follows the third as well as the second declension. Here we have not even an uncontracted form to guide us; but the adjective Μινώϊος would favor the conjecture of a form Μινοφός . The name of the small island Μινώα might well be a form of the same.

Returning to our words in $\epsilon\omega\varsigma$; the substantive $\text{περίνεως επιπερnumerary, ship-passenger}$, leads us to a stem περι-ναφ-ο , in which we see the stem of ναῦ-ς augmented by a suffix \omicron . A more serious variation of stem in the latter part of a com-

* Athenæus, ix. 400.

pound word meets us in the adj. ἡδύκρεως *well-flavored, having agreeable flesh*. The substantive κρέας (Homeric gen. κρειῶν) is reduced by the aid of kindred tongues to the stem κρεῖϝας. Our ἡδύκρεως shows however a shorter stem κρεῖϝο (older κραῖϝο), and that this stem is no imaginary one, but represents in truth the older form of the word, is made evident by the Sanscrit *kravja-m*, 'raw flesh,' Lithuanian *krauj-a-s*, 'blood,' and Gothic *hraiñ*, 'dead body,' the stem of which is *hraiñva*, which stands for *hraiñja*.* Perhaps indeed κρεῖᾶ neut. plur. regular in Homer is the plural of a κρείον. With this ἡδύκρεως may be compared some compounds of χρέος, as ἀξιώκρεως, which follow the Att. 2d decl. and show a stem χρεω instead of χρεες. Kühner assumes that χρέος stands for χρέϝος, on what evidence I know not.

With regard to the Attic ἔως, Epic ἠώς, I will here only remark that the primitive ἄϝος is amply attested by the Aeolic and Doric forms. We shall speak more particularly of this word below. The Aeschylean adjective κραταίλειος *strong* is interesting in its relation to the well-known anomalous substantive λάας *stone*. Κραταίλειος leads us, according to the established analogies, to a nominative λάος, of which the genitive λάων is found in Soph. Oed. Col. 195. Comparing λείυς, λείνω etc., we see the stem of the word to be λαϝο. The vulgar forms λάας (λάς), acc. λάαν (λάν), gen. λάος, nom. pl. ελάς etc. are difficult of analysis, but most of them may perhaps best be referred with Kühner to a stem λαϝας.

Of the proper names in -αρεως some admit a conjecture as to their formation. The clearest is Τυνδάρεως with its many collateral forms. The root is *tud* (Lat. *tund-o*) whence first Τυνδαρός, formed like σπιβαρός, βλαβερός. This means of course *striker, thruster*, and would seem to have been one of the forms of the proper name; its counterpart *Tyndarus* occurs in Latin writers, and the patronymics Τυνδαρίς, Τυνδαρίδης, are to be referred to it. Mostly however longer forms are in use; Τυνδάρης, Τυνδάρεως, Τυνδάρεος, perhaps even Τυνδαρεύς. Τυνδάρεως and Τυνδάρεος are evidently identical, and point to a Τυνδάρεϝος

* Just as stem *haila* for *halja* = Sanscr. *kalja*.

or something similar. As *Τυνδάρεως* from *Τυνδαρός*, so is *Βριάρεως* formed from the adj. *βριαρός*. 'Αμφιάρεως, also 'Αμφιάρῳς, seems to be derived from *ἀρά* *curse, prayer*; that the suffix is *φο* can hardly be proved.

The adjective *πλέως* *full* finds its primary form in the Homeric *πλεῖος*. Here there is no evidence that *ϕ* ever was present. The *ι* in its consonantal form *ϝ* has, as in *δίμνεως*, produced the effect of *ϕ* in lengthening the foregoing vowel. Another adjective is 'ίλεως, poetic *ἴλαος* (also sometimes *ἴλαος*). The Lesbians said *ἴλλαος*, the double *λ* having doubtless arisen from assimilation. But one etymology of this word has, so far as I know, been proposed; that of Gerth in Curtius' *Studien*, I. 2. 217, who assumes a form *ισ-λαφο-ς* and refers it to the root *is*, 'wish.' The word would then signify *well-wishing*. To this may be objected, not so much the rough breathing in *ἴλεως*, for that is often of secondary origin, but the *ε* in the Aeolic *ἴλλαθι* = *ἴληθι*. Then too *ἴλαρός* *cheerful, gay*, Gerth himself confesses to be nearly related, and its meaning does not accord well with the notion of wishing. Both adjectives would, I think, explain themselves better from the root *σφελ* *glow, be bright* (Curt. Etym., p. 503), and for *ἴλεως* we might suppose a formation *σφελ-ϝα-φο-ς* or something similar. But this conjecture rests on too little evidence to be worth much.* Little plainer is the proper name *Πετέως* in Homer, doubtless signifying *rusher, hastener*, from root *πετ*; the form *Πεταφος* is however presumable. The island-name *Κέως* (Ionic *Κέος*?) may be reasonably referred to a *Καφος*; compare the adjective *Κήιος*, just like *Κώιος*. That *Κέως* is merely a dialectic variation of *Κόως*, *Κῶς*, I suggest, but do not assert.

The compounds of *κέρας*, excluding those which take the *τ*-form in the genitive, as *δίκερω*, *δικέρωτος*, follow the Attic 2d decl.; *ὑψίκερω*, *ὑψίκερω*; *ἄκερω*, *ἄκερω*; these may be plausibly explained from the adjective *κεραός*, which is doubtless *κεραφός*

* Brugman in the dissertation above cited, p. 119, essays, following a hint of Ahrens (de Dial. I., p. 284), to bring all these words, with *Δάσκαμαι*, etc., into connection with *salvus, salvere*. He will have *ἴληθι* = *salve*, and then, I suppose, *ἰλάσκειν τὸν θεόν* will be to wish him good health! In this he will scarcely find many followers. Ahrens was more cautious: it was only by separating *ἴλλαθι* from the other forms that he proposed to connect it with *εἴλε* and *σαίλε*.

= *cervus*. The relation of this to *κέρας* with its double stem *κεράς* and *κεράρ*, I cannot with certainty make out. Moreover the accent of these proparoxytone compounds is not quite clear. In this connection may be mentioned *γέλως laughter* and *ἔρως love*, which occasionally show forms of this declension; as however some critics question their authenticity, or at least their antiquity (Bekker rejects them from Homer), they stand under some suspicion.

The proper name *Τάλως* may be considered as a contraction (with change of accent) of *Ταλαός*, which itself appears as a proper name. *Ταλαφός* is thought to be the old form. *Τυφως whirlwind* is also the name of a giant, who has besides the appellations *Τυφών* and uncontracted *Τυφάων*, whence we may fairly suspect that *Τυφως* is in like manner contracted from *Τυφαός* = *Τυφαφος*. The proper name *Ίάρως** may be compared with the late Attic *ἰέρεως* = *ἰερέυς*; † both have the stem *ἰερεφο* = *ιαραφο*, namely the stem of *ἰερέυς* augmented by an *ο*. As *ἰέρως*, *ἰερέυς*, *Ίάρως* are to each other, so the three names of the same fish, *ὄρφος*, *ὄρφεύς*, *ὄρφύς*. *Φλέως*, the name of a certain water-plant, is Attic for Ionic *φλοῦς*: one probably stands for *φλαφος* and the other for *φλοφος*, and both are doubtless to be referred to root *φλυ*, in regard to which see Curt. Etym., p. 282. *Ἄχρως* and a few similar compounds of *χρόα* stand alongside of *ἄχρους* etc. The adjective *σῶς safe* is plainly contracted from *σάος*, *σόος*, *σῶος*. There are no further indications, but we are naturally led to suspect *σαφος*; *σῆζω* would then explain itself as *σοφ-ίζω*. *Κάλως cable* is Attic for vulgar *κάλος*, and we may suspect that they sustain the same relation to one another as *λαγός*, *λαγός*; *Τυνδαρός*, *Τυνδάρεως*, etc. *Φέως* a plant, *Τέως* the city-name, *ταῶς* the name, probably of foreign origin, of the peacock, and a few obscure proper names complete the list so far as my knowledge goes.

The result of our inquiries is that the words of the Attic 2d decl. are to be traced, so far as their origin is traceable at all, to forms of the *ο*-declension ending in *ας †* and *ως*; that

* *Ίάρως* is Doric for *ἰερός*.

† Choeroboscus ad Theodosium, Bekker, Anec. III 1197.

‡ In one or two cases *ης* (from *εης* or *εως*) seems probable as intermediate step between *ας* or *ης* and *ως*: thus *πλίως* from *πλήης*, *πλεής*, and only remotely from *πλαής*.

the forms in *εως* and *οως* are derived from these by a shifting of quantity from penult to ultima, and those in *ως* impure by contraction. We saw moreover that *ωος* was uniformly traceable to an older *οφος*, and in like manner *αος*, in most instances, to an older *αφος*, in a few to *αγος* or *αξος*, in one to *ασος*. These words fall therefore to all intents and purposes into the same category as the contracts of the second declension. They are only the same fundamental forms differently treated. As from root *πλυ* we get *πλόφος*, *πλόος*, *πλοῦς*, so from root *κυ* we have *κόφος*, *κῶος*, *Κῶς* or *Κόως*. *Ἀγήρως* has as good a right to a place among the paradigms of contract forms as *ἀργυροῦς*.

A word or two is all that is necessary on the inflection. The oldest authenticated form of the gen. sing. is seen in the Homeric *Περεῶο* for *Πεταῖο*. The *ι* drops out after the long *ω* just as after the long *ā* of the 1st decl., *Ἀτρείδᾱο*. In Il. 14, 489, the genitive of *Πηνέλεως* is according to the vulgar reading *Πηνελείοιο*; for this Bentley and Bekker read *Πηνελέωο*, which is probably right. Others of these genitives are cited by Choeroboscus.* The accusative plural, as *νεῶς*, we shall of course not suspect of having lost a *υ*, but derive directly from *νεῶ-υς*. The neuter plural *ἀνώγεω* is for *ἀνώγεᾱ* through the influence of the other cases. The acc. sing. should of course properly end in *ων*; of the form without *υ* we shall speak anon.

The accent of these words is in many points unsettled, the statements of the ancient grammarians being contradictory and the usage of the manuscripts inconsistent. All agree that the ending *εως* allows the tone to recede to the antepenult, and that the accentuation of the nominative of barytones remains in all the cases: *Μενέλεω*, *ἀγήρω*, but *Μενελάω*, *ἀγηράω*. Not so however in the Epic genitive; *Πηνελέωο*, *Ἀνδρογέωο*. As to nouns in *οως* the general usage regards them as paroxytones, though some write *Ἄθωος*, *γάλωος*, at least in nom. and acc. Of the oxytones those in *εως*, it is certain, retained the acute even in gen. and dat.; why it is hard to say. Oxytones in *ως* impure, though often accented like those just

* *Περὶ ῥήνων*, Bekker, *Anec.* III., p. 1223.

mentioned ought probably to have the circumflex in the genitive and dative; λαγῶς, λαγῶ, etc.: some ancient authorities would have us even write λαγῶς, ὀρφῶς in the nominative, incorrectly, however. Τυφῶς may perhaps be right. The perispomena should retain their circumflex throughout. Here belong the monosyllables except ζῶς (from ζωός), also ταῶς. The accent of the numerous foreign proper names in ως, as Ταμῶς, Ἴναρως, Νεκῶς, is extremely uncertain.

But our treatise would by no means be complete without some notice of the many points of contact between the Attic second declension and other forms. As to the duplicates λαγῶς λαγός, κάλως κάλος, etc. we have thought ourselves justified in assuming the Attic forms to have amplified stems, formed from the common ones by the addition of some suffix as *fo*. But there are, beside these, interchanges of form between the Attic second and the third declensions. It is now a well established principle that cases of heteroclis and metaplasm have in general their origin in diversity of stem-formation; that they are traces of a period in the history of the language when there was great luxuriance in the use of formative elements; a period of extended polymorphism of derivatives, such as every one must acknowledge to have been a leading characteristic of the pre-Hellenic tongue. The plainest proofs of this are to be found in the Homeric poems; the multiformity of the Epic dialect finds its explanation only in the supposition of a still greater multiformity in earlier times. Thus, for example, the Epic forms of *νίος* point unmistakably to a time when three nominatives, *νίος*, *νῆς*, *νιεύς*, from three different stems, existed, each with full flexion, side by side. The difference of stem may consist in the interchange of one suffix with another (*δῆσμο*, *δῆσματ*), or the addition of suffix to suffix (*γονυ*, *γονφατ*). Thus, among other cases already considered, we saw the stem *κρεας* alternating with a shorter stem *κρεο* or *κρεω*. Collision of vowel-stems with *v*-stems is less frequent; yet a case is *ἄλως*, which has rarely a gen. *ἄλωνος*. But by far the most important of these substitutes for the Attic second decl. is the form of declension of the word *ἦρως*. In no less than three of the words which we

classed under the Attic 2d decl. we found the flexion in *-ως*, *-ωι*, *-ωα* alternating with the other; these were *ἄλως*, *Μίνως*, *πάτρως*. We saw that in *πάτρως* the 2d decl. was certainly the original form, and it is presumable that the same is true of *ἄλως* and *Μίνως*. Now the accusative sing. of *ἦρως* and the words declined like it often suffers contraction: *ἦρω* is quite as common in Attic as *ἦρωα*. Just so the accusative *ἄλω*, which occurs as well as *ἄλων*, is a contraction of *ἄλωα* and is to be referred to the 3d-declension form of the word. Here evidently is the explanation of the numerous accusatives of the Attic 2d decl. without *ν*, as *λαγῶ*,* *Κῶ*, *Κέω*, *Ἄθω*, etc. These accusatives are to be regarded as having passed over into the third declension. Of course it is not necessary to presume in all these cases that a complete inflection like *ἦρως* existed at any time: the analogy of *ἄλως* and words really admitting such inflection would favor the extension of these accusative forms to other words, and so *λαγῶ*, *Κῶ*, etc., might be compared to Attic *Δημοσθένην* and Herodotean *δεσπότεα*.

But not only do words of the Attic 2d decl. thus show third-declension forms, but conversely, some words which from preponderance of usage are referred to the 3d declension still show in good writers forms of the Attic 2d decl. *Μήτρως* *maternal uncle* cannot possibly be separated from *πάτρως*, and though it very seldom exhibits forms of the 2d decl., yet they occur; the acc. *μήτρων*, and the dative (in Pindar) *μάτρῳ*. Of course we shall class the two words together; it is mere accident that one has retained more fully than the other the earlier inflection. Even *ἦρως*, the representative word of its class, shows second decl. forms well authenticated; the gen. *ἦρω*, dat. *ἦρῳ*, acc. *ἦρων*. It is plain that the line is nowhere to be strictly drawn between the Attic second declension and the words like *ἦρως* of the 3d decl. Now what is the formation of these third-declension words? The oblique cases *ἦρωος* etc. show that a consonant has been dropped from the end of the stem. I see no reason to doubt the conclusion already arrived at by Curtius,† with the word *πάτρως* as a clue;

* Athenæus (9,400) says that this acc. was written "χωρίς τοῦ ν καὶ περισπωμένης". This confirms our theory, since the other acc. *λαγῶν* was doubtless oxytonic.

† *Erläuterungen zu meiner Schulgrammatik*, p. 50.

namely, that these words have *F*-stems. On what ground Kühner rejects this theory I cannot imagine; he does not substitute any other. We see therefore that *πάτρως* of the 2d decl. has a stem *πατροFo*; of the third, a stem *πατροF*; that is, the stem of the second-declension forms differs from that of the third-declension forms by the plus of an *ο*. Furthermore it is evident that in the cases *πάτρως* and *μήτρως* the stems *πατροFo* and *μητροFo* are the original ones, of which *πατροF* and *μητροF* are shortened forms. For that the stems in *F* are a formation existing independently of the longer forms in *Fo*, we are disinclined to believe, since this would necessitate the assumption of a secondary suffix *F* or *υ*, a thing unheard of. Moreover if there were a real original stem *πατροF* it is not easy to see why the nominative should not be *πάτρους* like *βούς*. What is established for *πάτρως* and *μήτρως* may be fairly assumed for *Μίνως*, *άλως* and *ήρως*. It is therefore extremely probable that the stems *ΜινοF*, *άλοF*, *ήροF* are in some way shortened from *ΜινοFo*, *άλοFo*, *ήροFo*; that is, that the second-declension forms are here too the original ones, the others being of secondary origin. This result immediately excites a suspicion that the few remaining words declined like *ήρως* may have a like origin. Nor does this suspicion appear to lack confirmation. The remaining words are *Τρώς*, *δμώς*, *θώς*. Of *δμώς* *slave* the second-declension form actually exists in Hesiod (Op. et Di. 430, 470) in the uncontracted state *δμῶος*. Choeroboscus cites this, and also *Τρῶος*. *Δμώς* is etymologically clear: it is from root *δαμ* with *Fo*; *δμο-Fo-s*. *Θώς* *jackal* viewed in the light of these other words appears to be identical with the adjective *θός* *swift*, that is *θοF-οs*, from root *θυ*. The apparently irregular accent of the genitives *Τρώων*, *δμῶων*, *θῶων* explains itself if we view them as from the nominatives *Τρῶος*, *δμῶος*, *θῶος*.

We are thus led to the conclusion that *ήρως* and all the words declined like it are but mutilated forms of words of the second declension ending in *οFo-s*. They are as it were estrays from the Attic second declension. Such an abridgement of a vowel stem is not unheard of in Greek: it has been shown to have taken place in other words, and must hereafter, I think,

be assumed to a still greater extent when we come to study carefully the genesis of the numerous classes of consonant-stems in Greek. It occurs also in Latin. I refer to Bopp's *Vergl. Grammatik*, III., p. 421, Schleicher's *Compendium*, pp. 438 and 453; and in particular, Angermaun in Curtius' *Studien*, III. 1, 117. Most frequently *i* final disappears: stem *νυκτ*, Indogermanic *nakti*: so the suffix *τητ* = Lat. *tāt* has arisen from *tāti*. So too stem *γραν*, originally, according to Curtius, *γεραφι*. Still others in Latin, *ment(i)*, *sacerdot(i)*, etc. More difficulty is at first sight presented by the rejection of an open vowel, because the change in stem involves a material change in inflection. Yet examples even of this are not wanting. With regard to a number of *κ*-stems, it can be shown by the evidence of the cognate tongues that the *κ* has arisen from the suffix *κο*, originally *ka*. Examples are *ἀλώπηξ*, *ἄρνξ*, *μύρμηξ*; also *φύλαξ*, the more primitive *φύλακος* being here actually preserved. *Φύλαξ* and *φύλακος* are as *δμῶς* and *δμῶος*.

The feminine form corresponding to this class of nouns is that of the well-known words *ἡχώ*, *πειθῶ*, etc. Curtius,* taking simply the dialectic forms of these feminines as data, has assigned to them stems ending in *οφι*, the feminine of *οφο*. Although other grammarians have dissented from this view, yet the grounds on which Curtius bases his conclusion seem to me in themselves sufficient, and when we consider, what Curtius himself points out, that to *πάτρως*, *μήτρως*, *ἡρως* corresponding feminines really exist in the proper names *Πατρῶ*, *Μητρῶ*, *Ἡρῶ*, the results separately arrived at in regard to the two classes of words are mutually confirmatory. *Ἡρῶ*, therefore sustains (so far as formation of stem is concerned) the same relation to *ἡρως* which *θούρις* does to *θούρος*, *κορωνίς* to *κορωνός*. Of course others of these masculines may form a feminine by changing *φο* into *φja*: so *δμφή*, that is *δμο-φja*.

One more word claims our attention; we have reserved it for the last, on account of its peculiar difficulty. It is the feminine *ἡώς* *dawn*, Attic *ἕως*. In the Epic language as in nearly all the dialects the word follows *αιδώς* in declension, and so

* *Erläuterungen*, loc. cit.

belongs unquestionably to the σ -stems; moreover the compound $\acute{\epsilon}\omega\sigma\text{-}\phi\acute{\omicron}\rho\omicron\varsigma$ leaves no doubt that the σ belongs to the stem. The etymology of $\acute{\eta}\omega\varsigma$ is as clear as that of any Greek word. The root is *us*, from which, by suffix *as*, is derived in Sanscrit the feminine stem *ushas* "dawn." This with the *Guna* amplification gives us *ausas*, Graeco-italic *ausos*.* The first *s* drops out in Greek, leaving stem $\acute{\alpha}\omega\varsigma$ (whence Aeolic $\acute{\alpha}\acute{\omega}\omega\varsigma$) or $\acute{\alpha}\mathcal{F}\omega\varsigma$, from which Doric $\acute{\alpha}\mathcal{F}\acute{\omega}\omega\varsigma$, $\acute{\alpha}\acute{\omega}\omega\varsigma$, Ionic $\acute{\eta}\omega\varsigma$. Now the Attic $\acute{\epsilon}\omega\varsigma$ distinguishes itself in three particulars from $\acute{\eta}\omega\varsigma$: it has a different accent, it has irregularly admitted the rough breathing, and it follows the Attic second declension except in the acc. sing., which is always $\acute{\epsilon}\omega$. It is I think commonly held by grammarians of the historical school, that the Attic forms of the word are due to a mere blunder, and that the word originally belonged only to the σ -declension. But evidence is not wanting that other forms of the stem were known to the Greeks. There are pretty plain indications that an $\acute{\alpha}\mathcal{F}\alpha$, $\acute{\alpha}\mathcal{F}\alpha\varsigma$, etc., of the first declension was in use among the Bœotians, and a corresponding $\acute{\alpha}\acute{\nu}\alpha$, $\acute{\alpha}\acute{\nu}\alpha\varsigma$ among the Lesbians. On these forms see Ahrens, *de Dialectis*, I. pp. 121 and 206. It is not impossible that there should have been beside the *a* stem also an σ -stem, $\acute{\alpha}\mathcal{F}\sigma$, from which $\acute{\epsilon}\omega\varsigma$ would come as $\lambda\acute{\epsilon}\omega\varsigma$ from $\lambda\alpha\mathcal{F}\sigma$. The prototype of this stem $\acute{\alpha}\mathcal{F}\sigma$ would be *ausa* or *usa*, and we find in reality a Sanscrit stem *usha* beside the *ushas* mentioned above. I am therefore inclined to recognize in Greek three stems; $\acute{\alpha}\mathcal{F}\alpha$, $\acute{\alpha}\mathcal{F}\sigma$, $\acute{\alpha}\mathcal{F}\omega\varsigma$.

Finally, we may remark that this form of declension is not peculiar to the Attic dialect, but has received its name from its being most extensively employed by Attic speakers and writers. To the Aeolic dialects it is, so far as I know, quite foreign. The Dorians employed only a few of the contracted forms, and these chiefly in proper names; $\mathcal{K}\acute{\omega}\varsigma$, $\mathcal{T}\acute{\alpha}\lambda\omega\varsigma$, etc. The Epic language admits a few contracts; $\acute{\alpha}\gamma\acute{\eta}\rho\omega\varsigma$, $\acute{\iota}\psi\acute{\iota}\kappa\epsilon\rho\omega\varsigma$, $\zeta\acute{\omega}\varsigma$, $\sigma\acute{\omega}\varsigma$: of the forms with shifted quantity it is very chary, admitting them only in proper names; $\acute{\Lambda}\gamma\acute{\epsilon}\lambda\epsilon\omega\varsigma$ (also $\acute{\Lambda}\gamma\acute{\epsilon}\lambda\alpha\omega\varsigma$), $\acute{\Lambda}\theta\acute{\upsilon}\omega\varsigma$, $\mathcal{K}\acute{\omicron}\omega\varsigma$, etc., and the single appellative $\gamma\alpha\lambda\acute{\omega}\omega\varsigma$. The

* Lat. *aurora*, i. e. *ausōsa*—Sanscr. *ushásá*.

usage of the Elegiac and Iambic poets does not differ in this respect from the Epic. Herodotus has in proper names both classes of forms; Μίνως, Ἄθως, Σησίλειως; very rarely in appellatives; πάτρων, λείων. The Athenians exhibit on the contrary a predilection for these forms. With reference to the words in εως = αος it has been shown that the form in εως belonged to the conversational every-day language, that that in αος on the other hand bore with it a certain dignity and hence was affected by the tragic poets. Aristophanes uses the former invariably in common dialogue, the latter in serious choral strains or in passages in which he travesties the stilted diction of the tragedy.

ADDENDUM.

In stating that πάτρως is unknown in the uncontracted form, I overlooked the form πατρῶς cited along with λαγῶς in Arcadius *περὶ τόνων*, lib. V., p. 42 of Barker's edition.

I take this opportunity of adding another passing remark to what I have said above (p. 25) about *lāas stone*. The gen. sing. λᾱος, dat. λᾱϊ, as well as all the dual and plural cases, are never resolved, but the accent of the gen. and dat. shows them to have once been trisyllabic. The ancients so understood them (Bekker *Anec.* III. p. 1219; Arcadius, p. 128) and agree in representing λᾱαος etc. as the original forms. Accordingly λαΨας is probably the stem of these cases. But what of λᾱας, λᾱαν? These can come regularly from no consonant stem. Curtius (*Erläut.* p. 66.) derives them from stem λαΨ and thinks the short *a* to be merely "*eingedrungen zur leichteren Bildung des Nom. und Acc. Sing.*" Is it not more reasonable, following the hint afforded by the form λάου, to consider them real 2d decl. forms, phonetic variations of λᾱος, λᾱον? The Dorians made Μενέλας out of Μενέλαος, probably through an intermediate stage Μενέλαας; just so the successive forms λᾱος, λᾱας, λᾱς, are possible.

III.—*Strictures on the Views of August Schleicher respecting the Nature of Language and kindred subjects.*

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THE name of Schleicher cannot be uttered by any student of comparative philology of the present generation without respect and admiration. Especially now, when the memory of his early and lamented death is so recent, no one can desire to remember aught of him save his immense industry and erudition, his ardor in the pursuit of the science to which his life was devoted, his critical acuteness, his liberal and independent spirit, his love of freedom, and the many other excellencies of his character as man and as scholar. His part in the development of the historical study of language was no unimportant one. His manual of Indo-European comparative grammar* has been the convenient and instructive text-book out of which many, in various lands, have drawn a knowledge and love of the subject; and, being now in process of translation into English, its usefulness among English speakers will soon be largely increased. If I, then, take the liberty to criticise and combat in this paper some of his fundamental views of language, I do it with no abatement of due respect to him, but because he stands forth as a very conspicuous representative of what I cannot but think a false and hurtful tendency in a part of modern linguistic science; and because his great and deserved reputation as a philologist, a comparative student of the facts of language and their concrete relations, gives a dangerous importance to his opinions as a glossologist, or student of the theory and philosophy of language. There is, unfortunately, no necessary connection between eminence in one of these characters and in the other; many a great comparative philologist has either left untouched the principles and laws underlying the phenomena with which

* *Compendium der vergleichenden Grammatik der Indogermanischen Sprachen.* Third edition, Weimar, 1870.

he deals, or has held respecting them views wholly superficial, or even preposterous and absurd. This state of things is one which marks the formative period of a science; there is every reason why it should now come to an end, and why certain fundamental truths, at least, should be accepted as so thoroughly established that he who denies them shall have no right to be seriously reasoned with, and may be simply passed by as a humorist.

The views which I shall here criticise are put forth in two brief pamphlets, both published toward the end of their author's life. The first appeared in 1863, and is entitled "The Darwinian Theory and the Science of Language."* It is in the form of an "open letter" to Prof. Hackel, the well-known zoologist, who, by dint of much urging, had persuaded its author to read Darwin on the Origin of Species. The work, once read, had won Schleicher's hearty and unqualified approval; it seemed to him to be simply the natural and inevitable next step forward in zoological science—in fact, the analogue of what had been already done in linguistic science; he had himself happened to state, at just about the same time, and in nearly equivalent terms, in his book on the German language,† the same conclusions respecting language which Darwin had put forth in attractive form respecting the history of animal life. And he goes on to draw out more fully the parallel between the two sciences, and to make the facts and principles of language demonstrate the truth of Darwinism. Now this parallelism has impressed many minds, and been used once and again, in the way of illustration or of analogical argument, on the one side or the other; but no one, so far as I know, has hitherto attempted to make so much out of it as Professor Schleicher here does—to prove that one species of animals must have descended from another very unlike it, because a modern dialect comes from an exceedingly dissimilar ancient one; and that animals of higher structure must be

* *Die Darwinsche Theorie und die Sprachwissenschaft*. Offenes Sendschreiben an Herrn Dr. Ernst Hackel, a. o. Professor der Zoologie und Director des Zoologischen Museums an der Universitat Jena, von Aug. Schleicher. Weimar, 1863. 8vo. pp. 29.

† *Die Deutsche Sprache*. Von August Schleicher. Stuttgart, 1860. 8vo. Second improved and augmented edition, 1869.)

developed from those of lower, because complicated tongues are derived from monosyllabic roots; and so on. Such reasoning, of course, implies something like a real and substantial identity between an organized being, an animal or plant, on the one hand, and a language on the other. And this identity Schleicher is logical enough, and bold enough, to assume. His fundamental view of language he lays down in these terms (pp. 6, 7): "Languages are natural organisms, which, without being determinable by the will of man, arose, grew, and developed themselves, in accordance with fixed laws, and then again grow old and die out; to them, too, belongs that succession of phenomena which is wont to be termed 'life.' *Glottik*, the science of language, is accordingly a natural science; its method is on the whole and in general the same with that of the other natural sciences."

Here, again, we have statements akin with those which are not seldom made by writers on language, only usually in less definite and categorical shape. Schleicher has put forth the theory of the independent and organic life of language in an extreme form, and has drawn from it extreme consequences, as if in order that we may be provoked to give it a thorough examination, and see whether it is a valuable guiding truth, or only a delusive figure of speech.

Our author does not attempt any proof of his dogma, or even let us see clearly the grounds on which it rests in his own mind. For aught that appears, he regards it as self-evident, or as sufficiently supported by the further expositions which he makes, and which involve it as an element. This is to be regretted, as imposing additional trouble and perplexity upon one who would fain test and, if possible, refute the doctrine; since it may remain to a certain extent doubtful whether the considerations which were held to be of the most importance have been after all touched. But Schleicher gives us in his statement two hints which we are justified in taking up and dwelling on, as very probably indicating the grounds of his faith: languages are "not determinable by the will of man," and their growth and change is "according to fixed laws."

Of these two, the former is evidently the more important. If the voluntary action of men has anything to do with making and changing language, then language is so far not a natural organism, but a human product. And if that action is the only force that makes and changes language, then language is not a natural organism at all, nor its study a natural science. Let us, then, look first and especially into this.

If we desire to understand the forces which are at work in language, we must be willing to examine their operations in petty and prosaic detail, not content with standing in admiring awe before their collective result. That language is a glorious thing, a divine gift, a characteristic of human nature, the sign and instrument of our superiority to the brute, and all that, is unquestionably true, and might be indefinitely enlarged upon, if pertinent to the present inquiry. Of somewhat the same character is a Beethoven symphony, a Grecian temple, an Egyptian pyramid. But if I wish to ascertain whether a certain pyramid is a work of human art, or, rather, a stupendous natural crystal, indeterminable by the will of man, and developed under government of the eternal laws of regular solids, I look to see how it is made up in its parts, and whether it is composed of independent stones, bearing the marks of human tools, and apparently fitted together by human hands; I do not stand at a distance and wonder at its regularity and immensity, contrasting these with the feeble powers of the men whom even a climb to its summit now exhausts. That no man can make a language, any more than he can make a pyramid; that no man, unaided, can make any item of language, any more than he can move or set in place one of the stones of the pyramid; that no man, nor any number or generation of men, can affect the present of a language except as they have its past behind them, any more than they can lay the top-stone of a pyramid without having its lower courses beneath them, is all obvious enough; only, so far as I can judge, these and others like them have been the considerations that have led some people to deny human agency in language;—for the equally reasonable purpose of disproving it in the pyramids, I do not remember to have seen them adduced.

Every one acknowledges that languages at the present time, not less than in the earlier stages of linguistic history, are in a state of constant change, or "growth," as it is often and properly enough called; and it ought not to be impossible, nor very difficult, to recognize the forces which are effective in producing this growth, and then, by comparing the modes and results of earlier growth, to satisfy one's self whether any other force or set of forces may or must be assumed as causing the latter. Now the difference which separates any given language, modern or ancient, from its predecessor at any distance in the past, is not a single integral thing, but rather the sum of a great number of particular items; and these items admit of being classified, in order to the better determination of the causes producing them. Let us briefly examine the classes, and see what kind of action they imply.

In the first place, the words of a language come to have a different meaning from that which they had formerly. Of all the modes of change, this is the most insidious and unavoidable in its action, and, in languages circumstanced like our own, the most deep-reaching and important in its effects. Every part and particle of every vocabulary is liable to it. And does it come about by an interior force, working in the substance of the spoken word? Not the least in the world; it is simply a consequence and accompaniment of the growth of men's knowledge, the change of men's conceptions and beliefs and institutions. It is as purely extraneous to language as the fact that the name *John Smith* given to the puling infant is borne also by the tottering old man into whom that infant grows. The world-wide change in the value of *priest*, from the simple 'older person (elder)' that it originally designated to its present sense of 'consecrated (and, in some religions, half-divine) minister of God,' is wholly subordinate to the change of men's ideas as to the character of the official to whom it is applied. The words *faith* and *love*, and *God* itself, are, in the meaning we give them, indexes of the education in point of religion and refinement which our part of the human race has enjoyed. The peculiar American sense of *college*, quite different from the English, is due to the peculiar circumstances

which have governed the development of our educational system ; just as the names *robin* and *blackbird* have been applied by us, for the sake of convenience and under the government of old associations, to birds essentially unlike, and only superficially like, those to which they belong in the mother country. That the name of a race, *Slave*, has become in Germanic speech the name of a bondman, has no other foundation than the historical circumstances which made so many Slaves bondmen of the Germans. The peculiar sacredness of association of *home*, the pregnant sense conveyed by *comfort*, have nothing to do with the phonetic texture of those vocables themselves, but are what the habits and feelings of English speakers have endowed them with. *Talent* is a term borrowed from a parable by men who had read and studied the Bible, and is applied, in accordance with the significance of the parable, to designate the treasure of ability which one possesses, as it were by gift of the Creator. And there are hosts of words like *light*, and *heat*, and *earth*, and *sun*, which have been, not indeed changed in outward application, but indefinitely widened and deepened in inner and apprehended significance, by the results of men's study of the universe and its relations.

So is it also with that developed wealth of word and phrase by which intellectual and moral acts, conditions, and relations have come by degrees to be signified. All, as the historical study of language distinctly shows, has been won through the transfer to an ideal use of words and phrases which had before designated something physical and sensible. And the transfer was made in the usage of individuals and communities who saw a resemblance or analogy between the physical act and the mental, and who were ingenious enough to make an application of material already familiar to new and needed uses. Take as examples one or two of the terms we have just been employing : *applicatum* is a 'bending to,' a physical adaptation of one line or surface to another ; *transfer* means 'carry across ;' *intellectual* comes, by an intricate series of changes, from a verb signifying 'pick among.' What agency other than that of the speakers of language has been at work here ? We are ourselves all the time repeating the same processes in lively phrase. *Circumvent* and *get around* are but one

metaphor, in an older and younger form; *comprehend* and *understand* are often familiarly replaced by the nearly equivalent modern phrases *grasp* or *get hold of* and *get to the bottom* (or *into the heart*) *of*, the figurative use of which is certainly a human product.

Once more, that large and conspicuous class of changes by which certain words are reduced from fulness and independence of meaning to the value of connectives, signs of form and relation, equivalents of grammatical terminations, is of the same origin. We trace, for example, the history of *have*, from the time when it signified possession only, to that when it has become in a part of its uses a mere sign of completed action, an "auxiliary" forming a "perfect tense" (as in *I have sat*); and we find no trace of any alterative agency save a slowly changing usage, through which the speakers of English (as of sundry other modern languages), without being conscious of what they were doing, or working reflectively toward an anticipated end, have converted the one thing into the other. So with *of*, which, from being in Anglo-Saxon time a full preposition, the same both in form and meaning with *off*, has now grown into a kind of detached and prefixed genitive ending. So, again, with *to*, once a preposition governing a verbal noun, now an arbitrary "sign of the infinitive," and even convertible and converted in childish and colloquial phrase into a representative of that verbal form (thus: "will you do it? no, I don't want *to*"). I have taken as examples some of the latest cases of this change, because, while not less fairly and fully illustrative than any which might be taken from other periods of linguistic growth, they are more directly intelligible in their process. We say sometimes that such words change themselves in people's mouths, without the knowledge of their speakers; but we know, at the same time, that we are only talking figuratively, in the same way in which we might say that a fashion changes itself, or a law, or a popular opinion.

My illustrations of this immense and varied department of linguistic growth are scanty, but I think that they ought to be sufficient for their purpose. If there is in the whole de-

partment anything of a kind essentially different from them, or calling into action other forces than they imply, it has at any rate entirely escaped my quest. Nor am I aware that any student of language has ever attempted to point out anything inconsistent with them. Such alterations are all the time going on in our own speech without any question as to whence they proceed ; and the burden of proof evidently rests upon those who claim that in other times they have involved forces of a different character.

A hardly less extensive department is that which includes changes in the forms of words, alteration of their uttered substance—phonetic decay, as it is sometimes loosely called, from the prevailing direction of the movement. I may be briefer in my notice and illustration of this, inasmuch as all authorities are virtually agreed in their attribution of its phenomena to a single prevailing cause—namely, a disposition to economy of effort in utterance. This disposition, felt in human minds and directing the operations of human organs of speech, it is, which in all languages abbreviates long words, wears off endings, gets rid of harsh combinations by assimilation, dissimilation, omission, insertion, compensation, and all the other figures of phonology, changes the tone of vowels and the place and mode of articulation of consonants, brings new alphabetic sounds into existence and lets old ones go into desuetude—and so on, through the whole vast list of modes of phonetic change. The ways in which the tendency works itself out are indefinitely various, depending upon the variety of human circumstances and human habits, as well as upon preferences and caprices which come up in a community in a manner often strange and unaccountable, though never justly awakening the suspicion of an agency apart from and independent of man. Every word which any one of us has learned to utter he has the power to utter always completely, if he will take the pains ; but the same carelessness and haste which bring about the vulgarism *pro'able* and the colloquialism *cap'n*, which make us say *bus* for *omnibus* and *cab* for *cabriolet*, tend to transmute gradually the whole aspect of our speech.

When we learn German, we are conscious of a little special effort in pronouncing *Knecht*; and the same feeling, in a less conscious form, converted the almost identical *cnicht* of the Anglo-Saxons into our *knight*. The laws of phonetic mutation in speech are in part the laws of the physical relations of articulate sounds; but only in part, for else the phonetic history of all related tongues would be essentially the same: the other great and indeterminable factor in the process is the will of men, in the forms of choice, willingness or aversion to articulating effort, sense for proportion and euphony, conservative tendency or its opposite, and other the like. And this, again, acts under the influence of all the inducements and motives, external and internal, which direct human action in other respects also. There is just as much and just as little that is arbitrary in the action of men on the form of language as in their action on any other of the elements which go to make up the sum of their culture.

There is another form of mental inertia which leads to changes in the constitution of words. Something of exertion is involved in the learning and remembering of apparently irregular forms, like *went* from *go*, or *brought* from *bring*, or *worse* from *bad*, or *feet* from *foot*. If the great majority of past tenses in English are made by adding *ed*, of comparatives by *er*, of plurals by *s*, there is economy of mental effort in making these usages universal, and saying *goed*, *bringed*, *badder*, *foots*. These particular alterations, it is true, being in very familiar and frequent words, sound strange and shocking to us; yet their like have borne no insignificant part in the reduction of English to its present shape; and that their root has been in the mind and will of man admits of no denial or question.

If we thus need to call in the aid of no extra-human agencies in order to account for the changes of words, in respect either of meaning or of form, how is it with the production of new words and forms? This ought to be, if anything, the distinctively characteristic part of the growth of language, which should bring to light whatever of mysterious forces there may be involved in it. If names are given to things by

speaking men, then the will of men has at least something to do with the determination of language; if, on the contrary, names are given, always or ever, otherwise than by speaking men, then we ought to be able to catch the power in the act, and to analyze and describe it, and see whether it be like that which is exhibited in the growth of animal organisms.

Now, in the first place, every one will have to acknowledge that men do sometimes give names to things. The father names his son, the author his book, the discoverer his isle, or bay, or plant, or animal, the inventor his machine or application of force, the scientist his stratum or epoch, the metaphysician his generalization—and so on, through an immense series of objects of thought and knowledge. Much of this, to be sure, does not gain universal use, does not get into the very heart of the popular speech; but that is perhaps because the essentials of popular speech were produced, not after a different fashion, but a long time ago. Parts of it, as circumstances determine, do make their way into familiar and every day use, becoming as thoroughly English as any words that “came in with the Conqueror,” or even with his freebooting predecessors, the Angles and Saxons. Again, it must be confessed that these are for the most part not productions of words wholly new, but adaptations or borrowings of elements already existing in this or in other tongues. Yet this also is a matter of subordinate consequence. To the great majority of the men who are to use them, the words *telegraph*, *dahlia*, *petroleum*, *miocene*, with all their kith and kin, are precisely the same as if they were forged brand-new out of the nomenclator’s brain. And in the occasional instances in which such new fabrications are made, they answer the same purpose, and just as well, as the others. It is the easier and the customary way to apply already existing material to new uses in the extension of language; men will sooner assent to and adopt your name if it be of that kind; but their assent and adoption is all that is needed to make language of it, from whatever source it may come. We have already examined, and referred without hesitation to human agency, the process by which appellations for new ideas are chiefly won—

namely, by changing and adapting an old name to fit them. What is accomplished otherwise than in this method is in part by taking in consciously words out of other tongues. Thus, certain animals, or plants, or products, or peculiar instruments, or strange institutions, are brought within our sphere of knowledge in connection with the names which they have borne where they were before at home, and we go on to call them by the same names; our English language coming by such means to include scattered elements from languages all over the globe. Or, what is of much more importance, there is some foreign tongue, to the stores of which customary resort is had when anything new requires to be expressed. Such a source of new expression to the English is the Latin, and, in a less degree, the Greek. No one, I believe, perplexes himself as to what may be the recondite organic affinity between English and the classical tongues, whereby, when a new term is wanted, a Latin vocable presents itself, and is seized and put to use. The act of choice involved in the process, the determination by the will of man, is clear and undeniable; all that the philologist attempts respecting the matter is to set forth the historical causes which have rendered possible and recommended our resort to these subsidiary sources. And when it is considered to what an enormous extent we have drawn upon the classical tongues, the dogma that men's will has nothing to do with determining language gains by this alone a very doubtful aspect. But farther, still another part of the new names called for in the uses of language is obtained by combining elements already existing in the language itself, by making new compounds, or new derivatives with the aid of such formative elements, prefixes and suffixes, as the language has in living use. In English, to be sure, this method of production is of minor importance, since the habit of composition and abundant and varied derivation has become deadened with us. But English differs here only in degree from languages like the German, Latin, Greek, and Sanskrit. We do make compounds still, either loose ones, like *ink bottle*, *steam-whistle*, *rail-fence*, or closer, like *inkstand*, *steam-boat*, *railroad*; and it has probably never entered into any

one's mind to doubt that such were actually made by us, and that the parts composing them did not grow together by any inherent force, separate from the determining action of the will of English speakers. And if this is the case with our compounds, it cannot be otherwise with the more abundant and various compounds of the other tongues to which we have referred. If any one be bold enough to maintain the contrary, he may be challenged to bring forward his proof, and to instance an example of a word of which the constituent members have combined by an internal organic attraction.

In this conclusion, however, is involved another, yet more important and far-reaching. On looking back into the history of our family of languages, we find that the combination of independent elements to form new words has been a process of the widest range and most conspicuous consequence. Not only have names been thus made, but grammatical forms also; the whole structure of inflective speech has had no other origin. Every formative element, whether prefix or suffix, was once an independent vocable, which first entered into composition with another vocable, and then, by a succession of changes of form and of meaning (changes which have been shown above to be due to human action alone), gradually arrived at its final shape and office. This can be proved by clear and acceptable evidence respecting so many formative elements, modern and ancient, that the argument by analogy from these to the rest is of a force which cannot be resisted. The *-ful* and *-less* by which we make adjectives, the *-ly* which forms adverbs, the *-d* of the past tense in our "regular" verbs, the *m* of *am*, the *-th* or *-s* of *loveth* or *loves*, are all demonstrably the relics of independent words; and if these (along with many others which might be instanced), then, by fair inference, all the rest. The grammatical apparatus of those languages whose history we best understand is essentially of the same kind with the *-ful* of *helpful*, and to whatever force we attribute the production of the latter we must attribute that of the former also. There are, it is true, left alive a few representatives of the antediluvian period of linguistic science, who hold that endings exuded from roots and themes by

some indefinable force, having no analogy with anything that appears in language now-a-days; and such may, without appreciable damage to their reputation either for consistency or for insight, maintain the independent organic existence of language; but all adherents of the prevailing modern school of historical philology, the school in which Schleicher himself is one of the leading masters, accept an explanation of structural growth which not only admits but demands the will of man as a determining force.

We will give our attention to but one other mode of change in language, namely the loss of words and phrases, their obsolescence and final disappearance. This doubtless presents analogies with the wasting of tissues in organized bodies. But it really means and is nothing save that communities who have formerly used certain words come to use them more and more rarely, and finally cease to use them altogether. When we look for reasons, we seek them in the grounds of human action, and only there: the thing which this vocable designated has gone out of use and so out of mind, and there has been no farther occasion for its name to appear in men's mouths; for this other, new expressions have chanced to arise and win acceptance, crowding this out of employment, which is existence; for yet another, no explanation, perhaps, can be given save the unaccountable, but human, caprices of popular favor and disfavor. Forms are lost, too, by the operation of phonetic decay, which destroys their distinctive signs, and so brings about their abandonment and oblivion; cases and genders, persons and moods, as our language more than others abundantly testifies, can go in this way; but they can go in no other. The same force which makes can unmake also, and nothing else can do it.

We have thus seen, or seemed to see, that words are neither made, nor altered in form or meaning, nor lost, except by the action of men; whence it would also follow that that congeries of changes which makes up the so-called growth or life of language is produced solely by human action; and that, since human action depends on human will, languages,

instead of being undeterminable by the will of man, are determinable by that will, and by nothing else. And the strangest thing about it all is that I have made no assertion respecting matters of detail, and have instanced no case in illustration, which would not probably have been accepted by Professor Schleicher and those who hold with him. So far as I am aware, no believer in language as a natural organism has ever professed or attempted to put his finger on this, that, or the other item in language as impossible to human agency, and exhibiting the peculiar organic force in action. Schleicher himself, certainly, abundantly admits in detail that which he denies in the totality. All the parts are as we have described them; only the whole is something entirely different. The parts are white, but put them together and they are black; every factor is positive, but the sum is negative! Passing strange indeed it is that the utter illogicalness of such a conclusion escapes these people's notice. As we have already seen, that by which a certain dialect differs from its ancestor, nearer or more remote, is not an indivisible whole; it is a mass of particulars, some of them isolated, others hanging together in classes; and each of these particulars or classes has its own time, place, occasion, origin, and effects; their cumulative sum makes up the general result. Now it is easy to throw a group of objects, by distance and perspective, into such apparent shape as shall obscure or conceal their true character and mutual relations. Look at a village only a little way off upon the plain, and its houses are flung together into a mass; trees grow out from their roofs; a cloud rests on the summit of the church spire; the mountains behind are lower than the house-tops. If you refuse to judge appearances there exhibited by those of the similar village in the midst of which you stand, you may arrive at any the most ungrounded and absurd views respecting them. So in language: if you insist on standing aloof from the items of linguistic change and massing them together, if you will not estimate the remoter facts by the nearer, you will never attain a true comprehension of them. And this is just what Schleicher has done in

the essay of which we are treating. He rejects the genuine scientific method, which is to study thoroughly the phenomena which fall under immediate observation, with the forces they involve, and to reason cautiously back from these into the obscurer distance, always making due allowance for change of circumstances, but never needlessly postulating a new force. There is not a vestige of scientific character in his fundamental dogma ; it is worthy only of the mythologic stage of linguistic study, when men were accustomed to veil plain facts in obscure and fantastic phraseology, and to assume *quasi*-personal causes for effects which are really due to the secondary workings of obvious and every-day agencies.

If the argument presented above, as to the presence of the human will as a factor in the growth of language, be found well-grounded and acceptable, then the question of the "fixed laws" alleged to govern that growth is also virtually settled, and does not require detailed discussion. What we call "laws" are traceable everywhere, in the action of individuals and of communities, in the progress of human culture and human history, as well as in the changes of physical nature ; the term is used, to be sure, in more than one sense, as designating generalizations and inferred causations of quite diverse character ; but for that very reason a close examination is necessary in each particular case where the government of law is asserted, that we may avoid the gross, though too common, blunder of confounding the various orders of law, and identifying their results. An egg goes into the hatching-room and comes out a chicken ; a bale of cotton goes into the factory and comes out a piece of cloth ; there is a palpable analogy between the two cases so far ; and there are, beyond all question, laws in plenty, even physical laws, concerned in producing the latter result, as well as the former ; but we do not therefore decline to peep inside the factory door, and satisfy ourselves with assuming that the cloth is a purely physical product, and an organism, because the chicken is so. Yet this, in my opinion, is precisely what Schleicher has done. A very little unprejudiced and common-sense research applied to language suffices to show us that the laws under which its so-called life goes on are

essentially different from those which determine the development of living organisms, animal or vegetable; they are simply modes of human action. Every law of speech has its foundation and reason in the users of speech—in their mental operations, their capacities, their wants and preferences, their physical structure, their circumstances, natural or historical, and their habits, the accumulated and concentered effects of all the rest. There is not less of linguistic mythology in setting up the government of language by law than the absence in it of human action as a reason why it should be regarded as an organism.

