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A LECTURE

ON THE

STUDY OF COMPARATIVE PHILOLOGY,

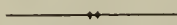
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ON THE STUDY OF COMPARATIVE PHILOLOGY.

IT is with a certain feeling of diffidence that I come before you to-day. The place which I now occupy has been occupied so often, and so much more worthily, by one of those masters and moulders of words who can throw the charm of interest and eloquence over the driest and most technical of questions, that I cannot help fearing lest the study I have at heart will lose from the short-comings of its advocate. The inevitable comparison will suggest itself between my plea for the study of Comparative Philology, and the well-remembered eloquence of a Professor who has made the science of language a household word in this country. To follow one who has added so much lustre to the University of Oxford, and so much renown to the study of language, is at once an honour and a source of embarrassment.

The time has gone by for pleading the claims of the science of language. Thanks to Professor Max Müller and other scholars, Comparative Philology has been admitted among the recognised studies of Oxford; it has been welcomed as a valuable aid to the study of Latin and Greek; it has taken its place in the charmed circle of subjects which may be offered for examination; and its public recognition by the University has been ratified by the establishment of a Chair. In this respect, at any rate, we have not fallen behind the most progressive University of Europe. The classical languages and lite-

rature have always been the staple of our education ; and in an age when the " old learning " is being superseded by modern science, it is only right and fitting that the education we give should be adapted to modern needs, and that the study of Greek and Latin be revived and illuminated by the application of the scientific method. Now the scientific method is simply the method of careful and exhaustive comparison.

We can know things only by comparing them. This is a truth which applies to the whole domain of our knowledge. Our knowledge of words and languages, therefore, does not become exact and scientific until they have been compared together. Even philology, in the old sense of the word, was obliged to have recourse to comparison ; its results were so frequently grotesque and erroneous, only because its range of comparison was not wide enough, its application of the comparative method too loose and capricious. It was in the Semitic languages alone that the method was at all successfully employed. The Semitic languages—Hebrew, Arabic, Ethiopic, Aramaic, Assyrian—are closely-related dialects, like the Romanic languages of modern Europe ; and the similarity of their roots and grammatical forms prevented the philologist from going far astray. Had it not been for the belief that Hebrew was the language of Paradise, and that all the other languages of the world, including, of course, Latin and Greek, must be derived from it, some of the results of Comparative Philology might have been anticipated in the field of Semitic research. But that field was too circumscribed and narrow, too closely shut in, as it were, by the barriers of similarity, for the foundations of

the science of language to be successfully laid in it. Another group of tongues was needed, in which the evidences of relationship lay below the surface, and, though numerous and conclusive, yet required a rigorous application of the comparative method in order to be discovered and brought to light.

Leibnitz gave the death-blow to the theory which saw in Hebrew the primæval speech of mankind. Those quaint specimens of perverted ingenuity which found the origin of the Latin *pars* in the Hebrew *pharash*, "to divide," or extracted *forma* from *μορφῆ*, on the ground that Hebrew is read from right to left, and Latin from left to right, remain embedded, like fossils, in the pages of obsolete dictionaries and theological tracts. The first naïve attempts at the comparison of words had failed; the comparison had taken a wrong direction, and the method employed had been a false one. Like the Ptolemaic theory of epicycles, the theory which had endeavoured to explain the existing facts of language had been based on erroneous assumptions, and could lead only to erroneous results. The *etymology*, or "true account," of words had yet to be given, and until this were the case a science of language was out of the question. Theories, however, do not create themselves; a scientific hypothesis, it is true, may be regarded from one point of view as the happy guess of a gifted genius, but there must be something to suggest it in the first instance, and if it is to become a permanent acquisition of science, it must be able to explain all the known facts. Leibnitz overthrew, indeed, the theory which saw in Hebrew the primæval language of mankind, but he had nothing to put in its place. He did what he could, however, by pointing out the

necessity of collecting linguistic facts and materials, by getting Jesuits and travellers, and even the Czar of Russia, Peter the Great himself, to work for him, and by laying down that we must begin with the actually spoken dialects of the world, if we would discover the original nature and condition of speech. The work inaugurated by Leibnitz was not long in bearing fruit. Apart from the interest excited in linguistic problems,—an interest strong enough to make the Empress Catharine devote nearly a year to little else than the compilation of a Comparative Dictionary,—vocabularies and *paternosters* were drawn up in dialects and jargons the very names of which had been previously unknown, and were embodied in works like the *Catalogo delle Lingue Conosciute* of Don Lorenzo Hervas (1784), and the *Mithridates* of Adelung and Vater.

Adelung's *Mithridates* was published in four volumes, of which the first appeared in 1806, and the last in 1817, and contains little more than lists of words, and copies of the Lord's Prayer, in a great variety of tongues. The languages are simply arranged in a geographical order; there is as yet no idea that they can be formed into groups, each group having a definite relation to the rest. The book was fitly named *Mithridates*: like the famous king of Pontus, it knew of languages only as so many disconnected phenomena, which would be learned practically, but not examined and classified according to the strict methods of inductive science. That which constitutes the very life-blood of a language, its grammar and structure, is almost wholly ignored; no wonder, therefore, that the inner nature of speech, its historical development, its changes and its growth,

should remain hidden from view. A science of language could not be constructed upon mere catalogues of individual words, however copious or accurate: language is the attempt to express thought, and as thought consists of at least two factors, the subject and the predicate, the science of language can deal with words only as combined in the sentence. It is grammar, and grammar alone, which forms a sure basis for Comparative Philology; it is only when comparative grammar has led the way, by demonstrating the common origin of a group of dialects, that etymology, in the sense of a true derivation of words, becomes possible. The roots to which we are then taken back, help in their turn to verify and strengthen the conclusions of comparative grammar. But without the clue furnished by a likeness in the grammar and structure, a mere similarity in the roots of two or more languages may be, and often is, simply delusive. After all, the ideas of primitive man, as well as the simple sounds in which he expressed them, were singularly few; and as they were probably derived for the most part from echoes and imitations of natural sounds, it would not be wonderful were we to find a close, and yet purely accidental, resemblance between them. An attempt, for instance, has been made, to institute a comparison between the roots of the Semitic and the Indo-European families of speech; but, when we come to examine the roots which have been thus brought together and compared, we find that they are roots like *sháarak* and *συρίζω*, "to whistle," *táphaph* and *τύπτω*, "to beat," mere reflections of natural sounds. The savages of New Guinea visited by Dr. Comrie, call a dog a *bow-wow*, but no one would think of arguing from this, that there

must be a radical connexion between this New Guinea jargon and the language of our nurseries. So, too, the ancient Egyptians spoke of a cat as a *miau-miau*, the same name that it still bears in some parts of China; but for all that, the Chinese and ancient Egyptian languages have nothing in common. Roots, in fact, are the material out of which speech is made, and the material must have been much the same everywhere, since the circumstances which surrounded the first framers of speech, their conceptions of things around them, and their physical organs of utterance, can have differed but little throughout the world. Where men differ from one another is in their mode of thinking, in their way of dealing with the material put before them; and so it is only in that part of speech which expresses thought, in the relations of grammar and the structure of the sentence, that any true test of the likeness or unlikeness of languages can be found.

The discovery of this test was due to the discovery of Sanskrit. As long as the comparison of languages was confined to drawing up lists of words, or translating the Lord's Prayer into a multitude of dialects, it was quite impossible to get beyond the geographical arrangement of speech. But the very year before the last volume of Adelung's *Mithridates* was published, there had appeared a work which founded the modern science of language, and suspended for ever the old Mithridatic manner of handling speech. This work was the "Conjugations-system" of Francis Bopp, in which the grammatical and structural identity of the leading languages of the Indo-European, or Aryan group—Sanskrit, Persian, Greek, Latin, and German—was demonstrated with a copiousness

and accuracy of details that left no room for doubt. A new conception was called into existence, that of a family of languages. In place of the geographical arrangement of speech, there was now a scientific classification based on the genetic relations of languages one to another. Just as the various members of a species in botany or zoology could be grouped together and derived from a common ancestry, so, too, Bopp had shewn that in language also there were well-marked species, the several members of which could be traced back to a common source. The way had been already prepared for Bopp by Sir W. Jones in England, and the two Schlegels in Germany. They had first detected the grammatical and lexical resemblances between Sanskrit and the languages of Europe, and Friedrich Schlegel, with a poet's insight, had struck out the conception of a common bond, a common brotherhood, as existing between them. But it was left to Bopp to work out this conception in its details, and to convert the conjecture of the scholar, and the dream of the poet, into a scientifically-established fact.