It would be great cause for rejoicing if this mythologic mode of treating the facts of language were confined to a single scholar, or a single school. But it does, in truth, characterize no small part of the current linguistic philosophy—even, or especially, in Germany, and among those who most affect profundity. Many an able and acute scholar seems minded to indemnify himself for dry and tedious grubblings among the roots and forms of comparative philology by the most airy ventures in the way of constructing Spanish castles of linguistic science.

Languages, then, far from being natural organisms, are the gradually elaborated products of the application by human beings of means to ends, of the devising of signs by which conceptions may be communicated and the operations of thought carried on. They are a constituent part of the hardy won substance of human civilization. They are necessary results of human endowments and dispositions, and also highly characteristic results; yet only results, and not the sole characteristic ones, of man's peculiar powers. Every human being, if endowed with the ordinary gifts of humanity, is put in possession, as part of his training, of a language, as he is of all the other elements of the civilization into the midst of which he happens to be born, and the acquisition of which makes him a developed man, instead of a mere crude savage, a being little higher than the highest of the other animals. If we are to give language a name which shall bring out its essential character most distinctly and sharply, and even in

defiance of those who would make of it an organism, we shall call it an INSTITUTION, one of the institutions that make up human culture. The term, probably enough, offends the prejudices of not a few; yet it is well chosen and correctly applied, and involves not a particle of derogation to the high dignity and infinite importance of human speech.

The study, moreover, which takes for its object languages, their varieties, structure, and laws of growth, is not a natural science, any more than is the study of civilization at large, or of any of its other constituents, of architecture, of jurisprudence, of history. Its many and striking analogies with the physical sciences cover a central diversity; its essential method is historical.

Of course, its foundation being withdrawn, Schleicher's whole argument in support of Darwinism falls to the ground, and there remains merely an interesting, and, if rightly used, instructive analogy between the two classes of facts and phenomena compared—one which Lyell (in his *Antiquity of Man*, chap. xxiii.), with a soberness of judgment strangely in contrast with the over-rash zeal of the German scholar, was content to set forth as an analogy only. Darwinism must stand or fall by its own merits; it cannot be bolstered up by linguistic science.

The second of the two pamphlets which I have undertaken to criticise is entitled "On the Importance of Language for the Natural History of Man."* It was published a couple of years later than the other, to which it endeavors to fill the office of a defense and support. Some persons, namely, having raised objections to the unsupported assumption there made, that languages are real concrete organisms, having a material existence, the second essay is intended to supply the lacking demonstration of that doctrine. Let us see how the demonstration is conducted.

The author begins with pointing out that the characteristic mode of activity of any organ—as, for example, of the stomach, the brain, the muscles—is now generally acknowledged to

* *Ueber die Bedeutung der Sprache für die Naturgeschichte des Menschen.* Von August Schleicher. Weimar, 1865. 12mo. pp. 29.

depend upon the material constitution of that organ. So the locomotion of different animals, even the peculiar gait of individual men, is conditioned by the structure of their organs of motion. The same is the case with language. This is the "audible symptom of the activity of a complex of material relations in the formation of the brain and of the organs of speech, with their nerves, bones, muscles, etc." The material differences of structure on which the differences of language in different individuals depend have never been anatomically demonstrated, and they may even prove forever too subtile for demonstration; but that does not show that they are not real. What light is to the sun, that audible sound is to these efficient peculiarities of organization; it manifests them; and it may, in a philosophical sense, be said to be identical with them. Hence, languages have an independent material existence, and the objections brought against their treatment as such are to be deemed and taken as set aside!

I solemnly affirm that this is, so far as I am able to make it, a faithful abstract of Schleicher's argument; and I refer incredulous readers to his text for its verification.

The most hasty examination of it cannot but make clear, in the first place, that the author, whether aware of it or not, has completely shifted his ground. A natural organism, which has grown and developed by inherent powers of its own, and under fixed laws, through a succession of ages, is one thing; a symptom or manifestation of a structural difference, which, speaking philosophically, may be said to be that difference itself, in the same sense (rather a Pickwickian one, surely) in which light is the sun, is another and a very different thing: one is a being, the other is a function; one is an actor, or at least an agency, the other is an act or effect. All the inferences, for Darwinism and everything else, which Professor Schleicher founded on his former doctrine, are virtually abandoned; you cannot make the history of a function prove the transmutability of animal and vegetable species. The only feature, so far as I can discover, which the two doctrines have in common is their denial of the agency of the human will: voluntary action is ruled out, on the one hand,

because language is an organism, growing and developing by its own internal forces ; on the other hand, because it is the necessary effect of real physical peculiarities of structure. This, then, is the point to which our attention has still to be particularly directed.

We have first to notice that it is not the uttered and audible part or side of speech alone that Schleicher has in view. He does not intend simply that, constituted as we are, we must produce the articulated sounds, the alphabetic elements, which we actually produce, and no others. For this by itself would never lead to unity of speech in a community or race. Out of our alphabet alone, without importing a click, or a guttural, or a tone, from other tongues, we might build up a language which should be as unlike our own as any that is spoken upon the face of the earth. No ; his doctrine, as evinced by the whole course of his reasonings, is plainly this : the reason why I, for example, say *hat*, instead of *hut*, or *chapeau*, or *causia*, or any other of the thousand words which people in various parts of the world use or have used to designate their head-coverings, is that my brain and my organs of speech are so constituted and connected that *hat* is to me the natural and necessary sign of this particular conception—and so with all the other signs that make up my language. Truly a most astounding doctrine ! There are, I believe, few writers on language who would have the hardihood to maintain it. Hardly one would fail to acknowledge that, whatever natural internal connection there may have been in the initial stage of language between sound and sense, there is, at least, none now ; that the English-speaking child *learns* to call a hat a *hat*, and could have learned to call it a *hut* or *chapeau*—as, indeed, he often does, earlier or later ; which of the names he acquires being a matter of entire indifference to him until he has acquired one, and become so accustomed to it that it seems to him the “ natural ” name for his tile, and he can only by an effort change his habit and come to call it by any other name. Or, generalizing this—for what is true of this one sign is true of every other of which our language is composed—while each human being has the capacity of speech,

none is directed by nature to speak any one language rather than any other; the infant, of whatever race, acquires the language of those who are about him, or sometimes more than one, and could have acquired any other equally well; but the older he grows, the more the language he has acquired becomes to him that habit which is justly called a "second nature," and the harder it is for him to lay it aside for another, or add another to it. These are, it appears to me, clear and undeniable truths; there is neither mystery nor doubt about them; and their importance is so fundamental that he who overlooks or denies them cannot fail to make shipwreck of his whole linguistic philosophy.

Our view of the acquisition of language is not in the least at variance with modern scientific theories of cerebral structure and action. There may be in the physical constitution of my brain something that makes me say *hat*; there may be atomic equivalents and atomic connections determining every item of my speech and all its combinations and uses; but it is a secondary or acquired something, a peculiarity effected by external causes, not inherent and self-determining. It is analogous with all the knowledge, the memories, the preferences, the habits, the special aptitudes, which my experience and opportunities, working on a general and specific basis of capacities, have produced in me. That I choose to wear a hat at all, that I prefer one of a certain size and color, that I take my hat off when I meet a friend, that I remember the hats I have worn and where and when I got them, that I know how many I possess at this moment and where they are—all this depends, if you will, on infinitesimal peculiarities in the present structure of my brain; and it is all of the same kind with my capacity and habit of using the word *hat*. This is a trivial example; but it is not less instructive and decisive of the points involved than the most dignified one that could have been selected.

Again, our view does not make against the theory of the transmission to a certain degree of the effects of culture in the form of higher inherited capacity. Among a certain number of persons born into such circumstances that they acquire

English as their "mother-tongue," one may possess by descent a genius upon which even English, with all its force and beauty, imposes a laming constraint; while, on the other hand, and much more probably, there will be others whose meaner powers would be more in harmony with some lower form of speech, as Chinese or Malay. So it is everywhere; if men were divided and languaged according to the kinship of their endowments, the present boundaries of races would be entirely broken up, and every community on earth would become a Babel. As things are, every man learns that language which circumstances place within his reach, whatever it may be, and works out and exhibits his higher or lower endowment inside of it, in his management and use of it. Even the humblest language that exists is so far beyond the capacity of even the ablest human being to produce unaided, that its acquisition raises him to a plane of power indefinitely higher than he could ever have attained if left to grow up speechless. All that he can have reason to regret is that circumstances should not have been still more favorable to him, and enabled him to work out the whole force which it was in him to develop. And what is thus true of language is true of culture in general, in its other elements not less than in the linguistic.

Professor Schleicher has noticed, or has had his attention called to, the objection to his theory of language which is involved in the power to learn other languages than one's mother-tongue; and he endeavors to set it aside—after the following fashion. First, pushing further a comparison already made, he says that a man can also learn to go on all fours, or to walk on his hands, while nevertheless no one can doubt that we have a natural gait as men, conditioned by our bodily structure. But it must be evident at a glance that this comparison, at any rate, does not run on all fours. To make it other than helplessly lame, we ought to see that a human being if brought up by quadrupeds would move naturally on hands and feet together; if by birds, would fly; if by fishes, would swim; in each case, without ever feeling a disposition to walk erect upon his feet. For he who has never

learned any language but English, of whatever parentage he may really be, is undistinguishable from an Englishman, and never exhibits the slightest tendency to relapse into the ancestral dialect. But Professor Schleicher goes on to argue the matter upon other grounds. Again ignoring the question as to how a person obtains his "mother-tongue" at the outset, he raises a doubt as to whether any one ever really acquires in a complete manner any other language; and, granting even that that be done, he suggests, as the very simple explanation, that such a one becomes in fact a different man from what he was; another constitution of brain and organs of speech is substituted for, or added to, his natural one. Further, he continues, even if (which is not to be conceded) a person becomes thus at the same time an Englishman, a Frenchman, and a German, it is still to be observed that these are related languages—in a certain sense, species of the same genus. But it is not at all to be credited that the same man can be master at once of wholly diverse tongues, like German and Chinese, or Arabic and Hottentot, any more than that he can walk easily and comfortably both on two feet and on all fours. Now it is an easy way of disposing of an adverse argument to discredit the facts on which it is founded; but we are convinced that what Schleicher refuses to believe is an undeniable truth: children of European parents do learn, where circumstances favor it, those outlandish tongues along with their own, as readily and surely as those of the most nearly related European nations; they do not perceive or feel the difference between a related and a non-related tongue; that is discoverable only by a process of reflection and learned comparison of which no young child is capable. Instances of persons learning at once languages like German and Chinese are merely less frequent than the others, and for the simple reason that circumstances do not so often bring them about. When one has once schooled his thoughts to one form of expression, it is true, the difficulty of acquiring a second will be partly proportioned to the resemblance or diversity between the latter and the former: but in this there is nothing strange or peculiar, nor does it in the least favor Schleicher's theory.

One might just as well say of a person who has mastered a musical instrument, as the flute, that he makes it his mode of musical expression because the minute constitution of his brain and of his blowing and fingering apparatus render it a necessity to him; that he never acquires an equal mastery over any other instrument, or, if he does so, it is only in virtue of his becoming so far another being; that he may at the utmost become able to play kindred instruments, like the clarinet and bassoon; but that the violin and the piano are entirely beyond his reach—proceeding then to argue that the musical notes of the flutist, as they reflect and represent peculiarities of his organism otherwise unmanifested, are themselves material existences; and that the development of modern flute melody from the first rude tones of the ancient pipes exhibits the essential characteristics of organic life, and proves the truth of the Darwinian theory! I say it in all seriousness, such an argument would be precisely as good as that which Professor Schleicher has constructed, and which is one of the most striking examples I have ever seen of the way in which a man of high merit and worthy achievement in one department of a subject can in another deny the most fundamental principles, be blind to the plainest truths, and employ a mode of reasoning in which there is neither logic nor common sense.

The subsidiary statements and reasonings of these two pamphlets partake fully of the unsoundness of their main argument. Thus, in the immediate sequel of what we have just been considering, the author declares that speech is the sole exclusive characteristic of man, and that any given anthropoid ape who should be able to speak would be called by us a man, [and a brother,] however unlike a human being he might be in other respects. As to this last assertion, it is so easy to speculate where the test of fact can never be applied, that I will not take the trouble to contradict it, although my own conviction is strongly against it, and I cannot but doubt whether Schleicher himself would have proved equal to fraternizing with his fellow-man if the case had been realized. But certainly, speech is so far from being man's sole distinc-

tive quality that it is not a quality at all, in our author's sense ; it is only a possession. The capacity of forming and acquiring speech is a quality, and one among the many which constitute the higher endowment of man ; but let the child of the most gifted family of the most highly cultivated race grow up untaught, in solitude, and he will no more employ a language than he will build a temple, paint a picture, or construct a locomotive. Not all the boasted development of the race will enable a single individual, if thrown upon his own unaided resources, to speak ; because speech, like the other elements of civilization, does not go down by inheritance, but by the process of teaching and learning.

It is not true, then, as our author argues later, that linguistic science leads us to the conclusion that man developed out of lower forms of animal life because language has been of slow development, and without language man would not be man. The rise of language had nothing to do with the growth of man out of an apish stock, but only with his rise out of savagery and barbarism. Its non-acquisition by a given individual cuts off, not his human nature, physical or intellectual, but his human culture ; it puts him back into a condition from which he would at once begin to advance by slow degrees to that of a speaking man, as his remote ancestors had already done before him. Man was man before the development of speech began ; he did not become man through and by means of it.

In connection with this, Schleicher brings forward again a dogma which he has repeatedly laid down elsewhere with great positiveness and confidence : namely, that "it is absolutely impossible to carry back all languages to one and the same original language ;" that there must necessarily have been at least as many original languages as there are now-existing families of language. This is entirely wrong, and even a complete *non sequitur* from the premises which he himself accepts. For he holds, with the historical philologists in general, that all languages had the same morphological form at the outset ; that is to say, that they began in the condition of bare roots, designating the simplest and most obvious

physical conceptions. He doubtless holds, also (I do not find a specific statement upon the subject, but it is an obvious and necessary inference from his expressed views), as others do, that it is not possible to point out with certainty the precise roots and conceptions with which the different families of language began; they are too much disguised and overlaid by the changes and additions of later linguistic growth to admit of being distinctly traced. Where, then, is the impossibility that the same roots should have served as basis of development to more than one family of languages? The question of probability we may discuss in any given instance as much as we please, but the assumption of impossibility is ruled out by the very nature of the case. To make this assumption, as Schleicher does, on the mere ground of the great unlikeness between the developed families, is quite illogical: for if languages starting even with the same completely developed structure can come to be as unlike as are English, Welsh, and Hindi, for example, there is absolutely no amount or degree of dissimilarity which might not arise between tongues which had in common only their first rude elements. This seems a truth so incontestable that its denial is one of the strangest points in Schleicher's linguistic creed, one that betrays most tellingly the character of that creed, as made up of prejudices rather than of cautious and well-founded deductions.

If there is another point in the creed entitled to contest the palm of unreasonableness with this one, it is our author's view of language as an infallible test of race, and the only firm basis for a classification of mankind. "How inconstant," he exclaims, "are the form of skull and other so-called distinctions of race! Language, on the other hand, is always a completely constant characteristic." And he goes on to point out that a German (we will say instead, an Englishman) may well enough chance to rival in wooliness and prognathism the most pronounced negro-head, while nevertheless he will never speak naturally (*von Hause aus*) a negro language. To exhibit the preposterousness of this claim, we have only to invert it, and say that it may well enough happen now and then

that a person of African blood should rival in complexion, hair and Caucasian cast of features a descendant of purest Puritan stock or of the first families of Virginia, while nevertheless he will never, never speak as his mother-tongue the English language. I fancy that some of us have chanced upon facts not entirely consistent with that statement. I should like to see some adherent of Schleicher's opinions going around in our American community with an English grammar and dictionary, determining by the evidence of language to what race its various constituents belong. It would not be difficult in almost any American village to set up before him for examination a row of human beings who should show unmistakable traces of African, Milesian, Scottish, and German, as well as English, descent; and yet every mother's son of them should speak English as his mother-tongue, and should not know a word of any other language under the sun. And our author's imagined woolly and prognathic German, or any other German, would only need to be brought up from infancy in an African *kraal*, in order to speak African as naturally (*von Kraale aus*) as the child whose ancestors had lived for ten thousand years on the *karroo*. It is nothing short of gross judicial blindness that can make one overlook the infinite number of facts like these which the history of languages presents, and their bearing, and set up the mere accident, as we may fairly call it, of one's mother tongue as the sole and sufficient test of race. One's "mother-tongue" is determined simply by one's teachers; and it is only because one's teachers are usually one's parents and a community akin in race with them that language becomes an indication, a *prima-facie* evidence, of race. On the broad scale, it is to a considerable extent a trustworthy evidence; and its contributions to ethnology are of extraordinary and unsurpassed value; but its degree of force in any individual case is to be measured by the degree of probability, determinable in part on other grounds than linguistic, that the given community is one of descent and not of agglomeration or mixture.

Another fallacy of Professor Schleicher's—one, however, which stands in a more logical connection with his general

theory of language—is his assumption that the primary differences of language are geographical: that is to say, that forms of speech grew up in the outset resembling one another in the ratio of their proximity and of the accordance of the surrounding physical conditions. There is no good reason for holding any such doctrine; it falls to the ground, at any rate, with the doctrine of the necessary physical origin of language, and is not unavoidably involved even in that. Not physical causes, but historical, determine language: dwellers in the same plain speak different tongues, without the slightest tendency toward unification, save as the effect of communication and mixture; dwellers in the plain and on the mountains, in the interior and by the sea, in icy, temperate, and torrid climes, speak the same or nearly related speech, because it comes down to them by tradition through the separated representatives of a single community. Schleicher says farther that “in the later life of language, among men who live under essentially similar conditions, the language also changes itself uniformly, or spontaneously and in corresponding manner in all individuals who speak that language:” thus ignoring the fact that only individual action tends to diversify language, and only communication to keep it uniform, and once more explaining as the result of physical forces phenomena which are in truth ascribable to human action, and to that alone.

In drawing his second pamphlet to a close, our author refers again to a very peculiar theory of his, more fully set forth elsewhere (in the introductory part of his *Deutsche Sprache*), that language-making and historical activity necessarily belong to different and successive periods in the life of a race or nation, the former absorbing the whole national force while it is in progress, and rendering the latter impossible. A community lies *perdu* while it is developing its speech (not learning to talk simply, but working the language up to its highest point of synthetic structure), and then steps confidently forward to play its part in the drama of general history. This is so palpable a fancy, and a fancy only, that we need lose no time over its confutation; we may simply notice that it in-

volves a most peculiar conception of language-making, since this really goes on as long as the race lives, and cannot be shown to exhaust more nervous force in synthesis than in analysis; a most peculiar conception of history, as if there were no history without record and publicity; and a most peculiar understanding of the circumstances which by their concurrence operate to bring a race forward into conspicuousness, or to make it take a part in those interworkings whose result is the higher civilization of the more gifted and favored races.

Finally, Professor Schleicher winds up with a bit of theory in pure natural history, which does not precisely concern us as philologists, but yet is too characteristic to pass over, and which I accordingly give in his own words: "It is in the highest degree probable that not all organisms which entered upon the road toward becoming man have worked their way up to the formation of language. A part of them were left behind in their development, did not enter upon the second stage of development, but fell under a law of retrogression, and, as is the case with all such deteriorations, of gradual decay. The remains of these beings, who continued speechless, deteriorated, and did not arrive at the condition of becoming human, lie before us in the anthropoid apes"! This looks like Darwinism reversed: the apes do not so much represent a condition out of which man has arisen as that into which creatures that might have been men have fallen, through simple neglect of learning to talk! If we accept the doctrine, we cannot but be impressed with the grandeur of the work in which we, as a Philological Association, are bearing our humble part. By encouraging and promoting, to the extent of our associated capacity, the maintenance and progress of language, we perhaps contribute to preserve our own remote posterity and the whole human race from sinking to the condition of the gorilla and the chimpanzee!

These peculiar and indefensible views of Schleicher appear more or less in all his later works which have occasion to deal with general questions of language. Thus for example, in the introductory part of his *Deutsche Sprache* (already more than

once referred to), they make so much of a figure as to render that work, interesting and suggestive as it is, a most unsafe one to put in the hands of persons not qualified to use it in an independent critical spirit. But in the two pamphlets which we have been considering, they are presented almost pure and simple; there is hardly room beside them for the acuteness of the comparative philologist to appear; while we are, of course, able to pick out here and there a remark or a paragraph which sustains the reputation of the author, yet, as a whole, the essays are utterly unworthy of him, and can only be read with pain and regret by those who admire him and respect his memory. From the beginning to the end, in foundation and superstructure, they are unsound, illogical, and untrue, and must hurt the cause of science just so far as they are read and accepted. I had supposed that, in the bare and overstrained quality of their errors, they would carry everywhere their own refutation with them; but facts show that this is not so; there are still incautious sciolists by whom every error that has a great name attached to it is liable to be received as pure truth, and who are even especially attracted by good hearty paradoxes. These two papers have been translated into French as the first and inaugural fascicle of a "Philological Collection," or international series of important essays in philology; and even so sound and careful a philologist as M. Bréal has been misled into giving the inauspicious beginning an implied sanction by letting his name appear alone upon the title-page, as author of the Introduction.* And the former of the two has been done into English and published in London by a Dr. Bikkers, who in his preface lauds it to the skies, as containing (with the sole exception of the dogma of the necessary diversity of primitive languages, which he rejects) only such doctrines as are to be taken for

* *Collection Philologique. Recueil de Travaux originaux ou traduits relatifs à la Philologie et à l'Histoire Littéraire avec un avant propos de M. Michel Bréal. Premier Fascicule. La théorie de Darwin.—De l'importance du Langage pour l'Histoire naturelle de l'Homme, par A. Schleicher.* Paris, 1863. 8vo. pp. vi. 31. M. Bréal's preface is of but a page or two, and in it he indicates—though, in my opinion, in a manner much less distinct and decided than the case demanded—his at least partial non-acceptance of Schleicher's views.

the established truths, the "axioms," of modern linguistic science (axioms they indeed are, in one respect: namely, that they are incapable of demonstration).^{*} It was the falling in by chance with Dr. Bickers's version, a few weeks since, in a library where it could only do unmixed harm, that led me to draw out and present these strictures.[†] Views which might seem to be self-refuting require to be elaborately argued down when they are in danger of winning currency and acceptance; especially if they have to do, like these, with principles of fundamental importance. And reverence for the name and works of a truly great man should not lead us to cover up or treat with indulgence his errors, when they are sought to be propagated under the shield of his reputation, and tend, if accepted, to cast the science of language back into a chaos as deep as that from which it has lately begun to emerge.

^{*} *Darwinism tested by the Science of Language.* Translated from the German of Professor August Schleicher, with preface and additional notes, by Dr. Alexander V. W. Bickers. London, 1869. 12mo. pp. 70.

[†] I had given the substance of them before a local society several years ago, on the first appearance of the second essay, but had no intention of making them more publicly.

IV.—*On English Vowel Quantity in the Thirteenth Century
and in the Nineteenth.*

BY JAMES HADLEY,
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It is a well-known fact that the Modern Greek has lost the system of vowel quantity which belonged to the ancient language: *κῶμη hair* and *κῶμη village* are pronounced alike by the Modern Greek; nor is it otherwise with *λύσεις thou wilt loose* and *λύσεις a loosing*. In like manner the Romanic languages have lost the system of vowel quantity which belonged to the ancient Latin. Thus the Italian and Spanish *mano, rosa*, French *main, rose* are alike in vowel sound with Italian and Spanish *vano, prosa*, French *vain, prose*, though the former come from Latin *mānus, rōsa*, and the latter from *vānus, prōsa*. It is an interesting question whether our own language has had in this respect the same experience as the Modern Greek and the Romanic tongues; whether we have wholly lost those distinctions of vowel quantity which undoubtedly belonged to the Anglo-Saxon.

It is sometimes said that we have no proper distinction of long and short quantity in English: all our vowels are alike in quantity; they are all equally susceptible of prolongation and abridgment; or rather, any vowel may be so prolonged as to exceed the ordinary quantity of any other: thus *fill* may be so prolonged in utterance as to take more time than is ordinarily given to *feel* or *file*. But this must have been the case also with Greek and Latin vowels: their absolute time was not fixed, but variable. One speaker must have talked faster or slower than another; the same speaker must have talked faster or slower at one time than at another; even on the same occasion one sentence or clause must have been uttered faster or slower than another; and thus it could hardly fail to happen that a short vowel would sometimes have a longer sound than the ordinary or average quantity of a long vowel. But the average quantity of a short vowel was less than the average for a long one; or, with the same general

rapidity of utterance, the quantity of long vowels exceeded the quantity of short. I say simply, the quantity of long vowels *exceeded*, was *greater* than, the quantity of short; not that the former was just *double* the latter. It may be presumed that in ordinary spoken utterance there was not any so exact relation; with the same *tempo*, the long might equal $1\frac{1}{2}$ of the short, or $1\frac{2}{3}$ of the short, or $1\frac{3}{4}$ of the short, as well as just 2; and probably the average actual ratio was rather less than 2 to 1; the average long would occupy rather less than twice the time of the average short. The fixing of 2 to 1 as the precise numerical relation was probably the work of rhythmopœia, or of rhythmopœia and melopœia together. When longs and shorts were combined in rhythmic composition, and especially when a musical accompaniment was added, the longs and shorts must have a definite and fixed ratio to each other; and the ratio of two to one was the most simple, obvious and convenient.

Now as regards our English syllables, it is certain that we have nearly or quite lost the feeling of length by position. By this I mean that we do not recognize a short vowel followed by two consonants as having any distinct relation to a long vowel followed by one consonant. We can perceive, of course, that there is more sound in *fist* than in *fit*, and more sound in *fight* than in *fit*; but we do not recognize any special relation of quantity between *fist* and *fight*. But in reference to vowel sounds, it should seem that our case is not essentially different from that of the ancient Greeks and Romans. There are certain sounds which, with the same *tempo*, the same general rapidity of utterance, we recognize as occupying more time than others; we thus recognize the former as long, the latter as short. It is true, the English short vowels differ somewhat in quality of sound,—that is, in position of the speech organs,—from the long vowels which most nearly resemble them, the short being a little more open than the corresponding long: there is a more open sound in *fill* than in *feel*, in *full* than in *fool*, in *fell* than in *fail*, etc. But this does not affect the relation of quantity. It is clear that we have long vowel sounds in *file* and *foul*, in *feel* and *fool*, in *fail* and

foal, and in *fall*; and that we have short vowel sounds in *fill* and *full*, in *fell*, in *doll*, in *dally*, in *dull*. Pronounce the two series in succession; on the one hand, *file*, *foul*, *feel*, *fool*, *fail*, *foal*, *fall*; on the other, *fill*, *full*, *fell*, *doll*, *dally*, *dull*:—the difference of quantity is manifest and unmistakable.

If then we have long and short vowels clearly distinguished from each other, it becomes a matter of interest to inquire whether the distinction is recent or ancient; whether, and how far, the vowels now sounded long or sounded short were sounded long or short respectively in early periods of the language. The question here raised is not whether our vowels have kept the same sounds, but whether they have kept the same quantities. It matters not that long *a* has passed from its original sound (of *ah*) to that heard in *fame*; long *e*, from the sound in *prey* to that in *key*; long *i*, from the sound in *pique* to that in *pike*; long *o*, from the sound in *bone* to that in *boon*; long *u*, from the sound in *prude* to that in *proud*. These changes have taken place to a very great extent, but they do not affect the question now before us: the old long vowel remains long still. So if the short vowels *ī*, *ū*, *ě*, (in *fill*, *full*, *fell*;) have become a little more open; if on the other hand *ǣ* has generally become closer (as in *dally*), approaching the sound of *ě* (in *dell*); if the old *ō* has disappeared altogether, passing into a sound more open than that of *a* in *fall*, and often described as its corresponding short (thus *fäll*, *föll*); if *ǔ*, and sometimes other short vowels, have sunk into the obscure and undistinguished sound heard in *dull*, *done*;—these changes do not concern us here, as the old short vowel still remains short.

In the inquiry whether, and how far, we can trace back the present long and short quantities of English vowels, we find our best guide and help in a single (and singular) production of early English literature. I refer to the *Ormulum*, so called from the name of its author, the monk *Orm*, or *Ormin*, who wrote in the eastern part of England, some time in the thirteenth century, or fully six hundred years ago. A series of metrical homilies on the successive daily lessons of the church service, its interest is philological much more than literary.

In the only manuscript from which it is known to us,—not improbably the only manuscript of it that was ever written,—we find on the part of the writer a careful and systematic regard to vowel quantity. He has a spelling of his own, to which he adheres with much consistency; and in this spelling the most peculiar and conspicuous feature is the doubling of every consonant which follows a short vowel. There was a tendency to this in the general English orthography even at that early period; what is remarkable in this author is that he consciously carried out this tendency as a uniform and universal rule. Thus he writes *it* with a double *t*, *if* with a double *f*, *hundred* with a double *n* and a double *d*, *lasteth* with a double *s* and a double sign for *th*. So much is he attached to this spelling, in spite of its strange and whimsical appearance, that in a preliminary address (seemingly very little needed) to the future copyist, he insists upon a careful conformity to it:

*Annd tatt he loke wel tatt he
An bocstaff write twi³³ss,
E³³wær thær itt uppo thiss boc
Iss writenn o thatt wise.
Loke he well thatt het write swa,
Forr he ne ma³³ nohht elles
Onn Enngliss^h writenn rihht te word
Thatt wite he wel to sothe.*

Which may be modernized thus, in the same measure, all but the unaccented ending of the even lines:

And that he look [full] well that he
A letter write twice [over],
Wherever it upon this book
Is written on that wise.
Look he well that he write it so
For he (ne) may not else
In English write aright the word,
That wit he well to sooth.

Thus then the spelling of the Ormulum enables us to say, in the case of every vowel followed by a consonant in the same word, whether the author pronounced it—or, at least supposed that he pronounced it—long or short. In order now to arrive at some general conclusions as to the persistence of vowel quantity in English, I have looked through the

vocabulary of the Ormulum, as presented with much fulness and clearness in the second volume of White's edition (Oxford, 1852), and have noted the words which survive in the English of to-day, including some few which, though lost out of the common language, are still generally known from their use in literary works of the modern period. I propose to state the general results of this comparison between the quantities of words as indicated in the Ormulum, and the quantities of the same words as heard in modern English. It should be said that the vocabulary of the Ormulum is not large. The work is nearly as long as the *Odyssey*; but the number of different words used in it is much smaller than in the Greek poem. There is a great sameness—a wearisome sameness—in the contents of the book: the leading facts, principles, and precepts of the Christian system are repeated over and over again with little variety of expression. Still there are words enough to give a fair idea of the relation between the vowel quantities of Saxon English six hundred years ago and those of Saxon English at the present time. I say "*Saxon English*," because few Latin words (aside from those already taken into the Anglo-Saxon), and fewer French words, are to be found in the Ormulum. Its language is as purely Teutonic as the modern German.

The most general statement suggested by the extended comparison of which I have been speaking is this: that in the great majority of cases the vowels which had a long sound six hundred years ago are long now; those which had a short sound then are short now. And if the exceptions are pretty numerous,—if in a good many cases the long sound of the Ormulum corresponds to a modern short, or the short sound of the Ormulum to a modern long,—most of these exceptional cases depend on a few obvious conditions, on clearly marked euphonic influences and tendencies, so that cases of capricious variation, of variation without apparent principle, are comparatively few. It will probably be most instructive, if we consider first (and indeed chiefly) these euphonic conditions and tendencies which have led to differences of quantity between the language of six hundred years ago and that of to-day.

In the first place, then, let us look at the cases where the loss of a consonant sound has occasioned the lengthening of a short vowel before it; as in *alms*, O. *allmess*, *buy*, O. *biggenn*, and the like. Such changes can hardly be considered as violations of the old system of quantities. If there is here an alteration, an increase, of vowel quantity, it only takes the place of a consonant quantity withdrawn. It is simply that the time before occupied by a vowel and consonant is now occupied by the vowel prolonged. This is sometimes described as an absorption of the consonant by the vowel, sometimes as a vocalization of the consonant. Neither of these expressions gives a distinct idea of the nature of the change. Of course, in every instance of the kind there must have been a time of transition, when the consonant was beginning to be omitted, when the very speakers who omitted it were perfectly aware of its existence, and perhaps generally pronounced it, but occasionally let it drop with a lengthening of the preceding vowel. Now this consciousness of a consonant with a claim to be pronounced is an important element in the phenomenon. The speaker who does not really pronounce it, does not feel that he can omit it altogether; he does not feel that he is altogether omitting it. To his own feeling he gives it a kind of recognition. He perhaps brings the organs of speech into some sort of approach toward the position required for pronouncing the consonant, so that the preceding vowel passes into a sound more or less modified, which does duty for the consonant. If this modification continues to be made, then the resulting long vowel-sound will not be a mere simple prolongation of the preceding short, but something different, perhaps a diphthong. Yet it may very well happen that in this *quasi*-pronunciation of the consonant, the approach made by the organs to the position for that consonant will grow more and more slight, and the sound produced will differ less and less from a mere continuation of the preceding vowel; until finally — and perhaps very soon — it comes to be just that and nothing else, and the consonant is replaced, as its claim for utterance is felt to be satisfied, by a simple addition of quantity to the preceding vowel. But whatever may be thought

as to the rationale of the process, it is one of which we find numerous instances in comparing the Semi-Saxon of the Ormulum with modern English. Thus where *l*, followed by another consonant, has been suppressed in utterance, though still retained in writing, the short vowel before it has become long in

- O. *allmess* (*alms*), A. S. *ālmesse*, Lat. *eleemosyna*.
callf (*calf*), A. S. *cealf*.
folc (*folk*, *people*), A. S. *folc*.
half (*half*, *behalf*), A. S. *healf*.
ilc (*each*, *every*, Sc. *ilk*), A. S. *ālc*, *elc*, *ylc*.
sallfe (*salve*, *ointment*), A. S. *sealf*.
sallme (*psalm*), A. S. *sealm*, Lat. *psalmus*.

In *should* (O. *sholde*), *would* (O. *wolde* and *wolde*), we have a short vowel sound; but we may see from the *ou* that the vowel was first lengthened (*shou'd*, *wou'd*, with *ou* as in *youth*); though afterward it became short again, by a new and independent change, similar to that by which *good* and *stood* have received their present short pronunciation. The same change has occurred also in *could*, which never had an *l* actually sounded. The Ormulum, like the Anglo-Saxon, has *cūthe*, in which the *th* became *d*, and the vowel was afterward shortened. As people were accustomed to write a silent *l* in *should*, *would*, and regarded *could* as a word of similar character, they put a silent *l* into that also. There would have been more propriety in the insertion of a silent *n*; for this letter belongs to the root as seen in *can*. It is a feature of the Anglo-Saxon in its earliest known form that it drops *n* before *th* or *s*, and lengthens the preceding vowel: as *gōs* (*goose*) for *gans*, *sōdh* (*sooth*) for *sunth* (which means *being*, *existing*, and is identical with Lat. *-sens*, in *praesens*, *-sentis*); and so *cūthe* for *cunthe* (*could*.)

Again, where *g* has been suppressed in utterance, the short vowel before it has become long in

- O. *biggenn* (*to buy*), *abiggenn* (*to aby*, *pay for*), A. S. *bycgan*, *ā'ycgan*.
leggenn (*to lay*), A. S. *lecgan*.
seggenn (*to say*), A. S. *secgan*.

But in most cases of this kind the *g* appears in the Ormulum

softened into the consonant *y*-sonnd (3), which after the short vowel is written double (33) : thus

- O. *da33* (*day*), pl. *da33hess*, *da33ess*, A. S. *dāj*, pl. *dagas*.
driz3e (*dry*), A. S. *dryge*.
e33lenn (to ail), A. S. *eglan*.
e33'herr (*either*), A. S. *ægðher*.
fu33err (*fair*), A. S. *fäger*.
fe33l (*flail*), Germ. *fegel*, Lat. *flagellum*.
ge33nenn (to gain), *ga33henn* (*gain*), O. N. *gagn* (*advantage*).
ge33nlike (aptly, cf. *ungainly*), O. N. *ge3n* (*apt, clever*), A. S. *ungägne* (*of no effect*).
la33 (*lay*), from *lin* (to lie), A. S. *läg*, from *licgan*.
le33 (impv. *lay*), *le33de* (*laid*), from *leggenn*, A. S. *lege*, *lägde*, from *lecgan*.
ma33 (*ho may*), A. S. *mäg*.
ma33 (*may, maid*), A. S. *mæg* (*femina, virgo*).
ma33lenn (*maiden*), A. S. *mägden*.
na33lenn (to nail), A. S. *näglian*.
re33n (*rain*), A. S. *regn*.
se33 (impo. *say*), *se33'h* (*saiht*), *se33de* (*said*), from *seggenn*, A. S. *sege*, *segdh*, *sägde*, from *secgan*.
inn-se33less (*seals*), A. S. *sigel*, *insegel*.
twæ33enn (*twain*), A. S. *twegen*.
twiz3ess (*twice*), also *twizess*, A. S. *twiga* (1?).
thriz3ess (*thrice*), also *thrizess*, A. S. *thriga* (1?).
wa33n (*waygon, wain*), A. S. *wägn*, *wæn*.
we33e (*way*), *awe33*, *awe33e* (*away*), A. S. *weg*, *äweg*.

In *e33'herr*, *ma33* (*maid*), and perhaps in *twiz3ess* and *thriz3ess*, a long vowel of the Anglo-Saxon is found shortened (in the last two, however, not uniformly) in the Ormulum. This shortening may perhaps be explained as the consequence of an effort to make the feeble 3 more fully audible. The vowel may have been passed over lightly in order that a greater force of utterance might be brought to bear on the weak consonant following it, so as give this a distinct enunciation. It would be perfectly natural, too, that the speakers of the language should become at length weary of this effort required for the weak consonant; and that they should then allow the consonant to be replaced by a mere continuance of the preceding vowel, which would thus recover its primitive long quantity.

In the word *master* (O. *ma33stre*, A. S. *mägestre*, *mägstre*, Lat. *magister*) we do not lengthen the vowel: here the Scottish *maister* shows the truer (that is, the more analogical) pro-

nunciation. In *saiþ* and *said*, the lengthened vowel sound which once belonged to them is still indicated by the *ai* with which they are written.

The *ʒ* of the Ormulum is not always to be traced to an original *g*. In some instances it seems to have arisen from the diphthong *ei* in the Old Norse, the language of the so-called Danes who came as invaders and settlers into eastern England: the vocabulary of the Ormulum shows evident marks of a Norse influence. Thus the plural pronouns *theʒʒ* (*they*), *theʒʒre* (*their*), *theʒʒm* (*them*) are not to be explained from A. S. *thá*, *thára*, *thám*, but from O. N. *their*, *theirra*, *them*; — *reʒʒsenn* (to *raise*), not from A. S. *rásian*, but from O. N. *reisa*; — *heʒʒlenn* (to *hail*, salute), not from A. S. *hál*, but from the corresponding O. N. *heill* (sanus, salvus), which, like E. *hail*, was often used in salutations. So *aʒʒ* (*aye*, always, ever) is perhaps to be explained from O. N. *æi*, *ei*, *ey*, which correspond to A. S. *áwa*; while *naʒʒ* (*nay*) may be a mere compound of *ne* and *aʒʒ*. The genitive *Keʒʒaeress*, usually *Kaeress*, from *Kasere* (*Cæsar*, Emperor), might be accounted for in the same way; but for the *ʒʒ* in *beʒʒsannz* (*bezants*, coined in *Byzantium*), and in the proper name *Eʒʒnoc* (*Enoch*), we have no explanation to offer.

Yet again, where a consonant *h* has been suppressed in utterance, the short vowel before it has become long in many words. I say “a consonant *h*,” for the Anglo-Saxon *h*, where it stands at the end of a syllable or is followed by *t* or *th* (*dh*), must be regarded as a true consonant. Thus in

- O. *bohhte* (*bought*), from *biggenn* (to *buy*), A. S. *bohte*, from *bycgan*.
brihht (*bright*), A. S. *beorht*, *byrht*, *bryht*.
brohhte (*brought*), from *bringenn* (to *bring*), A. S. *brohte*, from *bringan*.
cnihhtess (servants, soldiers, cf. *knight*), A. S. *cnihht*.
dohhterr (*daughter*), A. S. *dohhtor*.
drohh (*drew*), also *droh*, from *drayhenn* (to *draw*), A. S. *dróg*, from *dragan*.
druhhte (*drought*), A. S. *drugadh*.
duhhtiz (virtuous, cf. *doughty*), A. S. *dyhtig*.
ehhte (*eight*), *ehhtende* (*eighth*), A. S. *eahta*, *eahtodha*, O. N. *áttundi*.
fehht, *fe*, (revenue, money, cf. *fee*), A. S. *feoh*, *feó*.
fihhtenn (to *fight*), A. S. *feohtan*.
flihht (*flight*), A. S. *flyht*.
bi-kahht (*caught*), also *bikachedd* (*caught*); of doubtful origin.
lihht (*light*, levis), A. S. *leóht* (*líht*).

- O. *lihht* (light, lux), A. S. *leoht* (light).
mahht, *mihht* (might), *mihhte* (he might), A. S. *meaht*, *miht*, *mihte*.
nahht, *nihht* (night), A. S. *neaht*, *niht*.
nohht (nought, not), A. S. *náht*, *náwihht*, from *ne* and *áwihht*.
ohht (ought), A. S. *áht*, contracted from *áwihht*.
plihht (danger, state, cf. *plight*), A. S. *plihht*.
rihht (right), A. S. *riht*.
sahh (saw), from *seon*, *sen* (to see), A. S. *seah*, from *seón*; but see p. 93.
sihhte (sight, appearance), *innsihht* (insight, knowledge), A. S. *gesihdh*.
sohhte (sought), from *sekenn* (to seek), A. S. *sóhte*, from *secan*.
tahhte (taught), from *tæchenn* (to teach), A. S. *wæhte*, from *tæcan*.
thohh (though), A. S. *theah*.
thohhte (he thought), from *thennkenn* (to think), A. S. *thohte*, from *thencan*.
thuhhte (seemed, cf. *methought*), from *thinnkenn* (to seem), A. S. *thuhte*, from *thincan*.
wehhte (weight), A. S. *wiht*, *gewiht*, from *wegan* (to weigh).
wihht (being, person, cf. *wight*), A. S. *wiht*.
wrihhte (maker, worker, cf. *wright*), A. S. *wyrhta*.
wrohhte (wrought), from *wirrkenn* (to work), A. S. *worhte*, *wrohte*, from *wyrcan*.

In some of these words (*dohhterr*, *drohh*, *lihht*, *lihht*, *nohht*, *ohht*, *sohhte*, *tahhte*, *thohh*), we find a shortening of the Anglo-Saxon long vowel, similar to that just noticed in *ezzherr*, *mazz*, etc., and explainable in the manner then proposed; though the combination of consonants (*ht*), which in most of them follows the vowel, may have had something to do with its change of quantity.

Lastly, in a number of words which in the Ormulum have the consonant *w* repeated, showing that the vowel before it was then sounded short, this consonant is lost in English (or, at least, has no consonant power), and the vowel sound is long. Such are

- O. *chewwenn* (to chew), A. S. *ceówan*.
clawwess (hoofs, cf. *claw*), A. S. *clá*, *clawu*, pl. *clawe*.
cnewwe (knee), pl. *cnewwess*, *cnes*, A. S. *cneow*, *cneó*.
dæwwenn (to bedew), from *dæw* (*dew*), A. S. *dedáwan*, from *dedaw*.
fowwerr, *fowwe* (*four*), *fowwerttiz* (*forty*), A. S. *feówer*, *feówertig*.
strawwenn (to strow, *straw*), A. S. *streówian*, *stredwian*.
throwwinnge (*throe*, *suffering*), A. S. *thrówung*.
trewwess (*trees*), also *trees*, *tres*, sing. *treo*, A. S. *trew*, *t* *é*.
trouwe (*true*), *trouwenn* (to *trow*), *trouwthe* (*truth*), A. S. *tréówe*, *tréóv'an*, *tréówth*.

In most of these words we see an Anglo-Saxon long vowel shortened before the weak *w*, as we have already seen it before *h* and *z*. In *nowwharr* (*nowhere*), the shortening — which may

be compared to that of *no* in English *nothing*—really takes place before *h*, the true order of the sounds being that represented in the Anglo-Saxon orthography, *náhwær*. The words *owwotherr*, *nowwotherr*, (A. S. *ôwdher*, *náwdher*,) have the sense of *either*, *neither*; but these last connect themselves with A. S. *ægdher*. The form *nowwt* (cattle, Sc. *nowt*) is to be explained from O. N. *naut*, while English *neat* corresponds to A. S. *neát*. In these words, where the *ww* precedes a consonant, its sound can hardly have differed very much from that of the vowel *u*. Indeed the Latin *au* is represented by *aww* in *clawwstremann* (*cloister-man*, monk) from Lat. *claustrum*, and in the proper name *Sannt Awwstin* (*Saint Austin*, *Augustine*), though the Emperor (*Kaserr-king*) Augustus appears as *Augusstuss*.

We have now reviewed all the cases where a consonant, which in the time of the Ormulum was heard after a short vowel, is lost in modern English; and we have seen that in all but a very few (*should*, *would*, *saith*, *said*, *master*, *them*, *not*), the preceding vowel is long in our present pronunciation: even for these few, there is evidence that the most have been pronounced with long vowel sound, though that in more recent times has become short.

The next important point we have to consider is the effect of a weak *r* on the preceding short vowel. By weak *r* I mean to designate that peculiar sound of the letter which it has assumed in our present English, wherever it stands before a consonant or at the end of a word, as in *far*, *farm*, *for*, *form*, *fur*, *firm*. This is evidently weaker than the sound of *r* in *farrow*, *forest*, *borough*, *merit*, *spirit*, etc. According to Mr. Ellis, Ben Jonson, in his English Grammar of 1640, is the earliest writer who gives any sign of having recognized this distinction between a stronger and weaker *r* in the pronunciation of our language. Perhaps the phenomenon itself, the weakening of *r* where it is final or followed by a consonant, may not be much older than that time. In the dialectic pronunciation of the Irish, which has in many points preserved the older English sounds, it has not yet established itself. This weak *r* is most easily produced after the neutral vowel,

so called, which is heard as short in *cub*, *cud*, and as long in *curb*, *curd*. Except after the sounds of *ah* and *au* (as in *far*, *for*), this *u* sound is always heard before a weak *r*: thus it comes in, as a brief yet perceptible element, after the proper vowel in *fire*, *flour*, *fear*, *four*, *fare*. When the preceding vowel was a short *i* or *e*, this has been overpowered by and merged in the following *u* sound. Thus *fir* and *her* are not distinguished in pronunciation from *fur* and *Hur*. The short *u* itself becomes long when this consonant follows it; as we see in comparing *burgh* with *burrow*, where the first has a long sound before weak *r*, the second a short one before common *r*. The point with which we are now concerned is this, that the weak *r*, whether heard at the end of a word or before another consonant, is always preceded by a long vowel sound; if the preceding vowel sound was originally short, it has become long.

It is altogether improbable that in the time of the Ormulum *r* in this position had begun to assume its present weak sound; but it had begun to affect the quantity of a preceding vowel. We find quite a number of words in which a short vowel of the Anglo-Saxon, standing before *r* in this position, had become long in the Ormulum, as in recent English.

- O. *ærd* (place, region, Sc. *airt*), A. S. *eard*.
ærn (*earn*, *eagle*), A. S. *earn*.
bærn (children, Sc. *bairns*), also *barness*, A. S. *bearn*.
bærnenn (to burn), A. S. *beornan*.
birde (lineage, cf. *birth*), A. S. *gebyrd* (*birth*, lineage).
bord (*board*, *table*), A. S. *bord*.
cherl (*young man*, cf. *churl*), A. S. *ceorl*.
corn (*corn*), A. S. *corn*.
eorless (*earls*), A. S. *eorl*.
eorthe, *erthe* (*earth*), A. S. *eordhe*.
forth (*forth*), also *forrth*, A. S. *fordh*.
kirkke-gærd (*church-yard*), A. S. *geard*.
hird (*company*, *family*, cf. *herd*), A. S. *heord*.
hirde (*herd*, *shepherd*), A. S. *hirde*.
hord (*hoard*), A. S. *hord*.
leornenn, *lernenn* (to learn), but *lerrnde* (*learned*), A. S. *leornian*.
skarn (*scorn*), O. Fr. *escorne*.
stirne (*stern*, *fierce*), A. S. *styrne*.
sweord (*sword*), A. S. *sweord*.
word (*word*), A. S. *word*.

O. *Ʒeornenn*, *Ʒernenn* (to *yearn*), but *Ʒerrnde* (*yearned*), A. S. *geornian*, from *georn* (desirous, O. *Ʒeorne*, *Ʒerne*).