As the light of day rises in the east, and slowly travels towards the western horizon, so, too, it is from the east, from the dead language of India, from the poems and philological treatises of Hindu sages, that the light now shed on the nature and study of language has come. Let us never forget that without Sanskrit there would probably have never been a science of language at all; and a knowledge of Sanskrit is still indispensable to the comparative philologist. It is only in the Aryan or Indo-European family of speech that the principles of scientific philology have been elaborated with the minuteness

and certainty requisite for the purposes of a sound philological training and education ; it is only here, again, that the ordinary scholar starts with a knowledge of his materials, as embodied in the spoken languages of modern Europe, or the classical languages of Greece and Rome ; and the study of Aryan philology demands an acquaintance with that ancient language of India, which represents the eastern division of the Aryan family, and throws such a flood of light on so much that has become dark and obscured by the wear and tear of time in the less conservative languages of the West. It is not necessary that the comparative philologist should be a Sanskritist in the narrower sense of the word ; indeed, too special a knowledge of a particular language sometimes diverts the attention from the more important questions to a mass of subordinate details, and turns the comparative philologist into a philologist in the old sense of the term ; but it *is* necessary that he should have that acquaintance with Sanskrit, and more especially with Vedic Sanskrit, which will enable him to check the statements of others, and find his way through the mazes of a Sanskrit sentence.

The science of language requires hard labour and previous preparation, as much as any other science ; and its student must be content to go to school in Aryan philology, to acquire a fair knowledge of Sanskrit, and to obtain a minute and accurate acquaintance with at least one other Aryan dialect, before he can venture upon researches of his own, or investigate the languages of other races of men. To discuss the affinities of Chinese or Nuforian, to determine the position of the primitive speech

of Chaldea, or to speculate on the early relations of Semitic and Aryan roots, without a preliminary training in Indo-European philology, is merely a waste of time: and Indo-European philology implies a knowledge of at least one Indian tongue, as well as an European one. Even the classical philologist, who wishes to know what the new science has done towards clearing up disputed questions in Greek and Latin, or towards tracing the origin of their words and inflections, cannot dispense with a certain acquaintance with Sanskrit if he wishes to be something more than a mere dependant on the charity of others, a blind follower of authoritative names. The comparative philologist must begin with Sanskrit and Aryan philology, whatever be the province of speech he may afterwards mark out for himself. The day may yet come when the comparative study of the Semitic dialects, or of the Ural-Altaiic group, or of the Bâ-ntu languages of southern Africa, is as far advanced as the study of the Aryan family is now; but meanwhile we must be content to receive our training and education in the Aryan family, and apply the method learned therein to the examination of other groups of speech.

Let us not suppose, however, that all the problems of language can be solved by the study of the Aryan family alone. Far from this being the case, the Aryan group is a very exceptional one in the history of human speech. The parent-language, which we can restore by a comparison of the words and forms common to its derivative dialects, was a highly developed one, as widely removed from the primitive condition of speech as the Sanskrit or Keltic languages of a later day. The dialects still spoken by

the Bushmen of South Africa belong to a relatively far older period of speech than the ancient Aryan of our forefathers, even though more than 4,000 years may have elapsed since it was superseded by the languages to which it had given birth. It is thus that the Egyptian monuments of the Old Empire,—that, for instance, of the age of King Sent, now in our Ashmolean Museum, which the Egyptologues tell us is 6,000 years old,—reveal to us a civilization and culture superior to any since witnessed in the valley of the Nile; while, on the other hand, the Hottentot and the Papuan of the present day seem almost as degraded as it is possible for a human being to be. So, too, in the case of language, it is rather in the jargons of modern savages that we have to seek the traces of the primitive condition of speech, than in the cultivated languages of the ancient world, however long may be the time since they have ceased to be spoken. The parent-language of the Aryan group has behind it a long and chequered past, and its speakers were as much raised above the level of the barbarian, as the European of to-day is raised above the wild Veddah of Ceylon. They come before us in the records of speech as a community with settled laws and manners, with family relationships so clearly defined, as to require separate terms for a brother's wife and a wife's sister, and dwelling in houses furnished with doors, and made of wood or stone. Strictly monogamous, each member of the state had his separate possessions,—his house and court, his goods and cattle,—though the whole community also held in common certain domains and pasturages. The king or chieftain owned a palace and crown-lands, and wielded the same absolute power over the