It is not unlikely that some of these words, though lengthened in the Ormulum, may have retained their primitive short quantity in the prevailing English, until by the weakening of the *r* at a much later time they became long. It is certain that in most cases where an original short vowel has been lengthened before *r*, the change is not so old as the Ormulum. Thus in almost every instance where we have the sound of *ah* or *au* before a weak *r*, the word, if found in the Ormulum, shows a short vowel. Here belong

- O. *arrt* (*art*), *arnn* (*they are*), A. S. *eart*, O. N. *eru* (*sunt*).
arrcloss (north, cf. *arctic*), Gr. and Lat. *arctos* (*bear, north*).
arrke (*ark*), A. S. *earc*, Lat. *arca*.
arrness (*arms, brachia*), A. S. *earm*.
barrliȝ (*barley*), A. S. *bere* (*Sc. bear*).
berrme (*barm, leaven*), A. S. *beorma*.
berrne (*barn*), A. S. *bere-ärn*, *berern*, *bern*.
feorr, *ferr* (*fur*), A. S. *feor*.
forr (*for, prep. and conj.*), A. S. *for*.
forrme (*former*), A. S. *forma*.
harrd (*hard*), A. S. *heard*.
heorrtē, *herrte* (*heart*), A. S. *heorte*.
herrberrȝhe (*lodging, cf. harbor*), A. S. *hereberga*.
herrcnenn (*to hearken*), A. S. *hyrcnian*.
herrfesstid (*harvest-time*), A. S. *härfest*.
horrē (*horse*), A. S. *hors*.
karrrte (*cart, chariot*), A. S. *crät*.
marrch (*month of March*), Lat. and A. S. *Martius*.
marrtirrdom (*martyrdom*), A. S. *martyrdöm*, Lat. *martyr*.
merrke (*mark*), A. S. *mearc*.
norrth (*north*), A. S. *nordh*.
orr (*or*), from *othth*, *otherr*, A. S. *öðher*.
patriarrke (*patriarch*), Lat. *patriarcha*.
scorrcnedd (*scorched*), O. Fr. *escorcher* (*to excoriate*).
sharrp (*sharp*), A. S. *scearp*.
shorrt (*short*), A. S. *sceort*.
sperrd (*closed, barred, cf. spar*), *unnsperrenn* (*to unclose*), A. S. *sparrnan*.
starrē (*firm, cf. stark*), A. S. *stearc*.
steorrne, *sterrne* (*star*), A. S. *steorra*, O. N. *stiarna*.
thorrness (*thorns*), A. S. *thorn*.
thweorrt, *thwerrt* (*with ut; throughout, cf. thwart*), A. S. *thweorh*.
warrrm (*warm*), A. S. *wearm*.
werre (*worse, Sc. waur*), A. S. *weor* (*evil*).
werrpenn (*to cast, cf. to warp*), A. S. *weorpan*.
wharrfenn (*to turn, cf. wharf*), A. S. *hweorfan*.
Ʒerrde (*rod, cf. yard*), A. S. *geard* (*virga*).

Somewhat less numerous are the cases in which the short vowel of the Ormulum corresponds to any other vowel sound than those of *ah* and *au* (*far* and *for*) in modern English.

- O. *barness* (children, Sc. *bairns*), also *bearn*, A. S. *bearn*.
to-bressenn (to *burst*, Sc. *brust*), A. S. *berstan*.
currseinn (to *curse*), A. S. *cursian*.
darr (*dare*), *durrste* (*durst*), A. S. *dear*, *dorste*.
ferr (*verse*), A. S. *fers*, Lat. *versus*.
firrst (*first*), A. S. *fyrst*.
firthrenn (to *assist*, cf. to *further*), A. S. *fyrðherian*.
fortherr (*further*), A. S. *furdhor*.
girrdell (*girdle*), A. S. *gyrdel*.
hirrtenn (to *hurt*), Dutch and M. H. Germ. *hurten* (to *dash against*).
irre (*ire*), A. S. *yrre*.
kirrke (*church*), A. S. *cyrice*, Gr. *κνριακη*.
kirrtell (*kirtle*), A. S. *cyrtel*.
mirrthrenn (to *murder*), A. S. *myrdhrían*.
myrrha, *myrra*, *myrre* (*myrrh*), Lat. *myrrha*.
serfenn (to *serve*), O. Fr. *servir*, Lat. *servire*.
skerrenn (to *scare*), O. N. *skirra* (to *drive away*).
thirrst (*thirst*), A. S. *thurst*.
thridde (*third*), *thrittiz* (*thirty*), A. S. *thridda*, *thrittig* or *thrittig*.
turnnenn (to *turn*), A. S. *tyrnan*.
turtel (*turtle-dove*), A. S. *turtle*, Lat. *turtur*.
warr (*aware*), A. S. *wár*.
weorc, *werc* (*work*), *wirrkenn* (to *work*), A. S. *weorc*, *wyrcon*.
werræ (*worse*), *werrst* (*worst*), *wirrsenn* (*worsening*), A. S. *wyrsa*, *wyrst*, *wyr-sian*.
wurrm (*worm*), A. S. *wyrm*, *weorm*.
wurrrh (*worth*, adj.), *wurrrhshipe*, *wurrrshipe* (*worship*), A. S. *weordh*, *weordhscipe*.
wurrrhenn (to *become*, be, cf. *woe worth the day*), A. S. *weordhan*.

But *r* is not the only consonant which has had this effect of lengthening the vowel before it. We find it produced also by *l*, a liquid and a lingual like the *r*. Before *l* at the end of a word or followed by another consonant, a vowel originally short has often become long. Cases of this kind, in which the Ormulum still retains the short vowel, are the following :

- O. *all* (*all*), *allswa*, *allse* (*also*), *allmasst* (*almost*), A. S. *eal*, *ealswá*, *ealmæst*.
allderrmann (chief, ruler, cf. *alderman*), A. S. *ealdorman*.
allterr (*altar*), Lat. *altare*.
bulltedd (*bræd*, bread from *bolted flour*), O. Fr. *bulter*, *bluter*, M. H. Germ. *biuteln*.
fallenn (to *fall*, *fallen*), A. S. *feallan*, *feallen*.
fallse (*false*), A. S. *fals*, Lat. *falsus*.
galle (*gall*), A. S. *gealla*.

- O. *halp* (*help*), *hollpenn* (*holpen*), from *hælpenn*, A. S. *healp*, *holpen*, from *helpan*.
hallte (*halt*, *lame*), A. S. *healt*.
pall (*cloth*, cf. *pall*), A. S. *páll*, *pell*, Lat. *pallium*.
sallt (*salt*), A. S. *sealt*.
shuldre (*shoulders*), A. S. *sculdre*, pl. of *sculdor*.
stall (*stall*), A. S. *steal*.
walless (*walls*), *grundwall* (*ground-wall*, *foundation*), A. S. *weal*.

This lengthening of a vowel before *l* had already commenced in the time of the Ormulum; and indeed in most of the instances found in the Ormulum, where a vowel originally short is followed by the combination *ld*, the vowel appears as long in the Ormulum itself. Thus in

- O. *ald* (*old*), but *eldre* (*elder*, *older*) and *allderrmann*, A. S. *eald*, *yldre*.
bald (*bold*), *beoldenn*, *beldenn* (*to embolden*), A. S. *beald*, *bealdian*, *byldan*.
child (*child*), but *childre* (*children*), A. S. *cild*, *cildru*.
faldess (*sheep-folds*), A. S. *gefeald*.
feld (*field*), A. S. *feld*.
gold (*gold*), *gildene* (*golden*), A. S. *gold*, *gylden*.
haldenn (*to hold*, *holden*), A. S. *healdan*, *healden*.
kald (*cold*), A. S. *ceald*.
milde (*mild*), but *millce* (*mildness*, *mercy*), A. S. *milde*, *milds* or *milts*.
saldenn (*they sold*), from *sellenn* (*to sell*), A. S. *sealdon*, from *sellan*.
shildenn (*to shield*), A. S. *scildan*.
talde (*he told*), from *tellenn* (*to tell*), A. S. *tealde*, from *tellan*.
weldenn (*to govern*, cf. *to wield*), A. S. *wealdan*.
wilde (*wild*), A. S. *wild*.
zeldenn (*to yield*), A. S. *gieldan*, *gyldan*.

Indeed, the Ormulum sometimes lengthens a short vowel before *l*, where the modern English has it short. Thus in *wel*, also *welle* (*well*, A. S. *well* and *wella*, *fons*); and in *wel*, also *well* (*well*, A. S. *wel*, *bene*). The variation of quantity, which the Ormulum shows in the last of these words, is seen, continued to the present day, in Scottish *weel*, compared with English *well*. Further, before *ld* a short vowel is lengthened in the following:

- O. *cwaldenn* (*they quelled*, *killed*), from *cwellenn*, A. S. *cwealdon*, from *cwellan*.
dwalde (*he dwelt*), from *dwellenn*, A. S. *dwealde*, from *dwellan* (*to hinder*, *delay*).
elde (*old age*, cf. *eld*), A. S. *yld*: *ä*: *d*, *eld*.
oferrgildedd (*gilded over*), A. S. *ofergylded*.
seldenn (*seldom*), A. S. *seldan*.

In *scaldess* (*minstrels*, *scalds*, from O. N. *skáld-r*, *poet*), and *heold*, *held* (*he held*, A. S. *heóld*), the Ormulum preserves an original long sound, which has become short in English.

But the first of these is variously pronounced, as *scālds* and as *scaulds*.

Before the liquid *m* followed by the mute *b*, as before the similar combination *ld*, a short vowel is sometimes lengthened in the Ormulum. Thus in five words, three of which have a long vowel in English, while two preserve the earlier short:

- O. *camb* (*comb*), A. S. *camb*.
climbenn (*to climb*), A. S. *climban*.
wambe (*womb, belly*), A. S. *wamb, womb*.
dumb (*dumb*), A. S. *dumb*.
lamb (*lamb*), but pl. *lammbrē*, A. S. *lamb*, pl. *lambru*.

In like manner, before the liquid *n* followed by the mute *d*, a short vowel has become long in very many words. In *bi-hinndenn* (*behind*, A. S. *behindan*), and *hinnderrling* (degenerate, retrograde in character, A. S. *hinderling*), connected with E. *hinder*, the Ormulum still retains the short sound; as it does before *nt* in *funnt* (*font*, A. S. *font*, cf. E. *fount*), *munnt* (*mount*, A. S. *munnt*), *sannt* (*saint*, A. S. *sanct*), where the vowel has become long in English. But the instances are far more numerous in which a vowel before *nd* is already lengthened in the Ormulum. Thus in

- O. *bindenn* (*to bind*), *bundenn* (*bound*), A. S. *bindan, bunden*.
blind (*blind*), *blendenn* (*to blind*), A. S. *blind, blendan*.
findenn (*to find*), *fundenn* (*found*), A. S. *findan, funden*.
grindenn (*to grind*), A. S. *grindan*.
grund (*ground*), but *grundwall* (*foundation*), A. S. *grund, grundweal*.
hund (*hound*), A. S. *hund*.
kinde (*nature, kind, kindred*), A. S. *gecynd*.
minde (*mind, memory*), but *minndiznesse* (*memory*), A. S. *gemynd*.
sund (*sound, integer*), A. S. *sund*.
-windenn (*to wind*), in *attwindenn* (*to escape*), *wundenn* (*wound*), but *winde-clut* and *windeclut* (*winding-clout, swaddling cloth*); A. S. *windan, wunden*.
wunde (*wound, vulnus*), A. S. *wund*.

In the preterit singular, the Ormulum has *band*, *fand*, *wand*, like the Anglo-Saxon, but with short *a* lengthened; these forms, however, are not represented in English, where the vowel of *bound*, *found*, *wound*, comes from the plural forms, *bundenn*, *fundenn*, etc., A. S. *bundon, fundon*, etc. The change of vowel quantity before *nd* (as before *ld* and *mb*) is carried further in the Ormulum than in the modern English, being extended to a number of words, in which it failed to establish

itself, so that the original short vowel is heard in their present pronunciation. Thus in

- O. *band* (*band*), A. S. *bend*.
ende (*end*, vulgar *ceud*), A. S. *ende*.
hand (*hand*), oftener *hannd*, but with added *-e* always *hande*, A. S. *hand*.
land (*land*), A. S. *land*.
sand (*sand*), A. S. *sand*.
sendenn (to *send*), but *sennde* (he *sent*), A. S. *sendan*, *sende*.
shendenn (to *shend*, disgrace), A. S. *scendan*.
strande (*strand*, bank), A. S. *strand*.
sunderr-run (private communing, cf. *sunder*, *asunder*), A. S. *sundor*.
wand (rod, *wand*), O. N. *vand-r*, *vönd-r*, Goth. *vandus*.
wendenn (to *wend*, turn, go), but *wennde* (he turned, *went*), A. S. *wendan*, *wende*.

The word *freond*, *frend* (*friend*, A. S. *freönd*) does not belong to this series; it came with long vowel quantity from the Anglo-Saxon into the Ormulum, and passed thus into the older English, as we see from the spelling with *ie*, which it has in common with the opposite, but strictly analogous, *fiend* (O. *fend*, A. S. *feönd*).

It is a very curious fact that a lengthening of the vowel before *ng*, similar to that before *nd*, is frequent in the Ormulum, although unknown to modern English, in which the vowel before *ng* is always short.* Examples are

- O. *gang* (journey, cf. *gangway*), but *ganngenn* (to go), A. S. *gang*, *gangan*.
genge (company, cf. *gang*), A. S. *genge*.
king (*king*), A. S. *cyning*, *cyng*.
lang (*long*), *bilenge* (belonging to), A. S. *lang*, *gelenge*; but *lanng* (*long*, diu),
lennge (*longer*), A. S. *lange*, *lengra*, *leng*.
langenn (to *long* after), *forrlangedd* (desirous), A. S. *langiun*.
mang, *amang* and *amangg* (*among*), A. S. *dmang*, *gemang*.
ringenn (to ring), A. S. *hringan*.
singenn (to sing), *sungenn* (they sung), *sang* (*song*), A. S. *singan*, *sungon*, *sang*.
springenn (to spring), *sprang* (*sprang*), *sprungenn* (*sprung*), *offspring* (*offspring*),
A. S. *springan*, *sprang*, *sprungen*, *ofspring*.
stingenn (to sting), *stungenn* (*stung*), A. S. *stigan*, *stungen*.
strang (*strong*), *strengenn* (to strengthen), but *strenncethe* (*strength*), A. S. *strang*,
gestrangian, *strengdhu*.
swingenn (to scourge, cf. to *swing*, *swinge*), A. S. *swingan*.

* The Norse grammarians recognize in that language a similar lengthening of primitive short vowels (*a*, *o*, *u*, *i*), when followed by *ng* (or *nk*; also of *a*, *o*, *u*, when followed by *lf*, *lg*, *lk*, *lm*, *lp*, *ls*): thus *lång-r* (*long*), *springa* (to *spring*), *tunga* (*tongue*), *væng-r* or *veng-r* (*wing*). It seems, however, to be questionable, whether, or how far, this change belonged to the old language. See Heyne, *Kurze Gramm. der altgerm. Dialecte*, 2d ed., p. 82.

O. *thing* (*thing*), A. S. *thing*.

bithrungenn (oppressed, cf. *throng*, i. e. press of people), A. S. *bithrungen*, from *thringan*, *gethrang*; but O. *threnngdenn* (they thronged), A. S. *threngdon*, from *threngan*.

thwang (*thong*), A. S. *thwang*.

tunge (*tongue*), A. S. *tunge*.

wengess (*wings*), O. N. *weng-r*.

wrang (*wrong*), A. S. *wrang*.

zung (*young*), rarely *zunng*, comp. *zunngre* (*younger*), A. S. *geong*, *gyngra*.

In *heng* (*hung*, A. S. *hēng*; but *henngde* [*hanged*], A. S. *hangode*), the vowel was already long in Anglo-Saxon. Whether this extension to *ng* of the euphonic analogy which obtains for *nd* ever gained much currency in the language, may well be doubted. It seems certain that it cannot have prevailed at the time (probably in the fifteenth century) when the old long sounds of *i* and *u* (as in *pique*, *prude*) began to pass into the diphthongal sounds heard in *pike* and *proud*; for in that case, instead of saying *kīng*, *thīng*, *tōngue*, *sūng*, as we now do, we should probably be saying *kīng*, *thīng*, *toung*, *soung*, with the same vowel utterance as in *kīnd*, *sound*. It may be observed, however, that in the most recent English there is a noticeable tendency to lengthen somewhat the short sound of *o* before *ng*, so that *long*, *song* are apt to be pronounced with much the same vowel sound as *or*, *nor*, *for*.

If now we have found in combinations such as *ld*, *mb*, *nd*, *ng*, where the first letter is a liquid and the second its cognate sonant mute, a certain tendency to protract the quantity of a preceding short vowel, it must be remarked that the ordinary tendency of a combination of consonants is in the opposite direction, — not to the lengthening of a preceding short, but to the shortening of a preceding long. The speaker slights the vowel in order to concentrate his energy of utterance on the following consonants, which thus massed together present some difficulty of enunciation. It is as in the Greek *πενέστερος* (poorer), for *πενηστερος*, i. e. *πενητ-τερος*, from *πένης*, *πένητ-ος*. Of this change — a long vowel shortened on account of two or more consonants following it — numerous examples are found in the language of the Ormulum, when compared with the Anglo-Saxon. Thus

- O. *askenn* (to ask), A. S. *āscian*.
blossme (blossom), A. S. *blōstma*.
chappmenn (chapmen, merchants), A. S. *ceāpmen*; cf. O. *chepinngbothe* (market-booth).
clennlike (cleanly), *clennsenn* (to cleanse), from *clene* (clean), A. S. *clænlice*, *clænsian*, from *clæne*.
dredde (he dreaded), *forrdredd* (alarmed), from *drædenn*, *dredenn* (to dread), A. S. *dréd*, *dræden*, from *drædan*; in O. as in E., the verb has passed into the weak conj.
errnde (errand), A. S. *ærende*.
fedde (he fed), from *fedenn* (to feed), A. S. *fēdde*, from *fēdan*.
fiftiiz (fifty), from *fif* (five), A. S. *fiftig*, from *fif*.
fosstrenn (to foster), *fossterrfuderr* (foster-father), A. S. *fōsterian*, *fōsterfuder*.
goddspell (gospel) belongs here, if the A. S. word is *gó'spel* (good tidings, = *εὐαγγέλιον*); but this is now generally believed to be *godspel* (God's word).
hallzhenn (saints, cf. *Hallow-een*), *hallzhenn* (to hallow), A. S. *hālige* or *hālge*, *hālgian*.
hiddenn (they hid), *hidd* (*hid*), from *hidenn* (to hide), A. S. *hýddon*, *hýded*, from *hýdan*.
keppte (he kept), from *kepenn* (to keep), A. S. *cēpte*, from *cēpan*.
lasstenn (to last), also *lastenn*, A. S. *læstan*.
ledde (he led), *ledd* (*led*), from *ledenn* (to lead), A. S. *lædde*, *læded*, from *lædan*.
mosste (might, cf. *must*), A. S. *mōste*.
neast (nearest, next), also *nest* (Sc. *niest*), A. S. *nēhst*.
redd (*read*, part.), A. S. *rēded*, from *rēdan*.
shadde (he parted), *shadd* (parted), from *shædenn* (to part, cf. to *shed*), A. S. *sceōd*, *sceōden*, from *sceōddan*: of weak conj. in O. and E.
siththenn (*sithence*, *since*), A. S. *siðh tham*, *siðhdhan*, perhaps *siðhdhan*.
sleeppte (he slept), from *slæpenn* (to sleep), A. S. *slēp*, from *slæpan*: of weak conj. in O. and E.
soffte (*soft*), A. S. *sōfte*.
spredd (*spread*, part.), A. S. *spræded*, from *sprædan*.
thratte (he rebuked, cf. *threatened*), A. S. *thredēde*, from *thredian*.
wepptenn (they wept), from *wepenn* (to weep), A. S. *wēoþon*, from *wēpan*: of weak conj. in O. and E.
wimmann (*woman*), also *wifmann*, A. S. *wifman*, *wimman*, perhaps *wimman*.
wissdom (*wisdom*), also *wisdom*, A. S. *wisdōm*.

Probably the short vowel in *wraththe* (*wrath*), as well as in *laththe* (*loathing*, *enmity*), and *kiththe* seen in *kiththeliiz* (familiarily, cf. *kith*), may be accounted for in this way, from the addition of a suffix *the* (A. S. *dh*, *dhu*) — the same as in *strenncthe* (*strength*), *trouwthe* (*truth*), from *strang* (*strong*), *trouwe* (*true*) — to the adjectives *wrath* (*wrōth*, A. S. *wrādh*), *lath* (*loathsome*, *hateful*, A. S. *lādh*), and *cuth* (*known*, *couth*, A. S. *cūdh*): compare A. S. *lædhdu* (*offence*), *cýdhdu* (*home*, *household*). It is possible that in these words, as well as in *dredde*, *fedde*, *hiddenn*, *ledde*, *shadde*, *siththenn*, *wimmann*, the

first vowel may have been pronounced long, the following consonant being written double only because it was sounded twice, first in the stem, and again in the suffix.* It is also possible, or even probable, that in some cases the change from long to short, now under consideration, may have taken place already in the Anglo-Saxon; † but this makes no difference, either in the reality of the change, or in the cause from which it arose.

In the list of words just given, the short sound which appears in the Ormulum is maintained in modern English. The case is otherwise with those which follow :

O. *allmasst* (*almost*), though the simple word is nearly always *masst* (*most*), A. S. *mæst*.

demmd (*judged*), from *dem·nn* (to judge, cf. *doom*, *deem*), A. S. *dēmed*, from *dēman*.

derre (*dearer*), from *deore*, *dere* (*dear*), A. S. *dēorra*, from *dēore*.

derrling (*darling*), A. S. *dērling*.

dunnward (*downward*), from *dun* (*down*), A. S. *ādūnward*, from *dūn*.

hehhe (*higher*), also *hehre*, from *heh* (*high*), A. S. *hēhra*, from *hēth*.

herrde (*he heard*), *herrd* (*heard*), from *herenn* (to hear), A. S. *hýrde*, *hýred*, from *hýran*.

* Such a supposition must, however, be regarded as improbable for these words on account of the short quantity which they have in English ; and especially improbable for the preterits in *-dde*, on account of the corresponding participles *dredd*, *hidd*, *ledd*, etc., in which a really double pronunciation of the *d* is hardly to be thought of.

What is here recognized as possible — that a vowel before a doubled consonant may have been long, the consonant being written twice because actually twice sounded — must be admitted also for *lutte* (*he louted*), as well as the comparatives *derre* (*dearer*) and *nerre* (*nearer*), mentioned in the next paragraph ; and, perhaps with still stronger reason, for the words *clænnesse* (*clean-ness*), *fiffald* (*fivefold*), *læffull* (*belief-full*, *believing*). As we have *skillloes* (*skill-less*, *ignorant*), *sefennahht* (*seven-night*, *week*), *unneed* (*un-need*, *without constraint*), *sunderrrun* (*sunder-roun*, *private communing*), *forraht* (*perverted*, Germ. *ver-rückt*), it seems not unlikely that the *r*, *n*, and *f* would have been written thrice in *derre*, *nerre*, *clænnesse*, *fiffald*, *læffull*, if their first vowel had been short in sound ; but the spelling of *jullike* (*full-like*, *fully*), *stilliz* (*stilly*), *idellezyc* = *idellnesse* (*idleness*), *drunnkrennesse* (*drunken-ness*), *unnitt* (*useless*, Germ. *un-nütz*), *forrwundennessse* (*remissness*), *orrath* as well as *orrath* (*inops consilii*, O. N. *ör-rádh*), warns us not to lay too much stress on this consideration.

† The same possibility is not to be overlooked in other cases where the vowel quantity of the Ormulum differs from what must have been the primitive quantity in Anglo-Saxon. This is particularly true as to that lengthening of vowels in open syllables which is soon to be considered : the change could hardly have gone so far in the language of the Ormulum, if it had not made a beginning in Anglo-Saxon times.

- O. *laffði* (*lady*), A. S. *hlæfdige*; cf. O. *laferrd* (*lord*), A. S. *hláford*.
licness (*likeness*), from *lic* (*like*), A. S. *geltness*, from *geltic*, but O. *onnlicness*
(likeness, image).
lutte (*he bowed, louted*), from *lutenn* (*to lout*), A. S. *ledt*, from *lútan*: of weak
conj. in O. and E.
nerre (*nearer*), from *ner* (*nearly*), O. N. *nerri*, from *nær*; cf. O. *ner* (*nearer*),
from *neh* (*nigh*), A. S. *nedr*, from *nedh*.
oththr, *orr*, from *otherr* (all meaning *or*), A. S. *áðher* = *áðther* (*either*):
oththr, perhaps, by a confusion of A. S. *odhdhe* (*or*) with *áðher*.
Thurrsdag (*Thursday*), O. N. *Thórs-dag-r*, A. S. *Thunres-dæg*.
wennde (*he weened*), from *wenenn* (*to ween, think*), A. S. *wénde*, from *wénan*.
wesste (*waste, desert, adj. and subst.*), A. S. *wéste*.

From a continued working out of the same tendency, the English has a short vowel before two or more consonants in some words where the Ormulum shows the original long vowel quantity:

- O. *adle* (*disease, cf. addle*), A. S. *ádl*.
breost, *brést* (*breast*), A. S. *bréost*.
brethre (*brethren*), A. S. *bróðhru*.
buhsumm (*pliant, compliant, cf. luxom*), from A. S. *búgan* (*to bend, bow*).
to-clæf (*he cleft, also clave, clove*), A. S. *clæf*, from *cleófan* (*to cleave*).
dost (*dost, usual pron. dúst*), also *dosst*, from *don* (*to do*), A. S. *dést*, from *dón*.
fifte (*fifth*), *fiftende* (*fifteenth*), A. S. *fífta*, *fífteódha*, O. N. *fimtándi*.
freond, *frend* (*friend*), A. S. *fréond*.
gom (*care, heed, cf. gumption*), A. S. *geám*.
hese (*command, hest*), A. S. *hæs*.
heold, *held* (*he held*), from *haldenn* (*to hold*), A. S. *heöld*, from *healdan*.
moneth (*month*), A. S. *mónadh*.
nanness, in *forr the nanness (for the nonce)*, from *æness* (*once, Sc. aines*), A. S.
æne.

In the following words also the shortening may be explained on the same principle, since the vowel which is written before their final liquid is little, if at all, represented in their actual pronunciation:

- O. *æfre* (*ever*), *næfre* (*never*), A. S. *æfre*, *næfre*.
becnenn (*to beckon*), A. S. *bécnan*, *beácnian*.
bosemm (*bosom, often pron. with long oo sound*), A. S. *bósm*.
brotherr (*brother*), pl. *brethre* (*brethren*), A. S. *bróðhar*, *bróðhru*.
moderr (*mother*), A. S. *móðor*.
otherr (*other*), A. S. *óðher*.
wæpenn (*weapon*), A. S. *wæpen*.

The cases which we have been considering show an accented long vowel shortened in a close syllable, where it is

separated by more than one audible consonant sound from the vowel of the following syllable. We have next to notice a change which is the converse of this, — a change which has cut much deeper into the integrity of the old system of quantities, — the lengthening of an accented short vowel in an open syllable (generally a penult), that is, when separated by only one consonant sound from the vowel of the syllable which follows. This change has been carried to a very great extent in the modern German: *geben* (to give), *nieder* (down, cf. E. *nether*), *tragen* (to draw), *nehmen* (to take), are examples taken up at random out of an immense multitude. According to Schleicher, this change of quantity belongs to, and is a prominent feature in, the transition from Middle to Modern High German, which was made in the fifteenth century. In England the change must have commenced its progress earlier, as we find it carried very far in the language of the Ormulum, which belongs to the thirteenth century. We give first the instances in which the lengthened vowel seen in the Ormulum became so established in English usage as to remain long in the pronunciation of to-day. Thus

O. *-ale* (*ale*), in *bridale* (*bride-feast*), A. S. *ealu*, *brjdealu*. In E. *bridal* it has become short again.

azhe (*awe*), but also *e33e* (*fear*), A. S. *ege*; cf. O. N. *æggia* (to strike with fear or awe).

bakenn (to bake), A. S. *bacan*.

bede (prayer, cf. *bead*, *bead-roll*, *beads-man*), A. S. *gebed*.

berenn (to bear), *borenn* (born), A. S. *beran*, *boren*.

bidell (crier, messenger, cf. *beadle*), A. S. *bydel*

brasene (brazen), from *brass* (*brass*), A. S. *bräsen*, from *bräs*.

brekenn (to break), A. S. *breccan*.

bridled (*bridled*), with *i* from *bridell* (? not found in O.), A. S. *bridel*.

bule (*bole*, tree-stem), in *bulaxe* (*axe*, hatchet, cf. *pole-axe*), O. N. *bolöxi*, from *bol-r*.

care (*care*), A. S. *cearu*, *curu*.

chariz (mournful, anxious, cf. *chary*), A. S. *ceariy*, from *cearu*

chosenn (*chosen*), from *chesenn* (to choose), A. S. *coren*, from *ceösan*.

clofenn (*cloven*), A. S. *clofen*, from *cleöfin* (to cleave).

cnapess (boy's, cf. *knave*), A. S. *cnape*, *cnafa* (boy).

cnedenn (to knead), A. S. *cnedan*.

dækenn (Levite, deacon), A. S. *diacon*, Lat. *diaconus*.

dale (*dale*), A. S. *däl*: original quantity preserved in E. *dell*.

drazhenn (to draw, drawn), A. S. *dragan*, *dragen*.

kirrkedure (church-door), A. S. *duru* (*door*).

- O. *efenn* (equal, even), but pl. *effne*, vb. *effnenn*, A. S. *efen*, *efenian*.
ele (oil), A. S. *ele*, O. Fr. *oile*, *oille*, Lat. *oleum*.
etenn (to eat), but impv. *ett* (eat), A. S. *etan*, *et*.
faderr (father), A. S. *fäder*.
farenn (to go, fare), but impv. *farr*, A. S. *faran*, *far*.
biforenn (before), also *biforr*, A. S. *beforan*.
bifrorenn (frozen), A. S. *froren*, from *freósan* (to freeze).
gate (way, cf. *gait*), O. N. *gata* (way), A. S. *geat* (gate).
græfess (ditches, cf. *grave*), A. S. *gräf*.
-gume (man), in *bridgume* (bridegroom), A. S. *guma*, *brýdguma*.
hatenn (to hate), *hete* (hate), A. S. *hatian*, *hete*.
hefenn (to raise, heave), *hofenn* (hove, hoven), A. S. *hebban*, *hofen*.
hire (her), A. S. *hire*.
hizhenn (to hasten, cf. to *hie*), A. S. *higian*.
hope (hope), A. S. *hopa*.
iféll (evil), A. S. *yfel*.
kechell (cake), O. N. *kaka*.
ladenn (to draw out, cf. to *lade* water, also *ladle*), A. S. *hladan*.
late (late), but *lattré* (latter), *lattst* (last), A. S. *lüt*, *lättra*, *latost*.
lazhe (law), A. S. *lagu*.
forrlörenn (lost, cf. *forlorn*), from *forlesenn* (to lose), A. S. *forloren*, from *forleósan*.
makenn (to make, Sc. *mak*), but impv. *macc*, A. S. *macian*, *maca*.
mele (meal, flour), A. S. *melu*.
mete (meat, food), A. S. *mete*.
efennmete (commensurate), from *mett* (measure, cf. *mete*), A. S. *gemet*: O.
metelike (meetly), A. S. *gemellice*.
nakedd (naked), A. S. *nacod*.
name (name), but *nemmnenn* (to name), A. S. *name*, *nemnan*.
binethenn (beneath), but *niththrenn* (to lower, cf. *nether*), A. S. *beneodhan*, *nidherian*.
nizhenn (nine), *nizhennde* (ninth), A. S. *nigon*, *nigodha*, O. N. *niundi* (ninth).
oferr (over), but also *offr*, A. S. *ofer*.
openn (open), but *oppnenn* (to open), A. S. *open*, *openian*.
rezhllboc (rule-book), A. S. *regol*, Lat. *regula*.
sake (quarrel, cf. *sake*), A. S. *sacu*.
forsakenn (to forsake, forsaken), A. S. *forsacan*, *forsacen*.
same (same), A. S. *same* (pariter), O. N. *sam-r* (idem).
sezhenn, *sene* (seen), A. S. *sewen*, *segen*, *sén*, from *seón* (to see).
shame (shame), but *shammfásst* (shamefaced), A. S. *sceamu*, *sceamfäst*.
shapenn (to form, create, cf. to *shape*), A. S. *sceppan*.
skathenn (to harm, to *scáthe*), A. S. *sceadhun*.
slazenn (slain), from *slan* (to *slay*), A. S. *slagen*, from *sledn*.
smeredd (anointed, cf. *smeured*), A. S. *smyred*, from *smyrian*, cf. *smeoru* (ointment).
spekenn (to speak), A. S. *sprecan*, and *specan*.
stlenn (to steal), A. S. *stelan*.
stirenn (to stir, move, Sc. *steer*), A. S. *styrian*.
swerenn (to swear), A. S. *swerian*.

- O. *anndswere* (*answer*), A. S. *andswaru*.
takenn (to *take*, *taken*, Sc. *tak*), but impv. *tacc*, A. S. *tacan*, *tacen*, *tac*.
tale (reckoning, number, cf. *tale*), A. S. *talu*.
tholenn (to *suffer*, Sc. *thole*), A. S. *tholian*.
wakenn (to *wake*, *watch*), A. S. *wacan*.
waterr (*water*), but *wattrenn* (to *water*), A. S. *wäter*, *wäterian*.
weoreldd, *weoreld* (*world*), but gen. *weorrlless*, *werrldless*, A. S. *weoruld*, *wooruld*,
world.
wrekenn (to *wreak*), *wræche* (*wreak*, *revenge*), A. S. *wrecan*, *wracu*.
wuke (*week*), A. S. *wucu*.
ȝate (*gate*), also *gate*, A. S. *geut*.

It is remarkable that this change is carried to a much greater extent in the Semi-Saxon of the Ormulum than it is in modern English. It should seem that there must have been a reaction early established, which set limits to the tendency, and maintained the short vowel in many words where it had begun to be lengthened. Instances of this kind—where an accented short vowel in an open syllable is lengthened in the Ormulum, but the same vowel is found short in English (mostly, indeed, in monosyllables with final consonant sound)—are the following:

- O. *abufenn* (*above*), = *bufenn*, from A. S. *á*, *be*, and *ufan*.
beodenn, *bedenn* (*bidden*), A. S. *boden* (commanded), *beden* (entreated). [The A. S. verbs *biddan* (to entreat) and *beðdan* (to command) are pretty much confounded in O.]
bisscopess, pl. of *bisscopp* (*bishop*), A. S. *biscep*; *bisscopess* had a secondary accent on the *o*.
bite (*bit*, *morsel*), A. S. *bite*.
bodiz (*body*), A. S. *bodig*.
bule (*bull*), Dutch *bul*, O. N. *boli*.
clepedd (called, cf. *clept*, *yclept*), from *clepenn*, A. S. *cleopod*, from *cleopian*.
cūde (*cut*), A. S. *cud*.
cumenn (to *come*, also as part.), but impv. *comm*, *cumm*, A. S. *cuman*, *cumen*,
cum.
cwike, pl. of *cwicc* (*living*, *quick*), A. S. *cwic*.
dide (*did*), from *don* (to *do*), A. S. *dyde*, from *dōn*.
drake (*dragon*), A. S. *draca*, Lat. *draco*.
drifeann (*driven*), from *drifenn* (to *drive*), A. S. *drifen*, from *drifan*.
fretenn (to *fret*, trans.), A. S. *fretan* (to eat up).
glade, pl. of *gladd* (*glad*), *gladenn* (to *gladden*), A. S. *glād*, *gladian*.
godless, gen. of *godd* (*god*), but pl. *godless*, A. S. *god*.
greeses (*grasses*), sing. in *greshoppe* (*grasshopper*), A. S. *grās*, *gārs*, *gārshoppa*.
hafenn, but *habbenn* (to *have*), *hafest*, but *haffst* (*hast*), *haffde* (*had*), A. S.
habban, *hāfst*, *hāfde*.
hefiz (*heavy*), A. S. *hefig*.
heofenn (*heaven*) in comp., but as sep. word *heoffne*, *heffne*, A. S. *heofon*.

- O. *hiderr* (*hither*), A. S. *hider*.
hise, pl. of *hiss* (*his*), A. S. *his*.
huniȝ (*honey*), A. S. *hunig*.
kide (*kid*), O. N. *kid*.
kñess, *kñe* (comm. *kinness*, *kinne*), gen. and pl. of *kinn* (*kin*, *kind*), A. S. *cyn*.
lifethh (*liveth*), from *libbenn* (*to live*), A. S. *lifadh*, *libban*.
limes (*limbs*), sing. not in O., A. S. *lim*, pl. *leomu*, *lims*.
litell (*little*), pl. *litte*, A. S. *lytel*.
lokenn (*shut in*, cf. *locked*), A. S. *locen*, from *lúcan*.
lotess, pl. of *lott* (*lot*), A. S. *hlot*, pl. *hlotw*.
lufe (*love*), *lufenn* (*to love*), but *luffsum* (*pleasant*), A. S. *lufu*, *lufian*, *lufsum*.
maniȝ, *mani* (*many*), A. S. *manig*.
mikell (*great*, *many*, *mickle*, *much*), but pl. *mickle*, A. S. *micel*.
mineteress (*money-changers*, cf. *minter*, *mint*), A. S. *mynetere*, from *mynet* (*money*), Lat. *moneta*.
muneclif (*monk-life*), A. S. *munec* (*monk*), Lat. *monachus*.
naru (*narrow*), but pl. *narrwe*, A. S. *nearu*.
nile (*will he*, i. e. *will not*), but *nillt* (*will not*), A. S. *nelle*, *nelt*.
ofne (*oven*), dat. of *ofenn* (? not in O.), A. S. *ofen*.
peninng (*penny*), A. S. *pending*, *pening*, *penig*.
rathe (*quickly*, cf. *rathe*, *rather*), A. S. *hradhe*, *hradhor*, from *hrædh* (*quick*).
risenn (*risen*), from *risenn* (*to rise*), A. S. *risen*, from *rīsan*.
rotenn (*to rot*), A. S. *rotian*.
Saterrdazȝ (*Saturday*), A. S. *Säterndæg*, Lat. *Saturni dies*.
seofenn, *sefenn* (*seven*), but also *seoffne*, *seffne*; *seofenntiȝ* (*seventy*): A. S. *seofon*, *hundseofontig*.
shetenn (*to shut up*), A. S. *scyttan*.
sikerr (*sure*, Sc. *sicker*), O. H. Germ. *sihhur*, Lat. *securus*.
sine, rare for *sinne* (*sin*), A. S. *syn*.
skathelæss (*unharmed*, *scathless*), A. S. *sceadha* (*harmer*).
stafess, pl. of *staff* (*letter*, cf. *staff*, old pl. *staves*), A. S. *stäf* (*staff*, *letter*).
stede (*place*, cf. *stead*), A. S. *stede*.
stekenn (*to confine*, cf. *to stick*, *remain fast*), A. S. *stician*.
stoke (*stock*), dat. of *stoc* (? not in O.), A. S. *stoc*.
sume, pl. of *summ* (*some*), A. S. *sum*.
sumerr (*summer*), A. S. *sumor*.
sune (*son*), A. S. *sunu*.
Sunenndazȝ (*Sunday*), from *sunne*, rarely *süne* (*sun*), A. S. *sunne*, *Sunnandæg*.
thiderr (*thither*), A. S. *thider*.
fullthrif nu (*complete*, cf. *thriven*), O. N. *thriřinn*, from *thriřask* (*to thrive*).
thripell (*triple*), from Lat. *triplex*, Fr. *triple*, confused with A. S. *thri*; cf. prov. Eng. *thribble*.
tredenn (*to tread*, *trodden*), A. S. *tredan*, *treden*.
whiderrward (*whitherward*), A. S. *hwider*.
widewe, comm. *widdwe* (*widow*), A. S. *widwe*, *wydewe*.
wilenn (*to will*), but *willt* (*wilt*), A. S. *willan*, *wilt*.
witenn (*to know*, cf. *to wit*, O. E. *to weet*), but impv. *witt*, A. S. *witan*, *wit*.
writenn (*written*), from *writenn* (*to write*), A. S. *writen*, from *writan*: cf. O. *writess*, pl. of *writt* (*writ*), A. S. *writ*.

O. *wude* (*wood*), A. S. *wudu*.

wunedd (*wont*), from *wunenn* (to accustom), A. S. *wuna*, *gewuna* (*custom*).

zetenn (to *get*), *zett* (*gets*), *bizetenn* (*gotten*), A. S. *begitan*, *begiten*.

zifenn (to *give*, *given*), also written with *g*, but impv. *ziff*, A. S. *gifan*, *gifen*, *gif*

That this change — the lengthening of an accented short vowel in an open syllable — was still in progress at the time of the Ormulum, so that the usage in respect to it was then unsettled and fluctuating, is apparent from indications in the book itself. A number of the words given in the last two lists have here and there a mark of short quantity written over the vowel, as if the writer, having first given it as long with only a single consonant after it, was afterwards inclined to recall his judgment, to set it down as short, and therefore drew a curve line over it, this being an easier way than doubling the consonant by interlineation. What makes this explanation more probable is the fact that, while there are more than forty distinct words which in one place or another have this short mark over them, it occurs in almost every case over an accented vowel in an open syllable. That there was a special vacillation on the part of the writer as to the quantity of such vowels, seems a natural, if it is not a necessary, inference from this fact. Thus *berenn* (to *bear*) is once at least written with a mark of short quantity over the accented vowel; and the same is true of *bede* (*bede*), *dale* (*dale*), *hatenn* (to *hate*), *hete* (*hate*), *ladenn* (to *lade*), *late* (*late*), *mele* (*meal*), *mete* (*meat*), *name* (*name*), *stelen* (to *steal*), *takenn* (to *take*), *tale* (*tale*); also *bite* (*bit*), *cude* (*cud*), *kine* (*kin*), *lifethth* (*liveth*), *sine* (*sin*), *stede* (*stead*), *thrifenn* (*thriven*), *wilenn* (to *will*), *witenn* (to *wit*), *writenn* (*written*).

Under the broad euphonic analogies and tendencies which have now been described come all but a comparatively small number of the cases in which the modern English quantity differs from that in the Ormulum. There remain, however, some few changes which are not altogether of an isolated character. A long vowel of the Anglo-Saxon and the Ormulum has in a good many instances been shortened before a final mute. This is especially the case with the old long *o* before a final *k*-sound. The long quantity of that vowel was indicated

in early English by doubling the *o*: thus *bōc* was written *book*. The sound afterwards changed to that which we hear in *spook*, *spool*; and still later was shortened to its present pronunciation. Instances of this kind are

- O. *boc** (*book*), A. S. *bóc*.
croc (hook or crook, device), O. N. *krók-r*.
lokenn (to look), A. S. *lócian*.
fórrsac (*forsook*), from *fórrsakenn* (to forsake), A. S. *fórsóc*, from *fórsacan*.
toc (*took*), from *takenn* (to take), A. S. *tóc*, from *tacan*.

Occasionally other long vowels have become short before a *k*-sound, as in

- O. *brukenn* (to use, enjoy, cf. to brook), A. S. *brúcan*.
fic (*fig*), in *fictre* (*fig-tree*), A. S. *fic*, Lat. *ficus*.
seoc, *sec* (*sick*), A. S. *seóc*.
strac (passed, cf. *struck*, O. E. *strook*), A. S. *strác*, from *strican*.
wic (dwelling, street, cf. *Swanwick*, *Greenwich*), A. S. *wíc*.

The same change of quantity has taken place not unfrequently before *d*, seldomer before *t*: thus

- O. *blod* (*blood*), A. S. *blōd*.
flod (*flood*), A. S. *flōd*.
god (*good*), A. S. *gōd*.
stod (*stood*), from *stann denn* (to stand), A. S. *stōd*, from *standan*.
wod (*mad*, Sc. *wud*), A. S. *wōd*.
bræd (*bread*), A. S. *brædd*.
dæd (*dead*), A. S. *dæād*.
drædenn, *dredenn* (to dread), A. S. *drædan*.
hæfedd (*head*), A. S. *hæfōd*.
shædenn (to part, cf. to shed), A. S. *scæādan*.
shrædenn (to shred, pare, cf. Sc. *screeel*), A. S. *screddian*.
but, comm. *butt* (*but*, except), A. S. *būtan*.
fot (*foot*), A. S. *fōt*.
hat (*hot*), A. S. *hāt*.
lætenn and *lētenn* (to let, allow, also as part. *let*), pf. *let* (he let), A. S. *lætān*,
læten, pf. *lēt*.
swæt (*swent*), A. S. *swāt*.
wæte (*drink*), from *wet* (not in O., *wet*, Sc. *weet*), A. S. *wæt*.
wat, also *watt* (*wot*), from *witenn* (to know, cf. to wit), A. S. *wāt*, from *witan*.

In *bedethth* or *biddethth* (*biddeth*), *forbedethth* (*forbiddeth*), the long form comes from A. S. *beōdan* (to command), the short one from A. S. *biddan* (to entreat): in *biddenn* (to com-

* In this word, and in several others, where a long vowel has become short before a final consonant, the Scotch retains the earlier long quantity: thus *buik*, *bruik*, *bluid*, *gude*, etc.

mand, to entreat) of the Ormulum, the forms of the two verbs are very much confounded.

The few cases in which the difference of quantity between the Ormulum and the modern English is not to be explained from principles already set forth, will be found, so far as I have noted them, in the following list :

O. *amæn* (*amen*), Gr. ἁμήν.

an (*an, one*), rarely *ann*; *nan* (*none*); *onnan, anan*, also *anann* (*anon*); A. S. *án, nán*. Eng. *alone, atone, only*, and Sc. *ane, nane*, preserve the original long quantity.

aniȝ (*any*), A. S. *æniȝ*.

beon, ben (*to be, been*), A. S. *beón* (*to be*): the long sound of *been* is still sometimes heard.

cariteth (*charity*), Fr. *charité*, Prov. *caritat*, Lat. *caritas*.

chele, also *chēle* (*chill*, subs.), A. S. *cēle*.

clath (*clothing*, cf. *clōth*, but pl. *clōthes*), A. S. *cládh*.

cuthe (*could*), A. S. *cúðhe*.

dæf (*deaf*, cf. Sc. *deave*, *to deafen*), A. S. *deáf*.

death (*death*), A. S. *deádh*.

deofell, defell (*devil*, Sc. *deevil*), A. S. *deófol*, Lat. *diabolus*.

doth (*doth*, usual pron. *dúth*), from *don* (*to do*), A. S. *dádh*, from *dón*.

flesh (*flesh*), A. S. *flæsc*.

gluterrnesse (*gluttony*), O. Fr. *gloutonnie* (from *glouton*, Lat. *glūtō(n)*, from *glūtire*): in *gluterrnesse* English affixes are attached to the root (*glut*) of the Latin and French words.

gyn (*art, device*, cf. *gin*), shortened from O. Fr. *engin*, but perhaps confused with a derivative of O. N. *ginna* (*to deceive*).

inoh (*enough*, also *enow*), A. S. *genōȝ, genōh*.

bikæchedd (*caught*), also *bikahht* (*caught*); of uncertain origin.

profete, prophete (*prophet*), Lat. *prophēta*.

publicaness (*publicans*), Lat. *publicāni*.

rædiȝ (*ready*), also *rædelike*, A. S. *ræde, rædlíc*.

riche (*rich*), A. S. *rice*.

sariȝ (*sorry*), but *sare* (*sorely*), A. S. *sárig*, from *sár* (*sore*).

seliliȝ (*happily*), A. S. *sælig, gesælig* (*happy*, Sc. *seely*), whence E. *silly*.

shephirde (*shepherd*), from *shep* (*sheep*), A. S. *scedp, scedphirde*.

shunenn (*to shun*), A. S. *scúnian*.

tene (*ten*), rarely *tenn*, *tende* (*tenth*), A. S. *tȝn, tén, teóðha*, O. N. *tiundi* (*tenth*).

The old long quantity is preserved in the compounds *thirteen, thirteenth*, etc., and in Sc. *teinds* (*tithes*).

onnyenes (*against, again*), *onnyæn* (*again, against*), A. S. *ongedn* (*against*).

ȝet (*yet*), strangely lengthened in O., A. S. *git, get, yiet, gyt*.

druncnenn (*to drown*, trans.), in form = A. S. *druncnian* (*to get one drunk*), cf. O. N. *drukna* (*to be drowned*).

ennoell (*angel*), A. S. *engel, ängel*, Lat. *angelus*.

- O. *flumm* (river, cf. *flume*), O. Fr. *flum*, Lat. *flumen*.
funnt (*font*, cf. *fount*), A. S. *font*, Lat. *fons*, *font-is*.
irrene (of iron, ferreus), from *irenn* (iron), A. S. *iren* (ferrum and ferreus) : *rr*
in *irrene* perhaps an oversight.
munnt (*mount*), A. S. *munt*, Lat. *mons*, *mont-is*.
sannt (*saint*), A. S. *sanct*, Lat. *sanctus*.
slekkenn,* *slekkenn* (to slake), A. S. *sleac* (*slack*), *gesleccan* (to slacken), O. N.
slökkva (to slake).
thurrh (*through*), A. S. *thurh*, *thuruh*, (*through*, *thorough*).
wæcnenn (to waken, trans. and intrans.), A. S. *wæcnan* : lengthened in E. under
influence of *to wake*, O. *wakenn*, A. S. *wacan*.
whamm (*whom*), from *wha* (*who*), A. S. *hwam*, from *hwa*.
Ʒoc (*yoke*), A. S. *geoc*, *gioc*.