State as the father over his family. The laws were judgments, or "dooms," laid down after enquiry, and punishment was provided for the man who broke the law to which he was "bound" (*jus*). Free labourers worked for hire in the place of slaves, and the good conduct of the citizens was guaranteed by sureties who "knew" them. The objects of nature were worshipped as gods, though *one* only was addressed in prayer at one and the same time; and these gods were conceived of as immortal, all-powerful and holy, the rulers and guides of the universe. Even liturgical forms were used in worship, and the gods were praised as "givers of good things" (*dātāras vasuām*), or "the father of heaven" implored "to shew kindness," (*vāram bhar*, the Greek ἦρα φέρειν), and to grant "good courage," or "sense," (*μένος ἦϋ* = Zend *vohu mananh*), and "undying renown," (*κλέος ἄφθιτον* = Ved. *Sravas akshitam*). The lunar year was divided into three seasons; the numerals were in use at least as far as 100; roads were constructed for the purposes of trade, and the winter evenings beguiled with fairy-tales and songs. Even painting was not unknown, and though iron does not appear to have been in use, gold, and silver, and bronze were all much employed. The smiths, in fact, formed a special and an honoured class, as was only natural in a society involved in frequent wars. Cattle were the basis of wealth, for these primitive Aryans were herdsmen rather than agriculturists. Still wheat and spelt were grown, garden herbs cultivated, and the strongest term of loathing and contumely was "eater of raw flesh." The men dressed themselves carefully in wool, leather, and linen, wearing tunics and collars, coats and sandals. Even the beard was not

allowed to go untrimmed, and the existence of the same word for "razor" in both Sanskrit and Greek, (*kshuras*, ξυρόν,) shews that the barber's trade is no modern invention. It is somewhat strange, therefore, that Varro^a should assert that the Romans did not begin to shave till about the third century B.C. And as the assertion is borne out by the Latin name for the razor, *novacula*, which is peculiar to Italy, as well as by the fact that the small crescent-shaped razors which have been met with so plentifully in the islands of the Greek Archipelago, in Attica, Bœotia, in many parts of Etruria, and even north of the Alps, have never been found in the cemetery of Alba Longa, or in any other of the oldest Italic tombs, it would really seem that the ancestors of the Romans forgot to shave while on their wanderings, and only resumed the practice under Etruscan tutorage.

The causes which produce fixity and stability in a group of languages are still a matter of investigation. Why certain tongues should have made a permanent settlement, as it were, in the midst of the great mass of the nomade and changing languages of the world, is still an unsolved problem. All we know is, that the same causes which have tended to produce a fixed and civilized community, have tended also to produce a fixity in the dialects that community may speak. The normal condition of language is change and fluctuation, just as the normal state of ancient Greece was war and disunion; here and there only, a few groups or families have emerged from the vast sea of floating speech, and fixed themselves upon its surface, like so many islands of Delos. As the old Greek myths told, not until Delos had been planted firmly

^a *De Re Rustica*, ii. 11.

in its place did it become the birthplace of Apollo and Artemis, of culture and morality.

Besides the Aryan family of speech, Comparative Philology has succeeded in determining also the Semitic, the Ural-Altaic, the Bâ-ntu, the Malayo-Polynesian, and the Taic groups, to which one or two more will probably have to be added hereafter. In each of these cases we have common marks of relationship in structure, grammar, and vocabulary, which point to a single origin; we have, too, indications of a civilization, more or less perfect, which went hand in hand with the preservation of the marks of relationship. As research proceeds, these indications will grow clearer and more numerous, and we may look forward to a time when what has been done for the language and civilization of our Aryan forefathers, will be done also for those of the other great civilized races of the world. Language is the reflection of the thoughts and passions of a community, and its words and forms can tell us the history of the society that created them, as surely as the fossils of the rocks can tell us the past history of the earth. During the last few years, Ural-Altaic Philology has been receiving especial attention, and the comparative study of the Finnic idioms now bids fair to rival that of the Indo-European languages. The Ural-Altaic or Turanian group comprises the Finnic and Ugrian languages spoken in Finland, Lapland, Esthonia, and other parts of northern and eastern Russia, as well as the various dialects of the Turkic and Tatar tribes. To these are probably to be added Tunguse, Mandschu, and Mongol, though the inclusion of the latter in the Ural-Altaic or Turanian group is not yet quite certain. The political