In the case of *been*, *could*, *deaf*, *death*, *enough*, *ready*, *again*, *against*, the spelling shows that they came into English with the long quantity which they had in the Ormulum. The preterits *barr* (*bare*, *bore*, A. S. *bār*), *bat* (*bit*, A. S. *bāt*), *bracc* (*brake*, *broke*, A. S. *bræc*), *comm* (*came*, A. S. *cwam*, *com*), *cwathth* (*quōth*, A. S. *cwādth*), *sahh* (*saw*, A. S. *seah*). *spacc* (*spake*, *spoke*, A. S. *spræc*), *Ʒaff* (*gave*, A. S. *geaf*), have not been placed in the foregoing lists, because the English forms, though used in both numbers, correspond apparently to the plurals of the A. S. (*bæron*, *biton*, *bræcon*, *cwámon* or *cómon*, *cwædon*, *sáwon* or *sægon*, *spræcon*, *geáfon*) and the O. (*bærenn*, *comenn*, *sæzhenn*, *spækenn*, *Ʒæfenn*) : in *et* (he ate, A. S. *ät*) with long *e* like pl. *etenn* (they ate, A. S. *æton*), the same extension of the plural quantity to the singular appears even in the Ormulum. The *ou* in the English preterits *bound*, *found*, *wound*, — A. S. 1, 3 sing. *band*, *fand*, *wand*, pl. *bundon*, *fundon*, *wundon*; O. sing. *band*, *fand*, *wand*, pl. *bundenn*, *fundenn*, — is to be explained in the same way.†

We have not yet attended to the suffixes of inflection and derivation ; but for these only a few words will be necessary. The inflectional endings are all short in the Ormulum : there is reason, indeed, to believe that such as were originally long

* The digraph *ck*, in the Ormulum, is equivalent to *cc* or *kk*, and marks the vowel before it as short. At the end of a word, or before a consonant, *cc* is alone used : if a vowel follows in the same word, *ck* or *kk* takes its place.

† For several of these preterits the Scottish dialect has forms — such as *brak*, *cum*, *spak*, *fand*, etc. — which correspond to those here given from the Ormulum.

had become short during the Anglo-Saxon period. Thus the Ormulum has

- ess in the gen. sing.: as *flæshess kinde* (*flesh's kindred*, A. S. *flæsces gecynd*).
- ess in the plural: as *læchess* (*leeches*, A. S. *læcas*, earlier *læcās* or *læcids*).
- err in the compar. *forrtherr* (*further*, A. S. *furdhor*), from *forth* (*forth*, A. S. *fordh*): in the compar. of adjectives the O. has -*re* (A. S. -*ra*, -*re*), as *fulre* (*fouler*, A. S. *fūlra*). In E., -*er* has become long by change of *r*.
- esst in the superl.: as *deresst* (*dearest*, A. S. *deóroost*, *d-órest*).
- esst in the 2d person of verbs: as *heresst* (*hearest*, A. S. *hýrest*).
- ethth in the 3d person of verbs: as *lokethth* (*looketh*, A. S. *lócadh*).
- enn in the past part.: as *haldenn* (*holden*, A. S. *healden*).
- edd in the past part.: as *wundedd* (*wounded*, A. S. *wundod*).

The -*de* of the weak preterit is usually added directly to the stem, as *dredde* (*he dreaded*). The present participle terminates in -*ennde* (A. S. -*ende*), but is rare in the O., the only instances where it is a proper participle being *bærnennde* (*burning*), *dwallkennde* (*misleading*), *glowennde* (*glowing*), and *stinnkennde* (*stinking*). The suffix -*inng* is very frequent, but always forms a verbal substantive; while -*ung*, which in Anglo-Saxon is more used for this purpose, is in O. confined to the word *reowwsunng* (*rueing*, *repentance*) and two or three others. Suffixes of this kind, found both in O. and in E., are

- ell (A. S. -*el*): as *girrdell* (*girdle*).
- ene (A. S. -*en*): as *brasene* (*brazen*).
- ere (A. S. -*ere*): as *mineteress* (*minters*, *money-changers*); very rare in O.; another instance perhaps in *forrlezerrness* (*fornication*).
- inng (A. S. -*ing*, -*ung*): as *biginninng* (*beginning*), *laferrdinngess* (*lordings*).
- isssh (A. S. -*isc*): as *shepisshe* (*sheeplike*, *sheepish*).
- iȝ (A. S. -*ig*): as *modiȝ* (*moody*).
- linng (A. S. -*ling*): as *derrlinng* (*darling*).
- nesse (A. S. -*nes*): as *godnesse* (*goodness*), *wittness* (*witness*).
- stere (A. S. -*stre*): only in *huccsteress* (*huckster's*).

In final -*ene* and -*ere*, the first *e*, short in A. S., is lengthened by the open syllable: the English -*er* is of course long. Final -*iȝ* is long in consequence of the partial vocalization of the *g* (compare the effect of a weak *r*), while the corresponding suffix -*y* of the later language, discarding the semivowel, has returned to the short quantity of A. S. -*ig*. The same changes appear in the numerals *twentiȝ*, *thrittiȝ*, *fowwerriȝ*, etc. (*twenty*, *thirty*, *forty*, etc., A. S. *twentig*, *thrittig*, *feower-tig*, etc.). But in the suffix -*liȝ* (*our-ly*) the vowel was origin-

ally long, the words which contain it being compounds of the adj. *like* (O. *lic*, A. S. *gelíc*). Suffixes of this kind (really words in composition) are the following, found both in the Ormulum and in English :

- dom* (A. S. -*dóm*) : as *horedom* (*whoredom*).
- fuld* (A. S. -*feald*) : as *threfuld* (*threefold*).
- fusst* (A. S. -*füst*) : as *stedefusst* (*steulfust*) ; in *shammfusst* (*shamefaced*) the form has been changed by mistaken popular etymology.
- full* (A. S. -*ful*) : as *sinnfull* (*sinful*).
- had* (A. S. -*hād*) : as *mazzdenhad* (*maidenhood, maidenhead*).
- lac* (A. S. -*lác*) : only in *weddlac* (*wedlock*).
- læs* (A. S. -*leás*) : as *childlæs* (*childless*) ; rarely -*læs*, as *endeless* (*endless*).
- lic*, -*like* or -*liþ* (A. S. -*lic*) : as *eorthlic*, *eorthlike*, *eorthliþ* (*earthly*).
- mann* (A. S. -*man*) : as *allderrmann* (*alderman*).
- shipe* (A. S. -*scipe*) : as *wurrthshipe* and *wurrshipe* (*worship*).
- summ* (A. S. -*sum*) : as *halsumm* (*wholesome*).
- warrd* (A. S. -*weard*) : as *afterrwarrd* (*afterward*).

In -*fuld* and -*shipe*, the Ormulum has lengthened an Anglo-Saxon short vowel, from the influence of *td* in the first case, and of an open syllable in the second ; as to the last, the English agrees with the Anglo-Saxon. The short vowel of -*warrd* has been lengthened in English by the weak *r* ; while the long vowel has been shortened in -*dom*, -*had*, -*lac*, -*læs*, two of which end with mute sounds. In -*læs*, the change had commenced in the thirteenth century. The Ormulum has in many words a suffix -*leþc* — as seen in *godleþc*, = *godnesse* (*goodness*) — which corresponds to -*leik-r* (= A. S. -*lác*), a frequent suffix in the Old Norse. Peculiar cases are *rihtwiþ* (*righteous*, A. S. *rihtwiþ*), and *stallwurrthliþ* (*stoutly*, cf. *stalwart*, A. S. *stälweordh*).

It has seemed desirable to add here a list of all the words, not already noticed, which appear in the Ormulum with the same vowel quantity that they have in modern English. The cases noted in the foregoing lists as showing such an agreement consist of words in which the earlier quantity has been changed under euphonic tendencies which had commenced their course before the time of the Ormulum. But in nearly all the words which follow, the primitive quantity has remained unchanged from Anglo-Saxon times to the present day.

In this list, as in those before it, where the same root is found with different suffixes, only one form has been given, unless there were special reasons for adding others.*

- O. *ær* (*ere*), A. S. *ær*: superl. *æress* (*erst*) in *allræress*, A. S. *ærest*.
ære (*ear, auris*), A. S. *edre*.
æst (*east*), A. S. *edst*.
æth (*easy*), *unnæthe* (*with difficulty*), cf. O. E. *eath, unæath*, A. S. *eddhe*.
æfterr (*after*), *bæftenn* (*behind*, cf. *abæft*), A. S. *æfter, bæftan*.
ah (*I owe*), A. S. *ah*.
ahnenn (*to obtain, conquer*, cf. *to own*), A. S. *ågnian* (*to possess, acquire*).
allfa (*alpha*), Gr. *ἄλφα*.
alls (*as*), from *allswa*, A. S. *ealswá*.
amm (*am*), A. S. *eam*.
ænd (*und*), rarely *and*, A. S. *and*.
anngrenn (*to anger*), O. N. *ångr* (*vexation*), *ångra* (*to vex*), see note on p. 81.
anntecrist (*antichrist*), Lat. *antichristus*.
appell (*apple*), A. S. *äpl, äppel*.
ar (*early*, Sc. *air*), see *ær*.
asse (*ass*), A. S. *assa*.
asskess (*ashes*), A. S. *asce*.
athess (*oaths*), A. S. *aðh*.
att (*at*), A. S. *ät*.
axe† (*axe*), A. S. *äx*.
åzhenn (*own*), A. S. *ågen*; from *åzhenn* (*to possess*, cf. *to owe*), A. S. *ågan*.
bacc, bacch (*back*), A. S. *bác*.
bæm (*beam*), in *sunnebæm* (*sunbeam*), A. S. *bedm* (*tree, column*).
bære (*bier*), A. S. *bær*.
bretenn (*beaten*), A. S. *bedten*.
bannkess (*banks*), A. S. *banc* (*mound*).
bapptisless (*baptist's*), Lat. *baptista*.
bathe (*both*), A. S. *bá twá*.
bathth (*bath*), A. S. *bádh*.

* Monosyllables which end in vowels are not included in this list, nor in any of those already given, for the reason that the peculiar orthography of the Ormulum fails to indicate their quantity. There can be little doubt, however, that they were regularly long, those which were originally short—as *i*, also *icc* (*I*), *he* (*he*), *fra* (*from*, cf. *fro*), etc.—having been already lengthened. In modern English, all accented final vowels are long: if the articles *a* and *the* are short, it is because they have given up their separate accent, and become incorporated as proclitics with the words that follow them. In the Old Norse, too, a root-vowel is regularly long when it stands at the end of a word, so that short final vowels appear only in unaccented syllables of inflection or derivation.

† The writer of the Ormulum does not repeat the double consonant *x*. He writes *axe* (*axe*), *fox* (*fox*), *ore* (*ox*), *sere* (*six*), *waxenn* (*to wax*), though in all these the preceding vowel must have been short. He does, however, write *waxxenn* in at least one instance; and it is quite likely that in the preterit *wex* (A. S. *wéox*) the vowel was long.

- O. *bedd* (bed), A. S. *bed*.
belle (bell), A. S. *belle*.
bennche (bench), *bennkedd* (benched), A. S. *benc*.
bettre (better), *bettst* (best), A. S. *betera*, *betst*.
biddenn (to bid), A. S. *beódan*; see p. 91.
abidenn (to abide), *abad* (abode), A. S. *Abílan*, *Á!Ád*.
biggenn (to dwell), *unnbiggedd* (unbuilt on), cf. Sc. to *big* (to build), *biggit*
 (built), O. N. *byggja* (to build, dwell), A. S. *bájan*.
birrzenn (to bury), A. S. *byrgan*.
bisscopp (bishop), A. S. *bisceop*, Lat. *episcopus*; see p. 88.
bitenn (to bite), A. S. *bitan*.
biterr (bitter), A. S. *biter*.
bletenn (to bleat), A. S. *blatan*.
toblawenn (bloated, cf. to blow), A. S. *bláwan* (to blow).
blettcenn (to bless), *blettsedd* (blessed), A. S. *bletsian*, *gebletsod*.
blisse (bliss), A. S. *blis*.
blithe (blithe), A. S. *blidhe*.
blome (bloom), O. S. *blómo*, O. N. *blóm*, A. S. *bláwan* (to blow, bloom).
blunnt (blunt), O. N. *blunda* (to wink, drowse, be dull).
bone (boon), A. S. *bén*, O. N. *bón*.
bote (amend, cf. boot), A. S. *bót*.
bothe (booth), O. N. *búðh*.
bozhess (boughs), A. S. *bóg*, *bók*.
brad (broad), A. S. *bráð*.
brass (brass), A. S. *bräs*.
brennd (burned, cf. brand), A. S. *brenned*, *brand*.
breress (briars), A. S. *brér*, *brær*.
brid (bride), A. S. *bríð*.
bringenn (to bring), A. S. *bringan*.
tobrisenn (to bruise), A. S. *brýsan*, *tóbrýsan*.
bucc (goat, buck), A. S. *bucca*.
bure (abode, cf. bower), A. S. *búr*.
burrh (town, borough), A. S. *burh*, *burg*.
butt (but), also *but*, A. S. *bútan*.
buttenn (to but), Fr. *bouter*.
buzhenn (to bow), A. S. *búgan*.
cann (he can), A. S. *can*.
castell (castle), A. S. *castel*, Lat. *castellum*.
chaff (chaff), A. S. *ceaf*.
chepinningbothe (market-booth), cf. E. *cheap*, A. S. *ceap* (bargain, price).
chesenn (to choose), *chæs* (chose), A. S. *ceósan*, *ceds*.
cheastre (city, town, cf. -chester in names of place), A. S. *ceaster*, Lat. *castrum*.
childre (children), pl. of *child*, A. S. *cildru*, from *cild*.
toclæf (he clave, clove), A. S. *clæf*, from *cléofan* (to cleave).
clathess (clothes), pl. of *clath*, A. S. *cláðh*.
clens (clean), A. S. *clene*.
clippenn (to clip), O. N. *klippa* (to shave off).
cludess (hills, cf. cloud), A. S. *clúd* (rock, hill).
clutess (clothes, cf. clout), A. S. *clút* (clout).

- O. *cnaurenn* (to know), *cneow*, *cneow* (*knew*), A. S. *crāwan*, *cneāw*.
cneleenn (to kneel), A. S. *cneōwian*.
cnif (*knife*), A. S. *cnif*.
craft (*craft*, science), A. S. *crāft*.
cribbe (*crib*), A. S. *crib*, *cryb*.
crisstene (*christian*), *crisstnenn* (to christen), from *Crist* (*Christ*), A. S. *cristen*,
cristinian.
crummess (*crumbs*), A. S. *crume*.
crune (*crown*), O. Fr. *corone*, Lat. *corōna*.
cullfre (*culver*, dove), A. S. *culfre*, *culyfre*.
cunnenn (to know, be able, cf. *cunning*), A. S. *cunnaŋ*.
cupess (*cups*), A. S. *cupp*, *cuppa*.
cuth (known, Sc. *couth*), *unncuth* (unknown, *uncouth*), A. S. *cūdh*, *uncūdh*.
cwellenn (o *quell*, *kill*), A. S. *cwellan*.
cwen (*queen*), A. S. *cwēn*.
cwennkenn (to quench), A. S. *ācwencan*.
cwiicc (living, *quick*), but with -e *cwike*, A. S. *cwic*.
dæl, *dale*, *del* (*part*, *deal*), *dæleŋn* (to share, *deal*), A. S. *dæl*, *dælan*.
dew (*dew*), A. S. *dēdw*.
dede (*deed*), A. S. *dæd*.
delfenn (to bury, cf. *delve*), A. S. *delfan* (to delve).
delta (*delta*), Gr. *δέλτα*.
demenn (to judge, cf. to *deem*), A. S. *dēman*.
deop, *dep* (*deep*), A. S. *dēop*.
deor, *der* (*animal*, cf. *deer*), A. S. *dēor*.
deore, *dere* (*dear*), A. S. *dēore*.
deŋenn (to die), O. N. *deyja*.
dinnt (*blow*, cf. *dint*), A. S. *dynt*.
dippenn (to dip), A. S. *dyppan*.
dom (*doom*, judgment), A. S. *dóm*.
don (to do), A. S. *dōn*.
dræm (*sound*, connected with *dream*), A. S. *dredm* (*sound*).
dreoriȝ, *dreriȝ* (*sad*, *dreary*), A. S. *dreórig*.
drezhenn (to suffer, Sc. to *dree*), A. S. *dreógan*.
drifenn (to drive), *dráf* (*drove*), A. S. *drifan*, *dráf*.
drinnkenn (to drink), *drannc*, *drunnkenn*, A. S. *drincan*, *dranc*, *druncen*.
dun (*subs.*, *down*, *hill*), *dun* (*adv.*, *down*), A. S. *dūn*, *dūne*.
dusst (*dust*), A. S. *dust*.
dwelleŋn (to dwell, *delay*), A. S. *dwellan* (to hinder, *delay*).
ec (*also*, *eke*), A. S. *ēac*, *éc*.
efenn (*evening*, *even*), A. S. *æfen*.
effsone, *effsoneŝ* (*effsoons*), A. S. *eft* and *sóna*.
egge (*edge*), *eggenn* (to egg on), A. S. *ecg*, *ecgan*, O. N. *egg*, *eggja*.
ekenn (to eke, increase), A. S. *écan*.
eldre (*elder*), A. S. *yltra*, from *eald* (*old*).
elless (*else*), A. S. *elles*.
eyhe (*eye*), pl. *ehne*, *eyhne* (*eyne*, Sc. *een*), A. S. *éage*, *éagan*.
fierenn (to make one fear), *fieredd* (*afraid*, *afraid*), A. S. *āfieran*, *āfired*.
ŋawe (*ŋew*), A. S. *ŋeá*, = *ŋeáwe*.

- O. *fanngenn* = *fon* (to take, cf. *fang*), A. S. *fōn*, part. *fangen*.
fasst (*fast*, firm), *fusste* (*fast*, quickly), A. S. *fāst*.
fasste (*fast*, jejunium), A. S. *fāsten*.
fatt (*fat*, vat), in *reclefatt* (incense-vessel, censor), A. S. *fāt*.
frœhenn (to fetch), A. S. *feccan*.
fedenn (to feed), A. S. *fēdan*.
fell (skin, fell), A. S. *fel*, *fell*.
fell (he fell), A. S. *feól*, from *feallan* (to fall). Vowel shortened in O. and E.
fiend (enemy, fiend), A. S. *feónd*.
fearthe, *ferthe* (fourth), A. S. *feórdha*.
fesstnenn (to fix, fasten), A. S. *fästnian*.
fet (*feet*), from *fot* (*foot*), A. S. *fēt*, from *fōt*.
fezenn (to join, cf. to *fay*), A. S. *fēgan*.
fif (*five*), A. S. *fif*.
filenn (to file, defile), A. S. *fylan*, *áfylan*, from *fúl* (*foul*).
fillenn (to fill), A. S. *fyllan*, from *ful* (*full*).
fir (*fire*), A. S. *fjyr*.
fisskess (*fishes*), A. S. *fisc*, pl. *fiscas*.
flærd (mockery, cf. *fleer*, subs.), O. N. *flærdh* (deceit).
fleon, *flen* (to flee), A. S. *fleón*.
fletenn (to flow, float, cf. to *fleet*), A. S. *fleótan*.
flehenn (to fly), *flæh* (*flew*), A. S. *flebogan*, *fledh*.
flittenn (to remove, cf. to *flit*), O. N. *fletta* (to strip).
flocc (*stock*), A. S. *floc*.
flor (*floor*), A. S. *flór*.
flowenn (to flow), A. S. *flówan*.
fode (*food*), A. S. *fóda*.
fólzhenn (to follow), A. S. *folgian*.
fox (*fox*), A. S. *fox*.
frawarrd (away from, cf. *froward*), A. S. *framweard*.
fremnde (strange, Sc. *frem*), A. S. *fremde*, from prep. *fram* (*from*).
fressh (active, *fresh*), A. S. *fersc*, O. Fr. *fres*, fem. *fresche*.
frest (period of time, Sc. *frest*, cf. to *frist*), A. S. *fyrst*.
frosst (*frost*), A. S. *forst*.
ful (*foul*), A. S. *fúl*.
full (*full*), A. S. *ful*, *full*.
fulluhht (baptism), A. S. *fulluht*, from *fulvian*, *fullian*, whence probably E. to *full* (cloth).
gaddrenn (to gather), *togeddre* (*together*), A. S. *gad(o)rian*, *tógäd(e)re*.
gan (to go, gone), A. S. *gá*, (to go).
ganngenn (to go, Sc. to *gang*), A. S. *gangan*.
gast (spirit, ghost), A. S. *gást*.
gat (*goat*), A. S. *gát*.
gatt (he got), in *bigatt* (obtained), A. S. *begeat*, from *begitan* (to get).
gæhenn (*gain*), O. N. *gagn* (advantage).
gessthus (*guest-house*), A. S. *gäst*.
gillt (*guilt*), A. S. *gylt*.
beginnenn, *-gann*, *-gunnenn* (*begin*, *-gan*, *-gun*), A. S. *on-ginnan*, *-gan*, *-gunnen*.
gladd (*glad*), but with *-e glade*, A. S. *gläd*.

- O. *gledess* (*gleeds*, glowing coals), A. S. *gléd*.
glowennde (*glowing*), A. S. *glówan* (to glow).
godd (*god*), but *goddess* (*god's*), A. S. *god*.
godspell (*gospel*), A. S. *godspel*, see p. 83.
gret (*great*), A. S. *gredt*.
gredi3 (*greedy*), A. S. *grædig*.
grene (*green*), A. S. *gréne*.
greshoppe (*grasshopper*), A. S. *gärshoppa*.
gretenn (to greet), A. S. *grétan*.
grimn (*grim*, stern), A. S. *grim*.
gripenn (to gripe), in *bigripenn* (to rebuke), A. S. *grípan* (to gripe).
grissli3 (*hideous*, *grisly*), A. S. *gryslíc*.
habbenn (to have), also *hæfenn*, *haffde* (he had), A. S. *habban*, *hæfde*.
hæleinn (to heal), A. S. *hælan*.
hep (*heap*), A. S. *hæp*.
hær (*hair*), A. S. *hær*, *hér*.
hæte (*heat*), A. S. *hæto*.
hæthenn (*heathen*), A. S. *hædhen*.
hæwenn (to hew), A. S. *heáwan*.
hal (*whole*), A. S. *hál*.
hali3 (*holy*), A. S. *hálig*.
ham (*home*), A. S. *hám*.
hann (*hind*), also *hand*, A. S. *hand*.
heh (*high*), A. S. *hædh*.
helle (*hell*), A. S. *hel*, *helle*.
helffe (*handle*, *helve*), A. S. *helf*, *hielfa*.
hellenn (to help), A. S. *helpan*.
hengde (he hanged), A. S. *hangian*, *hongian* (to hang).
heoffne, *heffne* (*heaven*), A. S. *heofon*.
her, *here* (*here*), A. S. *hér*.
herenn (to hear), A. S. *hýran*.
hew (*appearance*, cf. *hue*), A. S. *hiw* (*htw?*).
hidenn (to hide), A. S. *hýdan*.
hill (*hill*), A. S. *hyll*.
himm (*him*), A. S. *him*.
hiss (*his*), A. S. *his*.
hof (*hove*, *heaved*), from *hefenn*, A. S. *hóf*, from *hebban*.
bihofethth (*behoveth*), A. S. *behófadh*.
horedom (*whoredom*), from A. S. *hóre* (*whore*).
huccsteress (*huckster's*), Dan. *höker*, M. H. Germ. *hocke*, *hucker*.
hunggerr (*hunger*), A. S. *hungor*.
hunnredd (*hundred*), A. S. *hundred*.
hunnte (*hunter*), A. S. *hunta*.
hus (*house*), A. S. *hús*.
husell (*eucharist*, *housel*), A. S. *húsel*.
icchenn (to move oneself, cf. to *hitch?*).
idell (*idle*), A. S. *ídel*.
iff = *iff* (*if*), A. S. *gif*.
ille (*evil*, *ill*), A. S. *yfel*, O. N. *ill-r*.

- O. *ilke* (same, cf. Sc. 'of that ilk'), A. S. *ilca*.
inn (*in*), A. S. *in*.
inn, inne (*inn, lodging*), A. S. *in, inne*.
inoh (*enow, enough*), A. S. *genóg, genðh*.
irenn (*iron*), A. S. *íren*.
iss (*is*), A. S. *is*.
itt (*it*), A. S. *hit*.
kannðellmesse (*Candlemas*), A. S. *candel-mässe, Lat. candela*.
kanunnkess (of *canonic person, monk's*), Lat. *canonicus*.
kaserr (*Caesar, emperor*), A. S. *cásere*.
kelenn (to *make cool*), A. S. *célan* (to *make cool*), *cdlian* (to *grow cool*).
kempe (Sc. *kemp, champion*), A. S. *cempa*.
kene (*keen, bold*), A. S. *céne*.
kepenn (to *keep*), A. S. *cépan, cýpan*.
kinn (*kin, kind*), A. S. *cyn*.
kinndlenn (to *kindle*), O. N. *kynda*.
laccenn (to *catch, cf. latch*), A. S. *lúccan*.
lade (*leading, way, cf. lode*), A. S. *lád*.
læche (*leech*), A. S. *læce*.
læfe (*belief*), A. S. *geledfa*.
læfess (*leaves*), A. S. *ledf*.
læn (*reward, cf. loan*), A. S. *leán*.
læpenn (to *leap*), A. S. *hledpan*.
læste (*least*), irreg. *lengthened*, A. S. *lúsest, læst*, superl. of *lytel*.
læwedd (*lay, cf. lewd*), A. S. *læwed*.
laf (*loaf*), A. S. *hláf*.
laferrd (*lord*), A. S. *hláford*.
lah (*low*), superl. *lahhest*, O. N. *lág-r*.
lahhænn (to *laugh*), also *lahhænn*, A. S. *hlehhan*.
lambbre (*lambs*), pl. of *lamb*, A. S. *lambbru*, from *lamb*.
lanng (adv. *long*), from adj. *lang*, A. S. *lange*, from *lung*.
bilappedd (*lapped, enclosed*), A. S. *lappa* (*lap, border*).
lare (*lore*), A. S. *lár*.
lasse (*less*), A. S. *lássá*, compar. of *lytel*.
lath (*loathsome, hateful*), A. S. *lådth*.
lattr (*latter*), *lattst* (*last*), from *late*, A. S. *lättra, lætst*, from *lät*.
lawe (*heap, hill, cf. Houns-low, Brad-law*), A. S. *hlæw*.
ledenn (to *lead*), A. S. *lædan*.
lefe (*leave, permission*), A. S. *ledf*.
lefenn (to *believe*), A. S. *gelýfan*.
bilefenn (to *remain*), *lefethth* (*r cmaineth, cf. to leave*), A. S. *læfian* (to *leave*).
leffenn (to *lift*), from A. S. *lyft* (*air*).
lenenn (to *lend, loan*), A. S. *lænan*.
lennenn (*Lent, spring-time*), A. S. *lencten* (*spring*).
leo, le, gen. *leanness, leness*, (*lion, lion's*), A. S. *leó* or *león*, Lat. *leo*.
leof, lef (*dear, cf. lief*), A. S. *leóf*.
leosenn, lesenn (to *loose*), A. S. *lýsan*.
forrlesenn (to *lose*), A. S. *forleósan*.
lettenn (to *let, hinder*), A. S. *lettan*.

- O. *lezhenn* (to lie, mentiri), A. S. *leógan*.
lhude (loudly), A. S. *hlúde*, from *hlúd* (loud).
libbenn (to live), A. S. *libban*.
lic (like), A. S. *geltc*.
lic, *lich* (body, corpse, cf. *lyke-wake*), A. S. *lic*.
lif (*life*), *bilife* (quickly, *belive*), A. S. *lif*.
lift (air, cf. Sc. *lift*), A. S. *lyft*.
likenn (to like, please), A. S. *lician* (to please).
lim (line), A. S. *lim*.
lin (to lie, jacere), A. S. *licgan*, but *lidh* (for *ligdh*).
lisste (it pleased, cf. to list), A. S. *lyste*, from *lystan*.
lisstenn (to list, listen), A. S. *hlystan*.
litte, def. and pl. of *litell* (little), A. S. *lytel*.
lithe (gentle, cf. *lithe*), A. S. *lidhe*.
lofft, in *o lofft* (*aloft*), A. S. *on lyfte* (in air, on high), O. N. *á lopti*.
lott (lot), A. S. *hlot*.
lozhe (flame, Sc. *low*), A. S. *lég*, O. N. *logi*.
luffamm (lovesome, pleasant), from *lufe* (love), A. S. *lufsum*, from *lufe*.
lust (lust), A. S. *lust*.
lutenn (to bow, Sc. *lout*), A. S. *lútan*.
macche (mate, consort, cf. *match*), A. S. *gemäcca*: and in same sense *make* (make, obs.), A. S. *gemaca*.
mæless (meals), A. S. *mæl*.
mænelike (common, cf. *mean*), A. S. *gemæne*.
mann (man), *menn* (men), A. S. *mun*, *men*.
mare, *mar* (more), *mæst*, *mast* (most), A. S. *māra*, *mæst*.
mede (need, reward), A. S. *méd*.
melltenn (to melt), A. S. *meltan*.
menenn (to moan), A. S. *mænan*.
menenn (to mean), A. S. *mænan*.
meoc, *mec* (meek), O. N. *miuk-r* (lenis).
messe (mass), A. S. *mässe*, Lat. *missa*.
miccle, pl. of *mikell* (mickle, much), A. S. *micel*.
middell (middle), A. S. *middel*.
mile (mile), A. S. *míl*.
mille (milk), A. S. *milc*, *neolc*.
mín, *mi* (mine, my), A. S. *mín*.
minnstre (minster), A. S. *mynster*, Lat. *monasterium*.
misstenn (they missed), A. S. *missan* (to miss).
mod (mood), A. S. *mód*.
mone (moon), A. S. *móna*.
muth (mouth), A. S. *múdh*.
narrwe, def. and pl. of *naru* (narrow), A. S. *nearu*.
ned (need), A. S. *nýd*, *néd*.
neddre (adder, for *nadder*), A. S. *nüdre*.
nedle (needle), A. S. *nædl*.
nèh (nigh), A. S. *heáh*, *néh*.
neow, *new* (new), A. S. *niwe*, *neowe*, with short vowel.
ner (nearly), O. N. *nær*; also *ner* (nearer), A. S. *neár*, comp. of *neáh*.
nett (net), A. S. *net*.

- O. *niththrenn* (to lower, cf. *nether*), A. S. *nidherian*, from *nidher*.
off (*of*), A. S. *of*.
offrenn (to *offer*, sacrifice), A. S. *offrian*, Lat. *offerre*.
offte (*oft*), A. S. *oft*.
olfennness (gen., camel's), A. S. *olfend* (camel), from Gr. *ἐλέφας* (*elephant*).
onn (*on*), A. S. *on*.
oze (*ox*), A. S. *oxa*.
pappe (nipple, *pap*), Lat. *papilla*.
paradis (*paradise*), Lat. *paradisus*.
pin (*pain*, Sc. *pine*), *pinenn* (to *pain*, cf. to *pine*), A. S. *pīn*, *pinian*.
pitt (*pit*), in *hellepitt* (*hell-pit*), A. S. *pyt* (*puteus*, *fovea*).
ploh (*plough*), Dutch *ploeg*, O. N. *plóg-r*.
postell (*apostle*), A. S. *apostol*, Lat. *apostolus*.
preost, *prest* (*priest*), A. S. *preóst*, Lat. *presbyter*.
racchess (scenting-hounds, cf. *rach*), A. S. *räcc*.
red (counsel, Sc. *rede*), *rædenn* (to counsel, Sc. *rede*), A. S. *ræd*, *rædan*.
ræfenn (to rob, *reave*, *bereave*), A. S. *ræfian*.
ramm (*ram*), A. S. *ram*.
rann (*ran*), A. S. *ran*, from *rinnan* (to run).
rannc (*rank*, *luxuriant*), A. S. *ranc*.
rap (*rope*), A. S. *ráp*.
reccnenn (to *reckon*), A. S. *recenian*.
recess (*incense*, cf. *reck*), also *reccless*, A. S. *récess*, from *récan*, *reócan* (to *reek*).
redenn (to *read*), A. S. *redan*.
reddenn (to *rid*), A. S. *hreddan*.
rekkenn, *reckenn* (to *reck*), *reckelæss* (*reckless*), A. S. *rican*, *riceleds*. Vowel shortened in O. and E.
reowenn (to *rue*, *repent*), *birewenn*, A. S. *hreówan*.
resste (*rest*), A. S. *rest*, *räst*.
rhof, *rof* (*roof*), A. S. *hróf*.
ridenn (to *ride*), A. S. *ridan*.
rime (*number*, *metre*, cf. *rhyme*), A. S. *rīm* (*number*).
rippenn (to *tear*, *spoil*, cf. to *rip*), A. S. *ryppan* (or *rýpan*?).
risenn (to *rise*), *ras* (*rose*), A. S. *risan*, *räs*.
rode (*rood*, *cross*), A. S. *ród*.
rote (*root*), O. N. *rót*, A. S. *wrótan* (to *root*).
ruh (*rough*), A. S. *hredh*, *hredw*: shortened in O. and E., see p. 74.
rum (*room*), A. S. *rūm*.
run (*secret converse*, cf. *roun* and *rune*), A. S. *rūn*.
sacclæss (*guiltless*, cf. *sackless*), A. S. *sacleds*.
sæte (*seat*), A. S. *sæt* (*insidiae*).
sære (*sorely*), A. S. *sære*, from *sār* (*sore*).
sawenn (to *sow*), A. S. *sāwan*.
sawle (*soul*), A. S. *sāwel*, *sāwl*.
scrennkenn (to *supplant*, *make shrink*), A. S. *dscrencan*, from *scrincan* (to *shrink*).
scribe (*scribe*), Lat. *scriba*.
sed (*seed*), A. S. *sæd*.
sekenn (to *seek*), A. S. *sēcun*.

- O. *sellenn* (to sell), A. S. *sellan*, *syllan* (to give).
self (self), A. S. *self*, *sylf*.
semenn (to seem), A. S. *sēman* (to make agreeable).
sende (he sent), from *sendenn*, A. S. *sende*, from *sendan*.
bisennkenn (to sink, trans.), A. S. *sencan*, from *sincan*.
seoffne, *seffne*, also *se(o)fenn* (seven), A. S. *seofon*.
seon, *sen* (to see), A. S. *seōn*.
serrzhe (sorrow), A. S. *sorg*.
settenn (to set), A. S. *settan*.
setledd (seated, settled), A. S. *setlan* (to settle).
sexe (six), *sextene* (sixteen), *sextiz* (sixty), A. S. *six*, *sixtjne*, *sixtig*.
shæfess (sheaves), A. S. *scedf*.
shæthe (sheath), A. S. *sceadh*, *sceddh*.
shæwenn (to show), A. S. *scedwian* (to view).
shall (shall), *sholde* (should), A. S. *sceal*, *sceolde*.
shannkess (legs, shanks), A. S. *scanc*, *scanca*.
shene (sheen, adj.), A. S. *scýme*, *scēne*.
shep (sheep), A. S. *scedp*, *scēp*.
shifftedenn (they divided, cf. to shift), A. S. *sciftan* (to divide).
shinenn (to shine), *shan* (shone), A. S. *scīnan*, *scān*.
shir (sheer, pure), A. S. *scīr*.
shothwang (shoe-latchet), A. S. *sceō*, *scō* (shoe).
shrifenn (to thrive), *shrifte* (shrift), A. S. *scriftan*, *scrift*.
shrud (clothing, cf. shroud), A. S. *scrūd*.
sibb (kin, Sc. *sib*), A. S. *sib*.
sikenn (to sigh), A. S. *sican*.
sillferr (silver), A. S. *seolfor*, *silfor*.
sinne (sin), A. S. *syn*.
sinnkenn (to sink), *sunnkenn* (sunken), A. S. *sincun*, *suncen*.
sithhenn (sithence, since), A. S. *sīdhhan* (*sīdhhan*?).
sittenn (to sit), *satt* (sat), A. S. *sittan*, *sāt*.
skill (skill), O. N. *skil* (distinction, distinct notion).
skinn (skin), A. S. *scinn*, O. N. *skinn*.
slæp (sleep), *slæpenn* (to sleep), A. S. *slæp*, *slæpan*.
slan (to slay), *slōh* (slew), A. S. *slēan*, *slōh*.
slaw (slow), A. S. *slāw*.
sleh (cunning, sly), O. N. *slæg-r*.
sloth (track, cf. sleuth-hound), O. N. *slōdh*.
smacc (savor, smack), A. S. *smāc*.
smec (smoke), A. S. *smāc*, from *smeōcan*.
smethe (smooth), A. S. *smēdke*.
smitenn (to smite), A. S. *smītan*.
sone (soon), A. S. *sōna*.
soth (sooth), A. S. *sōdh*.
spæche (speech), A. S. *sprec*, *spæc*.
sped (speed), A. S. *spēd*.
spell (utterance, cf. spell), *speldrenn* (to spell), A. S. *spel*, *spellian*.
stæp (steep), A. S. *stedp*.
staff (letter, cf. staff), A. S. *stāf*.

- O. *stallvurrthljz* (stoutly, cf. *stålwart*), A. S. *stälweordh*.
stan (stone), A. S. *stán*.
stannenn (to stand), A. S. *standan*.
steorenn, sterenn (to direct, *steer*), A. S. *steóran*.
stikkess (sticks), A. S. *stycce, sticce* (piece).
stille, still (*still*, quiet), A. S. *stille*.
stinnch (stench), A. S. *stinc*.
stinnkenn, stannc, stunnkenn, (to stink, *stank, stunk*), A. S. *stincan, stanc, stuncen*.
stinntenn (to cease, cf. to stint), A. S. *stintan* (to blunt).
stræm (stream), in *waterrstræm*, A. S. *stredm*.
stræle (street), A. S. *stræt*, Lat. *strata* (via).
strenncethe (strength), from *strang* (strong), A. S. *strengdhu*, from *strang*.
streon, stren (race, cf. strain), *stre(o)nenn* (to boget), A. S. *streónan* (procreate).
stunnt (stupid, cf. *stunt*), A. S. *stunt* (blunt, stupid), from *stintan*.
suhhzhenn (to sigh, cf. *sough*), origin uncertain.
summ (some), A. S. *sum*.
sunne (sun), rarely *süne*, A. S. *sunne*.
sur (sour), A. S. *súr*.
suastress (sisters), A. S. *sweostor, swustor*.
suth (south), A. S. *súdh*.
swelltenn (to die, cf. to *swelt, swelter*), A. S. *swoltan*.
swet (sweet), A. S. *swête*.
swifft (*swift*), A. S. *swift*.
swillc (such), A. S. *swylc, swilc*.
swin (swine), A. S. *swín*.
swinnc (labor, O. E. *swink*), A. S. *swinc*.
swollzhenn (to swallow), A. S. *swelgan*.
tæchenn (to teach), A. S. *tæcan*.
tæmenn (to generate, to *teem*), A. S. *týman, tēman*, from *tedm* (progeny).
tæress (tears), A. S. *tædr*.
takenn (token), *tacnenn* (to betoken), A. S. *tácen, tácnian*.
tel'enn (to tell), A. S. *tellan*.
temmple (temple), A. S. *tempel*, Lat. *templum*.
temmpredd (tempered), A. S. *temprian* (temperare).
tende (tenth, cf. -*teenth* in *thirteenth*, etc.), A. S. *teóða*, O. N. *tundi*, Frisic
tianda: cf. also Sc. *teinds* (tithes).
tene (ten, cf. -*teen* in *thirteen*, etc.), A. S. *týn, tén*.
tene (injury, vexation, O. E. *teen*), A. S. *teón, teóne*.
thær (there), A. S. *thær*.
thann (than), A. S. *thonne*.
thanne, thann (then, when), A. S. *thonne, thánne*.
thannkenn (to thank), A. S. *thancian*.
thatt (that, conj.), A. S. *thät*.
thennkenn (to think), A. S. *thencan, thencean*.
theos, thes (thighs), A. S. *theóh, theó*.
thin, thi (thine, thy), A. S. *thín*.
thinnkethuk (seems, cf. *methinks*), A. S. *thync(e)an, thinc(e)an*.
thiiss (this), A. S. *this*.
threapenn (to chide, Sc. *threap*), A. S. *thredþian*.

- O. *threfald* (*threefold*), A. S. *thrtfeald*.
threngdenn (they thronged), A. S. *threngan*, from *thringan*.
thresshenn (to thresh), A. S. *therscan*.
thrifenn (to thrive), *thraf* (*throve*), O. N. *thrifask*, *threifek*.
thusennde (*thousand*), A. S. *tu.úsund*.
thuss (*thus*), A. S. *thus*.
tid (*time*, cf. *tide*, *even-tide*), A. S. *tí.i*.
till (*till*), O. N. *til*.
time (*time*), A. S. *tíma*.
timmbrenn (to build, cf. *timber*), A. S. *timbran*, from *timber*.
tithennde (*tidings*), from A. S. *tíðian* (to betide, befall).
towarrd (*toward*), A. S. *tóweard*.
tradd (he trod), from *tredenn* (to tread), A. S. *trá.l*, from *tredan*.
trapp (*trap*), A. S. *treppe*.
tun (*town*), A. S. *tún*.
twafuld (*twofold*), from *twa* (*two*), A. S. *twá*.
twelff (*twelve*), A. S. *twelf*.
bitwenenn (*between*), A. S. *betweónan*.
twentiz (*twenty*), A. S. *twentig*.
twinne (*twin*), A. S. *getwinne*.
unn- (*un-*, negative prefix), A. S. *un-*.
underr (*under*), A. S. *under*.
uppe, *uppe* (*up*), A. S. *up*; O. *upponn* (*upon*), A. S. *uppan*.
ure (*our*), A. S. *úre*.
uss (*us*), A. S. *ús*; shortened in O. and E.
ut, *ute* (*out*), A. S. *út*, *úte*; O. *abutenn* (*about*), A. S. *bítan*.
utterlike (*outwardly*, cf. *utterly*), A. S. *ú or*, *uttor* (*outer*, *utter*).
wac (*weak*), A. S. *wác*.
wæde (*clothing*, cf. *weed*), A. S. *wæd*, *wæde*.
wannt (*wanting*), O. N. *van-t*, neut. of *van-r*, A. S. *wana* (*defect*): hence O. *wanntethh* (*wanteth*).
wass (*was*), *wærenn* (*were*), A. S. *wás*, *wæron*.
wasshenn (*to wash*), A. S. *wascan*.
wawenn (*woes*), pl. of *wa*, A. S. *wáwan*, pl. of *wáwe*, from *wá* (*adv.* and *interj.* *wo*).
waxenn (*to wax*, *grow*), also *waxzenn*, A. S. *wæxan*.
wecche (*watching*), A. S. *wárce*.
weddenn (*to wed*), A. S. *weddian*.
well (*adv.*, *well*), also *wel* (Sc. *weel*), A. S. *wel* (*bens*).
welle, dat. of *wel* (*a well*), A. S. *well* and *wella* (*fons*).
wenenn (*to ween*, *think*), A. S. *wénan*.
wenschell (*child*, cf. *wench*), A. S. *wincel* (*proles*), *wencle* (*ancilla*).
wennde (*he went*), from *wendenn* (*to go*, *wend*), A. S. *wende*, from *wendan*.
weppenn (*to weep*), A. S. *wépan*.
wesst (*west*), A. S. *west*.
whær (*where*), A. S. *hwær*.
whæte (*wheat*), A. S. *hwæte*.
whanne, *whann* (*when*), rarely *whane*, A. S. *hwonne*, *hwänne*.
whatt (*what*), A. S. *hwät*.
whellp (*whelp*), A. S. *hwelp*.

- O. *wheel, whel* (*wheel*), A. S. *hwéol*.
wheththr (*whether*), A. S. *hwáðher*.
whil (*while*), *whilum* (*whilom*), A. S. *hwil*, dat. pl. *hwolum*.
whille (*which*, Sc. *whilk*), A. S. *hwylc*.
wicche craftless (*witchcrafts*), A. S. *wicce* (*witch*).
wicke, wikke (*wicked*), probably connected with A. S. *wiccian* (to *bewitch*).
wid (*wide*), A. S. *wid*.
widdwe (*widow*), also *widewe*, A. S. *widwe*, *wydewe*.
wif (*woman, wife*), A. S. *wif*.
wiless (*wiles*), A. S. *wil*.
wille (*will*, subst.), A. S. *willa*.
wilt (thou *wilt*), *wolde* (*would*), from *wilenn*, A. S. *wilt*, *wolde*, from *willan*.
win (*wine*), A. S. *win*.
windwenn (to *winnow*), A. S. *windwian*.
winnenn (to *toil, win*), *wann* (he *won*), *wunnenn* (*won*), A. S. *winnan*, *wan*, *wunnen*.
winnterr (*winter*), A. S. *winter*.
wis (*wise, prudent*), A. S. *wis*.
wise (*wise, manner*), A. S. *wise*.
wiss (certainly, cf. *I wis*, O. E. *ywiss*), A. S. *gewis*.
wiste (he *wist, knew*), from *witenn* (to *wit*, O. E. to *weet*), A. S. *wiste*, from *witan*.
wiðh (*with*, prep.), A. S. *wiðh* (against, towards).
wiðthess (*withes*), A. S. *wiðhig* (*willow*), O. N. *wiðhi-r*; vowel shortened in O. and E.
witt (*knowledge, wit*), A. S. *wit*; also O. *witt* (know thou), A. S. *wit*.
witness (*witness*), A. S. *witnes* (*witnes?*).
wokenn (they *woke, watched*), from *wakenn*, A. S. *wócon*, from *wacan*.
wrath (*wrath, adj.*), A. S. *wrādh*: for *wraththe* (*wrāth*), see p. 83.
wrecche (*wretch*), A. S. *w ācca*, *wrecca*.
wrezenn, wrezhenn (to *accuse, bewray*), A. S. *wrēgan*.
writenn (to *write*), *wrat* (*wrote*), A. S. *writan*, *wrāt*.
writt (*writ*), A. S. *writ*.
wulle (*wool*), A. S. *wull*.
wunnerr (*wonder*), A. S. *wundor*.
zellp (*boast, cf. yelp*), A. S. *gīlp*, *gelp*.
Ʒer (*year*), A. S. *Ʒār*.
Ʒett (*gets*), from *Ʒetenn*, A. S. *gīt*, from *gitan*.
Ʒiff (*give*), impv. of *Ʒifenn*, A. S. *gīf*, from *gīfan*.
Ʒiff (*if*), also *iff*, A. S. *gīf*.
Ʒol (*Yule, Christmas*), A. S. *gēol*.
Ʒonnd (*yonder*), *biƷonndenn* (*beyond*), A. S. *geond*.
Ʒunnre (*younger*), from *Ʒung*, rarely *Ʒunng*, A. S. *gyngra*, from *geong*.
Ʒure (*your*), A. S. *eower*.
Ʒuw (*you*), A. S. *eow*.

V.—*Anglo-Saxon and Early English Pronunciation.*

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The Anglo-Saxons, Old Saxons, and Icelanders mark off their poetry into verses by the rhythmic repetition of letters. The most common form of it is alliteration, the repetition of the same initial sound in the first accented syllables of certain words.

The Common Narrative verse in Anglo-Saxon consists of two sections, and in a perfect verse two syllables of the first section and one of the second begin with an alliterating sound. If this be a consonant sound, it must be the same in all the syllables; following consonants of a combination need not be repeated, though *sc*, *sp*, and *st* usually go together.

It would seem then that alliteration may furnish some evidence of the pronunciation of the consonants in Anglo-Saxon and Early English, first, as to what consonants are sounded alike; secondly, as to the order in which the consonants of any combination were uttered.

Mr. A. J. Ellis in his great work on Early English pronunciation gives the sounds of all the letters in Anglo-Saxon and English, and wishes to bring together all the evidence connected with the subject, but neither he nor any of his critics, so far as I have seen, have directed their attention to alliteration. There are several combinations as to which the evidence from this source seems to be decisive against his representation of their sound.

1. The initial combinations *hl*, *hn*, *hr*, *hw*, he believes to have been pronounced *lh*, *nh*, *rh*, *wh*. But these are frequent alliterating letters all through the Anglo-Saxon poetry, and regularly alliterate with *h* alone, or with other combinations beginning with *h*. I will cite a single example from each of the three great sources, Beowulf, Cædmon, and Cynewulf.

- EL. *Wé purh ho'dne hige hildford pinne.* Beow. 267.
and tó heofnum up hlcædre riærdon. Cæd. 1675.
hleatre behworfen, ah in hel e ceafl. Andreas, 1705.

- Hn. *heord-weorðunge hndhran rince.* Beðw. 952.
Gyld mé mid hylde þæt ic þé hneaw ne wæs. Cæd. 2823.
- Hr. *habban on healse hring-weorðunge.* Beðw. 3017.
habban wolde, und r h ðf gefö. Cæd. 1360.
hlúde for hergum : hrefn weorces gefeah. Elene, 110.
- Hw. *æfter hæleda hryre hwate Scyldingás?* Beðw. 2052.
hæft mid hringa gespanne. Hwearf him eft niðer. Cæd. 762.
hálig under hrusan, þe gé hwíle nu. Elene, 625.

Such is the regular alliteration. There are a few lines in which *hw* may alliterate with *w*. Thus in Psalms, lxxxii. 10, the three words *wægnes : hwæðl :: windes* occur, and in Psalms, cvi. 28, *windes : hweoðu :: weorðað*, where *hw* may be the second alliteration in the first section; but it is to be noted that a very large number, more than a third of all the verses in Anglo-Saxon poetry, have but one alliterating word in the first section, and that these verses are therefore complete without counting the *hw* as a rime.

There are also a few lines having both *w* and *h* as possible alliterations to *hw*, where *w* is in the foot which oftenest rimes :

hwate Scyldingás : gewát him hdm þonon. Beðw. 1601.

In the following verse there is no alliteration except between *word* and *hwíle*, or very light particles :

Ne mágon gé þá word geséðan þe gé hwíle nu on unriht. Elene, 582.

It would be easy to emend the few lines of this kind; but they are not numerous enough to throw doubt on the current pronunciation, and I am inclined to believe that some of them do really represent an exceptional pronunciation of the poet or scribe who gave the poem its last touches. There are other indications that in some dialects *h* was going silent. A few verses are found where a word beginning with a vowel alliterates with one in *h* followed by a vowel :—

se þisme ár hider onsende. Andreas, 1606.
ealdum ceorle hondslýht gíofan. Beðw. 2972.

See also more examples cited by Heyne, *Beowulf*, page 102, note on line 2930, none of which however are as sure as might be wished, as, indeed, is the case with those here cited. On the whole, the handful of irregularities in the riming of *hw* and *h* serve to assure us that the poets really followed the sound as they heard it.

Mr. Ellis also holds that in the initial combinations of *w*, the *w* is secondary; that *wl*, *wr* were *l* and *r* labialized as in French *loi*, *roi*. But *w* is the alliterating letter:—

*w*ǣpnum gewurðad. þá þær wlonc hæleð. Beðw. 331.
ðð þæt for wlence and for wonhygdum. Cæd. 1673.
wigspéd wif wraðum purh þæt wlitige treð. Elene, 165.
Wederð peðden wraçe leornóde. Beðw. 2336.
on þás wer-peðde wraçcan láste. Cæd. 2822
 and þá wig-præce on gewritu setton. Elene, 658.

To this evidence from Anglo-Saxon may be added that from Old Saxon and Old Norse; all these combinations are common in the Heliand, and those beginning with *h* are common in the Edda, and the alliteration is the same as in Anglo-Saxon. Single examples will suffice. From the Heliand (ed. Heyne, 1866):—

endi mid hlutrun trewun. Ward tho the helago gäst. 291.
holdan hêrron, hnég imu tegegnes. 2419.
an thea hêton hel hriwig-móde. 4448.
Ak thea mô:un hwerban an that himiles lióht. 1920.
umbi thiú word an gewinne: stóðun wianka man. 3928.
theró wár-sagonó word thém wrekkian sagða. 631.

From the Edda (ed. Lünig, 1859):—

Hlióðs bið ek allar helgar kindir. Völuspá, 1.
er vit hörmug tvou hnigum at ránum. Gudrun, 3. 4.
Valði henni Herföðr hringa ok men. Vö uspn. 23.
Hvern létu þeir höfði skemra. Hymiskviða, 15.

When we consider how important a part alliteration plays in the history of these tongues, how old and deep its work is, it seems necessary to admit that these peoples must have heard the alliterating sounds as first and most emphatic in their combinations, and that for all literary purposes, at least, transliterations of the old texts should preserve the priority of the riming letters.

In the Early English alliterative poems, as fast as these combinations change their pronunciation, the words with which they alliterate change. The *h* of *hl* and *hr* is no longer written, and *lord*, of course, alliterates with *l*, *ring* with *r*. *Wh* alliterates with *w*:—

And pere miȝte þow wite, if þow wolt which þei been alle. Vision of P. P. ii. 44.
And with him to wonye with wo while God is in heuene. ii. 106.

I should expect the Anglo-Saxon alliteration of *hw* to be preserved in Old English of the northern dialect. In the latest alliterative poems we still find *wl*, *wr*, riming with *w* :

Lo, suche a wrakful wo for wlatsum delez. Deluge, 307.

That I might worchen his wille pat wrought me to man. Vision of P. P. i. 82.

This brings *wr* down to Chaucer's time :

He was a wel good wright, a carpenter, Cant. Tales, Prologue. 614.

A similar examination of Anglo-Saxon and Early English alliteration assures us of the pronunciation of *cn* = *kn*, *gn*, and other initial combinations, about which however there is, I believe, no difference of opinion.

There is some question as to the sound of *c*, *sc*. *g*, *p*, *d*, and the rune called *wen*, which the Germans generally transliterate by *v*, and the English by *w*.

It has been thought by some that *ce* was sounded like *ch*, that in *ceaster* (English *-chester*), for example, from Latin *castrum*, the *ce* is the Celtic notation for *ch*. But the alliteration shows that the poets did not discriminate it, nor *c* before *i*, *y*, from the regular *c* = *k* :

þæt sió ceaster hider on þás cneorisse. Andreas, 207.

of Caldéa censtre álédde. Cæd. 2200.

his cymé kalend ceorlum and eorlum. Menolog. 31.

and so often. But in *Piers Ploughman* such words are spelt with *ch* and alliterate only with each other or French *ch* :

For in charnel atte chirche cherles ben yuel to knowe. vi. 50.

And þat chaude or plus chaud for chillyng of here mawe. vi. 313.

while *c* before *e*, *i*, *y*, in French words alliterates with *s*.

Ac þanne swore Symonye and cyuile bothe. ii. 168.

Sc when followed by a parasitic *e* is by many pronounced *sh*. But in Anglo-Saxon poetry all *sc*'s are alike :

Swá scridénde gesceapum hweorfad. Traveler, 135.

scearp scyldwiga gescád witan. Beðw. 288.

while in Early English such words alliterate only with each other or with *s* :

I hope me in shroudes as I a shepe were. Vision of P. P., Prol. 2.

Moue be siker þat her soule shall wende to heuene. i. 130.

There are some words in which *ge* represents *i*-consonant (English *y*) of other languages: *geong* has corresponding words in Sanskrit, Latin, Gothic, German, beginning with the sound *y*; in English it is *young* and in Anglo-Saxon it is sometimes spelt *iung*. But this word, like other similar words alliterates freely with all words beginning with *g*:

geong : *geardum* :: *God.* Beów. 13.
geógode :: *gleðwóst.* Cæd. p. 221, 1.

And so other words, foreign proper names especially, even retaining their spelling with *i*;

Iacobes :: *góde.* Psalms, lxxxvi. 1.
Iordane :: *gréne.* Cæd. 1921.

In Early English a large number of words with the *y*-sound initial came in from the Norman and alliterated with each other. The Anglo-Saxon stragglers varied awhile, but finally went over to the Normans. It seems probable therefore that *g* in these words, as certainly in others, was intended to represent some palatal sound, either the same as *g* in *go*, or so like it as to have not been clearly discriminated from it.

It has been generally believed that *ð* represents the sonant *th* = *dh* which we have in *thine*, *other*, *smooth*, and the rune *p*, the surd in *thin*, *loveth*. But it seems to be admitted that so far as actual use in the manuscripts is concerned, they are mere calligraphic variations, like the two forms of Greek sigma; and we find that the words which in English begin with *dh* alliterate freely with those which begin with *th*: *píne* (thine) alliterates with *ge-peahunge* (thinking), Psalms, liv. 13; *pæne* (that), with *purstige* (thirsty), Ps. lxi. 4; *ponan* (thence) with *Thrácia* (Thrace), Meters, 26, 22; and the like.

The regular shifting is from surds to sonants. Wherever the English has surd *th* the presumption is that the Anglo-Saxon also had it; but the English sonant is a natural weakening of a surd, and is of no great weight against the evidence of alliteration.

A surd and sonant do not combine in the same syllable. We may be sure that the ending of the third person singular of the indicative present of syncopated forms of surd roots is surd: *pincp* (thinketh) and like words, end in a surd *th*.

There are other euphonic laws which indicate that *th* rather than *dh* was the common sound in Anglo-Saxon, final as well as initial. (See March's Comparative Grammar of the Anglo-Saxon, § 194.)

There is no Latin word in Anglo-Saxon poetry beginning with *v* or *w*. The general law of shifting is in favor of the sound of English *w* rather than the German, since the German *w* is a weakening of the English. The sonant continuous labial represented in Anglo-Saxon by *f* between two vowels, and which has changed to *v* in English, probably resembled the present German *w* = *bh*, an unstable transition sound from *b* to *v*.

Alliteration throws little light on the vowels. The poets prefer to have riming vowels differ. There seems little room for any wide divergence from the sounds accepted in Germany and America, and set forth with such accumulation of proofs by Mr. Ellis. The laws of change in vowel sounds make it doubtful whether the pure *a* sound ever obtained any general currency among people of Saxon traditions in words where we find it already weakened in Anglo-Saxon. The Normans perhaps did not adopt in their speech, and did not try to express in their spelling those modifications of the *a* sound which the Anglo-Saxons distinguished by *æ*, *ea*, *e*, *o*, *ā*; but we know that these very tendencies to change *a* towards *e* on the one hand and *o* on the other have been active and modified a large part of the language, and it is likely that the progress has on the whole gone on ever since the Anglo-Saxon times, and that grammars and dictionaries which represent the Roman *a* as in general use in such words in the reign of Elizabeth, speak rather for the court and the college than for the folks at home.

VI.—*Some Notes on Ellis's Early English Pronunciation.**

By CHARLES ASTOR BRISTED

One volume of this book was noticed in the *North American Review* rather more than a year ago, since which time two of the remaining three volumes have appeared.

Our first feeling in connection with the work is one of excusable national pride. It is, partially at least, a publication of the Chaucer Society, and one of the principal supports of the Chaucer Society is Professor Child of Harvard, who had already so well merited of the republic of letters by bringing about the Percy Reprint. And it is gratifying to find our countryman's deserts so freely and gratefully acknowledged in England. The current report of the Chaucer Society says: "The active help of Professor F. J. Child, of Harvard, has been continued; to him we owe nearly all our fresh members. The enlightenment of the managers of public libraries in the United States contrasts favorably with the disregard of our work by the librarians, or rather library-committees of Great Britain and Ireland. The society has twenty public libraries subscribing to it in the United States, against eight in England, one in Ireland, and none in Scotland."

I think we ought to rejoice in these things and to give them full prominence without being deterred by any bugbear of mutual admiration or self-praise. The American philologist has an up-hill task. He is much less encouraged by both the general public and individuals than the professors of the positive and mechanical sciences are. He finds fewer like-minded men. He needs all the support he can get.

On the very first page of the first chapter of Mr. Ellis's

* *On Early English Pronunciation, with especial reference to Shakspeare and Chaucer, containing an investigation of the correspondence of writing with speech in England, from the Anglo-Saxon period to the present day, preceded by a systematic notation of all spoken sounds by means of the ordinary printing type. Including a re-arrangement of Professor F. J. Child's Memoirs on the Language of Chaucer and Gower, and reprints of the rare tracts by Salesbury on English, 1547, and Welsh, 1567, and by Barclay on French, 1521. By ALEXANDER J. ELLIS, F. R. S., F. S. A., Fellow of the Cambridge Philosophical Society, formerly Scholar of Trinity College, Cambridge, B. A. 1837, &c., &c., &c.*

book we find a statement which deserves wide circulation, as it helps to correct some erroneous ideas which have lately come into vogue. "We speak," says Mr. E., "of the 'dead' languages of Greece and Rome, unconscious that our own English of a few years back has become as dead to us." This is perfectly true, and true in a wider sense than our author uses it, because he had only occasion, for his purpose, to employ it with reference to pronunciation and idiom. We have often heard it asserted within a few years, and especially by what I may call the phonetic interest, that the difference not merely between present and early English, but between the former and Anglo-Saxon, is almost entirely and solely a difference of orthography. Of which popular error I hardly think it necessary to go into a deliberate and detailed confutation before this body. No one with even a moderate knowledge of the subject, having before his eyes *Havelok the Dane* and King Henry III.'s Proclamation (to go no further back than the 13th century), could seriously and honestly maintain such a proposition.

But before examining the body of the work we must carefully scrutinize the introduction, containing the *palaeotype*, the author's system of notation and literation for scientific purposes.

It is called *palaeotype* because the old (Roman) types are used in it, without accents or diacritical marks, though some of the letters are turned or reversed. The elements called letters (though some of them are combinations of as many as five letters) reach the high number of 270, besides which there are nearly fifty tonic signs, used as suffixes. These elements are intended to express *all known sounds*, not only in the Indo-Germanic but also in the Asiatic and African languages.

While giving due praise to the remarkable industry and learning displayed in this system, we cannot avoid regarding it as somewhat cumbrous and overdone. The letters and combinations are not in all cases happily chosen. *Q* for our *ng* has an odd and repulsive effect and *c* for the Spanish *d* (which is either *d* or *dh* flat, or *th* sharp, according to position, and

certainly 'needed' no separate sign,) may very well mislead. But the most puzzling is the *æ* diphthong. Mr. Ellis uses this, so far as I can make him out,* to express the shortest or very nearly the shortest possible *a*, something shorter than any ordinary continental form of the letter, and doubles it (*ææ*) to express a prolongation of this sound, not so long or full as the alpha† in words like *car*. Now, in spite of its occurrence as an Anglo Saxon alpha, the diphthong *æ* is apt to be associated in our minds with the sounds of (English) *ā* and *ē*, rather than with any modification of alpha. (Thirty years ago, some of the professors and tutors of Yale College, and probably of some other New England colleges, did most barbarously shorten this diphthong where it occurred in Latin antepenults, but they made it *ě* not *ǣ*.) Mr. Ellis's use of *æ* has confused in one place the writer of the notice in the *North American*, who takes his double diphthong for (English) *ā*; and I once thought it had deceived Mr. Ellis himself, in writing palæo-typically the Scotch word *plaid*, till I found afterward that he really supposed the word to be pronounced *pladd*—a singular slip for one of his dialectic knowledge and experience.‡

But these are trifles; the main objection is to the whole theory of the scheme, which is like an attempt to exhaust the inexhaustible. Take, as the first case, the varieties of alpha from the shortest and thinnest (say English *ǣ*) to the longest and broadest (say German *ā*) which passes gradually into (English) *au*. Between *ǣ* and *au* a delicate musical ear might detect an almost infinite number of shades, especially when the modifying power of following consonants is taken into account.§ Mr. Ellis himself says, that "if we descended into

* He gives as illustration *man, cat, sad*. But the vowel of *cat* is surely not the alpha of *man*; it is rather the first syllable of *manners*.

† I use alpha as a convenient term throughout for the continental or non-English power of *a*.

‡ See Scott's rhymes, *laid, plaid, maid*. On a subsequent re-reading of the book, the conviction has been forced upon me, that Mr. Ellis is sometimes confused by his own notation and that he has brought together under his *æ, ææ*, sounds as different as ordinary English *ǣ* and *a*.

§ *R*, according as more or less strongly sounded, has a marked effect on a preceding vowel. Most of us are familiar with the Irish pronunciation of *horse*. Many, perhaps most persons would express this in English letters by *harse*; it is

every minute shade of spoken sound; the variety would be so interminable that all definite character would be lost" (ch. i, p. 19), but if he does not grasp at these interminable varieties, he strives to admit as many of them as possible, and in particular to make out for each language its own distinct set of vowel sounds, thus increasing (as it seems to me) the already sufficiently great difficulty of acquiring foreign tongues.*

My own idea, I confess, is the reverse of this. In the interest of practical philology, I always try to bring together as many sounds of different languages as I can, making small account of the inadequate and often erroneous rules given in grammars and dictionaries. We may often find an equivalent which, though perhaps not scientifically accurate, is sufficient for practical purposes. Thus our own *ē* may not strictly cor-

generally thus printed by those who undertake to represent the Irish *patois*. Others might compare it to the proper name *Horace* with the *a* elided, and might write it *hor'ce* or *horrse*, which last is the combination I should adopt to explain it to a foreigner who understood English. But many persons, as I have said, hear the vowel as *ā*. The Bath pronunciation mentioned by Mr. Ellis seems akin to the Irish. He was asked for a piece of *card* as he supposed, when the applicant really wanted a *cord*. It is to be regretted that he does not state whether the people of Bath pronounce the *r* more strongly than Englishmen generally; if they do, it explains the modification of the vowel. Last winter a lady who is an excellent linguist was reading or declaiming French verse to a small circle. I noticed that she gave a peculiar sound to *e* before *r*, e. g. instead of *perdu* she said *pardu*, or something so near *pardu* that I could not express it otherwise either in speech or writing. When her attention was called to the peculiarity (of which she was of course unaware), she suggested what appeared to be the true reason of it, namely, that in endeavoring to avoid the common Anglo-Saxon fault of not sounding the continental *r* fully, she laid a little extra stress on it, and thus modified the preceding vowel. On the other hand, the suppression of *r* also modifies the vowel before it. Vide New England *gal* and *gaal* for girl, and young-New-York *fest* for *first*. My German gardener calls horses, *hāssee*. These are cases of the vowel's being thinned. In other well-known instances, the labialization or complete elision of the *r* broadens it.

* In the distinction, elsewhere noticed, which Mr. Ellis so often and strongly insists on, between our *we* and the French *oui*, our *i* and *ou* and the continental *ai* and *au*, he has no lack of support; nevertheless I cannot agree with him as to the amount, importance, and nature of the differences. It seems to me that the diphthongal sounds are the same, that is, have the same elements; but we pronounce them more quickly and compactly, it being in accordance with the genius of our language to compress and condense diphthongs.

respond to the French *é* and its general equivalent *ai* diphthong; but it is so near that we may consider it an equivalent. Our numeral *ten* does not absolutely reproduce the name of the distinguished French critic, but it is so near that no Frenchman would misapprehend it, and by adopting this pronunciation we avoid the common Anglo-Saxon error of calling him *Tane*, a sound which one of his countrymen might possibly misunderstand. The name of the French poet and novelist who died a few years ago, may not be exactly our word *merry* with the accent reversed, but it is very nearly so, and by calling it *mer-ry'* we avoid the danger of pronouncing it like our proper noun *Mary* with the accent reversed.

But Mr. Ellis's minute subdivision is not confined to the vowels. He has an odd theory of labialized letters and every initial consonant followed by the digamma sound he considers a distinct sound, not merely *q*, but *dw*, *fw*, *pw*, *rw*, &c. The writer of the notice in the *North American* has expressed his dissent from this conceit, but a word or two more may be said of it. Most of these new elements are formed by taking to pieces the French diphthong *oi* (Eng. *waa* or *waw*), in what I must call a most arbitrary manner. Take *roi* for instance: what ground is there for connecting the digammatic sound with the initial consonant? None whatever. It belongs to the following vowel. Take away the initial *r*, and you still have the sound *waw*, as in *oie* or the first syllable of *oiseau*. Take away the *i* or the *o*, and replace the *r* as in *roseau*, *risible*, and what becomes of the digamma? Mr. Ellis makes out a great difference between our *we* and the French *oui*, which I consider altogether imaginary, so far as the *hearer* is concerned, which is the main point. For here, to parody the Eastern *mot*, "the speaker is one and the hearer is another," though we cannot continue the quotation and say, in all cases, that "there is no harm done."* Mr. Ellis's view is what I should call too subjective. He is guided by the manner in which the sound is formed, the position of the

* I once saw an Englishman's pronunciation of *oui* expressed in French comic writing by *ui*. But this must have been a mistake, the French diphthong *ui* being one of the most difficult sounds to an Anglo-Saxon.

vocal organs. But what practically concerns the philologist in such cases is the effect rather than the cause. The German or the Charleston *w* may be formed by a position of the organs different from that which produces the ordinary *v*. I can only say that it sounds to me and to most persons like *v*, and I do not see the good of calling or writing it *bh*.

Apart from these general objections, I think special exceptions should be taken to two particular points in the literature, namely the notation of *i* and *ow*, and of *ch*. The first element of the diphthongal sign *i*, and the diphthong *ow* (or *ou*) he expresses by a turned *e*; but what sound he intends is doubtful. In the equivalent within brackets he makes it \ddot{a} or a slight modification of \ddot{a} , to which there is no particular objection; but the example which he gives is the indistinct short vowel of *but*; and he illustrates a modification of the sound by the French *e* (muet) and *eu*. What analogy, not to say identity, is there between these indistinct sounds, (which we may roughly call \ddot{u}) and \ddot{a} ? It may be remarked here that Mr. Ellis, with what I consider his usual superfluity of distinction, finds two if not three different vowel sounds in the pronoun *I*, the noun *eye*, and the affirmative *ay*.

Our *ch* he represents by *tsh*, as the French and German grammars usually do. I am convinced that this notation, except for final *ch*, is erroneous, and that the old English orthoepists, wrong in so many respects, were right when they gave *ti* or *ty* as the continental representative of the sound.

If we begin a word with *tsh*, this combination has a tendency to form a syllable by itself; thus *T-s-h-a-r-l-e-s* would naturally be not *Charles*, but *Tisharles*, a dissyllable. If I were trying to give a Frenchman an idea of our *ch* in *chair*, I should refer him to the French proper name *Thiers* (the name which so many people absurdly call *Tears*); it is not the exact equivalent of *Thiers*, but it comes very near.

The proper notation of medial *ch* may be explained by these three combinations of English words:

hurt shoe,

hurt you.

her chew (*chew* pronounced like first syllable of *choosing*).

I think every one will admit that the second of these combinations is nearer to the third than the first is, and that it slides into the third more readily than the first does.

Final *ch* alone is accurately represented by *ish*.

The same observations apply *mutatis mutandis* to the notation of our *g* soft and *j*.*

Some of Mr. Ellis' foreign transliterations, as hinted in the palaeotypic scheme and expanded in the body of the book, strike me as very odd. He considers French *é* the representative of our *ï*, and would transliterate *pity* in French by *pété*. One is curious to know how he would transliterate *petty*. I have already expressed my conviction (founded on a ten years' residence in Paris,) that our *é* is the proper representative of the French *é* and its equivalent (in most positions) *ai*. Thus the French word for wing (*aile*) is virtually our letter *l*.

He says that the Spanish guttural *x*, or in modern orthography *j*, becomes *ch* (that is our *sh*) in French. Evidently Mr. Ellis never drank a *Kères Koblère* in Paris. The *jota* becomes *k* in French; comparative philology supplies many analogies to this change.

In Italian he has actually transposed the *o aperto*, and *o chiuso* making the former *o* and the latter *au*. He also supposes the Italian *eu* to be a diphthong like the Spanish *eu*, forgetting that there are no diphthongs in Italian and that *Europa* is as much a quadrisyllable as *paura* is a trisyllable.†

* These views called forth, as I had anticipated, strong opposition. Professor Schlegel went so far as to deny any resemblance between the initial *ti* of the word *tiens* and our initial *ch*, even after I had shown him in Mr. Van Name's paper on the Creole Dialects that some of the West-Indian negroes had made out of *tiens* *bon* a verb *chamber* or *chomber* "to hold."

Mr. Ellis himself, while maintaining that the two sounds are "quite distinct," admits that the passage from one to the other is "very short and swift" (p. 205).

Practically, I put the case thus: When a given sound does not regularly exist in a language, but may be approximately expressed by two combinations of letters, one unfamiliar, the other familiar, by which should we transliterate it? And I answer without hesitation, the latter. Even when the letter power exists but is not common in the connection, I prefer to use a more familiar combination, e. g. to transliterate *key* in French by *quégue*.

† If any exception to this rule can be found, it is *oi* which sometimes comes very near to our own *oi* (and in the most common words, such as *voi*) much nearer indeed than Mr. Ellis would probably admit.

The awful Dutch guttural *sch* he admits as a soft sound, on Dutch authority (one would suppose the Dutch easily pleased in the matter of soft sounds,) apparently because in some dialects it is pronounced like *shr*.

If I am blamed for dwelling so long on this introductory subject of letter-notation, I can only reply that the palaeotype is a main thread of the work, running all through it, and constantly attracting attention, and I shall therefore take the liberty of going on still further in the same direction, and noting certain points where Mr. Ellis is in the main right, but not so clear or full as he might be, and where his observations suggest additional remarks.

In reference to the peculiar Welsh *ll*, he says that it is not the least like *thl* or *shl*, which sound all Englishmen give it. He is right in saying all Englishmen, for though Shakespeare wrote *Fluellen* for *Llewellyn*, the *th* and *f* are so closely connected, that Shakespeare's orthography cannot be justly considered an exception. How all Englishmen come to make this mistake he does not attempt to show, nor is his explanation of the true sound as intelligible as it is elaborate. It seems to be *tl* preceded by a click or cluck, which modification must be sometimes inaudible, since (as he tells us) the word *llan*, when shouted from a distance, sounds like *tlan*.

The French *ll mouillé* (*ll* preceded by *i*) is merely a long *i* or *y*. Whatever may have been the case once, there is now no sound of *l* remaining in it. This, Mr. Ellis admits in the third volume, though he does not always write in the other volumes as if he were quite sure of it. If any one doubts the fact he may be convinced by these two circumstances, that French comic writers use the *ll mouillé* to express an exaggerated and affected pronunciation of *ī, e, g, patrille* for *patrie*; secondly, that half educated persons frequently substitute it for *y* in writing; thus a porter will spell the participle of *avoir*, *willant* instead of *ayant*.

The Spanish liquid *ll* seems to be in a transition state. When medial, as in *Caballo*, the *l* is certainly sounded; when initial, as in *llamar* it is frequently dropped. The Italian *gl* always, I believe, in good Italian, preserves the *l*.

I will conclude my remarks on this part of the subject with some observations on the Spanish *d*. Mr. Ellis, on the authority of some recent Spanish grammarians, gives to this letter, whether initial, medial, or final, the sound of *th* flat. His example is *deidad*, pronounced *dheidhadh*. The old grammars (I mean those in vogue forty years ago) give three different sounds to the Spanish *d*, according as it is, first, initial or following a consonant; secondly, medial after a vowel; thirdly, final. In the first case the pronunciation is the same as that of the English letter, in the second our *th* flat, in the third our *th* sharp. So that each *d* in *deidad* (*deidhath*) would have a different sound. Now which of these rules is right, or are they both right according to their respective dates, and has the Spanish language undergone what we may call a certain amount of orthoepic degradation during the present century? The result of my inquiries surprised me, and will probably surprise some of my hearers. On the one hand I have not been able to satisfy myself that initial Spanish *d* is anywhere pronounced differently from our own *d*, or that final Spanish *d* ever has the sound of *th flat*, so that the old grammars may be considered more trustworthy, so far, than Mr. Ellis' more recent Spanish authority.* But on the other hand I discovered startling traces of orthoepic degradation. That the lower classes in South America drop the final *d* and slur over the medial, so as almost or quite to elide it, need not surprise us any more than their pronunciation of *z* and *c* soft as *s*, or the apparent negroism prevalent in Cuba, of substituting a vocalized *r* for the strongly trilled final *r*, e. g. *amaw* (or something very like it) for *amar*. But I was greatly astonished to find the same elisions and others equally marked, in the Spanish capital. My son who has just returned from Madrid, where he spent several months (having passed the early winter in other parts of Spain,) tells me that persons of the best society drop the final and eliminate the medial *d*. No one but a foreigner says *usteth*, the natives all say

* Is it the most recent? He relies on Cube y Soler, 1851. I have seen guides published within the last ten years which insist on the pronunciation of the *d* everywhere like English *d*. But this, even if theoretically right must be practically wrong. *Vide infra*.

usté. But what more surprised me was a slurring of medial *r*, the very thing which is the usual reproach against Anglo-Saxons in speaking the Romance tongues. And I was even still more struck with the elision of medial *s* before a consonant, especially before *t*, precisely similar to what has happened in French. The fashionable pronunciation of Madrid seemed to my son studiously effeminate, a deliberate weakening or dropping of the strong consonants. Mr. Hay, the well-known author, tells me that the Castilians drop the final *s* of their particles, e. g. for *greater* they say, not *mas grande*, but *ma grande*. He was almost certain that he had heard the orator Castelar say *lo reyes* for *los reyes*.^{*} In the observations of these two gentlemen, who though liberally educated, and good practical modern linguists, are not professional philologists or even, strictly speaking, scholars, we cannot look for scientific accuracy, and must expect some discrepancies. Thus, my son thought that the apocope of *s* was confined to the lower classes, and Mr. Hay had not clearly noticed either the apocope or the syncope of *d*.

We are now at length able to proceed to the main body of the work. The general results of Mr. Ellis' elaborate investigations are, I believe, tolerably well known to scholars, and with two, or at most three exceptions, generally acquiesced in. That our

^{*} Castelar is, I understand, an Andalusian, so that his pronunciation would be no more test of pure Spanish usage than Patrick Henry's would have been of pure English. In a subsequent conversation my son explained the case thus:

The Andalusian dialect tends to drop final letters, even *r*. [So that the Cuban *amaw* is not a negroism, as seemed probable.] It also drops medial *s*; e. g. *azul celete* for *azul celeste*. This provincial pronunciation has largely invaded Madrid. The Spanish teachers say this is owing to the Cubans, who are mostly of Andalusian origin and have brought back their pronunciation to the capital. [Rather a roundabout route! but not absolutely impossible when we consider the extent of sectional feeling and consequent separation between the Spanish provinces, and the fact that Cuba is a common ground to them.]

In respect to *d*, while it is sounded clearly and like our own letter as an initial and in the *-ido* terminations, [this peculiarity Mr. Ellis has correctly noted,] it is dropped entirely from the *-ado* terminations, but without compromising the disyllable or the separate sound of the vowels. Thus *prado* is *pra-o* (or, as Mr. Ellis would write it *pra.o*). *D* medial before *r* is *th* flat (*dh*); thus the *d* of *podrir* is the *d* of the Irishman's *dress*. But some exquisites drop even this *d*, and say *Mari* for *Madrid*! This pronunciation, however, is generally condemned and ridiculed as an affectation.

peculiar vowel powers are of modern date ; that our ancestors pronounced \bar{a} as alpha, (which of the modifications of alpha is a question of secondary importance,) \bar{e} as \bar{a} , \bar{i} as *ee*, *ea* as \bar{a} , *ou* as *oo*, and *oi* or *oy* as *oo ee*, — these points may be considered pretty well established. There is some doubt as to the date of the change from alpha to English \bar{a} . Mr. Ellis considers it not yet to have taken place in Shakespeare's time ; others are of opinion (basing their conclusion partly on the same data,) that it had then taken place, or at any rate that the vowel was then in a transition state. As to the early pronunciation of *ai* diphthong, the difference of opinion is strongly marked. Mr. Ellis considered it to have been what for practical purposes we may call our \bar{i} . Mr. Payne, no mean authority on such matters, attributes to the early diphthong its present sound. The French diphthong naturally follows the English, as they rhyme in early verse, macaronic or other. Mr. Ellis, with most laudable fairness and accuracy, has quoted Mr. Payne's *ipsisima verba* at full length, so that the reader may compare both their views at leisure. Every reader must make his choice. I incline to Mr. Payne. Some of the instances not adduced by him, and on which Mr. Ellis dwells rather strongly, seem to me to confirm the views of the former gentleman rather than of the latter ; *e. g.* the remarkable political macaronics in the Auchinlech MS. To show how obvious the medial rhyme is, I will read eight lines of it. [We must remark beforehand : 1st, that *len* in the first line is for *l'on*, and the verbs *ferre* and *defere* are spelled with an *e*, not with *ai* diphthong ; 2d, that the present French nasals were much weaker then, or hardly existed, so that we must rhyme French and English *ent* ; 3d, that *crey* in the 5th line is for *crois* ; 4th, that our \bar{i} was then *ee*, so that *fire* was *feer*, and *shire* (as it still is to some extent in England,) *sheer*.]

“ Len pent fere et defere, ceo fait il trop souent,
 It nis nouper wel ne faire, perfore Engeland is shent.
 Nostre prince d' Engleterre par le consail de sa gent,
 At Westminster after pe feire maden a gret parlement.

La chartre fet de cyre ieo lenteink et bien le crey
 It was holde to neih þe fire and is molten al awey.
 Ore ne say mes que dire, tout i va a Tripolay,
 Hundred, chapitle, court an shire, all hit gop a deuel wey."

These alternate French and English lines seem on the face of them to rhyme in their quatrains or double-pairs not only finally but medially: to pronounce with Mr. Ellis "it nis nouter wel ne fire" in the second line, breaks up the rhyme.* I think also that Mr. Ellis' explanation of the connection between the diphthongs *ai* and *oi* in French (given it is true in another writing, but not contradicted in this book, and about which we shall have more to say,) tells against him here. Mr. Payne considers that in Norman and Early English, *ai*, *ay*, *ei*, *ey*, and even their reversed forms, *ia*, *ie*, had the sound of \bar{a} , as well as *ea* and *ae*; in short he holds to what we may call an etacism in old French.†

* The rhyme "lasteth ay," "miserere mei" (Ellis, p. 447), I take to be a make-shift rhyme of a monosyllable with a dissyllable, such as *share* and *layer* would be now.

† The sound of *é* and its general equivalent *ai* diphthong in modern French I presume to be of late introduction; and this is apparently assumed by both disputants.

If we can trust De Saint Lien — who styled himself *Gentilhomme Bourbonnais*, Anglicised his name into *Holyband* and published *The French Littleton* in 1609,— the diphthong must then have been in the transition state. He gives no fewer than three different sounds to *ai* or *ay*. First, that of *é* in the final syllable of the future indicative, in *ay* (present of *avoir*) and *sçais* (present of *savoir*) Secondly, "the first person of the first perfect [what is now usually called the preterit definite] is sounded as it is wrjten." Whatever this may mean, the distinction is really curious. It is intelligible enough that *aimerais* (conditional) = *aimerè*, while *aimerai* (future) = *aimeré*: but on what principle could the final syllables of the preterit and the future (*aimai*, *aimerai*,) be differently pronounced? Thirdly, in all other cases, "sound it as *gaye* [gay] *gaping*," that is evidently our \bar{a} .

A writer in *The Academy* has pointed out the etymological difference of *é* and *è*, the latter representing a Latin \bar{a} while the former represents a Latin *e*. But his inference that these two *e*'s have exchanged their original sounds is very questionable. I cannot bring myself to believe that *mère*, *père* were ever pronounced like the first syllables of *Méry*, *périr*, or of our own *merry*, *perry*.

There is another point connected with the English diphthong *ai* which ought not to be passed over; so I shall introduce it here, though it comes in somewhat clumsily. The old standard dictionaries (Walker, &c.) give five sounds of English *a*, the four which are familiar and obvious, and a fifth, "the sound of *ai* in *fair*." No difference exists at present between *fare* and *fair* in the pronunciation of Englishmen or Americans, and this fifth sound of *a* is either an anachronism or a mere fantasy. Which is it? When I ventilated this question twenty years ago, Professor Halde- man threw out a suggestion that the English of the last century gave a French sound

But the most disputed of Mr. Ellis' points is the French sound of *u*, which is attributed to our *u*, both long and short, until after Shakespeare's time. If he is correct, the change that has occurred is most extraordinary; the French *u* is now not only so foreign to the Anglo-Saxons that they cannot (without much effort and instruction and practice) pronounce it, but they have not a conception of what it is like; and at this day there are dozens of poetasters in this country, and not a few in the mother country who imagine (judging from their practice) that French words like *perdu* and *plus* rhyme with English words like *you* and *through*; they might almost as well rhyme them to *bee* and *flee*. Mr. Ellis, however, would say that this assertion is too broad, the sound *does* exist in Anglo-Saxendom, to wit, in Scotland and in some of the English counties. I am by no means sure that this Low-

to *ai*, pronouncing *fair*, for instance, like the first syllable of *ferry*. I am not aware of his reasons for this hypothesis, nor can I find any direct reference to such a pronunciation in Mr. Ellis; but there is a circumstance which bears on this point indirectly though it can hardly be said to confirm Prof. Haldeman's view. In the last century *cheerful* and *chair fill* were sufficiently alike in sound to give rise to a bad conundrum noticed by Mr. Ellis "Why is a fat man a merry man?" "Because he is a cheer-ful." Now our first impulse is to refer this to the pronunciation of *chair* as *cheer*, which we know was then current to some extent in England, as indeed it is to this day in South Carolina and possibly in some other Southern States. I am unable to satisfy myself how far this pronunciation extended, whether it included all words in which *ai* is followed by *r*, whether it included any in which *ai* is not followed by *r*, but there are indications in the literature of the day that so far as it did prevail, it was the result of a reaction against a Hibernian attempt to revise the archaism of *a* for *ea* diphthong, which is a well-known Hibernicism to the present day. But another mode of explaining the conundrum occurs to me. The pronunciation *cherful* was known in 1780 and is still known in England, and indeed is conformable to the analogy and genius of the language, which shortens in compounds the long vowel of the simple, *know*, *knowledge*; *vine*, *vinyard*; *Whitby* from *white*, and even *Whitsunday* from *white* — if that be the true derivation of the word which, however, is doubtful. Now we know that final *r* in English is utterly destructive of the sound of *ē* changing it into the indistinct *ū*, whether the final syllable be or be not accented. Is it not then possible that Englishmen of the last century in trying to give the *ai* some such [theoretical] sound as Prof. Haldeman supposes, may have run it into *ū*. It is entirely odd to suppose our great grandfathers talking of a *fur* day and sitting on a *chur*; yet it is equally strange to suppose them sitting on a *cherr* in a *ferr* day; and if we reject both these, I see no third alternative except to pronounce this fifth sound of *a* altogether imaginary, and the old lexicographers under a delusion when they invented it.

land Scotch *ui* is the French *u*; but allowing it to be identical, I do not admit the inference; for the Lowland Scotch was a very peculiar dialect of English, resembling, indeed, that of the border counties, but very distinct from the midland and Southern varieties. As to the Devon, Mr. Ellis confesses (note on pp. 635-6, chap. vii) that the sound in this dialect is vague and indeterminate, sometimes verging on *oo*, more frequently on his *oe oe*, that is the French *eu* long as in *jeûne* "fasting," or the long sound of that indistinct vowel which we usually consider as *ū*.* The evidence of the 16th and 17th century orthoepists is very conflicting, as we might expect, considering the frequent confusions and errors which occur in our so much more enlightened days. It is certainly annoying and perplexing to find two men of the same locality, education and social position, contradicting each other point blank, as in the case of Wallis and Wilkins. The critic of the *North American* thinks that in such a strait we should prefer the writer who states that a foreign sound is strange and difficult to his own people; but it would hardly be safe to adopt this rule broadly and without limitation. However, the very utmost weight which we can assign to Bullokar, Wallis, and the others who identified the sound of *u* in French and English, is to let them offset the contrary statements of Wilkins, Erondele, and the others who discriminate between the sounds. We are then thrown back upon the general probabilities of the case, and these are surely in favor of the present sound. For my own part, I doubt very much if the French *u* was ever fairly naturalized in England, even in the French speech of the upper classes. We all remember how Chaucer describes his prioress as speaking French

"ful faire and fetisly

After the scole of Stratford at the Bowe

For French of Paris was to hire unknowe,"—

showing that in his time there was a French French, and an English French. The French *u* is and always was a strange sound to the Spaniard, the Italian, the Portuguese, the Dutch-

* It would be well to obtain the opinion of some French orthoepists as to the identity or non-identity of these Scotch and provincial sounds with the French *u*.

man, yes, and we may add the German, in spite of the theoretical and grammar-inculcated correspondence of the German *ue* diphthong with the French vowel.

There are three passages in Mr. Ellis' work which have particularly attracted my attention.

1st, As to the numeral *one*. It doubtless surprised most of us when our attention was first called to the fact that the digammatic prefix to this word is of comparatively recent date. Mr. Ellis is unable to fix the exact time of its introduction, but it was not before the 17th century. I have a conjecture (I do not pretend to call it anything more) that while passing from *own* into *wun*, the word took the intermediate form, *un*. Let us examine what may be called a crucial passage in *Love's Labor Lost*: "Master Person, quasi perse-on, and if one should be perst, which is the one?" with our modern pronunciation this is unintelligible, except the vulgarism of *perse* for *pierce*, still common in some parts of America. Mr. Ellis pronounces: "If own should be pirst which is the own?" But suppose we throw out the words "is the" and read, "If un should be pirst which un?" then the clause becomes modern rustic English, for English rustics say *un* for *one* to this day.*

2d. As to the English prosthesis and aphæresis of the letter *h*. He begins by speaking of the words in which initial *h* is properly mute. These he reduces to five, *heir, honest, honor, hostler, hour* (and of course their derivatives). *Humble* and *humor* he leaves doubtful. This may surprise some of us. I believe no Americans say *humble*, and very few say *humor*. We do not suppose it good English to say so. Dickens evidently sounded the *h* of *humble*, (see *Uriah Heep* in *David Copperfield*.) but Dickens, after all, was not a man of the highest education. It is certainly singular to find an American aphaeresis contrasted with an English *quasi*-prosthesis. I must say that on this point my own recollections do not agree with Mr. Ellis' experience.

* They also use it for *it, him, them* — a sort of indefinite pronoun like French *on*, but only in the objective case.

My conjecture on the intermediate stage of *un* may perhaps be confirmed or refuted by reference to the rhymes of the period.

The main question, however, relates to the English actual prosthesis, or prefix of the *h* where it is not written, conjointly with the equally common aphæresis. Respecting these peculiarities, the popular American conception is erroneous. There is a current idea (made the most of by would-be dramatists and comic writers) that all Englishmen except those of the very highest class (and even many of those) always prefix an initial *h*, where there is none, and omit it where it is written; and that the same persons are guilty of both the prosthesis and the aphæresis. This is a grave error. The result of my own experience and observation I sum up thus: In London, no man above the rank of a servant or a small tradesman says *a hass* or *a hangel*. Thackeray and Trollope may be quoted against this assertion. But I do not put implicit faith in novelists as philological authorities, and though Thackeray is sometimes very happy in transliteration, he is not uniformly so, e. g., when he writes *cage* instead of *cadge* to express *carriage* in the flunkey dialect. Let us, however, to avoid appearance of hair-splitting, draw the line a little higher, so as to include the upper order of tradesmen; *there* the prosthesis must stop. But the aphæresis extends much higher. Gentlemen in the best society sometimes talk of *'ouse* and *'ome*: they are not conscious of saying so, any more than a Massachusetts gentleman is conscious of calling a certain familiar article of dress his *cot* or his *caught* instead of his *coat*. But when we go into the western and northwestern counties, and what we may broadly call the manufacturing districts, the prosthesis extends much higher up into society. It is common in what the English call the upper-middle classes, and among men whom we should call merchants. The aphæresis, on the other hand, is not so common there, in the best society, though on this point I feel less certainty. The difference is conformable to what we might expect; as we go northward the aspirate becomes more prevalent, and (so to speak) more respectable. Perhaps my conclusion is an imperfect generalization, but Mr. Ellis bears me out in the first part of it, at least. He says, (chap. iii., p. 221,) "In the practice even of the most esteemed speakers, *ham* in names of places has no aspirate, *ex-*

hibit, exhibition, lose h, and his, him, her, when unaccented drop their h. It is extremely common in London to say ã tome for at home."* The general impression given by his remarks (which are not so full or clear as could be wished) is that the prosthesis denotes a lower grade of society than the aphæresis. At any rate it is certainly wrong to assign both, indiscriminately, to all or nearly all Englishmen, as the average American is apt to do.

The entire absence of this erroneous aphæresis and prosthesis of *h* from all varieties of American dialect has often struck English tourists. There is, however, one Americanism—though not solely an Americanism—connected with *h*. It is the aspiration of the initial *wh*. Good English practice entirely omits the *h* here, making, for instance, no distinction between the noun *witch* and the relative *which*. The only Londoner (if, indeed, he could properly be called such) whom I ever heard aspirate the initial *wh* was Prof. John Grote. To aspirate the *wh* is Scotch, Irish, American. Thackeray, to express it in the speech of his O'Mulligans and Costigans, reverses the letters, writing *hwat* for *what*. It is probable, however, that the north-county men, who have some of the Scotch peculiarities, aspirate the initial *wh*, though I cannot recollect any of my acquaintances who did, *e. g.* Tom Taylor, who is a Cumberland man, certainly did not.

Before taking leave of the letter *h*, let us say something about it in its opposite position—at the end of a word. Mr. Ellis shows how in Shakespeare's time the final *h* after *o* had the same diacritic power as final *e* mute; the name written *moth* in *Love's Labor Lost* was pronounced *mote*; the page is not called *moth* as a fluttering filbertigibbet lad, but *mote* as a mere speck or mite of a boy. Mr. Grant White wished to improve on this, and give the same power to medial *h*, which seems to be an error. The mediæval Latin orthographies show that this diacritic power of final *h* was once very general. It is still retained in German. The most natural way to a German of expressing the sounds *āte, ōte*, is *eth, oth*. An English acquaintance of mine, named Mate, who had reported

* His paleotype is perhaps *ũ tome*. I am not sure of it.

himself *viva voce* to his landlord at Baden, was much disgusted at appearing next day in the watering-place gazette as Mr. *Meth*.

3d. As to the diphthong *oi*, the different powers and changes of this diphthong in different languages, were discussed by Mr. Ellis, in a paper read before the Philological Society, in 1868, of which paper a portion only is embodied in the present work. (I may be allowed to mention here as an illustration of the difficulties with which the American student has to contend, that after failing to find this volume of the Society's transactions in the public libraries of more than one city, and equally failing to find any bookseller who would undertake to import it for me, I was compelled to write to the author himself.)

In a paper which I had the honor to present at the first meeting of this association, I suggested that the first element of the Greek diphthong *oi* may originally have had a digammatic power, *which was afterwards lost*. This is Mr. Ellis' view. There is a continental theory—I am unable to say who first put it into shape; it may be found in the transactions of our Oriental Society—which bears on this question. The theory is as follows: the diphthongs *ai oi* differ from the other diphthongs in being more simple sounds, and in having some of the qualities of short vowels, *e. g.* when final they throw back the accent to the ante-penult. *ai* is the equivalent of *ε*, (just as *ai* in French is of *é*) and *oi* of *υ*. The epithet *φίλον* applied to the two vowels does not mean, as generally supposed, *smooth, unaspirated*, (which indeed involves a contradiction when applied to *υ*;) it means *simple*, as opposed to the compound or diphthongal equivalent. This hypothesis is at least ingenious. It must assume, however, the non-existence of any digammatic element in *oi*, or at any rate, its disappearance before the names *Epsilon*, *Upsilon*, were given to those letters.*

The connection of *o* with *ov*, in the apparent relation of short and long, which Mr. Ellis insists on, may help to prove that

* We must remember also that *omega* in certain cases throws back the accent to the ante-penult.

o and *ω* were different vowel powers; I do not think it necessary as a support to the existence (at some time) of a digammatic element in *oe*.

The Roman *œ* certainly looks like an equivalent of the Greek *οι* and partly invented for that purpose. But there is a very prevalent opinion among scholars that it was only a conventional representative, not an equivalent, and that it had the sound of English *ā*. This conclusion they draw, not merely that *oe* has become *e* in the Romance languages (for *that* only from the fact proves that the diphthong had this sound in later Latin, which no one ever doubted,) but also from the occasional interchange of *ae* and *oe* in Latin, even in words like *coelum* which are at least cognate to the Greek.* They are not, however, agreed among themselves as to details, and especially as to the explanation of pairs like *moenia*, *munia*, *poena*, *punire*. Some, (our friend, Prof. Hadley, is of the number) do not admit that *oe* ever had any sound but [Engl.] *ā*. Some, like Corssen, allow an original sound which had something of *u* in it.† Some think that the *o* was at first digammatic. Among these last is Mr. Ellis, who holds that as *oi* was originally [Engl.] *wee*, so *oe* was originally [Engl.] *wā*.‡ This is certainly an easier way of accounting§ for the above mentioned pairs, than to suppose that the Romans were at first undecided whether to express *oi* by the vowel *u* or their new diphthong *oe*, and so split the difference by taking *u* as its representative in some words and *oe* in others. It also explains the later sound of *oe* as simple *e* by the dropping of the prefix. But the whole subject is involved in difficulty, as I have shown in the paper already referred to, where I really understated the case by omitting to take account of this very difference be-

* Mr. H. A. J. Munro, however, condemns *coelum* as a late coinage like *sylva*.

† This was Corssen's *first* opinion. He afterwards came to the conclusion that the old Roman *oi* split into *æ* and *u* according as the second or first element of the diphthong prevailed in popular pronunciation. He also rejects the *close* connection of the Greek diphthong with the Latin *vi* of words like *vinum*.

‡ Written in paleotype, *ui ue*. Perhaps Mr. Ellis would hardly allow his *u* to be digammatic, but it comes to this practically, if the combinations are to be considered diphthongs at all.

§ By the singular but not impossible absorption of the *second* element.

tween the Greek diphthong and its Roman representative, which is, perhaps, the most puzzling of our confusions. I must confess that I cannot see my way clearly through it. At an earlier period, when the two languages were farther removed, the Romans seem to have had no difficulty in expressing the *oi* by *vi*—doubtless pronounced *vee*. At a later period, the sound of the *oi* is so strange to them that they are obliged to make a diphthong partly on purpose to represent it—and after all, the representation is only conventional; the foreign sound is not correctly rendered. If *oe* was merely [Engl.] *ā*, what was the use of inventing it when they already had *e* and *ae* with the same sound?

Two possibilities suggest themselves:

The first is, a variation of the Roman *e* towards *i*, of which there are some apparent signs; but the absence of anything like Iotacism in the Romance tongues seems to negative this supposition at once. I therefore dismiss it, though somewhat unwillingly.

The other is as follows: We may suppose, that whatever the original sound of the second element in *oi*, and whether it ever had, or, having had, still retained a digammatic prefix, it had come to be no longer a pure *ee* but contained some admixture of *u*. (A digammatic prefix might well pass into such a shade of *u*.) Then the sound would be foreign and difficult to the Romans, who seem not to have had any false sounds in their language, and were greatly puzzled by the *v*. Although they made a special sign for the Greek diphthong, their clumsy attempts at pronouncing it might soon degenerate into simple [Engl.] *ā*. Much as the Germans, though they have made *their* *oe* a conventional representative of the French *eu* and *œu*, stumble fearfully at these French sounds, generally rendering them by *e*, sometimes even by Alpha. A German *valet de place*, at Munich, once told me that Lola Montes had *marshes* (*avait des marais*) in a certain street, meaning that she had lived (*avait demeuré*) in it.