and literary importance of this family of speech is second only to that of the Aryan family; Russia is at bottom a Turanian, rather than a Schlavonic power, while Osmanli Turkey holds the key of the Eastern question, and the Slavonic speech of Bulgarians and Bosnians but thinly disguises their Hunnish and Turkic descent. The literature of Finland, of Turkey, and of Hungary, is of a high order; the Finns like the Magyárs have their literary and scientific periodical, the *Kirjallinen Kuukauslehti*, or "Literary Monthly^b;" and the old Finnic and Esthonian epics, the *Kalevala* and *Kalevipoeg*, are worthy of comparison with Homer or the *Nibelungen Lied*, and throw light on many of the questions suggested by the *Iliad* and the *Odyssey*. If the primitive Accadian language and population of Chaldea turn out to be really Turanian, the Ural-Altai group will receive a fresh increase of importance, as Chaldea was the source of western Asiatic civilization, and exercised a profound influence upon the early Semitic mind. For the students of language the Ural-Altai family has a special interest, inasmuch as it belongs to the agglutinative division of human speech, in which the relations of grammar are expressed by the postfixing of semi-independent words instead of by inflections, and for some years to come it will form the battle-ground of the question, whether or not flexion has arisen from a previous agglutination.

A young Finnic scholar, Weske, has lately endeavoured to shew that the Finnic dialects are really inflectional and not agglutinative, and on the strength

^b Literally, "monthly-leaf." The Hungarian *Magyar Nyelvőr*, ("Watchman of the Hungarian Language,") is a philological journal of high merit and value.

of this has suggested their possible inclusion in the Aryan group. Such a theory, however, will probably share the fate of Bopp's attempt to connect the Polynesian and Indo-European languages together; but it affords a striking illustration of the narrow boundary that divides the inflectional from the agglutinative in speech, and of the difficulty we often experience in individual instances of distinguishing between them. More fruitful in results have been Ahlqvist's researches into the early culture and civilization of the Finns, as disclosed by a comparative study of their dialects. Following in the steps of Professor Thomsen, of Copenhagen, who first drew up lists of words borrowed by the Finns from the Germans and Scandinavians of some 2,000 or more years ago, Professor Ahlqvist has shewn that the Finnic tribes were mainly hunters and fishermen when they first settled in Europe, and that they learnt the elements of civilization—agriculture and cattle-breeding—from their neighbours, the Teutons and the Slavs. Before their contact with the latter, they were turf-cutters rather than agriculturists; numerous words exist in the various Finnic idioms which all signify turf-cutting, but none of native origin which signify "a field." The plough (*aura* for *aatra*) was borrowed from the Goths, and the only cereals which have native Finnic names are the barley (*ohra*, *otra*) and the turnip (*negris*). So, too, the words for "cattle" and "swine," *nauta* and *sika*, come from the Norsk *naut* and *sugge*; while the name of the "horse," *hepo*, or *hevonen*, is the Swedish *happa*, the Danish *hoppe*; and that of the sheep, *lammas*, the German *lamm*, our *lamb*. The names of the stallion, the mare, the cow and the bull, on the other hand, are all of native

derivation, and prove that these animals must have been known to the Finns before their intercourse with the Aryans. Like the other members of the Ural-Altaic family, the Finns were acquainted with metallurgy from an early period. The Finnic word for "copper," *vaski*, is identical with the Magyar *vas*; from which we may argue that this metal was worked before the ancestors of the Finns and the Hungarians separated from one another, in their primitive home in the Ural. The words which denote "silver," again, are of native origin, though they differ completely in the several Ugro-Finnic dialects. *Gold*, on the contrary, has received a German name in Finnic, and a Persian name in Magyar. Strangely enough, too, in the Finnic dialects of the West, the word for "iron" has been borrowed from Aryan languages, although there is good ground for believing that iron was used by the Ugro-Finnic nations long before it superseded bronze among the populations of Aryan descent. The fact is a warning to us, not to infer too much from the absence of a native name for some particular object or conception. The native name may quite possibly have once existed, and yet have been expelled by a foreign intruder, just as the old English *wanhope* has disappeared before *despair*, or *inwit* before *conscience*. The Basque terms for "knife," *ganibeta* (Fr. *canif*) and *nabala* (Sp. *nabaja*, Lat. *novacula*), both come from abroad, and yet it would be absurd to conclude from this that the Basques were unacquainted with a cutting instrument until after the rise of the modern French and Spanish languages. As a matter of fact, Prince Lucien Bonaparte has found, in a single obscure village, a native Basque word for "knife," *huistoa*, from