Professor Drisler's opinion is somewhat peculiar: He thinks that in the pairs like *poena*, *punire*, the *u* represents the *oe*, not by substitution or omission, but by simple contraction, *oe* becoming *u*, just as in Greek *oe* becomes *ou*.

On the whole, I must reiterate my inability to arrive at any satisfactory solution of all our difficulties. The only two positive conclusions at which I have succeeded in arriving are both negative (pardon the Hibernicism;) I am confident that the classical sound of *oi* was not, as in modern Greek, a simple *i* (Engl. *ee*,) and that the *first* sound of *oe* was not as in later Latin a simple *e*.

We now pass to the diphthong in French. The interchange of *oi* with *ai* in certain proper nouns and adjectives (as *Français*, *français*, or *François français*; *aimais*, *aimait*, or *aimois*, *aimoit*) up to a comparatively recent date* is a puzzle at first sight, for there seems little connection between the sounds. Mr. Ellis considers that the second element of the diphthong was originally a French *e*, and that *oi* thus passed into *ai* by dropping what I should call the digammatic element, thus *Françvais*, *Français*. This explanation is plausible and probable. *Moé*, *toé*, (that is in English letters nearly *mweh*, *tweh*), have always been provincialisms for *moi*, *toi*. The Norman use of *ai* (or its equivalents) for *oi* is of ancient date. At one time the sound of *ai* had encroached largely on *oi*. *Sait* for *soit* and *fraid* for *froid* were good seventeenth-century French (p. 134). One of the curiosities of the confusion is that the names of the French letters, afterwards *bé*, *cé*, *dé*, &c., and now *be*, *ce*, *de*, were, in the sixteenth century, *boy*, *çoy*, *doy*, &c.

The present sound of the diphthong, Mr. Ellis considers to be *waa* rather than *waw*. He has abundant French authority for this; yet I have heard the latter in Paris at least as often as the former. It is safest to consider the pronunciation as fluctuating between the two sounds, much as the *English* pronunciation of *vase* fluctuates between *vaaz* and *vauz*.†

We finally arrive at English. Mr. Ellis has shown pretty conclusively that the original English pronunciation of *oi* was

* There is at least one living writer, Couture, the painter, who still uses *oi* for *ai* in his verbs.

† I believe all Americans pronounce *vase* to rhyme with *case*. Moore (an Irishman) rhymes it with *grace*, habitually. Sotheby (an Englishman) rhymes it with *draws*.

[Engl.] *ooee*. Our ancestors pronounced *boy* as an American pronounces "buoy," *booee*. (In regard to this word *buoy* I had always supposed our pronunciation a pure Americanism, but Mr. Ellis says that it is also that of all nautical men in England. In ordinary English society the word is pronounced exactly like *boy*.)

In its passage to the present sound, the diphthong (in the 17th century) came near taking that of \bar{i} ; but this pronunciation was condemned, and has passed into a vulgarism and a Hibernicism. It is curious to note, as showing how completely such things are matters of fashion and convention, that exactly the reverse has happened in German with the *eu*, the pronunciation of which as *oi*, though theoretically correct, is practically considered vulgar.

I am inclined to dwell somewhat on this interchange of *oi* and \bar{i} , because it seems to me to afford additional proof of Mr. Ellis' error in considering the first element of these diphthongs to be the indistinct \bar{u} , rather than alpha in one and [Engl.] *au* in the other. As alpha broadens into *au*, so *i* broadens into *oi*; the change is clearly accounted for. According to Mr. Ellis' notation, it is less easy to understand or explain.

Mr. Ellis considers that our *oi* is a peculiar sound, not existing in the other European languages. *Sed quaere*.

Loose and desultory as these remarks on the diphthong *oi* and its representatives may seem, there is, I think, a leading idea to be gathered from them, whether we consider the first element as \bar{o} , [Engl.] *oo*, or [Engl.] *au*, the second as *i* [*ee*] or *e* [\bar{a}], there appears in the four languages which we examined a certain similarity of progress; the first element has originally a digammatic force; this digamma afterwards disappears, and the second element is modified. We cannot be so sure of this in Latin as in the other languages, but even there, we have at least a probability. In French the digamma still remains except in the few proper nouns, adjectives, and inflections, where *oi* has given way to *ai*.

I have already trespassed too long on your patience, but it is hard to part from Mr. Ellis without taking some notice of his labors and arguments in favor of orthographic reform.

Most of the recommenders of phonetic systems have been met with ridicule, and it is not unjust to add that many of them have deserved nothing better. Ignorance, indolence, love of notoriety, that blind radicalism which, with about as much wit as a mischievous monkey, attacks whatever *is*, merely *because* it is,—such are the inspirations of the majority of them. Some are so ignorant of Greek as to call themselves *phonic* which, if it meant anything would mean *murderous*—and they certainly *do* murder common sense and logic; some so ignorant of English that they do not know by what rule or on what principle the *a* of *mate* is long. From such persons Mr. Ellis is removed *toto coelo*. He is a man of wide and deep knowledge, a scholar, a mathematician (sixth wrangler at Cambridge,) apparently a musician; he has labored many years at his particular specialty, and his very mistakes are such as no ignorant man could make. Whatever he says should receive the most respectful consideration. He sees the great inconveniences and practical absurdities of the present system (all of which are exaggerated here), particularly the subordination of authors to printers. If an Englishman feels this, how much more must an American, above all a New Yorker, in the majority of the printing-houses of whose city the Websterian cacography reigns supreme. All the faults of the existing orthography are set forth well and truly and without exaggeration. But Mr. Ellis soon makes an admission which is indirectly fatal to the proposed reform. He says (Chap. vi., pp. 624, *sqq.*), that there can be no absolute standard of pronunciation, and this position he illustrates at length. I was able to add another illustration within fifteen minutes of reading the chapter. After giving the last-century pronunciation of *sewer* (drain) which was *shore*, he expresses the present sound by a monosyllable which most persons would be apt to pronounce like *sure*. I had scarcely read this when there called on me two English gentlemen of about the same age, education, social and official position. “How do you pronounce this word?” I asked. The reply of one was a monosyllable very like Mr. Ellis’, the reply of the other a disyllable very like the pronunciation of most Americans. Sev-

eral of Mr. Ellis' own pronunciations would not find universal acceptance. As an orthoepist, he sees the great advantage which a scientifically-framed phonetic system would have in giving the pronunciation of each writer. We might almost be able to get at the statistics of dialectic peculiarities and to tell how many Massachusetts men call a coat a *col*, and how many call it a *caught*. But we must remember that it is not the sole use of written language to inform the people of one section or country how the people of another section or country pronounce. By giving all local and even individual peculiarities a species of legitimate sanction in serious writing, we debase the standard of pronunciation still more, while we break up the standard of orthography altogether. The attempt to create a perfect system of spelling would inevitably end in the confusion and destruction of all system. When Mr. Ellis, and some fellow-reformers, started a newspaper on the improved plan, they came to grief on the very title. It was *Phonetic News*; some pronounced the second word *nooz*, others *nyooz*; of course each pronunciation required a different notation. This anecdote, reported in perfect good faith by the author, strikes me as an excellent practical *reductio ad absurdum*.

If I have spoken freely of many passages and statements in this book, it is not from want of admiration for the work, which is a monument, not only of industrious, but of intelligent learning, a treatise of exceeding interest and value. I am sure we all deeply regret that the author's impaired health has delayed the completion of it by the appearance of the last volume.

VII.—*On Algonkin Names for MAN.*

BY J. HAMMOND TRUMBULL.

The Indian speaker never generalized. He loved figurative expressions, but however frequent his metaphors or dark his allegory might be he used no word of which the *literal* meaning was not exactly limited. His language supplied him with specific names for all known objects, qualities, and relations, and its marvelous possibilities of synthesis enabled him to frame new terms as often as new distinctions were required. It grew by progressive differentiation,—from genera to species, from species to varieties and individual peculiarities. There is not, perhaps, in the Indian mind—certainly not in the structure of Indian languages—absolute incapacity for generalization, but the scrupulous *avoidance* of it as a defect, whether in thought or speech, is a characteristic of the race.

Though the Algonkin languages are poor in general names, yet we find in all of them certain elements of synthesis which may be regarded—from one point of view, or another,—as rudiments, or as vestiges, of such names. These are not used as independent words, but in composition they take the place of the ground-word or principal root—their denotation being limited or directed by the attributive prefixed. Such, for example, is the (Chip.) terminal *-abo* (after a vowel, — *wabo*; Abnaki *-a'bo*, *-wa'bo*), denoting “drink,” found in many specific names, but never without a prefix: as in Chip. *wi'ass-abo* (meat-drink) broth, *ishkoté-wabo* (fire-drink) whiskey or other ardent spirit, *mashkiki-wabo* (herb-drink) liquid medicine, *tolosh-abo* (breast-drink) milk, etc. In a few instances, such a generic expression which in one dialect is inseparable, in others has attained—or has not yet lost—independent position as a *specific* name. In the Massachusetts language, *-min*, denoting “small-fruit” (berry, nut, or grain), does not appear to have been used without an attributive, e. g. *wuttahimin* (Chip. *odéimin*) heart-fruit, a strawberry, *weno-min* twine-fruit, a grape, *wompi-min* white-fruit, a chestnut, etc.: in the Delaware and in some western Algonkin languages, *-min* is similarly employed in composition, but is also used inde-

pendently as the name of a single species — the bilberry or huckleberry.

Other grammatical devices by which the deficiency of these languages in general names is compensated need not here be pointed out. That such a deficiency exists is indisputable, yet it has been often disregarded in the selection of words for comparison of different languages and dialects. No one has recognized more clearly than did Mr. Gallatin "the extreme precision of the Indian languages," and their poverty in "generic designations or words,"* but of the first twenty English words in his "Comparative Vocabulary of fifty-three tribes" (in *Trans. Am. Antiq. Society*, vol. i., pp. 307 and after,) fifteen are relative and general names not one of which can be accurately translated by a single word in any Indian language. Every Algonkin dialect has names for an "elder brother," a "younger brother," a "twin-brother," a "son of the same father," and a "son of the same mother," and has moreover two forms of some or all of these names, one used exclusively by men, the other by women. But in no dialect can there be found the precise equivalent of the English "brother," in its largest denotation. The nearest approximation to it is, perhaps, by a term which, in some languages, designates "one of the other sex, born of the same parents;" spoken by a woman, this word means "brother," — by a man, "sister."

The names by which *MAN* has been designated, by different tribes, or, more accurately, which most nearly correspond to the English appellative in its two meanings, "an individual of the human race" (*homo*), and "one possessing in a high degree the distinctive qualities of manhood" (*vir*), have occasioned much perplexity to vocabulary makers. Mr. Hale, in a note to his *Vocabularies of North America* (*Trans. Am. Ethnol. Society*, ii. 74), remarks that "in general, there was no means of ascertaining with precision the existence of this distinction." He has, however, nearly indicated its true character by the suggestion that, in vocabularies, the term "answering to *vir* will usually be found under *man* or *hus-*

* *Transactions of the Am. Ethnological Society*, vol. ii., p. cxxxii.

band," and the " term answering to *homo*, under ' *Indian, native*.'" The truth is, it is as impossible to find an Indian equivalent for *homo* as for *man*. By resorting to the Latin, we only halve the difficulty, not remove it. There is not in any American language any single name applicable alike to the red man and the white, to native and foreigner, to ally and enemy, to chief and counselor and to prisoner and slave, and in its largest sense common to both sexes. For *vir* a term nearly correspondent may be found in every dialect — though seldom, if ever, as a primary word ; but *homo* is untranslatable by an Indian.

In Algonkin languages—and the same probably is true of all others spoken by North American nations — we have three classes of names for *Man*, into the composition of which enter three or more different roots. These are indicated, not very clearly, by Roger Williams, in the introduction to his *Key into the Language of America* (1643) :

" I cannot observe that they ever had (before the coming of the English, French or Dutch amongst them) any names to difference *themselves* from *strangers*, for they knew none ; but two sorts of names they had, and have, amongst themselves. First, *general*, belonging to all *natives*, as *Ninnuock*, *Ninnimissinnûwock*, *Eniskeetompauwog*, which signifies *men*, *folk*, or *people*. Secondly, particular names, peculiar to the several nations of them amongst themselves, as *Nanhigganěuck*, *Massachusěuck*," etc.

Of the three " general " names, the second, *ninni-missinnuwock*, is formed from *missin* (with indef. suffix, *missin-nin*,) a derivative of *missi* great, much (*multus*), and comprehends all *homines* who are not *viri*, corresponding etymologically and in its denotation to the Greek *οἱ πολλοί*, or the Latin *multitudo*. It was a general name for tributaries, captives, slaves, — that is, for all mankind, the speaker's nation and its allies excepted. The prefix *ninni*-, however, limits it to inferiors of the speaker's own race, as will presently be shown. Eliot employs *missinnin* for " man " (*homo*) in Gen. vi. 7, and in the plural, *missinninnuog*, for " people," Exod. xxiv. 2, 3, Deut. iv. 33, etc. In Jonah, i. 8, *howaé missinnin ken?* " of what

people art thou?" would convey to an Indian the meaning of "what kind of slave (or, whose servant) art thou?"

In Williams's other names, *ninnu-ock* (*ninnu-og*, Eliot) and *eniskeetompau-wog*, both plurals, we find two roots common to all Algonkin languages. They vary in pronunciation (and in the phonetic notation employed by different writers), one as *nin*, *nen*, *enin*, *aren*, *len*, *illin*, etc.; the other as *omp*, *aⁿbé*, *abé*, *ápé*, *áp*, etc. These two roots are combined in the Abnaki *aren-aⁿbé* and the Delaware *len-ápé*, and the former is repeated, as a prefix, in the Delaware tribe-name *lenni lenápe*.

Mr. Heckewelder, who received with unquestioning faith the legends of his chosen people, the Delawares, and was convinced that theirs was the parent stock from which all Algonkin nations were derived, found in this tribe-name new evidence of their high antiquity and purity of race. *Lenni lenápe*, he says (*History of the Indian Nations*, p. 25), "signifies original people, a race of human beings who are the same that they were in the beginning, *unchanged* and *unmixed*." As to the analysis of the name, he is not quite clear. *Lenno*, he says, signifies "a man;" in the names of quadrupeds, "a male." *Lenápe* signifies man—"in a more extended sense,"—and "in the name of the *Lenni Lenápe*, it signifies *people*, but the word *lenni* which precedes it has a different signification and means *original*, and sometimes *common*, *plain*, *pure*, *unmixed*." "Under this general description [and very general it is, certainly,] the Indians comprehend all that they believe to have been first created in the order of things." (*Corresp. with Duponceau*, pp. 368, 412.) Mr. Cass, in the *North American Review* for January, 1826, remarked the "confusion in Heckewelder's ideas of the name in question," and offered another—and a worse—translation of it. *Lenee*, he says, "generally and properly means 'male,'" and "the true meaning of *lenaupé* is 'common'." He was as far as was Mr. Heckewelder from detecting the connection between *lenno* "man" and a word meaning "original, common, plain," etc.

To discover the primary signification of each of the two roots found in *len-ápé*, we will look first to the Massachusetts

language, where the materials for etymological research are more abundant and, generally, more trustworthy than in the Delaware.

Every savage believes in the superiority of his own tribe and nation to all others. He and his are the real *men*: the rest are servants, tributaries, *missinninnuog*. Whatever is greater than himself passes out of his order of being and becomes to him *manitou* 'preternatural.' The Illinois, says Marquette, call themselves *The Men*, "comme si les autres sauvages au prés d'eux ne passoient que pour des *bestes*." This conviction of personal and tribal excellence stamps itself on every savage language. In some of the North American tongues its traces are very plainly marked. Notwithstanding the want of a substantive verb, "I am" is a constant element of Algonkin grammar. The demonstratives and relatives which in Indo-European languages appear to have been derived from the primitive pronoun of the third person are in the Massachusetts and other eastern Algonkin dialects manifestly related to the pronoun of the *first* person. The Indian conception of *man* was as one 'like' himself. Men of his own nation were "such as I," *nostrates*, and his was the "original," "common," normal, type of humanity.

The (Mass.) pronoun of the first person singular is *nîn*; as a prefix, *n'*; plural *nîn-awun*. The demonstrative of inanimate objects is *ni*; of animate beings, *nô* (*nôh*, Eliot); of place, *na* there. The distributive 'some,' 'any,' 'of the kind of,' is '*uni* or *un'ni*. Resemblance or identity was expressed by *ni-unni* (*neane*, Eliot) such as this, or *nan* same; *ni-nan* the same thing, *nônan* the same person; '*nnih* (Eliot), '*nniu* (R. W.), it is *so*, or it is the same; * *nanwi* (*nanwe* Eliot) common, usual, i. e. 'such as' ours, or 'of our kind,' hence, 'native,' 'indigenous.' Eliot wrote *nanwe missinninnuog* "common people," Mark xii. 37 (= *ninnimissinnûwock* of Roger Wil-

* Comp. Chip. *in-, in-*, prefixed to verbs, "to signify a certain *way* or *manner* in which something is done or used," etc.; e. g. *IN-âbi* he *so* looks; *od'INâbaman* he *so* sees him; *INagode* "it hangs *so*"; *nind INawa* "I resemble him; *INIDÉ* "it is cooked in a certain manner" (*so*); *INIGini* "he is *so* large;" *INO* "it is *so*" Baraga.

liams, before quoted), and *namwe wut-epistle-um Jude* for "the general epistle" etc.*

'*Nnin-u* (*enin*), pl. *ninnuog*, which Roger Williams gives as one of the "general names belonging to all natives" and "signifying men," was occasionally used by Eliot in the plural and, with an attributive prefixed, in the singular, for 'man,' 'men;' but the Indians restricted its denotation to men *like themselves*, of the *common* or native type, of the speaker's kind (though not necessarily of his tribe or nation). It is opposed to *penowi* (Abn. *pirōi*) strange, foreign, of another kind.

In other Algonkin dialects, the Massachusetts '*ninnu* or *enin-u* becomes (Abnaki) *areni*, (Quinnippiac) *ren*, (Delaware) *lenno*, (Illinois) *illini*, (Cree) *ethinu*, etc., — meaning

* Schleicher (*Vergl. Grammatik*, 2te Aufl. p. 642) considers the root of the 1st sing. pronoun in Indo-European languages — *ma* 'I,' 'me,' — identical with the verbal root *ma* 'to think,' 'to measure,' and with the *ma* in Sansk. *ma-nu*, Goth. *ma-n* 'the thinker,' 'man': for since "we must not ascribe to the primitive language the abstract conception of the *Ego*,—what," he asks, "should 'I' be, originally, but 'man'?" The likeness of the corresponding roots in Algonkin languages is as noticeable — and the probability of their original identity is at least as great — as in the Indo-European. Compare Chip. *nin* I, me, *in-i* so, such, *in-in-i* man, and *nind' in-en-dam* (intrans.) I think, suppose, it seems to me, I am (so) minded, *nind' in-en-dan* (trans. inanimate) I think of it, think it (so), *nind' in-en-ima* (trans. anim.) I think of him, think him (so). But I do not believe that the Indian — of Asia or America — waited for the demonstration "cogito, ergo sum," as a necessary preliminary to self-assertion or to the vocal designation of his fellow-savage. Without rising to "the abstract conception of the *Ego*," he in some way discovered and expressed the distinction between 'this, — me' and 'that, — my Like,' — *alter ego*. His mental states and activities, — his likes and dislikes, opinions, regards, emotions, — how he was affected by an external object, what he *thought* of it, how he estimated or *measured* it, — he would naturally express by "it is *so to me*" (though perhaps *not so to another*); "*I so regard, feel, esteem, believe, think it.*" Of the same object, one might say *nin mino-endan* I well-think it, it to me is good; another, *nin jing-en-dan* I hate it, it to me is odious; toward the same individual and with reference to the same act one would express his emotion by *nin-nishk-en-ima* I am angry minded at him, another by *nin bap-in-en im* I am laughter-minded, joyful; what one remembers (*mikwéndan* = *mikoa-en-dan* finds in thought), another forgets (*wanéndan* = *wani-en-dan* misses in thought, or *dón-en-dán* ceases thinking of).

In Chip. *inéndam* (= Del. *eléndam*, Abn. *eréndam*, Mass. *unantam*), only *en* represents the root: *-dam* is the grammatical formative, and the prefixed *in-* is the adverbial 'so,' 'in such manner,' which is dropped when the verb receives any other prefix — as in *minwéndam*, *nishk-niman*, etc.

always, a 'common man,' of the speaker's kin or kind. Used as an adjective, the Mass. *nanwi*, Abn. *areni*, Del. *lenni*, denotes the 'common,' 'usual' or 'native,' as distinguished from *penowi*, Abn. *pirowi*, the 'strange,' 'foreign,' of 'other kind': e. g. Abn. *areni odama* "common or native tobacco, *aren-a"dwé* he speaks Abnaki (comp. *pirow-a"dwé* he speaks a foreign language); Del. *len-achpoan*, common (i. e. Indian) bread, *lenna-meek* common fish (the sucker, found in almost all streams), *len-chum* common or Indian dog, (distinguished from the species introduced by Europeans), etc. Zeisberger translates "*Lennape*, an Indian; *Linni lenape*, Indians of the same nation."

In *lenápé*, we have this adjective in synthesis with an inseparable generic. Heckewelder (*Corresp. with Duponceau*, 411) says that the termination *ap* or *ape* "belongs to animals walking in an erect posture; hence, *lenape* mau." It is found in all pure Algonkin languages (Mass. *-omp*, Abn. *-a"bé*, Penobscot *-ombè*, Chip. *ábé*, etc), but nowhere as an independent word. As a generic suffix it denotes 'an adult male.' With a demonstrative prefixed (*n'*) it designates 'the male,' or as an adjective, simply, 'male.' The primary meaning of the root may have been nearly that which Heckewelder suggests. It appears in the Mass. *ompa-*, Chip. *ombi-*, a prefix to verbs of lifting, raising, erecting, etc.: e. g. Mass. *ompandeu* "he lifts himself up," from a stooping position, John viii. 7; Chip. *ombinan* "he lifts or raises it up," *ombbate* "the smoke ascends," *ombashin* "the bread rises," etc. (comp. Abnaki *abási* a standing tree); as an adjective, in Mass. *nompaiäs* male, *nomposhim* male beast, *pish nompaiyeuw kah squaiyeuw* there-shall male-be and female-be (Gen. vi. 19); in Chip. *nabé* male, *nin-nabem* "my husband" (Baraga), etc. The dependence of the Indian warrior and hunter on his *bow* is expressed in its designation as "belonging to the adult male," and by transferring it from the class of inanimate ('ignoble') objects to the animate or 'noble': Mass. *ohomp*, Abnaki *'ta"bi*, Powhatan *attawp* or *auhtab*.

Len-ápé (= Abnaki *aren-a"bé*, mod. Penobscot *aln-ombè*),

denotes "a common adult male," i. e. an Indian man; *lenno len-âpé*, an Indian of our tribe or nation, and consequently, *vir*, "a man of men." The roots, *len* and *a'p*, correspond more nearly to *nostras* and *mas* than to *homo* and *vir*; but the former is as exclusively *masculine* as the latter, and cannot be prefixed to a feminine noun-generic.

Recurring now to Roger Williams's division of names into "general, belonging to all natives," and "particular, peculiar to the several nations amongst themselves," we will first trace these two principal roots, under their dialectic modifications, through the several Algonkin languages, and afterwards notice some of the names for men of *inferior* race, — for enemies, strangers, and foreigners, — into the composition of which neither of these two roots may enter.

1. *MAN* of the 'common' or 'native' type; of the speaker's kin or kind; *nostras*. Root, 'NEN, 'REN, 'LEN, — from an earlier *IN*? with a demonstrative prefix, or reduplication. As an adjectival, it denotes 'common,' 'indigenous,' sometimes 'mere.' Formed as a verb, 'to be a man (like ourselves),' hence, in many dialects, 'to live.'

Old Algonkin (Nipissing), *inini*: *nin-ininyu* "I am a man." Howse.

Chippeway, *inini*, pl. *inini-wak*. Ottawa, *anini*.

Massachusetts, *-inin*, pl. *-ininnuog*; *ninnu* "male," Eliot (Mark x. 6.)

Narragansett, *'nnin*, *inin*; pl. *ninnuog*. R. W.

Menomini, *inin*. Potawatomi, *nini* (Lykins), *enin ü* (P. Jones).

Sâki (Sâuk), *nænni*. Maximil. Musquaki (Foxes), *nini*.

Montagnais, *irini-ou* [he is] man; *iriniou-in* "life." Le Jeune, 1634.

Abnaki (Kennebec), *aren-i*; as adjective 'simple,' 'plain,' 'mere.'

Quinnippiac, *ren* (pl. *renewak*) man. Peirson, 1658.

New Sweden, "*rhenus*, Mann: *renappi*, Menniskia." Campanius.

Delaware, *lenno*, pl. *lennowak*. Zeisb.

Shawnee, *üint* "man," *lindwat* "Indian;" *lindwai-wt* "he lives." Howse.

delnoieh "Indian." Whipple.

Illinois, *illini*.

Miami, *elaniah* (Volney), *ahlanuah* (Barton).

Micmac, *el'nu*, *l'navi* (Mail.), *al'nu* (Howse).

Montagnais of Labrador, *il'no*.

Cree, *ethin'u* "man, an Indian," Howse; Western Cree, *hiyenu*, Maximilian.

[Comp. 1st pers. pronoun *nitha* I, and *net'étin* I do so, I so act. Howse remarks that "the *th* is so softly uttered that a nice ear only can detect it," and, among the western Crees, it "is lost in the *ÿ* or *y*; *nitha* becomes *niya* [= *ni'ia*], *ethinu* is *iytnu*. The western Crees call themselves

Néayabé which Dr. Hayden translates: "those who speak the same tongue." Of *Néhethówuk*, the equivalent in the dialect of the Hudson Bay Crees, Howse makes "exact beings, or people," and Sir John Richardson, "exact or complete men."]

Shyenne, *ita'ni* (adj. male, of man); *eta'nio* "people." Hayden.

Atsina, *nithun'a*. Comp. *nathan'i-nita* "to live." Hayden.

Arapaho, *inen'*, pl. *inen'a*. Comp. *ininek'tina* "to be alive."

? Blackfeet, *ninnow*, *nenow*. Howse. Hayden has *nin'a* "chief," but for Indian, *ni-i'-tsa-ta'-pi*. Comp. *nistu'a* [= Cree *nita*] I, *nitsinan* mine.

Powhatan. The generic name appears in such compounds as Strachey's *rawERUNNUW* "an old man." For "man," John Smith has *nemarough* (by a misprint, probably, for *nematough*), and Strachey, *nimatew*. This is the equivalent of *nemat* (Strachey; and so in the Massachusetts dialect,) "my brother," my mate, with the verbal formative (= Mass. *ne-mat-ou* he is my brother, or mate).

Nanticoke, *ihn*, *iin*, "Indian." *Wohacki*, for "man" in Gallatin's vocabulary, means 'his body,' 'himself,' = Mass. *wuhhogki* (Eliot), Narrag. *wuhhoak* (R. W.).

The characteristic *n* of the pronominal root is constant throughout. The prefixed demonstrative, or reduplication, varies, with changes of dialect, as *n*, *l*, *r*, and (rarely) *y*; is lost in strong aspiration of the following vowel; becomes a soft, scarcely audible *th* in the speech of the eastern Crees and the Atsinas of the northwest, and among the Shyennes is represented by *t*.

Without intending to follow the Algonkin name beyond the presumed limits of the Algonkin group, I may be permitted to allude to the fact that the Crees and Atsinas are neighbors of Athapascan tribes, suggesting the possibility of relationship between the Cree *ilhi'nu*, Atsina *nithun'a*, and Shyenne *ita'ni*,—and the Chepewyan *dinnie*, Takulli *tenni*, Umkwa *tüne*, Navajo *tennai* and Apache *n'de*, all having the same meaning, "man, native." The likeness of the east-Algonkin 'ninin-u, *inin-i*, to Labrador-Eskimo *innuk*, pl. *innuit*, man, *innu-wok* alive, *una* he, this, *ingna* the same, etc., is not less noticeable.

II. An adult male: designated by the inseparable noun-generic *-a'be*, *-áp*, *-omp*, or other dialectic modification of the root A'B. With *n'* demonstrative prefixed it designates 'the male,' or as an adjectival, simply, 'male.' With a pronominal prefix, it may mean 'husband,'—e. g. Chip. *ne-nabem* [the final *m* is possessive,] my husband; but Baraga in his

Otchipwe Dictionary, marks this use of the word as "unpolite." With the prefix 'nen (*ren, len,*) it denotes a 'common man,' i. e. an Indian adult male. With other attributives, it forms class-names and tribe-names.

1. With the demonstrative prefix, designating 'the male'; and, with the possessive suffix (*-om, -em, -m*), 'husband':—

Algonkin and Chippeway, *ndbé*; *ni-ndbem* [my male,] my husband.

Ottawa, *nápé*; *ni-ná-bom*.

Menom., *naupe-om, ndpium*, "husband." Dr. James.

Potawat., *nawbam*; *nin-nawbam* "my husband."

Miami, [*ndpem* husband,] *nenapéma* my husband. Volney.

Illinois, *nampeheman* husband. Gallatin.

Montagnais, *napiou* "man," *ndpen* "husband" (*naapen*. Gabriel).

Naskapi (Scoffe), *naabouh* "man," *naahpen* "husband."

Abnaki, *na"bé-*, prefixed to names of male animals.

Massachusetts, *nomp aás* male, a male; *nomp-oshim, nomp-oshimwus* a male quadruped; *nompai-yeuoo* [he is] male, Gen. vi. 19. Eliot. Roger Williams does not use *omp-* or *nomp-* as a prefix; but for a male beast has *enewáshim*, = Del. *lenno-wechum* (Zeisberger).

Cree, *nápayoo* man, pl. *napeywuk*: *ne-nabem* "my husband." Howse.

Nanticoke, *ndáp*. Heckw. Pampticco, *nuppin* "Indian." Lawson.

2. With the prefix 'nen, (*ren, len,*) 'common,' 'native,' 'of our kind'; designating an Indian adult male:

Abnaki (Kennebec), *aren-a"bé* "homo" Rasles.

(Penobscot), *alnombé*; *alnambay*. Vetromile.

Delaware (N. Sweden), *renappi*, Campanius— who has, incorrectly, *piri renappi* for "strangers."

(Unami) *len-ápé* "an Indian," pl. *len'ápewak*. Zeisb.

Mississauga, *linip?* ["linneep." Barton.]

3. With other attributives, forming class and tribe names:

Mass. *Nítomp*, Narrag. *nítôp*, Abn. *nida"bé*, Del. (N. Swed.) *nítappi*, Powhatan *netab*, pl. *netapewh* (Strachey), *nítoppu* (J. Smith),—the familiar "*netop*" of the early colonists, sometimes translated "brother," but by Roger Williams, more accurately, "friend,"—denotes a brother by *adoption* or *affinity*, one who is regarded as a brother; literally, 'man of my family,' or 'my kinsman.' The prefix (Mass. *nít-*) may be translated 'of the family,' 'domestic'; as in Chip. *níta* "my brother-in-law" (Baraga), Mass. and Narrag. *nítassu* (*netassu*, El.) a domestic animal.

Mass. *Ket'omp* (*kehtomp*, El.) chief man; from *ketti* (*kehte*, El.) chief, greatest.

Mugwomp great man, captain; from *mogki* great, powerful.

Kinomp (Abn. *Kina*"bé "homme courageux, brave, généreux," Rasles), a "brave"; Eliot uses it for "captain" in John xviii. 12, where Mayhew (1709) substitutes *mukquomp* = *mugwomp*; Micmac *keenap* "warrior, hero," Rand.

Nonk'omp young-man; literally, light or slender man, from *nonk'i*, levis.

Pinomp (*penomp*, El.; Del. *pilâpé* "a big boy," Zeisb.) a new (i.e. a chaste) man: from *pinu* (Del. *pili*-, Chip. *bini*-) new, strange, unused, chaste. Perhaps the most curious mistake in Eliot's version of the Bible is the use of *penomp* for "virgin," e.g. in Gen. xxiv. 16, Isaiah vii. 14, 1 Kings, i. 2, and Matt. xxv. 1, where the parable is of the ten *penompaog*, i.e. chaste young men. With the Indians chastity was a masculine virtue, and it is easy to see how Eliot's interpreter, misunderstanding his question, gave him *nescius vir* for *nescia viri*.

Delaware *Kigâpe* (Zeisb.), Abn. *kiga*"bé, a young unmarried man, is in those dialects the equivalent of Mass. *pinomp*. The corresponding feminine appellation in the Delaware (Unami) is *kikochque*, Zeisb., Ottawa *gigang* "virgin, maid," Baraga. Blackfoot *asi'*-*apî* = Del. *kigâpe*.

Abnaki (Kennebec) *seé'na*"bé, modern Penobscot *senombi*, Mass. *sannup* (Wood, 1634), was the common designation of an Indian man, in the vigor of manhood, married, or master of his lodge. Rasles translates it by "vir." The signification of the prefix is not quite clear. The word is not found in Eliot or Mayhew, but was much used by the English colonists, who understood "sannup and squaw" to mean "Indian man and woman." Possibly, the former name is a contraction of *anisina*"bé—which, in other Algonkin dialects, has nearly the same meaning, but is not found in the Massachusetts of Eliot or the Abnaki of Rasles.

Old Algonkin (Nipissing) *alisinapé*, Lahontan; mod. Alg. and Chip. *anishun-abe* ("Indian") Baraga; Ottawa *nishanâba*; Potawat. *nishinapé*; Penobscot *olisenombi* "good man." The same prefix, with *irini* (= *inini*) as the generic, is found in Montagnai's *arichi-irini-ouak* (pl.), men (Le Jeune, 1634),

modern *arrishirini* (Vetromile). Compare Blkf. *nītsatāpi* "Indian" (Hayden). The prefix signifies 'good,' 'well-doing'; Mass. *wunnesu*, Del. *wulisso*, Alg. and Chip. *onijishi* "he is fair, beautiful, fine, good." (Bar.)

Narrag. *enisketomp* contr. *'skitomp* [*skeetomp*, R. W.] "man"; Quinnip. *eansketambe* "an Indian," *wusketambaug* (pl.) "men," "people"; contr. *sketambaug*, Peirson; Mass. *wosketomp*, Eliot, Mayhew, and Cotton, for "man"; Etchemin *oskitap*, *uskidab*, "man," *n'oskitapaim* "my husband" (comp. *uskitch-inu* "Indian man," Vetromile, = *ouskejin*, Barrett, and Micmac *uskiginu* "Indian man," Vetromile); Naskapi (Scoffie) of Labrador, *nashkapou* [he is] Indian (Gabriel), *naskupi* and "*nasquapee*," which, says Mr. Hind (*Exploration of Labrador*, ii. 96), they translate, "people standing upright." The prefix appears to be the equivalent of Chip. *onishk-*, in *onishka* "he rises, stands erect," particip. *wenishk-ad* "one who stands erect," etc. — repeating and emphasizing the meaning of the generic *-omp*, *-āp*.* In Mayhew's version of John's gospel (1709), *unashketomp*, pl. *-paog* (not found in Eliot,) is used for "officers," ch. vii. 46, xvii. 12, 22, — and in Wood's vocabulary, Mass. (1634), *sasketupe* is translated "a great man."

Blackfoot *malāpi* "man" (Hayden) belongs to this class. The prefix may be from *ma'tsi* "brave." The generic affix, for "male," is found also in *asi'tAPI* "young man," *sako'tAPI* "boy," *nī'tsataPI* "Indian," and in the names of Blackfoot bands, e. g. *A'petUPI* "Blood people," *MumitUPIo* (pl.) "Fish Indians," etc. Comp. Blkf. *etAPI* "to live" (Hayden).

The Micmac designation of an adult male is peculiar. Gal. latin's vocabulary gives (from Maillard) Micm. *tchinem* "man (vir)"; *tchenem-emool* "husband;" [*em* is possessive, and *-ool* is an affix of the 2d and 3d person sing., 'thy' or 'her'.] Rand's vocabulary (in Schoolcraft) has *n'cheenum-com* "my husband"; *wobaika-cheenum* "white man" (but this last is probably white man's Micmac, of modern formation). Only in *nīlhetop* "my friend" (Gal.) = Abn. *nīla'be*, Mass. *nītop*,

* Comp. Del. *LENNI LENape*, and (in an other group of languages) the Pawnee tribe-name *Cha'hiksi cha'hiks* "men of men."

do I find the generic suffix for 'male' which is common to all Algonkin languages. The tribe-name—the true *vir*—corresponding to the Alg. and Chip. *anishinabé*, Del. *lenno-lenape*, Naskapi *nasquapi* etc., does not appear in the Micmac vocabularies. The etymology of *tchinem* is obscure. It may be a dialectic corruption of Abn. *se'na'be* (Mass. "*sannup*"), with the loss of the *p* by the nasalization of the preceding vowel.

III. Man inferior in degree or kind; not 'of us' or 'such as we are':

Mass. *missininnuog*, Narr. *missinnuwock*, "folk, people" (R. W.),—if of the speaker's nation, *ninni-missinnu-wock*,—has been previously noticed. Literally, "the many," *οἱ πολλοί*: Abnaki *mesairwak* "ils sont plusieurs" (Rasles). From the same root, Mass. *musi* (and redupl. *mámussi*) wholly, of the whole; Narr. *missi-su* "the whole of him"; Del. *messisu*; Abn. *messiooi* "tout entier"; Chip. *misi*, *misiwe*, "every where," "all," etc.

Mass. *penwi* (*pendwe* El.) strange, novel, different,—whence *penowot* stranger, foreigner; pl. *penowohtedog* strangers, is used by Eliot for "the heathen," Ezek, xxxvi. 3, 4, and elsewhere, and for "gentiles." Abn. *pirwi-arena'bé* "homme étranger" (Rasles), *piri* "de nouveau," = Del. *pili*, Chip. *bini*, etc. The Chip. *maiag-* has nearly the same meaning,— "foreign, strange, changed" (Bar.); *maiag-anishinabé* "a strange Indian from another tribe; in Scriptural language, pagan, gentile," *maiag-isi* "he is a foreigner" (Bar.).

Mass. *howân*, *auwon*; pl. *howanig*, somebodies, any-bodies, or interrogatively, who is this? who are these? (Narr. *awâün* "there is somebody," *awâün ewó?* "who is he?" R. W.) As an adjective, *howâé* any, some kind of. Abn. *awenni*, Micm. *wen*, Del. *auween*; Cree, *owena* who? pl. *owéneki*; *ow'euk* some one, any one; Chip. *awénen* who? Hence one of the designations of Englishmen by the Indians of New England,—usually written *awannux* or *owanux*; Narrag. "*awaunagus-suck* English-men, . . . as much as to say, These strangers" (R. W.), Pequot *waunnuksuk* (Stiles). Abn. *awennots* "Frenchman" (Rasles) has the same etymology.

IV. Nations of different language, enemies, and Europeans, were usually designated by a verb or participle in the animate-plural, without affixing a noun-generic. The principal tribe of the Iroquois, for example, was called by the Algonkins of New England "*Mohowaug-suck* or *Mauquáú-og*, cannibals or men-eaters"—as Roger Williams explains (*Key*, p. 16)—"from *móho* to eat.* Eliot writes this verb, *mowhau'* he eats what lives (or an animate object); *noh moohhukque* "he that eateth me," John vi. 57; *mowhauqua-og* they who eat what lives, etc. Hence, the name "Mohawks" adopted by the English, and the Dutch *Mahakuaas*, contracted to *Maquas*.* (Comp. Abn. *ne-móha"ók mégoak* "I eat the Iroquois," Rasles.) The French and northern Algonkins may have derived the same name, "Maquas," from Alg. *makwa* a bear,—*Ganniagowari*, the national name of the Mohawks, signifying "a she bear"; but it is nearly certain that to the Indians and English of New England, the "Mohawks" or "Mauquauogs" were, by name, "cannibals."

A Mohican tribe in eastern Connecticut received from their enemies (Narragansetts and Niantics) the name of *Paquatauog*, or *Pequittog* (R. W.), destroyers, ravagers, and passed into history as "Pequots," only a small band, which had deserted the main tribe, retaining the national name of *Muhhekanneuk* (Wolves) corrupted by the English to "Mohegans."

The "Eskimos" bear an Algonkin nickname which describes them as "eaters of raw flesh"; Cree *eskwa-móuyow*, Abnaki *eski-móha*, he raw-eats (animal food).

The name *Algonkin*—*Algoumequin* and *Algonquin* of the French—has been extended over a great family of nations and languages. "The Algonquin was the mother tongue of those who greeted the colonists of Raleigh at Roanoke, of those who welcomed the Pilgrims to Plymouth. It was heard from the Bay of Gaspe to the valley of the Des Moines; from Cape Fear, and, it may be, from the Savannah, to the land of the Esquimaux; from the Cumberland River of Kentucky to

* "The *Mauquawogs* or *Mohowawogs*, which signifies men-eaters." R. W. in Letter to Winthrop, 4 *Mass. Hist. Collections*, vi. 239.

the southern branch of the Missinipi."* Yet the origin of the name has, I believe, never been pointed out, and scarcely two authors agree in fixing the locality of the tribe to which it originally belonged.† Mr. Gallatin (*Synopsis of the Indian Tribes*, p. 24) found it "difficult to ascertain whether this name *did* belong to any particular tribe, or was used only as a generic appellation." Etymology removes the difficulty. An Algonkin was, eo nomine, removed from all "local habitation." No tribe ever called itself or was known to neighboring tribes by the name. It was not even a "generic appellation," until the French and English adopted it as such.

We first meet with the "Algooumequins" in Champlain's narrative of his voyage to Canada in 1603 (*Les Sauvages*, etc. repr. Quebec, 1870, pp. 6, 8, 9). He was in company with M. du Pont-gravé and had as interpreters two Indians of some Algonkin-speaking tribe—probably Montagnez from Tadoussac,—whom Pont-gravé had carried to France on his return from a former voyage to the St. Lawrence. At Pointe de Saint Matthieu (now Pointe aux Allouettes) at the mouth of the Saguenay, opposite Tadoussac, they found a war-party of Indians "of three nations, the Estechemins [Etchemins], *Algooumequins*, and Montagnez," returning from a successful expedition against the Iroquois. The Montagnez were already at home, on the north bank of the St. Lawrence; the Etchemins and their country were well known to the French, but the "Algooumequins" were new acquaintances. Their name—or what Champlain understood to be such—must have been learned from themselves or their allies, and must belong to one of the dialects which we call Algonkin.‡

The *l* is clearly an interpolation, for it does not belong to

* Bancroft's History of the United States, iii. 237.

† See, in Shea's Charlevoix, vol. ii., p. 8 (note 3), a collation of the principal authorities—exhibiting, as the editor remarks, "most remarkable differences of opinion" on this point.

‡ The learned author of *Etudes Philologiques sur quelques Langues sauvages*, in a later work (*Jugement Erroné de M. Ernest Renan*, etc. 2me éd. Montréal, 1869) which did not come in my way until after this paper was presented, derives the name "Algonquin" from the *Huron*, a dialect of the Iroquois. The Hurons and the Algoquins were allies, he remarks: the former, impatiently awaiting the

the Montagnais, Etchemin, or any other Algonkin language at that time known to the French. The termination *-in*, or as it was afterwards occasionally written *-ain*, is that of the French adjective (as in *Mexiquain*, or *-cain*), but it perhaps represents, as in some other tribe-names of French adoption (e. g. Champlain's *Quenongebin*, *Ochataguins*, *Otaguottouemin*, etc.), an original *-inin* 'man,' or its plural. In Champlain's later publications (*Voyages*, editions of 1619 and 1632, and the Map,) he writes "*Algommekins*" for "*Algoumequins*." We have then as the base of the name, *A'goumek* or *A'gommek*—and recognize an equivalent of the Virginian *Accomac*, the Narragansett *Acaawmen-oake* "land on the other side" or *acáw-muck* (R. W. Key, pp. 3, 4), Mass. *o'gkomuk* and *ogkomuk* (Eliot), Abn. *a'gwa'mek* "en delà," "au-delà," and *Aga-menó'ki* "France" (Rasles), Cree *akámik* (Howse), Chip. *agámíng* (Baraga). Among the Montagnais at Tadoussac, or by the Etchemins of l'Acadie,—anywhere, indeed, east of the Ottawa River,—the original Algonkins would have naturally been designated by their eastern confederates as men from "the other side," from "the beyond-river country." The editor of the Quebec reprint of Champlain's voyages, in a note to the account of the first meeting with the "Algoumequins" in 1603 (*Les Sauvages*, p. 9), suggests, unconsciously, the derivation of the name, by the remark that they lived on the Ottawa River "et au-delà."*

coming of their friends, used to ask one another, *IAKO-KEN?* which is Huron for 'Est-on arrivé?' And *Iako-ken*, at first "une sorte d'appel militaire," came to be the recognized designation of a tribe and nation, and finally was corrupted to *Algonquin*! That the "Algoumequins" whom Champlain met on the lower St. Lawrence in 1603, years before he visited the country of the Hurons or promoted the Algonkin-Huron alliance, made themselves known to him by a name borrowed from an "appel militaire" in a foreign language—and which required an interrogation mark to give it meaning—is, to say the least, improbable. Without raising the question whether even French ingenuity could extract "Algonquins" from "*Iako ken?*"—is not such a derivation of a tribe-name as absurd as the worst of the etymological blunders of Schoolcraft and Duponceau which the author of *Etudes Philologiques* has so gleefully exposed?

* The "Algoumequins" encountered at Tadoussac in 1603, appear to have belonged to the tribe which afterwards became known to the French as *Kichesipirinióek* (i. e. Great-river men) and "Sauvages de l'Isle." These occupied the Ile des Allouettes (as it is now called) in Ottawa River—the "Great River of

In the Jesuit *Relations*, the name changes from "*Algomme-kins*" to "*Algonquains*" and, finally, "*Algonquins*." This change was perhaps effected by the influence of the Huron name for the same tribes. The Hurons, who spoke a dialect of the Iroquois, designated their "*Algommekin*" allies as "*Aquannaque*," i. e. "of a different language," "foreigners" (Sagard). "Our Hurons"—writes Father Lallemand in the *Relation* for 1641 (Quebec edition, p. 72),—"call the Neutral Nation *Attiwandarok*,* that is to say, 'people of a slightly different language'; as for the tribes which speak languages which they (the Hurons) cannot at all understand, they call them *Akwanake* [= *Aquannake* of Sagard], of whatever nation they may be, that is to say 'strangers.'" The Huron name became more familiar to the French than that by which the tribes on Ottawa River had first been called,—these tribes, when *at home*, could not properly be designated as "from the other side,"—and there was sufficient resemblance between *a'gwa"mek* and *a'kwanake* to make the transition from *Algommekin* to *Algonquin* easy.

The Chippeways call the modern Algonkins, *Odishkwagamig* 'Lake-enders,' from *ishkwa* at the end of, and *gami* lake (literally, water). Mr. Schoolcraft gives a translation and analysis of this name—of which he seems to have regarded "*Algonquin*" as a corruption or the equivalent.

The eastern tribes gave, as we have seen, the same name to countries of Europe as to the region between the Ottawa River and the great lakes: Narr. *acawmen-ōake*, Abn. *aga"-menōki*, Chip. *agūming*, 'land on the other side' or 'over the water.' To the Nipissings and the Montagnez, the French and English were "Algonkins."

The French in Canada were called sometimes *Awennots-ak* 'somebodies' (= Narr. *awaunagussuck* "these strangers," see p. 150, ante); but were usually distinguished as 'Wood-en-boats'—Alg. *Mittigouchiowek* (Lahontan, who translates,

the Algommekins "of Champlain's later voyages and Map of 1632. Perhaps the appellation *Kichsipiriniowek* was originally given to all the tribes and bands living on or near the "great river" (*kitchi-sipi*), to distinguish them from the "small-lake men" (*Nipissiriniowek*) dwelling near Lake Nipissing.

* Whence probably the modern *Adirondack*.

inaccurately, “*constructeurs de vaisseaux*”), Chip. *wemitigoji-wag* (Baraga); Cree *Wem'slĕgoso-ak*.

The English in New England were specifically described as “Coat-wearing” (Narr. *Wautaconâuog*, R. W.), but soon received the appellation by which Anglo-Americans, and since the separation of the colonies from Great Britain, the inhabitants of the United States, have been designated by all northern tribes,—“Big Knives.” “They call Englishmen *Châuquauock*, that is, Knife-men,” from *chauuog* knife (R. W.). In other dialects, different names for ‘knife’ are employed: e. g. Alg. and Chip. *mokoman*, whence Chip. *Kitchi-mokoman* “an American” (Baraga), and *Kitchi-mokoman-aki* [great-knife-land,] the United States; Cree, *Ketsimohkoman*. Del. *Mechan-schican*, ‘*Chanschican*’ (Heckw.), Miami *Mitchimalsâ* (Volney), Blackfoot *Omakstoä*, and Arikara *Nehsikuss* all have the same meaning, though formed from different roots.

The Alg. *Aganeshâ*, Chip. *Jaganash* and *Saganash*, Cree *Agâthâsu*, *Hakatahsu*, Miami *Aχâlâchima* (Volney), and probably *Yengees*—by double corruption, “Yankee,”—represent Algonkin imitations, more or less successful, of “English,” “Anglais” or “ces Anglaises.”

There are Algonkin names for “whites” and “blacks,” but these are without any generic affix to restrict their application to ‘men’: e. g. Chip. *Waidbishkiwed* “a white man or a white woman” (Baraga), a participle (subjunctive) from *wabishkiwi* to be whitish, pale,—and Miami *Ouâbkioketa* “white skin” (Volney): Chip. *Maketewias* and Cree *Kis-kitowias*, “black flesh”; etc.

V. For WOMAN there are names corresponding nearly to *femina*, *mulier*, and *uxor*. The first—which has been anglicized from east-Algonkin dialects, as “squaw,”—as a generic suffix denotes one ‘of woman-kind,’ as a prefix signifies ‘female,’ without restriction to the human species. Eliot did not employ it independently for “woman.” In Gen. vi. 19, he wrote *pish nompâi-yeu-w kah squâi-yeu-w* “they (animals) shall be male and female,” but in Gen. v. 7, *wosketomp kah mittamwossis-soh ukkezheüh* “male and female (man and wo-

man) created he them." With a suffix denoting 'living creature,' 'animal,' — *squá-as* (contracted by R. Williams to *squáws*) is 'a female,' without distinction of age or condition. So, *squáshim* (*squá-oshim*) a female quadruped, Abn. *skwéssem*, Del. *ochquéchum*. It has the place of a noun-generic in the Mass. *nunk-squá* young woman; Narr. *keegsquaw* virgin (R. W.); *sonkisqueá*, contr. *sonsq'* (and Narr. *saunks*, R. W.) mistress, sachem-squaw; etc.

Though this general name is found either as an independent word or as an element of synthesis in every Algonkin language, it is not easily traced through the published vocabularies, in which it is often confounded with or represented by names for *mulier* and *uxor*. It does not appear under "Woman," in the Micmac, Etchemin, Abnaki, Massachusetts, Mohican, or Miami vocabularies given by Mr. Gallatin, but it occurs in some of these under "Girl" or "Wife."

Old Algonkin, *ickoue*, Lahontan. Chip. *ikwé*, Baraga, *ecquoy*, Long.

Ottawa, *akwé*, Bar., *ekwa*, Tanner. Potawatomi, *ókwé*, *ukquah*, Gal., *oqué*, *qué* Lykins.

Delaware, *ochque-u* woman, Zeisb.; *h'que'i* woman, *quai'tchitz* (dimin.) girl.

Whipple. New Swed. *aqæo*; as a suffix, *-óque*. Campanius.

Naticoke, *achquahike*; suffixed, in *песнquah* girl. Gallatin.

Shawnee, *equiwa*, dimin. *squithetha* girl, Johnston; *s'squawowáh*, dimin. *s'squaw the e thah* girl, Whipple.

Powhatan, *-usqua*, in *wironausqua* "woman queen"; dimin. *usquaseins* "girl."

Strachey. [For "woman" Strachey has *cucheneppo*, *cutsseneppo*; J. Smith *creneppo*; of which I can make nothing.

Mohican, *-esqua*: in *peesquasoo* girl, Edwards; *peesquáthuh*, Jenks.

Mass. and Narr. *squa-*, *squé*, female; *squaäs*, El., *squáws*, R. W., a female.

Abnaki (Kennebec) *skooé-* (prefixed) and insep. *-skooé*, female; as in *na"k-skooé* "fille," *kwosihw-skooé* "vierge." Penobscot, *kosiuskwe* virgin, Vetromile.

Etchemin, *-sque*. *Pelsquasis* girl, Kellogg; *noksqw-ak* "girls" [young women], Barrett

Micmac, *-shquëi* [*chkoëi*, Maill.] insep. generic; contractde, *-ishk*. [*Na"zkwé*, *nazkwe*, Vetromile, the equivalent of Abn. *na"k-skooé*, Mass. *nunksquá*, young woman, has been improperly used by some of the Catholic missionaries (I find it also in Mr. Rand's vocabulary—as *noksow*) for "virgin." In Vetromile's "Indian Good Book," *Nazwhet Mali* stands, in the Creed, Rosary, etc. for "the Virgin Mary." The prefix (Abn. *na"k-*, Mass. *nunk-*, *nonk-*, Chip. *náng-*) means 'light' (levis); in this connection, 'not full grown': comp. Mass. *nunkomp* young man. *Nazwhet* (Vetr.) is the participle of *na"rkwá*.

Montagnais, *schquow* woman; dimin. *squasish* girl: comp. *tishquah* [his]

wife. Gabriel. [*Tessarawi*- and the participle *tessarawit* used for "virgin" in the Montagn. Prayers, Creed, Confiteor, etc., in Vétromile's *Indian Good Book*, (c. g. *Mari eiapitsh tessarawit* Maria semper virgo,) to an Indian denotes — like Eliot's *penomp* — a chaste male. It becomes feminine only by suffixing the generic *-shqua*. Comp. Alg. and Chip. "nitéssanaw I am in a virginal state (a male speaking)," participle *taies-sanawid*, and "nin tessanAKWÉW I am a virgin (a female speaking)," ptc. *taies-sanAKwid*. Baraga.

Naskupi (Skoffie), *schow* woman, *squash* girl, *teshquouet* wife. Gabriel.

Cree, *iskway' w* [she is] woman, of woman kind. Howse.

Blackfoot, *ski-*, a fem. prefix to names of animals: but *aki'ma* woman, pl. *akiks*; *aki'kuen* girl. Hayden.

In the far-off Arapaho *isi'* woman (and as fem. prefix), and the corresponding Atsina (Falls Indian) *ith'a* and *ithe'i*, we nearly lose trace of the harsh guttural *очнуе* of the Delawares and the Alg. *ikwe*.

For *mulier* we find in different Algonkin languages at least three names:

(1.) Abn. *phainem* [*p'hainem*], Rasles; mod. Penobscot, *p'hanem* ("sanoba ala phanem man or woman," Ozunkh.); Mohican *p'ghainoom*, Jenks.

(2.) Micm. *epit*, pl. *epitgik*, Maill.; *aibit* woman, *aibitis* girl, *n't'aibit-em* [my] wife, Rand.

(3.) Mass. *mittamwossis*, contr. *mittamwus* El. (*muttumwus* Mass. Psalter), used both for *mulier* (Gen. ii. 22; iii. 2), and *uzor* (Gen. ii. 24, 25; iii. 8; Ephes. v. 22); Narr. *mittámus* woman, wife, R. W.; Miami *metaimsah*, Schoolcr. Vocab.; Chip. *mindimoié* old woman; *mindimoiémish*, always preceded by a possessive pronoun, "wife, [my] bad old woman." Baraga. The affix *-ish* is derogatory, but is not always to be translated by 'bad.' 'My poor old wife' is better — if, as is not certain, Baraga's analysis of the word be correct. The Abnaki *mana"-dagwéssw*, which Rasles gives (with *p'hainem*) for "femme," is probably an equivalent of Chip. *mindimoiémish*. Comp. Powhatan *utumpseis*, *tumpsis*, old woman (Strachey); Menom. *metamo* woman (Schoolcraft); Shyenne *matum'ha* (Hayden).

The names for *uzor* need not be considered, in this connection. For "my wife" the Indian usually said "my woman," and in the second and third person the feminine generic (*-sque*, *-kwé*) suffixed to a man's name or title designated his wife: e. g. Chip. *ogima* chief, *ogimákwe* the chief's wife.

The principal results of the analysis which has been attempted in this paper may be briefly recapitulated, as follows:

1. There is no Algonkin name for Man (= homo) common to both sexes and to all varieties of the human species.

2. The name of largest denotation is one which designates Man as a being of the speaker's race and language, his *like*, of his kind or kin.

3. This name (Alg. *inin-i*, Mass. *enin-u*) is related to the pronoun of the first person (Alg. *nin*, Mass. *nîn*, prefixed, *n'*), to the demonstratives animate and inanimate, to various words expressing likeness, relation or identity; when used as an adjective, it distinguishes the common, usual, and native, from the strange, unusual, or foreign; and it is the theme of a verb meaning 'to live' i. e. 'to be a man,' to be *such as* other men. The root of this name, if not identical with, is not distinguishable from the root of verbs meaning 'to think,' 'to be minded.'

4. Only the second *n* of the name belongs to the root (IN or IN). This is constant in all pure Algonkin languages. The prefixed demonstrative (or reduplication) varies in different dialects as *in-*, *en-*, *ar-*, *el-*, *eth-*, *et-*, etc.

5. Names for Man = *vir* are formed by prefixing attributives to the inseparable noun-generic (-AⁿB, -AP, -OMP) denoting an adult male. With a prefixed demonstrative, this generic forms the adjective *naⁿbe*, *nábé*, *nompé*, 'male': with the adjectival *inin-* (= *aren-*, *len-*, etc.) it designates, as in Del. *len-ápé*, 'a common male,' i. e. an Indian man: with other attributives, it forms class, tribe, and specific names, e. g. Alg. *anishin-abé*, Abn. *seë'n-aⁿbé*, Mass. *wosket-omp*.

6. Inferiors, enemies, and Indians speaking a different language, were designated as "slaves," "captives," "strangers," or merely "somebodies"; collectively, as "the many," *oi πολλοί*. Names given to Europeans and to foreign tribes were sometimes formed from *inanimate* nouns, e. g. "Wooden Boats," for Frenchmen; "Big Knives," for Anglo-Americans; sometimes from verbs or participles animate, as "Eaters of raw flesh," for the Eskimos; "They who eat what lives, or is alive," for the Iroquois; "The Clothed" or "Coat-

wearers," for Europeans. Kindred and friendly tribes were often designated by their geographical position: the *Nipissiriniwek*, (Nipissings) and other tribes between the Ottawa and the lakes were, to the Montagnez, *Aⁿgoumek* "on the other side," the Indians of Maine were "of the east land" (*Abnaki*), to western Algonkins.

7. For Woman, some modification of the root of Chip. *ikwé*, Mass. *esqua*, 'femina,' is found in every Algonkin language, as an inseparable generic if not as an independent name. It is the common appellation of both *mulier* and *uxor*, and its diminutive, of *puella*: but there are distinct names for *mulier* and *uxor* in every language, as there are also for *juvencula* and *virgo*, though Eliot does not appear to have discovered in the Massachusetts dialect either of the last two, and one has often been mistaken for the other in the compilation of vocabularies and by translators.

VIII.—On Some Forms of Conditional Sentences in Latin, Greek, and Sanskrit.

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IN the treatment of the Protasis and Apodosis or Hypothetical Period the so-called General Supposition, since it was first distinguished by Professor Goodwin, has, among American scholars at least, been generally recognized in Greek, but in Latin it has not commonly been admitted to exist except as a Grecism.

It is useful for a logical treatment of the subject in Latin, as well as for the purposes of comparative syntax — a branch of the science of language that has not as yet been much attended to — to determine whether this form of protasis and apodosis is an heirloom of the Indo-European family, or only a special development in the Greek, which was afterwards borrowed by the Latin.

Now the nature of this form is this: the protasis or con-

dition does not refer to a single act or event, in present or past time, upon which the conclusion is founded. This form it is the province of the indicative in both clauses to express. Nor does the protasis refer to a future act or event upon the happening of which the apodosis will be true. This form is expressed either by the optative in both clauses, or by the subjunctive in the first with the future indicative in the second. But what the protasis does refer to, is the indefinite or repeated happening of an act or event in all time (or at any past time), upon every occurrence of which the apodosis becomes (or became) true. The formula for this kind of hypothetical sentence is: "If ever he does (or did) this, it is (or was) in all such cases well," — and this idea is clearly distinguishable from "If he is now doing this, it is well," as well as from "If he should do (or does) this, it would (or will) be well." And in Greek this distinction is carefully maintained. The first is Ἐάν τοῦτο πράττη καλῶς ἔχει. The second is Ἐί τοῦτο πράττει καλῶς ἔχει. The third is Ἐάν τοῦτο πράττη καλῶς ἔξει. To use Prof. Goodwin's examples:

Ἦν ποτε δασμὸς ἴκηται σοὶ τὸ γέρας πολὺ μείζον, *Il.* i. 66. If ever (that is, in all cases in which) a division comes, your prize is always greater.

Ἐί τις ἀντείποι εὐθὺς τεθνήκει. *Thuc.* viii. 66. If any one refused (in all cases of refusal) he was put to death.

So also with all indefinite relatives and relative particles:

Ἦνίκ' ἂν δ' οἴκοι γέγωνται, ἐρῶσιν οὐκ ἀνασχετά. *Arist. Paz.* 1179; Ὅτε ἔξω τοῦ δεινοῦ γένοιοντο πολλοὶ αἰτῶν ἀπέλειπον. *Xen. Anab.* ii. 6. 12. The protasis is expressed by the subjunctive or optative, according to the time of the condition, but the apodosis is some form of the indicative expressing a general truth either in the present or past. Occasionally however the protasis also is expressed by the indicative, like the particular condition present or past, a fact which is significant as throwing light on the Latin usage. Now in Latin, at least in the monuments of literature, this form of construction is not ordinarily distinguished from the particular condition in present or past time, so that the exceptional Greek is the usual Latin form. There are however some traces of this construction in Latin

which agree with the Greek though from their rarity they have usually been considered as imitations.

It has long been noticed that the second person singular of an indefinite subject has a kind of affinity, so to speak, for the subjunctive mood. It is obvious that there is no magic about this second person which should change the mood of the verb when with any other person it would be indicative; the difference must be in the nature of the thought expressed. Upon examination these cases are found to be of two kinds. They are always either protases or apodoses. The protases of this kind correspond for the most part to two forms of apodoses. Their apodoses are either in the subjunctive or some other form referring to the future, or in the present indicative used to express a general truth. In the first case they are clearly cases of future protasis and apodosis of the ordinary form: e. g. *In qua (amicitia) nisi, ut dicitur, apertum pectus videas, tuumque ostendas, nihil fidum, nihil exploratum habeas.* Cic. *Laelius*, xxvii. 97. So also, *Ubi enim istum invenias qui honorem amici anteponat suo?* Ibid. xvii. 64,—where the protasis is omitted, an exceedingly common usage. So, *Quod si etiam possis quidvis deferre ad alterum, videndum est tamen quid ille possit sustinere.* Ibid. xx. 73,—where the participle in *dus* takes the place of a future form. Now in the second case this construction has never to my knowledge been analyzed, but it seems to me unmistakably the same as the Greek general supposition. Take for instance, *Vita humana prope uti ferrum est, si exerceas conteritur.* Cato. *Carmen de Moribus*, cited by Aulus Gellius, xi. 2 (Jordan, *Reliquiae Catonis*, p. 83). Here we have the subjunctive in protasis referring to any one of a series of acts, with the indicative in the apodosis expressing a general truth, precisely parallel with *ἐὰν τοῦτο πράττῃς καλῶς ἔχει*, which is the regular construction. So, *Virtutem necessario gloria etiamsi tu id non agas, consequitur.* Cic. *Tusc. Disp.* i. 38. So also with relatives and relative particles: *Bonus segnior fit ubi negligas,* Sall. *Jug.* 31; *Cum animum ab istis imaginibus ad veritatem traduxeris nihil relinquitur,* Cic. *Tusc. Disp.* 55.

One can hardly realize the frequency of this construction

unless his attention is particularly called to it. In fact it is almost universal in writers of all periods. In order therefore that the frequency as well as the nature of the construction may be understood, examples are given at some length:

Istaec ubi periculum facias aculeata sunt, Those things when you try them are full of stings. Pl. *Bacch.* v. 63; *At nunc si attingas eum manu, paedagogo puer tabula dirumpit caput*, But now if you lay your hand on him the boy breaks his master's head with a slate. Ibid. v. 440; *Quom patrem adeas postulatam puero sic dicit pater*. Ibid.; *Quos quom censeas esse amicos reperiuntur falsi falsimoniis*. Ibid. v. 540; *In re mala animo si bono utare adjuvat*. *Capt.* v. 202; *Nam doli non doli sunt, nisi astu colas; set malum maximum, si id palam provenit* (observe the third person in the indicative, in precisely the same construction). Ibid. v. 221; *Consimile' st quom stertas, quasi sorbeas*, *Mil. Gl.* v. 820; *De magnis divitiis, siquid demas plus fit an minus?* *Trin.* v. 348; *Mage si exigere occupias duarum rerum exoritur optio*. Ibid. v. 1052; *Stultus et sine gratia's. Tibi recte facere? quando quod facias perit*. You're a fool and thankless fellow. Do rightly by you, when what one does is lost upon you! *Aul.* v. 335.

Uxor, si cesses, aut te amare cogital, aut etc. (see whole passage). *Ter. Ad.* v. 32; *Ille quem beneficio adjungas, ex animo facit*. Ibid. v. 72; *At tamen 'ubi fides' si roges, nil pudent*. *And.* v. 637.

Tantum remanet, quod virtute et recte factis consecutus sis. *Cic. Cat. Maj.* xix. 69; *Quae (exercitationes virtutum) cum diu multumque vixeris mirificos efferunt fructus*. Ibid. iii. 9; *At memoria minuitur, credo, (parenthetical) nisi eam exerceas aut si sis natura tardior*. Ibid. vii. 21; *Quae (utilitas) tamen ipsa efflorescit ex amicitia etiamsi tu minus secutus sis*. *Lael.* xxvii. 100. *Sed haec adjuvant in oratore . . si quid persequare acrius, ut invitus et coactus facere videare*. *De Orat.* ii. 43; *Hic quantum fit mali, si non levem testem laeseris?* Ibid. ii. 74; *Ista discuntur facile si et tantum sumas quantum opus sit, etc.* Ibid. iii. 23; *Plures ineuntur gratiae si uno tempore dicas pro pluribus*. *Brut.* 57, ad fin.; [*Conformatio*] *sententiarum permanet, quibuscunque verbis uti velis*. *de Orat.* iii. 52.

Nam si velis quod nondum vetitum est, timeas ne vetere; at si prohibita impune transcenderis, neque metus ultra neque pudor est (where in the first sentence we have the second person in both protasis and apodosis, and hence the subjunctive; in the second the apodosis has the third person, and hence the indicative). Tac. Ann. iii. 54.

Plerique, quae delicta reprehenderis malevolentia et invidia putant. Sal. Cat. 3.

That this construction is not imitated from the Greek is sufficiently proved, it seems to me, by its universality at all periods of the language, and secondly, by the fact that in the same sentence the second person is expressed by the subjunctive but the third by the indicative, a distinction which is entirely foreign to the Greek. Obviously if the earliest writers were copying from the Greek they would have used the subjunctive throughout, as the Greek does. Several of the examples from Plautus are of this kind: e. g. *In mala uxore atque inimico siquid sumas, sumptus est; in bono hospiti atque amico quaestus est quod sumitur.* Plaut. Miles Glo., v. 673; *Volup est quod agas, si id procedit lepide.* Ibid. v. 947; *Nimia'st voluptas, si diu afueris domo domum ubi redieris, si tibi nulla aegritudo animo obviam'st.* Stich., v. 524. See also Tac. Ann. iii. 54, and Plaut. Capt., v. 221, cited above.

There are a few cases where the same construction is used in the first and third persons: e. g.

Nihil proficiunt mercatores nisi admodum mentiantur. Cic. de Off. i. 42; *Luxuria vero cum omni aetate turpis, tum senectuti foedissima est. Sin autem libidinum etiam intemperantia accesserit, duplex malum est.* Cic. de Off. 1. 34; *Neque alitur si faciat ullam inter suos habet auctoritatem.* Caes. B. G. vi. 11;— see also, Caes. B. C. ii. 24, Q. Curt. vi. 5.

• It will be observed that all the cases thus far have been in present or general time, corresponding to the Greek subjunctive and expressed with the present tense in the apodosis.

But it has long been noticed that the same construction was used exceptionally, especially by later writers— not to my knowledge by Cæcero,— of past time, with the imperfect in apodosis, corresponding to the Greek optative with the im-

perfect. It is this construction which has been considered a Grecism. *Si quis a domino prenderetur consensu militum eripiebatur.* Caes. B. C. iii. 110.

The cases are numerous but as the construction is familiar the passages are only referred to:—

Caes. B. C. ii. 41; Liv. ii. 27, iii. 11, xxxiv. 38, iii. 19, i. 32, viii. 8; Q. Curt. iv. 30, ad fin.; Nepos, xvii. 8, xx. 4, xxv. 2, xvii. 1, xviii. 3; Sallust. Jug. 58; Tac. Ann. vi. 30.

This same construction also occurs in Sanskrit, that is, with the protasis in the subjunctive or optative and the apodosis in the indicative, expressing a general truth. The more common construction however is with the subjunctive or optative in both, as in the first case of the second person in Latin, mentioned above.

For Sanskrit scholars I may cite Rig-Veda, i. 94. 15; i. 79. 2; i. 79. 3; Hitopadesa, 800.

Now we see this construction regularly used in Greek, very frequently found in Sanskrit, and in Latin universal in one form and occurring occasionally in other forms in writers of various dates. We are naturally led to conclude that this construction was in use more or less in Indo-European times and was received by each of the languages as a part of the original inheritance. It was afterwards developed by the Greek almost to the exclusion of other forms, so that the indicative is only the exception, but gradually disused by the Latin except in one or two cases, to re-appear again occasionally in the later language, while the Sanskrit retained both constructions.

It is worth while perhaps to consider the origin of the construction. This is not difficult to see if we consider the origin of the use of the subjunctive and optative in protasis generally. There can be no doubt that the original form of the hypothetical sentence (so far as the condition is future or general or contrary to fact) is represented by such expressions as "*Tolle hanc opinionum, luctum sustuleris*" and "*Naturam expellas furca, tamen usque recurret,*" in which two coördinate clauses appear, the first containing a command, and the sec-

ond a consequence of the (implied) performance of that command. Now it is obvious that such a formula may develop into two constructions, the one meaning "Let one do so and so, (and) such will be the effect;" the other stating the consequence more generally, as "Let one do so and so, (and) such is (always) the effect." These two correspond to the particular and general protases. In Greek both forms are used in their proper place. In Latin the former is chosen for future protasis and many general protases, as it obviously makes little difference whether one says "such is the effect" or such "will be the effect," when the statement is intended to be general.

In the case of the second person singular of an indefinite subject the language adopts both, but for the ordinary general condition it takes another form, of different origin, in which the protasis is not a command at all but a statement of a fact which for the moment is assumed to be true. This form gives the indicative in both clauses, a construction which as we have seen occurs also exceptionally in Greek. The Sanskrit adopts most commonly the first form both for future and general conditions, but it also often uses the second with the indicative in the apodosis, like the Greek.

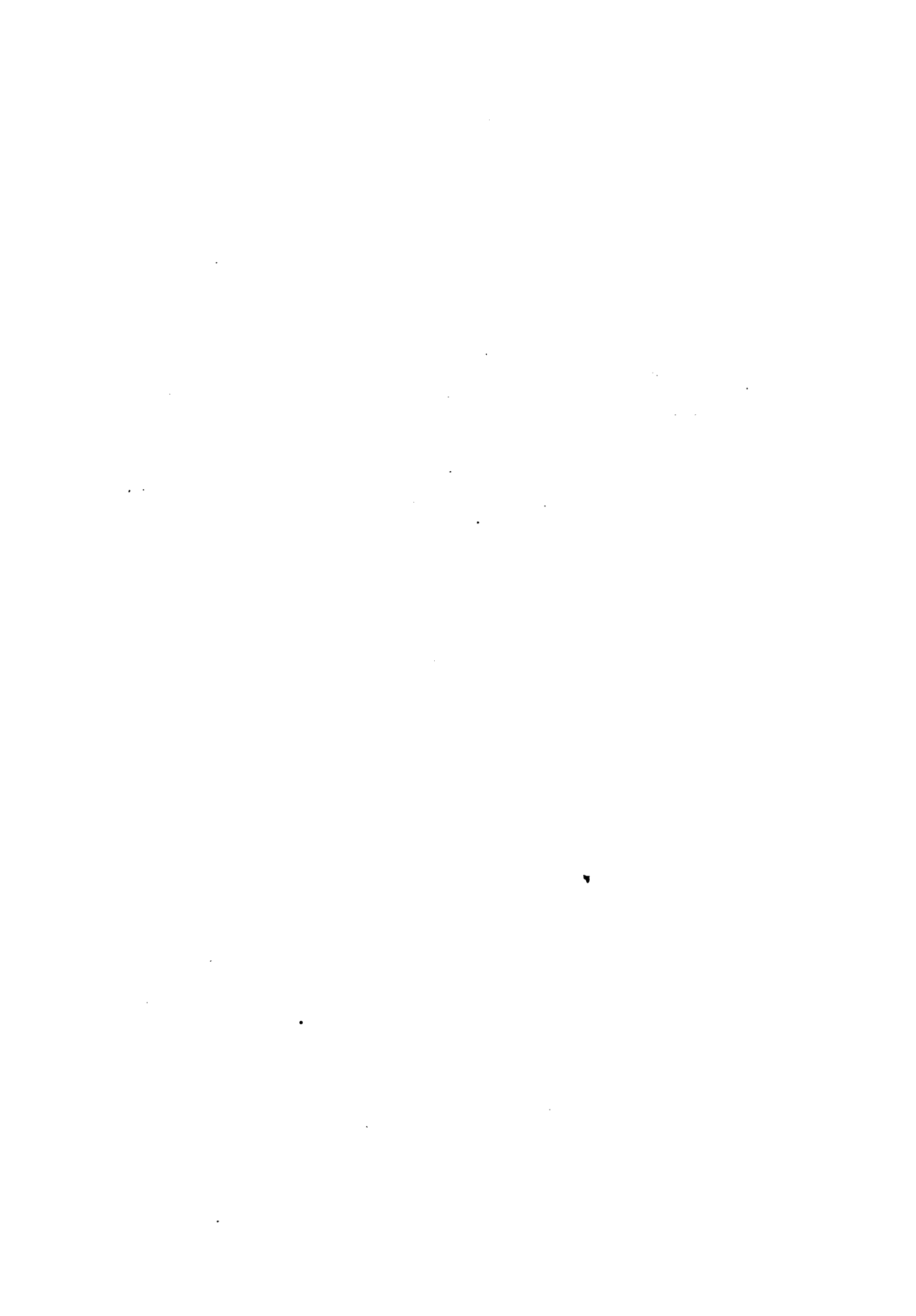
In regard to the origin of the protasis generally, see the able treatise "*Der Gebrauch des Conjunctivs und Optativs im Sanskrit und Griechischen*," by B. Delbrück (Halle, 1871).



PROCEEDINGS.

- THIRD ANNUAL SESSION,

HELD AT NEW HAVEN, JULY, 1871.



AMERICAN PHILOLOGICAL ASSOCIATION.

NEW-HAVEN, Ct., July 25, 1871.

THE Association assembled, agreeably to notification, in the Representatives' Hall of the State-House, at three P.M., with the President, Chancellor Crosby, in the chair.

The report of the Secretary was then read and adopted. In the report it was announced that the following persons had become members of the Association, according to the provisions of the constitution, during the course of the year.

Professor Frederic D. Allen, East-Tennessee University, Knoxville, Tenn.; Professor J. Graeff Barton, College of City of New-York; Mr. F. S. Batchelder, Stafford, Ct.; Rev. J. H. Blakeley, Bordentown, N. J.; Miss Mary L. Booth, New-York; Mr. P. Born, Selinsgrove, Pa.; Mr. Elihu Burritt, New-Britain, Ct.; Mr. S. M. Capron, Hartford, Ct.; President Alexis Caswell, Brown University, Providence, R. I.; Rev. Dr. Talbot W. Chambers, New-York; Professor Elie Charlier, (Life-Member,) New-York; Professor Elisée Charlier, New-York; Professor Lyman Coleman, Lafayette College, Easton, Pa.; Professor Nelson E. Cobleigh, East-Tennessee Wesleyan University, Athens, Tenn.; Rev. William B. Corbyn, Quincy, Ill.; Mr. A. Crittenden, Brooklyn, N. Y.; Professor William C. Crane, Baylor University, Independence, Mo.; President E. S. Dullin, St. Stephen's College, Columbia, Mo.; Dr. F. Ebener, Baltimore, Md.; Professor William M. Fisher, Baylor University, Independence, Mo.; Professor Leon C. Field, Casenovia, N. Y.; Mr. James B. Greenough, of Harvard University, Cambridge, Mass.; Mr. Edward M. Greenway, Jr., Baltimore, Md.; Professor Calvin S. Harrington, Wesleyan University, Middletown, Ct.; President Lucian H. Hammond, Lebanon Valley College, Annville, Pa.; Professor Willabe Haskell, Bucksport, Me.; Professor B. J. Hawthorne, West-Tennessee College, Jackson, Tenn.; Professor H. W. Haynes, University of Vermont, Burlington, Vt.; Professor M. W. Humphreys, Washington College, Lexington, Va.; Professor John T. Huntington, Trinity College, Hartford, Ct.; Professor William H. Jeffers, Wooster College, Mo.; Professor S. A. Theo. Jobe, St. John's College, Little Rock, Ark.; President Abiel A. Livermore, Unitarian Theological Seminary, Meadville, Pa.; Professor Ch. Louis Loos, Bethany College, Bethany, W. Va.; Professor J. H. McDaniels, Geneva, N. Y.; President George H. Magoun, Iowa College, Grinnell, Iowa; Professor Daniel Marvin, Jr., Racine College, Racine, Wis.; President F. A. Muhlenberg, Muhlenberg College, Allentown, Pa.; Mr. Bennett H. Nash, Boston, Mass.; Mr. C. W. Nassau, Lawrenceville, N. J.; President Cyrus W. Nutt, Indiana University, Ind.; Professor Edward North, Hamilton College, Clinton, N. Y.; Rev. E. G. Parsons, Derry, N. H.; Professor Oval Pirkey, Christian University, Canton, Mo.; President J. C. Pershing, Female College, Pittsburg, Pa.; Professor A. J. Quinche, University of Mississippi, Oxford, Miss.; President Joseph Shea, St. John's College, Fordham, N. Y.; Professor E. Snyder, Illinois Industrial University, Champaign, Ill.; Professor Friedrich Stengel, Columbia College School of Mines, New-York; Professor Daniel S. Talcott, Bangor Theological

Seminary, Bangor, Me.; Professor J. Henry Thayer, Andover Theological Seminary, Andover, Mass.; Professor E. H. Twining, Minnesota University, St. Anthony, Minn.; Professor William S. Tyler, Amherst College, Amherst, Mass.; President T. R. Vickroy, Lebanon Valley College, Annville, Pa.; Professor Stephen S. Young, Bowdoin College, Bangor, Me.

The Treasurer's report was presented, read, and accepted. It showed the receipts and expenditures of the past year to have been as follows :

RECEIPTS.

| | |
|---------------------------------------|----------|
| Balance on hand, July 26th, 1870..... | \$32 86 |
| Annual assessments paid. | 245 00 |
| Fees from new members..... | 310 00 |
| | <hr/> |
| | \$587 86 |

EXPENDITURES.

| | |
|--------------------------------------------------------|----------|
| Printing of Transactions, 1869-70, 500 copies..... | \$408 53 |
| Printing, postage, stationery, and other expenses..... | 59 78 |
| | <hr/> |
| Total expenditure, 1870-71..... | \$468 26 |
| Balance on hand, July 25th, 1871..... | 119 60 |
| | <hr/> |
| | \$587 86 |

The Treasurer, for the Committee of Publication, announced that the volume of Transactions for 1869-70, was printed and ready for delivery to members.

Upon motion, Professor T. R. Lounsbury and Professor W. L. Montague were appointed Assistant Secretaries.

The address of welcome to the Association to the hospitalities of New-Haven was given by Lieutenant-Governor Francis Wayland. A response was given in behalf of the Association by the President, Chancellor Crosby, of the University of New-York.

The Association then proceeded to its regular business. The first paper, upon "Inaccuracies in Grote's Narrative of the Retreat of the Ten Thousand," by Professor Fisk P. Brewer, of Chapel Hill, N. C., was read, in the absence of the author, by Professor James Hadley.

Professor Brewer's criticisms were confined to the interval between the time when Xenophon received command and the arrival at Trapezus. He showed, by a minute examination of passages, that many of the details given by Grote are inconsistent with, or at least not warranted by, the statements of Xenophon and Diodorus, the only authorities whom he quotes. Thus, where Xenophon is represented (vol. ix., p. 78, Harper's ed.) as saying to his fellow-lochagi, "The enemy will be upon us at day-break." The expression (p. 79) that Apollonides "protested against it as *insane*" is hardly justified by Xenophon's *ἀναπειθὲν*. P. 80 speaks of *four* commanders as seized by Tissaphernes, instead of *five*. On p. 88, we find "cavalry and bowmen," in place of "bowmen and slingers," and on p. 89, "four thousand horsemen and

darters," where it should be "a thousand horsemen and about four thousand bowmen and slingers." For "darts" and "darters" on the *Persian* side, (pp. 88, 90,) no authority is found. The "galloped" of p. 92 is too strong for Xenophon's *προσελάσας*. That the houses of the Karduchi were "comfortable," (p. 95,) is not proved by *χαλκώμασι παμπόλλοις κατασκευασμένας*. On the same page it is intimated, without warrant, that the Greeks *waited* before taking what was necessary for refreshment. On p. 96, Kleonymos and Basias are spoken of as "two distinguished men" among "several" Greek warriors mortally wounded; yet Xenophon does not say that any others were killed, and these are only described as *καλῶ τε κύραθῶ*. Instead of a repeated refusal by Cheirisophus to obey Xenophon's entreaties, (p. 96,) there was really but a single instance. The *two* marches, (p. 102,) from the residence of Tiribazus to the river Teleboas, should be changed to *five*. For the statement (p. 105) that the reliefs from Cheirisophus were "sent back to bring up exhausted soldiers who had been left behind," there is no evidence. The attendance of the native youths (p. 106) was not confined to the fatigued soldiers. The "nine days' march" on p. 109 should be changed to *twelve*. The statements on p. 112, as to a certain soldier who had been a slave in Athens—that he was exported from home in his boyhood, and that he had escaped from slavery (with the suggestion as to the time and place of this event)—are not sustained by the language of Xenophon.

The second paper, by the Rev. Stephen R. Riggs, missionary to the Dakotas, "Concerning Dakota Beliefs," was read, in the absence of the author, by Hon. J. H. Trumbull.

This paper was not intended to cover the vast field of things of which their faith takes hold, but rather to select such as are most characteristic and such as are important enough to have made an impress on their language.

The Dakota names of the heavenly bodies were first noticed. Their family or generic name is *Wi*. The sun is the day *Wi*, the moon is the night *Wi*, and the stars are the "battle-axes" or "war-clubs" of *Wi*, (*wi-chanhpi*), perhaps because they are regarded as a great war-party, marshaled under the great captain *Wi*. The morning star is the "light-shooting star;" the evening star is the "large star;" the parallelogram of Orion is "the bearer" or "the bier;" and the milky way is "the Spirit Road," along which men's spirits, they say, pass to the great Hereafter. When the moon wanes, it is believed to have been gnawed by mice, and they say, *wi-yashpapi*, "the moon is bitten off." The sun is the real *Wi*; it "appears" in the morning, "goes down" or is "cast into" some place at evening. To it the Dakotas pray, offer sacrifices, and dance the "sun dance." They address it as "grandfather," and the moon as "grandmother."

Thunder is "the Flyer," *Wa-kiy-an*, and is represented as a great bird. Of lightning, "god-manifestation" or the "spirit coming-home," they make no representation. Of the four quarters of the heavens, the east and the west are "the sun rising" and "the sun going-down;" the north and the south are *Waziya* and *Itokaga*, regarded as gods, ever in conflict and each in turn victorious.

Boulders are the "solid gods," "hard *wakan*." These they worship, paint-

ing them red, decorating them with swan's down, and offering sacrifices. The boulder is *toonkan*, "grandfather," by preëminence.

Oonktehi, the great god of the waters, may be regarded as their chief divinity; certainly one of their oldest gods. To him they attribute the making of the world, by bringing up earth-seed from the deep waters. The name *Oonktehi* is not resolvable into its elements, and seems to belong to an early stage of the formation of the language. The name of the *Takooohkanakkan* "god of motion," is of more recent origin. He is the Jupiter of the Dakotas and the object of frequent worship.

Heyoka, the personification of *contrariness*, the grotesque, the anti-natural, is one of the old gods, not much worshiped now. He is the god of fable and romance.

Wakan is an ancient word which represents the *god-worship* of the race. Every object of worship is *wakan*, and is worshiped because it is *wakan*. Its compounds are manifestly of recent date; a gun is a "*wakan* iron," a horse is "*wakan* dog." The idea of the "Great *Wakan*" (*wakan-tanka*) can not be an old one. It is their designation of the white man's God, and they have learned it from the white man. The "*wakan* dance" has been borrowed from other Indians, and is not an old institution with the Dakotas. Mr. Riggs gives some account of this dance, and of the initiation to the secret society by which it is performed, and proceeds to speak of the Dakota belief as to the soul and its future state. *Nagi* means "shade" or "shadow," as well as "soul" or "spirit." Of one who has breathed his last, they say, *nagi iyaya*, "the spirit (or shadow) is gone." They believe in the separate existence of the soul, and in a "house of spirits," *wanagitipi*. Every thing, even the dumb boulder, has a spirit. The world is full of spirits, who cause all disease and death. The conjurer works his cures by expelling or overcoming one spirit by another. To do this is *pikiya*, from a root *piya*, meaning "to make over again," "to renew," "to mend."

Sacrifice is probably an old form of Dakota worship. Mr. Riggs has observed it offered most frequently to the "painted stone," *toonkan*. The offering was sometimes a small dog, killed and painted red. He points out the apparent relation between *woshna* and *wayushna*, "to offer sacrifice," and *yushna*, "to drop," "to let slip," "to miss," "to make a mistake," and between the words for "labor" and "sin."

The observance of *wohduse*, or voluntary abstinence from something "sacred or forbidden"—the *taboo* of the Dakotas—is next mentioned. Then, their belief in omens or presentiments, (*wohdeche*), and in dreams, (*ishamna*), with their "vision-seeking," (*hamdepi*), by fasting, prayer, etc. The relation of what has been seen in a vision (*hamdohdaks*, "declaring the vision") must be given in *wakan* language, a sacred dialect, whose words have a peculiar meaning. In this dialect, "man" is the "two-legged being;" a dog is "the four-legged animal;" a black bear is "the black *wakan*," etc. Their songs are often composed in this *wakan* language.

The next paper was on the "Imperfect Tenses of the Passive Voice in English," by Fitz Edward Hall, Honorary D.C.L. Oxford, of Marlesford, England.

This paper was presented and read by Professor Whitney, who prefaced it

with a brief account of the author; the latter, though an American by birth and education, having spent his life so much abroad as to be less known than he should be to American scholars. He is a native of Troy, N. Y., and a graduate of Harvard, of the class of 1846. Having been shipwrecked on the coast of India, he was led to remain there, and to enter the British service, in which he held successively the positions of professor of Anglo-Saxon, Sanskrit, and Hindustani, inspector of schools for a province, and, after his return to England, librarian, for a time, of the India Office. In Sanskrit and Hindustani he has shown scholarship and done work not surpassed by those of any other living scholar of English birth. He has also always been an industrious and fruitful student of English, modern and ancient; is one of the editors of the Early English Text Society's series of publications; and has now in hand an extended series of chapters on points in the history, grammar, and criticism of our language. It was at his own suggestion, Professor Whitney said, that Dr. Hall had prepared and forwarded a paper for presentation at this meeting of the Association.

The subject discussed is the propriety of such locutions as *is being built*. Dr. Hall begins with quoting expressions of opinion, generally unfavorable and often violently denunciatory, respecting these locutions and their originators, on the part of various recent authorities. He then inquires respecting the time of their appearance. They are not mentioned in Priestley's grammar, (1772,) nor in Brethland's extension of it, (1785;) but Skillern (1803) gives a complete paradigm of verbal conjugation on the plan they involve. They are found used by Southey in 1793, by Coleridge in 1797, and by Lamb, Landor, De Quincey, and others, in passages which the writer quotes and refers to in full. And this sort of phraseology is becoming more and more common; the best English reviews, magazines, and journals are constantly marked by it; and some of the choicest of English writers employ it freely. After *is in building* had been corrupted to *is a-building*, and this had come to be felt as vulgar and abbreviated to *is building*, a just avoidance of ambiguity led, in the latter part of the eighteenth century, to the creation of *is being built*. There were two present participles in use, active and passive, namely, *building* and *being built*, and as an active imperfect or continuous tense had been formed by prefixing *is* to the former, so now likewise a passive imperfect by prefixing the same auxiliary to the latter. The form is not resolvable into *is being* + *built*, as has been strenuously urged by objectors, but into *is* + *being built*. Overlooking this, men like G. P. Marsh and R. G. White have been misled into strangely exaggerated reprobation of the new phraseology. The strictly analogical relation of *is building* and *is being built* is so obvious that it can not have failed to suggest itself to many minds, though it has escaped the notice of the authorities mentioned. The "absurdity" of combining *is* and *being* is wholly imaginary. If *is being built* is wrong because Latin *ens edificatus est* is inadmissible, then *is building* is also wrong, because *edificans est* would be bad Latin. If *be* and *exist* are completely synonymous, then *is existing* is as bad as *is being*. If *is being* involves an absurd repetition, then *sono stato* and *ist gewesen* are also absurd. Mr. Marsh's claim that consistency would demand, equally with *is being built*, its analogues *will be being built* and *would have been being built*, and their like, is not to be allowed; we say, for example, *preparedness*, but not *understoodness*, *designedly*, but not

acknowledgedly, a now too notorious fact, but not a never to be sufficiently execrated monster; practical usage having the right to decide how far it will go in a given direction of expression, where a compromise is to be made between desirable clearness and a felt awkwardness of phrase. To pronounce the locution "unidiomatic" implies a wholly new definition of *idiomatic*, and as to "being opposed to the genius of the language," that is a sounding phrase which has no philological value. The strength of those who decry the modes of speech here in question consists mainly in their talent for calling hard names, and their opposition really proceeds from no higher motive than literary conservatism and dislike of novelty.

The paper closes with a parallel between the new phrase *is being built* and the word *its*, which was new and shocking to the purists not very long ago; and it is made to appear that the latter involves worse violations of sound principle and analogy than the former.

EVENING SESSION.

The annual address was delivered by the President of the Association, Rev. Dr. Howard Crosby, Chancellor of the University of New-York.

After alluding to the progress of the Association in its work, and the favorable prospects under which it enters the third year of its existence, Dr. Crosby spoke somewhat as follows:

"Linguistics or philology may be considered either as a science or as a philosophy. Under the first aspect we may gain some idea of its extent by thinking of the vast number of languages which are to be investigated, not only those now spoken, but also many of which we have but the fossils. It touches here psychology and history, and enables us to know the unseen. A linguistic criticism is the source of all true commentary. By philology we can reconstruct prehistoric man, and read the history of times before the Olympiads and Nabonassar. Languages are never lost. By this science, the original unity of the human race is already nearly proved. The philologist is also in part a physiologist and an anatomist, because he must study the organs of speech. He seems to be the centre of all science; he is the universal interpreter; therefore he can not be contracted or illiberal. He receives from all and bestows upon all. Again, philology as a philosophy speculates on the value of language to man, and its relation to his mind. These speculations are not to be confounded with the facts of the science. Man has worked out language for himself, according to his needs. Language has wrought its marvels; its triumphs are the triumphs of our race. But itself records its weakness by its constant use of negatives. Every profound thinker has found himself fettered by language. Hence disputes and misunderstandings have arisen. Also in poetry, in devotion, in music, language is shown to be imperfect; it can never be made sufficient for the whole realm of thought. Man, in his development, must have a nobler and fuller language than he has to-day. This may be in a new creation with spiritual bodies."

The President, in conclusion, referred to the field of American languages as especially open to the researches of the Association, suggesting its division into sections and the organization of local branches.

After the close of the address of the President, Professor Comfort read a paper upon "The Order of Precedence in Study of the Ancient and the Modern Languages."

After stating the present condition of the discussion with reference to the position of language in education, Professor Comfort proposed the following reorganization of our system of linguistic education :

The study of one living language should be commenced by pupils when ten or twelve years of age. As much time, or more, should be given to the study of this modern language, as is now given to Latin in the academy or preparatory school. The method will at first be conversational and practical. Rigid grammatical instruction will be given later in proportion to the growth and progress of the student.

Two years before the close of the academic course the study of a second living language will be commenced. Upon entering college, the proficiency of the pupil in these two languages will be nearly equal. These two modern languages will take the place of Latin and Greek in the studies which are required for entrance to college.

During the whole of the freshman year, these two languages will be studied according to the most rigid philological method. During the remainder of the college course, at least one study at a time in other branches of science will be pursued from text-books in one or the other of these modern languages.

The study of Latin will then be commenced in the sophomore, and that of Greek in the junior year. Both of these ancient classical languages will be pursued about two years.

It will then remain for philological faculties in post-collegiate universities, or for professional schools, like the school of philology which is to be opened in connection with Yale College, to give that high training and culture in all branches of linguistic science, which is in general so lacking in America. Associations of linguists, like the American Oriental Society and the American Philological Association, have also a work to perform, in the promotion of linguistic science in America, which also is beyond the province of any school of instruction.

It is only through the influence of the (post-collegiate) universities, and of the various philological societies in Germany, that philology has, like the other sciences, attained such a high stage of development in that country.

Professor Comfort then gave at length the arguments in favor of this plan, claiming that it contains the natural order and method of the study of language, and that it offers great advantages over the present system, or conflicting systems, to all classes of students: to those who shall finish only the academic course; to those who complete the collegiate course; to those who, after leaving college, shall study in professional or technical schools; and to those who shall become professional linguists.

The objections that are urged to this plan were passed in review. A very respectable minority among the best philologists and educators in Europe, and quite a number in America, already favor this change. A number of the features in the plan proposed are adopted, and with eminent success, in some of the best colleges and other schools in Europe and America.

MORNING SESSION, WEDNESDAY, JULY 26, 1871.

The first paper of the morning was on "English Vowel Quantity in the Thirteenth Century, and in the Nineteenth," by Professor James Hadley, of Yale College, New-Haven, Ct.

Professor Hadley remarked that the modern Greek and the Romance languages have lost the systems of vowel quantity which belonged to the ancient Greek and Latin; and raised the question whether the same is true of English as compared with Anglo-Saxon. It is admitted that in English we have nearly lost the feeling of length by position, (where a short vowel stands before two or more consonants;) if *flat* and *fight* seem each longer than *fit*, we do not recognize *flat* as having to *fight* any definite relation of quantity. But as to vowel sounds, it can not reasonably be doubted that those in *file, foul, feel, fool, fail, foal, fall*, occupy more time in average enunciation than those in *fill, full, fell, doll, dally, dull*.

If, then, the present English has long vowels in some words, and short vowels in others, how far do these quantities agree with those which belonged to the same words in earlier periods of the language? In deciding this question, valuable help is to be derived from the *Ormulum*, a series of metrical homilies on the daily lessons of the church service, composed by the monk Orm in the thirteenth century. In the only known manuscript, written perhaps by the author's own hand, a consonant is regularly doubled when it follows a short vowel: thus, *it, if, hundred*, are written, *itt, yiff, hundredd*. We can see then what vowels were sounded short, and what long, by the writer of this work; and by comparing them with present pronunciation, we can make out the nature and extent of the changes which have taken place since that time.

Such a comparison shows that, in the great majority of cases, the syllables which then had long or short vowels, have the same quantity now; and that the exceptional cases, where the quantity has changed, can mostly be referred to certain recognizable euphonic influences and tendencies. These euphonic causes of alteration in vowel quantity, it was the main object of the paper to set forth in their nature and working.

Thus, vowels have become long, since the thirteenth century, through the suppression of a following consonant, as in *alms, buy, day, brought*, etc.; in *light, four*, etc., the original long quantity has been restored in this way. Vowels have been made long also by the effect of a weak *r* before a consonant or at the end of a word, as in *for, dare, church*. So, before the liquid *l*, as in *all*; and especially before *ld*, as in *child*; and before the similar groups *mb* and *nd*, as in *climb, kind*. These changes before liquids had begun in the time of the *Ormulum*, which in some respects carries them further than the English; it often lengthens a short vowel before *ng*, as in *king, tunge*, (tongue.) Before other combinations of consonants, a long vowel has been shortened, and was so in many cases in the *Ormulum*: thus in *sleeppe*, (slept,) *softe*, (soft.)

But the most frequent change in English quantities has been caused by the tendency to lengthen an accented short vowel in a penultimate syllable, when separated by only one consonant from the vowel of the final syllable. This

tendency, which has produced the long sound in *evil, chosen, name, etc.*, is carried much further in the Ormulum, where *heavy, risen, love, etc.*, have long vowels. It has also prevailed very extensively in the German.

Other euphonic tendencies to change of quantity were pointed out, which, however, have a more limited range of application. The paper closed with some remarks on suffixes, such as *-dom, -hood, -ly*, which were long in the Ormulum, but have become short in modern English.

Upon motion of Dr. A. B. Hyde, the Executive Committee were requested to cause a catalogue of the members present to be printed for distribution.

The next paper was entitled, "Notes on A. J. Ellis's Early English Pronunciation," by Mr. C. A. Bristed, of Lenox, Mass.

This book awakens a pardonable pride in us, when we consider that it is published by the Chaucer Society, of which our countryman, Professor Child, is so active a member. The work is a monument of industry, intelligence, and learning; nevertheless, we must take exception to some things in it. The palæotype is too cumbersome, and makes hypercritical distinctions. The notation of several sounds, both English and foreign, is open to objection. Mr. Ellis has committed the error of transposing the two Italian *O's*, (*chiuso* and *aperto*), also that of making diphthongs in Italian.

An examination of the Spanish D leads to the conclusion that the Spanish language is undergoing an orthoepic degradation, by the syncope and apocope, not only of D, but of S, and even of R; and is passing through a stage similar to that which the French has already undergone.

With the majority of the old English sounds, as fixed by Mr. Ellis, no fault is to be found. The time, however, when long A received its present sound, most critics would put further back than the author has done. Mr. Paine's views on the diphthong A I (both in old English and old French) are, on the whole, more plausible than those of Mr. Ellis. What was "the fifth sound of A, *ai* in *fair*," given by the eighteenth century lexicographers? Was it the short E of *ferry* (= French *é*), or the indistinct short U? As to the French sound which Mr. Ellis assigns to the old-English U, we may well doubt if it was ever naturalized in English, even among the French-speaking population. In Chaucer's time there was already a *French French*, and an *English French*; his prioress spoke the latter.

Three subordinate points in the work specially attract our attention. 1st. The word *one*. Possibly, in passing from *own* to *wun*, it had an intermediate stage of *un*. The pun in *Love's Labor Lost*, read with this pronunciation, becomes modern rustic English. 2d. The (present) prosthesis and aphæresis of H in English conversation. Mr. Ellis says truly that the former denotes a lower stage of society than the latter. Might he not have added that in the manufacturing districts the prosthesis extends to more respectable classes than in the metropolis and southern counties? It is a common popular error in America to attribute the prosthesis and aphæresis to the *same* classes and persons. Few Englishmen aspirate the H of initial WH; all Irishmen, Scotchmen, and Americans do. 3d. As to the diphthong O I; an examination of it in English and French, compared with Greek *oi* and Latin O E, suggests

a probability that in all four languages the first element had originally a digammatic force, which was afterward dropped in three of them.

In regard to the reformation of our orthography, while Mr. Ellis states very fairly and forcibly the defects and inconveniences of our present mode, he makes an admission fatal to the proposed change. "There can be no absolute standard of pronunciation;" therefore, there can be no fixed standard of phonetic orthography.

The next paper was upon "Anglo-Saxon and Early English Pronunciation," by Professor F. A. March, of La Fayette College, Easton, Pa.

The alliteration of Anglo-Saxon poetry gives a good indication as to what consonants were pronounced alike, and in what order the consonants of any combination were pronounced. The early English alliterative verses enable us to date approximately the changes of sound. An account was given of the alliteration of *c, sc, g, h, j, th*, and the combinations *hl, hn, hr, hso, wl, wr*.

Certain laws of phonetic change sometimes give a clue to sounds where alliteration fails; *th* as in *thin*, is not distinguished in the alliteration from *th* in *thine*; but surds gradually weaken to sonants, sonants do not change to surds. Hence arises a presumption that words pronounced with surds in English had them in Anglo-Saxon.

Again, a surd and sonant do not combine in the same syllable. Hence, the *-th* of the syncopated forms of verbs ending in a surd must have been surd: *thinedh* (thinketh) is incredible.

The Anglo-Saxons distinguish shades of vowel sounds which the later Norman English neglect. Words in *a*, for example, may exchange it for *ae, ea, e* and *o*. The traditional pronunciation of the descendants of those who used these weakenings of *a*, has probably never been pure *a* in those words which are still pronounced weak.

The statements of grammarians who describe any vowel as having a single uniform sound in early English are hasty generalizations.

AFTERNOON SESSION.

The Association met at three P.M., the Vice-President, Professor W. W. Goodwin, of Harvard University, in the chair.

The first paper read was on "The so-called Attic Second Declension," by Professor F. D. Allen, of the University of East-Tennessee, Knoxville, Tenn.

The close connection of the nouns in *ωc, ω* with those in *οc, οv* was recognized by the ancient grammarians. No satisfactory exposition of the origin of this form of declension is found in modern grammatical works. The words belonging to it have *ω* at the end of the stem in place of the *ο* of the common form. This *ω* is, however, in no case original, that is, descended from a pre-Grecian *δ*. Examination of the individual words, with the aid of collateral forms and in the light of modern etymology, shows that the *ω* stems have arisen: . . .

1. From stems in *ao* (older *afo* or *ajo*) by interchange of quantity, as in 'Ατρείδew from 'Ατρείδαο: thus *λεύς*, *νεός*, *άνώγειων*, from *λαός*, (*αφο*), *ναός*, (*ναφο*), *άνωγαον*, (*άνω-γαφjon*.) Kühner's view, that *uo* was first contracted into *ω*, and an *e* arbitrarily prefixed, is singularly perverse.

2. From stems in *ao* (older *afo*, *ajo* or *aso*) by contraction: *δίμνω*, *δείνω*, *άγήρω*, from *δίμνω*, *δείνω*, (*-ναφο*), *άγήρω*, (*άγηρω-ο*).

3. From stems in *ωo* (older *ofo*) by shifting of quantity: *Κώς*, *γαλώω*, from *Κωός*, (*κοφο*=*cauus*), *γάλωω*, (*γαλοφο*).

4. From the same by contraction: *Κώς*, *γάλω*, *ζός*, (*ζοφο*), *πάτω*, (*πατροφο* = *πατρυμ*, cf. *suus*, from old Lat. *sonos*), *άλω*, (*φαλοφο*), *λαγώς* from *λαγωός*.

The remaining words, to be similarly explained, although some of them can not be with such certainty analyzed, are: 'Αθω or 'Αθώω, ('Αθοφο), *Μίνω*, (*Μινοφο*), *περίνω*, (*περι-ναφο*), *ήδύκρω*, (*-κρατjο*), *κραταίλω*, (*-λαφο*), *έω*, (*έφο*), *άξιοχρω*, *Τυνδύρω*, *Βρυύρω*, 'Αμφύρω, *πλέω*, (*-λετjο*), *ίλω*, from *ίλω*, *σώς* from *σώω*, *κάλω*, *Πετέω*, *Κέω*, and several others.

The inflection explains itself without difficulty. The accent of the nominative remains in all the cases.

But *άλω*, *πάτω*, *Μίνω* may follow the third declension, and conversely *ήρω* and *μήτω*, commonly of the third declension, occur in forms of the Attic second declension. The line is nowhere to be strictly drawn; all these words are one in formation. The stem ends in *ofo* or *of* interchangeably. That the fuller form is the original one, the etymology of *πάτω* shows. The second declension form is therefore the earlier in all these words. The other words declined like *ήρω*, namely *Τρώ*, *δμώ*, *θώ* have doubtless a like origin, (the accent of gen. pl. *Τρώων*, etc., may be thus explained,) and this whole class are seen to be, as it were, estrays from the Attic second declension. The acc. sg. in *ω*, so common in the Att. 2d decl., 'Αθω, Κω, etc., corresponding as it does to *ήρω*, (contr. from *ήρωα*), is to be regarded as a third declension form, referable to the heteroclisis just explained.

The word *έω*, Epic *ήώ*, Doric *άφώ*, is distinct from these. The Epic and Doric forms come from an *s*-stem *άσω*, (Sanskrit *ushas*.) The Attic *έω* (2d decl.) is generally thought to be due to a mere blunder of the language, but I am inclined to recognize a genuine vowel-stem *άσω*, to which the parallel form exists in Sanskrit *usha*.

This form of declension is not entirely confined to Attic, but is more a favorite there than in other dialects, particularly in the less elevated style or diction.

The third paper was on "A Mode of Counting, said to have been used by the Wawenoc Indians of Maine," by Hon. J. H. Trumbull, of Hartford, Ct.

The late Dr. J. G. Kohl, of Bremen, author of a "History of the Discovery of Maine," published by the Maine Historical Society in 1869, mentions, as a possible "reminiscence of the Northmen among the Indians of New-England," the fact that "among the Wawenoc Indians near Pemaquid, certain numerals have been handed down by tradition, bearing a resemblance to the Icelandic, which may have been derived by them in their barter with the northern strangers" who visited New-England in the eleventh century.

These Wawenoc numerals were first brought to notice by R. K. Sewall,

Esq., of Wiscasset, in a communication to the Maine Historical Society, January, 1868. They were printed in the *Historical Magazine* for March, 1868, with a note from the Rev. Dr. Ballard, of Brunswick, Me., (since deceased,) who asked "Whence did they come? Did Madoc bring them here in his semi-true, semi-fabulous voyage? or did Northmen leave them on the coast?"

The Wawenocs were a tribe or band of the Abnakis. They became extinct about 1750. Tradition affirms that they used these numerals, in their intercourse with the whites, early in the eighteenth century. Not one of the numerals, however, belongs to the Abnaki or to any other aboriginal language of New-England.

The writer was convinced they were not *Icelandic*. If, as he was inclined to believe, they were of Welsh origin, he saw no reason for looking back to Madoc, or the twelfth century, for their introduction. After searching unsuccessfully all the English and Scottish provincial glossaries, he has lately come upon their track. First, he ascertained that the knowledge of these numerals was not confined to the Wawenocs or to Maine. Two friends in Hartford had learned "the Indian way of counting"—manifestly of the same origin as the Wawenoc numerals—nearly fifty years ago, from their father, who resided in Massachusetts, and afterward in Windsor, Vt., (but never in Maine.) A lady in Western New-York had been taught the same way of counting by her mother, who used to live near the Narraganset Indians in Rhode Island. So, if the numerals were of Norse origin, the Northmen must have taken great pains to disseminate knowledge of their numerical system among the "Skrellings" of all Vinland, and the Skrellings must have had excellent memories, to preserve the strange sounds with so little corruption for seven or eight hundred years. A few months ago, light came from an unsuspected quarter. Mr. Alexander J. Ellis, of London, in the Transactions of the Philological Society, 1870, gave some specimens of English dialects written in "Glossic." Among these was a method of *scoring* sheep, used in the dales of Yorkshire. The Yorkshire score was surprisingly like the Wawenoc and Narraganset numerals! That they came from the same source, there could be no question. In answer to a letter of inquiry, Mr. Ellis most obligingly communicated all the information he had been able to obtain respecting this mode of counting, and promises further investigation. The score was printed for the first time, probably, in Mr. Ellis's paper on Palæotype, in 1867. He obtained it from a lady who learned it fifty years ago in Yorkshire. He has since received it, with some variants, from correspondents in Leeds, and elsewhere, and ascertained that it has been used within the memory of persons now living, in counting sheep. One correspondent thinks it was "prevalent in the East-Riding of Yorkshire, and right through to Thirsk."

Mr. Ellis agrees with the writer that the score is, *partly* at least, of Welsh origin. Whether it was brought into New-England from Wales or from Yorkshire is uncertain. There were Yorkshiremen in almost every township before the middle of the seventeenth century, and a good many Welshmen have visited Maine since the time of Madoc. There is clearly no reason for assigning its introduction to a high antiquity.

These scores are to be regarded rather as *tally-marks* or *counters* than as true cardinal or ordinal numbers. They were employed in counting off by

fives, tens or twenties. Traces of some such systems may be found in many school-boy rhymes for "counting out."

The fourth paper was on "The Newly Discovered Relationship of the Tuteloes to the Dakotan Stock," by Rev. Joseph Anderson, of Waterbury, Ct.

Mr. Anderson's paper consisted largely of extracts from letters of the well-known philologist, Horatio Hale, Esq., now residing at Clinton, in the Province of Ontario, Canada, giving an account of a visit to Nikungha, the last survivor of the tribe of the Tuteloes, and reporting a discovery made at that time. This venerable Indian, who has died since Mr. Hale's visit, at the advanced age of a hundred and six years, or thereabout, resided on the Reserve of the Six Nations, near Brantford. The Tuteloes, of whom he was the last representative of pure blood, had been looked upon by ethnologists as an Iroquois tribe, chiefly because holding a place in the Iroquois confederacy. But the list of words obtained by Mr. Hale from Nikungha showed conclusively that the Tutelo language belonged not to the Iroquois but to the Dakotan stock. Mr. Hale's list embraced over two hundred words: of these there are none which appear to be related to the Iroquois languages, while a considerable number of them bear a marked resemblance to the Dakota or the closely allied Omaha.

As introductory to the extracts from Mr. Hale's letters, Mr. Anderson gave a rapid sketch of the fortunes of the Tuteloes, from the time of the earliest records, when they were situated in southern Virginia and northern North-Carolina, until their removal, as one of the nations of the Iroquois confederacy, to the Reserve in Canada. He presented, next, a comparative vocabulary of twenty-five Tutelo, Dakota, and Nottoway-Iroquois words, in the preparation of which he had been assisted by Rev. Stephen R. Riggs, author of the "Dakota Grammar and Dictionary" published by the Smithsonian Institution; and considered in conclusion the bearings of Mr. Hale's discovery upon the whole subject of Indian migrations. One of the questions suggested by this newly-discovered relationship is, how to account for the separation of this single, isolated tribe from the extensive group of affiliated nations now situated to the west of the Mississippi River, and its establishment, so far away from the others, on the Meherrin River in Virginia. This question was discussed with special reference, on the one hand, to Mr. Lewis H. Morgan's hypothesis, (*North American Review*, January, 1870, p. 50.) that the course of the Dakotan migration was from the Rocky Mountains eastward, by the way of the Platte River and the Black Hills of Nebraska, to the head-waters of the Mississippi; and, on the other hand, to the opinion, which has found favor with some of our American ethnologists, that while other Indian stocks may have come from the north-west, and moved continuously eastward, the Dakotan stock came from the east and has been moving westward. The opinion which seems to harmonize the ascertained facts most readily, although leaving undecided the line of movement of the Dakotan migration, is that of Mr. Hale, that "in former times the whole of what is now the central portion of the United States, from the Mississippi nearly to the Atlantic, was occupied by Dakotan tribes, who have been cut up and gradually exterminated by the intrusive and more energetic Algonkians and Iroquois."

Of the twenty-five words in the comparative vocabulary embodied in Mr. Anderson's paper, eleven are evidently of the Dakotan stock, and five others probably so. In view of the great divergence among the confessedly Dakotan dialects, and the strong tendency to dialectic variation in all the American languages, the number of words which are the same or nearly the same in the two lists is surprisingly large. The following may serve as examples: "Two" in Tutelo is *nōmp*; in Dakota, *nōnpa*. In Nottoway, on the other hand, it is *dekanee*. "Four" is *tōp* in Tutelo; in Dakota, *tōpa*; but in Nottoway, *hentag*. "Seven" is *sagoin* in Tutelo, in Dakota, *shakowing*. "Nine" is *sang* in Tutelo; in Omaha, *shanka*. The Tutelo for "father" is *tūt*; the Omaha, *ndade*; the Tutelo for "fire," *pēti*; the Dakota, *pēta*; the Tutelo for "water," *māni*; the Dakota, *mini*. Some of the less obvious resemblances are equally suggestive to the comparative philologist.

In the evening there was no session, as the members of the Association attended a brilliant reception which was given to them in the galleries of the Yale School of Art.

MORNING SESSION, THURSDAY, JULY 27.

The Association met at nine A.M., the President, Dr. Crosby, in the chair.

The following persons were announced as having been elected members of the Association in accordance with the provisions of the constitution:

Professor A. M. Black, Monmouth College, Monmouth, Ill.; Rev. Charles E. Brandt, Farmington, Ct.; Rev. Dr. Horatio Q. Butterfield, New-York; Mr. H. L. Boltwood, Princeton, Ill.; Professor Franklin Carter, Williams-College, Williamstown, Mass.; President William C. Cattell, La Fayette College, Easton, Pa.; Professor Francis J. Child, Harvard University, Cambridge, Mass.; Professor Edward B. Cole, Yale College, New-Haven, Ct.; Professor J. C. Daniels, Olivet College, Olivet, Mich.; Professor George E. Day, Yale College, New-Haven, Ct.; Miss Mary C. Dickinson, Northampton, Mass.; Professor John B. Duncan, Washington College, Topeka, Kansas; Professor Evan W. Evans, Cornell University, Ithaca, N. Y.; Professor William C. Fowler, Durham, Ct.; Mr. A. W. Fowler, New-York; Professor J. N. Fradenburg, Fredonia, N. Y.; Professor Daniel C. Gilman, Sheffield Scientific Institute, New Haven, Ct.; Professor Joshua B. Garritt, Hanover College, Hanover, Ind.; Professor William H. Green, Princeton Theological Seminary, Princeton, N. J.; Professor Ephraim W. Gurney, Harvard University, Cambridge, Mass.; Mr. Horatio E. Hale, Clinton, Ontario, Canada; Professor James H. Hanson, Waterville, Me.; Professor Samuel Hart, Trinity College, Hartford, Ct.; Professor J. H. Jewett, Olivet College, Olivet, Mich.; Miss Rebecca Lowrey, New-York; Dr. Washington Matthews, Fort Buford, Dakota Territory; Professor G. C. Merrill, Washington College, Topeka, Kansas; Professor John L. Mills, Marietta College, Marietta, Ohio; Professor Edward D. Morris, Lane Theological Seminary, Cincinnati, Ohio; Professor William M. Nevin, Lancaster, Pa.; Mr. A. Parish, New-Haven, Ct.; Professor Lewis R. Packard, Yale College, New-Haven, Ct.; Mr. Tracy Peck, Bristol, Ct.; Professor D. L. Peck, University of Alabama, Tuscaloosa, Ala.; Rev. Dr. John Pike, Rowley, Mass.; President Noah Porter, Yale College, New-Haven, Ct.; Rev. Stephen R. Riggs, Lake Traverse, Minn.; Professor Timothy H. Roberts, Whitney's Point, N. Y.; Professor William C. Russell, Cornell University

Ithaca, N. Y. ; Mr. Eugene Schuyler, U. S. Legation, St. Petersburg, Russia ; Mr. Wesley Sawyer, Boston, Mass. ; Professor Charles A. Schlegel, Female Normal College, New-York ; Professor John S. Sewall, Bowdoin College, Brunswick, Me. ; Professor T. K. Smith, Colby University, Waterville, Me. ; Professor Frank Snow, Kansas State University, Lawrence, Kansas ; Professor Thomas A. Thacher, Yale College, New-Haven, Ct. ; Dr. Joseph Thomas, Philadelphia ; Professor Crawford H. Toy, Southern Baptist Theological Seminary, Greenville, S. C. ; Professor Henry M. Tyler, Knox College, Galesburg, Ill. ; President Milton Valentine, Pennsylvania College, Gettysburg, Pa. ; Mr. M. Warren, Providence, R. I. ; Professor Albert S. Wheeler, Florida, N. J. ; Professor Alonzo Williams, Brown University, Providence, R. I.

The first paper of the morning was on "Strictures on the Views of August Schleicher respecting the Nature of Language and other related subjects," by Professor W. D. Whitney, of Yale College, New-Haven, Ct.

Professor Whitney said that he had been led to prepare this paper by having fallen in with an English version of one of the essays to which it related, prefaced by an extravagant and indiscriminating laudation of its merits. When false views were presented and urged under the recommendation of highly considered names, it was necessary to take pains to refute them. He disclaimed any lack of respect for Schleicher, or of grateful appreciation of his many and great services to comparative philology, in criticising his linguistic philosophy.

The first essay spoken of was published in 1863, and bears the title "The Darwinian Theory and the Science of Language." It is an attempt to prove Darwinism true by the evidence of language ; because languages, like animals or plants, are natural organisms, which grow according to fixed laws, and are not determinable by men's will. This view of language the writer endeavored to prove false. He went through with all the particular modes in which a language comes to differ from another, its predecessor and ancestor, and showed that in each of them human agency is concerned, and no other agency beside ; and that what was true of every part was, of course, true of the whole, their sum ; and that this sum, and nothing else, constituted the so-called life of language. Of course, this being shown, the attempted proof of Darwinism falls away of itself.

The second essay was published a year later, and was a defense of its predecessor. It is entitled "Respecting the Importance of Language for the Natural History of Man." In professing to support the dogma formerly laid down—that a language is a natural organism—it really changes ground entirely, claiming that a language is the necessary result and expression of a specialty of physical organization in the person speaking it. This new doctrine, it was shown, is equally erroneous with the other. It entirely ignores the fact that every child *learns* its "native language," and might as easily have learned any other. Schleicher's attempts, partly to deny, partly to explain away, the fact that one is able to learn other languages, in addition to that which he has learned first, or his "native language," are also a lamentable failure. The subsidiary dogmas—that language is the sole exclusive characteristic of man ; that it is the sole reliable test of race ; that there must necessarily have been many primitive languages, and, therefore, many original and independent races of men ; that linguistic science leads us to the con-

clusion that men descended from the anthropoid apes ; that language-making and historical activity can not coexist, but characterize successive periods in the life of a race ; and so on—were one after another taken up, and their refutation attempted. It was claimed by the writer that the two essays were, in their foundation and whole superstructure unsound and illogical to a degree rarely equaled.

The second paper was on "The Origin of Language," by Professor F. A. March, of La Fayette College, Easton, Pa.

The roots of speech are from two sources, man's natural language, and the sounds made by external objects. An examination of parts of the Bible, Homer, Nala, The Hitopades's, Beowulf, Kalewala, and Hottentot legends was reported as affording evidence to prove that the sounds of external objects are not what men most think of and name, and so going to show that imitation of such sounds did not furnish any considerable part of the fundamental sounds of language.

The facts are such as we might anticipate from psychological and physiological considerations.

Instinctive speech consists of utterances and vocal gestures to express the most vital needs of animal man, to invite, repel, warn, woo ; to utter joy, pain, surprise, love, hate, weariness, and the like. These are what he would talk, about first and most ; then would come objects which affect these feelings and wants, named as so affecting them.

Again, the life of a word is found in a permanent relation in a living man between certain states of his mind and certain nervous and muscular habit of his vocal organs ; a relation often hard to establish. In natural language it is established by instinct, and such sounds may be imitated by the slightest assent of the will. But the imitation of the sounds of external objects demands energetic effort of the imagination as well as of the muscular sense and of other powers, and it is to be classed in its beginnings rather with pantomime than speech proper, and is likely to be one of the rarest exercises of the mimetic power.

The latest school of science inclines to give the first man, as distinguished from the "ape-like progenitor," a large accumulation of inherited sound-signs. They therein agree, as to substance of linguistic fact, with the old belief that man was created with the divine endowment of language. There is no *caltus* in man's history to be called an origin of language ; but the present languages are proper growths from the natural language of the first free agents. The articulations seem to be distributed among the signs partly by the law of the least effort, the easiest going to the most used roots. Most objects are named at first as they affect man, the denotation being eked out by gesture, and the selection of objects to be named being directed by the eye ; but afterward a number of complex names are not built from roots, but made by whim as children make jargon names, or by onomatopoeia ; and a few of these are incorporated into language. It would seem possible to accumulate data for determining with fair probability the extent of the original speech, mainly by the scientific study of the speeches of savages, and the vocal sounds of infants, deaf-mutes, idiots, and the lower animals.

The third paper was upon "An Old Latin Text-Book," by Colonel T. W. Higginson, of Newport, R. I.

The writer desired to present the study of languages from the literary and artistic, as others had presented it from the scientific stand-point. Beginning with a sketch of the delightful childish associations which, in his case, surround a certain old book, (Leverett's *New Latin Tutor*,) he passed to a general assertion of the value of classical study to a boy as impressing him early with a sense of the beauty of words. Beneath all the excessive attention paid to the classics in our colleges there was this merit, that the sense of beauty, as distinct from mere science, had thereby been kept alive. The boy, he maintained, was naturally classical in taste, rather than romantic; the growing youth loved German literature, but the boy preferred the more definite outlines of the classics: as Emerson said, "Every healthy boy is a Greek." The current scientific tendency was to deprive English style of its beauty, and make it merely frank, manly, and direct; but the sense of art must be kept alive by the study of pure literature, and especially the models remaining to us from the Latin and Greek. [The entire paper has since been published in the volume entitled *Atlantic Essays*, by this author.]

The fourth paper was upon "Sign-Language as indicating the Law of Vocal and Written Language," by President G. W. Samson, of Columbian College, Washington, D. C.

Sign-language, though specially the means of intercommunication between deaf-mutes, is the method to which children, and rude tribes with but the vocabulary of a child, resort to make their wants and sentiments known. In its elaborated form, seen in all the characters used in early written communication, it is, and must be, composed of three elements, the mimic, the tropic, and the phonetic. The communications of uneducated mutes, limited to material wants, are chiefly mimic, being a mere pointing to an object, as bread desired, and to the organ, as the mouth, which feels the want. This element is also a prolific fount in the elaborated modes of communication of instructed mutes; as it is in the kindred address to the eye in all hieroglyphic and primitive alphabetic signs. The second element, the tropic, provides for the expression of sentiment; by which mental convictions and emotions, as distinct from bodily wants and material operations, are communicated. The third, or phonetic element, is the only possible means provided by the language of signs, whether those signs be the motions of the mutes or the characters drawn by the pen, to enable mutes to communicate proper as distinct from common names.

In the merely elementary education heretofore given to mutes, these three elements of sign-language have been found adequate after the generations of inventive skill employed to enlarge their number. It became a serious question with the first deaf-mute college, whether any power of invention would prove adequate to the task of multiplying signs which could communicate every form of conception and sentiment essential to the comprehension of the several departments of mathematical and metaphysical investigation required in the study of natural science, of mental, moral, and æsthetic philosophy. This difficulty has led to the effort to train mutes to learn by the

eye to copy vocal utterance ; and this attempt, as well as the enlarging of the field of sign-language, throws light upon the origin and growth of language.

The effort to train mutes to vocal utterance by mere observation of the play of the vocal organs in others, calls attention to the facts that the vowels require but a very few, ten or twelve only, fixed positions of the vocal organs ; while the consonants, only from twenty to twenty-five in number, are produced by movements observed in four organs, the lips, teeth, tongue, and larynx. All these fixed positions and movements can be carefully noted by watching with the eye and by placing the hand on the throat. The force of the utterance necessary to make these positions and movements convey vocal sounds to those who hear, is learned by holding the hand of the mute before the mouth of the teacher. The elements of vocalization thus become so simplified and practically comprehended by the mute, that in due time he can follow the speaker and distinctly respond, as sure and confident in the use of his natural organs as the trained pianist is of the utterance that will come from touching his artificial keys.

In the advance of invention in sign-language, it is found, as might be anticipated, that only simple ideas, or roots, can at first be formed ; that conceptions of time, mode, quality, etc., enumerated in the categories of Aristotle and of Kant, must be conveyed in separate signs ; while time permits the shortening, the combining, and finally the elaboration of grammatical prefixes and affixes to root-signs, so that case, mode, and tense assume the character found in the most polished tongues.

Thus in a new language forming in aggeration, the origin of language as an invention, and its growth to maturity, may be scanned.

Upon motion, the President appointed Professor W. S. Tyler, Professor H. N. Day, and Rev. J. Anderson, a committee to select the place for the next annual meeting.

Upon motion, the president appointed Rev. Dr. Hyde, Professor S. S. Haldeman, and Rev. C. H. Brigham a committee to nominate officers for the ensuing year.

The president announced that the members of the Association were invited by the president of Yale College to visit the different buildings and cabinets of the college during the intermission between the morning and afternoon sessions.

AFTERNOON SESSION.

Dr. J. Thomas, of Philadelphia, and Dr. N. W. Benedict, of Rochester, read papers upon the "Pronunciation of the Latin and Greek Languages." The reading of these papers was followed by a long discussion, but as the committee on pronunciation of the ancient classical languages, which was appointed last year, and to which the whole subject was referred, had made no further report, no additional action was taken by the Association.

EVENING SESSION.

The first paper was on "The Celtic Elements in French," by Professor A. H. Mixer, of Rochester University, N. Y.

Buffon said many years ago, "Le style, c'est l'homme." The linguistic science more recently has added with emphasis, The language; it is the nation. Every people, it is now claimed, may be analyzed by its speech. Language furnishes to civil history its background. It takes up the thread where history began, and traces it back to the beginning of the nation—the infancy of the race. It thus solves the most difficult problems of ethnology; those pertaining to the beginnings of our primitive races. But more than this, the speech furnishes much of the very minutia of subsequent history, and all the more important changes and phases of the progressive national life. Hence the testimony of language and that of history must agree. Where these now seem discrepant, we must suppose the disagreement but apparent, as the future investigations may prove.

This article proposes to examine the linguistic testimony as the nationality of the French. Is the Frenchman essentially Celtic or Roman? Every student of the French language and people finds from the outset of his work this discrepancy, that the language appears more completely Roman than the people does, or than the facts of history seem to justify. Are we mistaken in the facts of language or those of history? What are the historical probabilities?

The French nation is the issue of three successive waves of migration. The Roman invasion, where history begins, found the country occupied by the Celts. These form the basis of all future national and linguistic growth. The picture of the ancient Celt, as drawn by Roman writers, strikingly corresponds in every feature with that of the Frenchman of to-day: "In order to understand the history of the French nation," says Heeren, "it is necessary to consider it the issue of the Celtic race. It is thus only that we can explain this character which, in spite of the various intermixtures to which the Celtic population has been subjected, remains even to-day in the French such as it is delineated in Cæsar." "The Celts were not barbarians, but true heralds of civilization wherever they settled; the equals of Saxons and Romans and Greeks, whether in physical beauty or intellectual vigor."

With such testimony to the magnitude and character of this ancient people, can we doubt the necessarily powerful influence it exerted upon any nation with which it combined? Were the millions of Gauls absorbed and lost? Was there not here, as in all such cases, a *compromise*, and will not the language, when properly analyzed, show this?

All possible influence of the Celt in the formation of the French is included in contributions to the vocabulary, and changes effected in the other elements, chiefly the Latin. The contributions to the vocabulary were very few, for reasons readily apparent; but the changes wrought in the Latin elements were numerous and great, including both changes in words and changes in syntax or the fundamental structure of the tongue. Perhaps the most striking feature in the French is, that nearly all the words appear here orthographically and phonetically shorter than in the language from which they

are derived. The phonetic decay is immense. Is not this remarkable feature, which even Schleicher thinks is due to some strong local influence, to be credited in a high degree to the Celt, whose hasty and impetuous temperament would naturally tend to bring about just this result? It is a significant fact that all the simple sounds in French are found in Neo-Celtic Bretonne dialect, and also all those of the Bretonne with the single exception of the guttural *ch* are in the French. Several of these sounds were unknown to the Latin. The nasal sound, the most marked peculiarity of the French pronunciation, appears due to the Celt. Indeed, so numerous and great have been the changes from this source as to lead us to conclude that in the most characteristic features of her phonetic system the French language is not of Latin, but of Celtic birth.

The changes in the syntax have been equally numerous and radical. The fundamental law of the Latin was synthesis and dependence; that of the French, analysis and independence. The Celt has broken the proud structure of the Roman into fragments. These fragments are used in the formation of the new speech, but that the Celt is the artisan is seen throughout all. He has also caused to enter into the new tongue that simplicity, directness, elasticity, and vivacity—that spirit—that something which renders it surely more Gallic than Roman. The testimony of language is thus found to harmonize with that of history in leading us toward the conclusion that the French character is essentially the offspring of the ancient Celt.

The second paper was entitled "Studies in Cymric Philology," by Professor E. W. Evans, of Cornell University, Ithaca, N. Y.

This paper was devoted to the discussion of various questions relating to the early Welsh.

After stating the consonant changes which, as shown by Zeuss, characterize the transition from old to middle Welsh, (*p, t, c*, when not initial, to *b, d, g*; *b* and *m* to *v*; etc.) Professor E. showed, further, that these changes, when the consonant is not followed by another, are regularly attended with the lengthening of preceding short vowels: thus, *cat*, battle, becomes *cād*, *epawl*, colt, becomes *ēawl*; etc.

Professor E. showed by examples that the verb-ending *-it*, 3d sing. pres. act. ind., (compare Irish *-id* and Latin *-it*), which Zeuss, or his editor, finds preserved only in one Welsh gloss, is really of frequent occurrence in the old Welsh poets.

As another result of his own researches, Professor E. showed that the *-ator, -itor*, of the old Welsh poets, heretofore treated as gerund and supine endings, are really passive endings of the finite verb—the equivalents of the Irish *-ither, -ithir*, and the Latin *-atur, -etur, -itur*.

He impugned Zeuss's etymology of the name *Cymro*, Cambrian, (*cyn*, con, and *bro*, regio,) by showing that the early derivatives of the name indicate *cymra* as its older form.

Among other subjects discussed by Professor E., was an old Welsh gloss of the *Folium Luxemburgense*, which Zeuss passes over as obscure.

The next paper was on "Algonkin Names of Man," by Hon. J. H. Trumbull, of Hartford, Ct.

The Indian speaker aimed always at extreme precision. He never generalized. His vocabulary was poor in generic terms. It grew by progressive differentiations—from genera to species, from species to varieties and individuals. There was not, perhaps, in the Indian mind, certainly not in his language, any inherent incapacity for generalization; but he avoided it as a defect, whether in thought or speech.

A large proportion of the English words selected for the basis of comparative vocabularies of American languages are generic or class names. None of these can be translated by a single word, in any Indian language. Every Algonkin language, has, for example, names for "elder brother," "twin brother," and "younger brother," for "son of the same father," and "son of the same mother;" but in no dialect is there a precise equivalent of the appellative "brother."

The names given by various tribes to *man*, or rather the names which have been assumed to be the equivalents of the English word *man*, in its two senses, of "an individual of the human race," (*homo*), and "one possessing in a high degree the distinctive qualities of manhood," (*vir*), have occasioned much perplexity to the vocabulary-makers. The truth is, that it is as impossible to find an Indian word with the precise meaning of the Latin *homo* as of the English "man." By resorting to the Latin, the difficulty is *halved* merely, not escaped. No American language has any single name applicable alike to the red man and the white, to the speaker's own tribe or nation and to his enemies or subjects, to young and to old, to chief and to councillor, prisoner and slave, and in its larger sense common to both sexes. *Vir*, it is true, finds in almost all dialects a correspondent term; but *homo* is untranslatable by an Indian.

Mr. Trumbull proceeded to analyze and discuss the meaning of the two classes of names for "man" found in the Algonkin languages—both of which are combined in the Abnaki *aren-ambé*, and the national name of the Delawares, *lenni-lendps*. He pointed out the errors of Heckewelder, Cass, and Duponceau in the analysis of this Delaware name. The Massachusetts *ninnu*, Abnaki *areni*, Delaware *lenni*, are identical; *n*, *r*, and *l* being interchangeable in Algonkin dialects. Each means a man "of the same kind" as the speaker, that is, an Indian—an "original," or "common," or "normal" man, as opposed to a "stranger," or "foreigner," or one "of another language." This contrast is preserved in the names *Illinois*, (*lenni* or *illini*, with the termination given it by the French,) "men of our kind," and *Peoria*, from *piroue*, "strange," "foreign," which was a village of Indians speaking a strange language.

Omp, áps, ambe, is a noun generic denoting an "adult male;" primarily, the Latin *mas*, not *vir*. With one or another prefix, it denotes a "chief man," "captain," "husband," "brother," etc. Its primary signification is "to stand upright;" "walking in an erect posture," Heckewelder translates it.

Lenni-Lendps means, "adult Indian men," "*vir* of our race;" "men like ourselves"—of the "common" or "normal" type.

This was illustrated by the analysis of tribe names in several languages of the Algonkin stock.

MORNING SESSION, FRIDAY, JULY 28.

The committee upon nominating officers for the ensuing year reported the following nominations, which were carried unanimously:

President.—Professor W. W. Goodwin, Harvard University, Cambridge, Mass.

Vice-Presidents.—Rev. Dr. A. C. Kendrick, Rochester University, N. Y.; Rev. Dr. W. S. Tyler, Amherst College, Mass.

Secretary and Curator.—Professor G. F. Comfort, New-York.

Treasurer.—Hon. J. Hammond Trumbull, Hartford, Ct.

Additional Members of the Executive Committee.—Rev. Dr. A. N. Arnold, Chicago University, Ill.; Chancellor Howard Crosby, New-York University; Professor James Hadley, Yale College, New-Haven, Ct.; President G. W. Samson, Columbian College, Washington, D. C.; Professor J. B. Sewall, Bowdoin College, Brunswick, Me.

Upon the motion of Dr. Samson, it was voted that the duties of the officers-elect should commence with the close of each annual session.

The report of committee for selecting the place for holding the next (fourth) annual meeting of the Association, fixing upon Providence, R. I., was unanimously adopted.

The first paper of the morning was on "The Chronology of some of the Events mentioned in Demosthenes on the Crown," by Professor W. W. Goodwin, of Harvard University, Cambridge, Mass.

Professor Goodwin said, It is generally conceded by scholars that the decrees, laws, and other documents included in the text of Demosthenes on the Crown are spurious; but the fact that Clinton's *Fasti Hellenici*, which recognizes the documents in question as of historic authority, still remains the chief authority in Greek chronology, coupled with the recent republication of a popular edition of Aeschines against Ctesiphon which follows Clinton's chronology in general, makes it worth while to call attention to the subject. If these documents are taken as authority, it is absolutely impossible to make any consistent chronology of the events which preceded the battle of Chaeronea, and it will strike every one who examines the subject that not a single name of an archon, and not a single important date given in these documents, can be shown to be correct. But if we follow the plain statements found in the text of Aeschines and Demosthenes, nothing can be simpler than the whole order of events. Aeschines tells us that in the last month of the year of Charondas (338-7 B.C.) Demosthenes was appointed one of a commission of ten for restoring the walls of Athens. Now, the whole object of Aeschines in this part of his argument is to prove that the decree for crowning Demosthenes was proposed during the latter's year of office. It was

therefore proposed during the year which followed his election, that is, the year 337-6 B.C. As the crown was to be proclaimed at the Great Dionysia in the spring, the decree of Ctesiphon must have preceded that festival; and as the indictment must have been brought against the decree immediately after the proposal—that is, between its passage by the Senate and the first day on which it could be presented in the assembly—we must place the two events together, probably in the winter or early spring of 337-6 B.C. But Aeschines further states that his indictment preceded the death of Philip, that is, the summer of 336 B.C. But the documents above mentioned place the decree in October of the year of Euthycles, (who never was Archon at all,) and the indictment in March of the year of Charondas, 338-7 B.C. The same is true of the dates of the events which precede the battle of Chaeronea. Leaving out of account the spurious documents, we see that Aeschines made his famous speech at Delphi in the spring of 339 B.C.; that Philip was chosen general of the Amphictyons in the autumn of the same year; that immediately after his election Philip passed Thermopylae and seized Elatea. The panic at Athens and the embassy of Demosthenes immediately followed. The alliance with Thebes and the entrance of the Athenian army into Boeotia succeeded; and the skirmishes between the allied forces and Philip's invading army fell in the winter, one of these being called by Demosthenes "the winter battle." The decisive battle of Chaeronea was fought in the following summer. The year of the delivery of the orations is shown, by a great variety of testimony, to have been 330 B.C.

The second paper was on "The Mode of expressing Number in certain Indian Languages," by Mr. George Gibbs, of New-Haven, Ct.

Mr. Gibbs referred to a paper by him published in the Smithsonian Miscellaneous Collections, (160, Appendix B,) on the numeral systems of certain languages, showing that modifications, either by direct change or the introduction of particles, were then used in counting different objects. This peculiarity exists not only in very many American languages, as, for instance, the Algonquin, the Iroquois, the Selish, the Mexican, and others; but among some of the South-Sea Islands, and even in the Yoruba, an African language. The idea appears to be in all cases descriptive. In some languages, it seems to correspond to the "animate" or "inanimate" objects counted; but in others, it has a vastly wider range, and the connection between them can not easily be traced.

The most extraordinary development known is in the Cakchiquel or Guatemalteco of Central America. The late Mr. Theodore Dwight, a member of the American Ethnological Society, had found in a rare work on that language, not less than forty-five modifications of the simple or common numerals, of which it will be sufficient here to mention a few: In counting words, the syllable *pañ* is added, cutting off the last letter of the simple numeral, thus, *hun*, one, *hupañ*, one word; *cañ*, two, *capañ*, two words.

In the same way, other changes are made in counting by threads or strings; by hands; by pairs; by closed hands, or fists; by drops; by fragments, splinters, crumbs, and swallows in drinking; by spoonfuls; in counting

timbers, poles, and fishes; in counting provinces; parties; globular objects, as eggs, loaves of bread, etc.

In the Cherokee language, according to the Rev. J. B. Jones, the same idea enters into the verb; as, for instance, "I take a long object; I take a round object; I take objects folded, or which can be laid one upon another;" but it does not appear in the numerals themselves.

Further remarks were made upon a peculiarity in the Uniapa language, of one of the Micronesian Islands, in which it appears that a systematic anatomical vocabulary exists; also distinct names, not systematic, for geometrical figures, etc., and finally distinct numerals for different classes of objects.

Mr. Trumbull read some extracts from a letter lately received from Dr. Washington Matthews, U. S. A., Post Surgeon at Fort Buford, D. T., accompanying specimens of a dictionary of the language of the Minitares or Gros Ventres, Indians living near the north branch of the Missouri, between the Mandans and the Yellow Stone River. This language, of which vocabularies have been published by Say, the Prince Wied-Neuwied, and Dr. F. V. Hayden, is of the Dakota stock, nearly related to (if not to be regarded as really a dialect of) that of the Aubsároke or Crows. Dr. Matthews, who has had favorable opportunities for acquiring a knowledge of the language, had nearly completed a dictionary of it, when his manuscript collections were destroyed by fire, at Fort Buford. He is now busily engaged in re-writing his work, in which he aims to exhibit the analysis of every compound word and to refer derivatives to their roots.

"I consider (he writes) that not only is the analytical method the *best* way of studying the aboriginal tongues, but it is the *only* way of studying them, that is, of giving to them an attention which we may dignify by the name of study. In converting an oral into a written language we can only secure a reliable orthography by a careful analysis. I have found that Indians, in conversation, will take the same liberties with their language, that Europeans do with theirs—abbreviating, suppressing sounds, and slurring words together, where it suits their convenience. A word as it falls from the lips of a speaker is not always to be put down with a certainty of correctness. In different connections, and in the mouths of different individuals, the same word will often sound differently, and the *standard* word, as it should be written, can only be discovered by analysis. A person who endeavors to 'pick up' a language from the Indians themselves, will so frequently hear phrases instead of words, and experiences such difficulty in obtaining the single word sign for any idea, that he will progress but slowly unless he attempts to analyze from the beginning; it is even difficult to fix a long compound word in the memory, unless the component parts of it have been discovered. So in the first steps to the acquisition of a language, as well as in the more thorough examination of its grammatical construction, he must be assisted by analysis."

"In comparing one language with another, or in endeavoring to draw conclusions as to origin from such comparison, analysis is indispensable, and the errors committed by those who disregard it are aggravating," as Dr. Matthews shows by examples from the vocabularies. "Again, in languages totally different we occasionally find words of similar meaning, pronounced alike, or nearly alike, and only from analysis we can learn their dissimilarity." Mr. Catlin, endeavoring to establish the Welsh origin of the Mandans, calls attention to the "striking similarity" of the Mandan *Maho pensta*, "the Great Spirit," and the Welsh *Mawr penacthir*, "to act as a great chief—head or principal—sovereign or supreme." "The analysis of the Mandan name would have shown Mr. Catlin that it is formed from *ma*, 'the, that, which,' *hopini*, 'medicine, mystery,' etc., and *te*, (pronounced *hte* or *htes*, except in compounds), 'great,' that it should be written *ma-hopini-te*, 'the great mystery' or 'medicine;' and that there is no possible connection between it and the Welsh *mawr, penacthir*, 'head-man;' moreover, the Mandans call their highest deity or deities, not 'The Great Spirit,' but 'Chief of Life,' 'Master of Life,' (*Omahank numakni*), or 'The First Man,' (*Numak mahhana*), as we may learn even from the first part of Mr. Catlin's work—written before he started his hypothesis of Welsh origin."

The next paper was on "An Ancient Bulgarian Poem concerning Orpheus," translated by Rev. C. F. Morse, for thirteen years a missionary of the A. B. C. F. M. in Bulgaria.

It was presented, in the absence of the author, by Professor Whitney. The poem is said by Mr. Morse to have been brought to light by S. I. Verco- vich, of Serres, and printed at Moscow, in 1867, by a Russian ethnographical society, with a prose translation and preface in Russian. Its age is unknown; but it must have been composed since the Bulgarians received Christianity, and, judging by the dozen Turkish words contained in it, since the Turkish conquest of the country. Probably it is two or three centuries old, and produced in Macedonia. The metre is somewhat irregular; repetitions of the end of one line at the beginning of the next are a frequent feature. The translation given is quite literal, and not in verse.

The poem tells how Orpheus went to Arabia to win a royal bride, and finally succeeded in bringing her home, after overcoming various obstacles and enemies of a supernatural character. The whole action is completely, almost absurdly, supernatural, and borrows nothing whatever from Greek tradition or fable, except the name of the hero, and his skill upon the harp, and power to work wonders by its means.

Professor A. C. Kendrick, of Rochester University, N. Y., read a paper on the "Pronunciation of the Greek Aspirates."

He first gave an account of the origin of the aspirates, and then controverted the arguments of Professor George Curtius in favor of their being uttered like the Sanskrit aspirates with a separate sound of the breathing. The paper endeavored to set aside Professor Curtius's arguments drawn successively from the movableness of the breathing, or its easy disengagement from the body of the consonant, from the testimony of inscriptions, from the barbarian corruptions in Aristophanes, and from the mode of transliterating the Greek aspi-

rates into Latin; and also to show the insufficiency of his answer to Arendt's objection to the dictum, founded on the difficulty or impossibility of pronouncing the frequently recurring combinations $\phi\delta$, $\chi\delta$, with a separate utterance of the breathing. The purpose of the paper was negative rather than positive; aiming rather to weaken the force of the arguments for the aspirate theory, than to establish the opposite view.

Mr. J. B. Greenough, of Harvard University, presented the next paper, showing that the "General Supposition," first distinguished by Professor Goodwin, in Greek, which is expressed by the subjunctive or optative in the protasis and the indicative of a general truth in the apodosis, was also found in Latin.

He argued that the construction was an heirloom of the family, and not, as is commonly supposed, developed separately in Greek.

This view he supported from the fact that the second person singular of an indefinite subject in a hypothetical sentence regularly takes this form in Latin in all periods of the language and in all kinds of writers, though the first and third persons take the more usual Latin form of the indicative in both clauses. As in Cato, *Carmen de Moribus, Vita humana prope uti ferrum est, si exercitas conteritur*. While there were hundreds of instances of this form in writers of all periods, not more than two or three cases of the indicative could be found. That this was not an imitation of the Greek, he argued from its universality, as well as from the fact that in the same sentence the subjunctive of the second person and the indicative of the other two appeared side by side, whereas in Greek there was no such distinction; but the modal forms were used in all persons alike in this construction. He also showed that the same usage occurred both in the Vedic and later Sanskrit. From these arguments he concluded that the construction belonged to the time of Indo-European unity, or, what practically amounts to the same thing, if it is not really the same, the time of Græco-Italic-Sanskrit unity.

Hon. J. H. Trumbull presented, and gave an abstract of, a paper comprising "Contributions to the Comparative Grammar of the Algonkin Languages," founded on twenty-five versions of the Lord's Prayer, in nineteen languages and dialects of the Algonkin stock.

The writer had endeavored to give a *literal* English translation of each of these versions. Brief grammatical notes were added, and some of the most obvious peculiarities of the several dialects were pointed out. The difficulty of forming an accurate judgment of the nearness of relationship between two Indian languages, by the comparison of vocabularies compiled or translations made by different persons and at different periods, was incidentally illustrated. The unlikeness of two versions does not prove the unlikeness of the two languages in which they are made. It may be attributable to the incompetence of the translator, or to the wide range in the selection of words more or less nearly equivalent to those of the European text which do not admit of exact translation into an American language. The word "bread," for example, in the fourth petition of the Lord's Prayer, was translated by Eliot, in the language of Massachusetts by *nummeetsuông[anon]ash*, (Matthew 6:11,) and

petukqunneg, (Luke 11 : 3.) The former word (corrected by the insertion of two syllables which were omitted by the printer or transcriber) means "our eatings" or "meals;" the latter is, literally, "something rounded," and was the Indian name of a small *round* cake or loaf. In the Abnaki versions, the word selected means "baked (or roasted) grain;" in Zeisberger's Delaware, it is, simply, "something baked;" in Edwards's Muhhekan, *tquogh*, another way of writing the familiar "tuckahoe" of Virginia and the Middle States, from the same root as Eliot's *petukqunneg*, and denoting "something round." The Algonkin (Canada) and some Chippeway versions have a word by which the Indians distinguished a *loaf* of bread of European fashion, as "something to be cut off from," that is, to be *sliced*, or cut in pieces.

President Samson gave a short abstract of a paper, the reading of which he deferred for lack of time till the next session, upon the "Families of Languages as developed in the Mediterranean Civilization, and their Influence upon each other."

The following resolutions were offered by Rev. C. H. Brigham, and were carried unanimously:

Resolved, That the members of the American Philological Association thankfully acknowledge the lavish and graceful hospitality which they have found in the homes of the citizens of New-Haven, and from the officers of Yale College.

Resolved, That the thanks of the Association be given to the local committee of New-Haven, for their arduous and incessant labors to provide for the comfort and convenience of the members of the Association during the present session.

Resolved, That the thanks of the Association be given to the State Government of Connecticut for their kind permission to the Association to use the rooms of the State-House during the present session.

President Samson offered the following resolution, which, after considerable discussion, was referred to the Executive Committee:

Resolved, That a committee be appointed by this Association to consider and report upon the expediency and practicability of securing a comprehensive analysis of the English language, as spoken and written in the American States, which shall be in harmony with those prepared to aid students in other modern languages, now so generally spoken among us and required in our schools.

The same disposition was made, after some discussion, of the following resolution, which was offered by Mr. Sawyer, of Boston:

Resolved, That the Executive Committee be requested to consider and report to the Association at the next annual meeting, a plan for the systematic division of the proper work of the Association and for holding preliminary local meetings.

The minutes of the Association were read, and, after some remarks by the President, the Association adjourned at twelve M.

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Elie Charlier, (Life-Member,) Institute for Young Men, 124 East Twenty-fourth street, New-York.
Elisée Charlier, Institute for Young Ladies, Madison Avenue and East Thirty-third street, New-York.
Francis J. Child, Harvard University, Cambridge, Mass.

American Philological Association.

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