a root which means "to cut." It has been driven out elsewhere by foreign influence, and perhaps also by the improved knives introduced by the foreigner.

In spite of the discovery of Assyrian, with its contemporaneous monuments reaching back to about B.C. 2000, Semitic philology is still in a backward state. This is due in great measure to the narrow field of comparison open to Semitic philologists, the Semitic languages being closely-related dialects, the mother-speech of which has been lost. In fact, the Semitic philologist is in the same position as the Romanic philologist would be were Latin unknown; and the possibility that Old Egyptian or the so-called sub-Semitic languages of northern Africa are related to the Semitic stock, seems to grow less from year to year. Even in the Semitic field, however, the application of the comparative method has not been without results. The origin of the two tenses is being cleared up by the help of Assyrian, and a beginning has been made of an investigation into the nature and level of primitive Semitic civilization. Thus it has become evident to the students of the ancient monuments of Babylonia that like the modern Bedouin the Semite was a wandering nomade up to the epoch when the several Semitic languages—Arabic, Himyaritic-Ethiopian, Assyrian, Aramaic, and Phœnician-Hebrew—separated from one another. The well-known Hebrew word for "city," 'ir, which probably forms part of the name Jeru-salem, is unknown to Arabic, Himyaritic, and Ethiopian, in short, to all the southern division of the Semitic family; and the cuneiform inscriptions have informed us, that it was one of the many words borrowed from the Accadians of Chaldea by their Semitic neighbours. The As-

syrians, however, used it but rarely, preferring another word, *álu*, the Hebrew *'ohel*, which properly signified "a tent." It was thus that the language preserved a recollection of the old time when its speakers lived only in tents, before they had come into contact with Chaldean civilization, and learned both the nature and the name of the city and city-life. They were still in the position of the wandering Arab of to-day, and those who have travelled in the East know well how low he must be placed in the scale of civilization. He stands immeasurably beneath the ancient Aryan shepherd on the slopes of the Hindu-Kush; and this inferiority may perhaps account for the needless strain upon the memory, and the corresponding backwardness of the reasoning faculties implied by the Semitic dictionary, where the ideas expressed by derivatives in our own family of speech are represented by different roots. It is somewhat puzzling, therefore, to find this half-civilized nomade exceptionally conservative in the matter of language. Semitic speech seems to have been petrified, as it were, at its very outset; and the language of the modern Bedouin is in some respects more archaic than that of the Assyrian 4,000 years since. The same phenomenon makes its appearance in the Aryan family also, where Lithuanian, the least advanced member of the whole group, has yet preserved more ancient forms than any other of its sister-tongues. It would seem that when a language has once reached a certain stage, isolation and literary inactivity tend to protect it from decay and change.

If we turn our eyes to southern Africa, there, too, we shall find a clearly-marked group of tongues

spoken by Kafir tribes, from Mozambique to Sierra Leone, and termed Bâ-ntu by Dr. Bleek. It is to this scholar that we owe our present knowledge of the family, and his untimely death must be deplored by every student of language. It is much to be hoped that means will be found for establishing a chair of Comparative Philology at the Cape, and so securing the continuance and completion of Bleek's researches. Unfinished as they were, they have already thrown light on some of the obscurer problems of speech; the enquiry into the origin of gender, for example, has received unexpected illustration from the dialects of southern Africa. Besides the Bâ-ntu group, the main characteristic of which is the prefixing of pronouns and pronounial elements, Bleek has determined the existence of other unallied languages in southern Africa,—the inflectional dialects, namely, of the Hottentots and Bushmen. The Bushman jargon is raised but little above the inarticulate speech of the brute creation; with the exception of a few words, of the most common use, every word contains at least one click. These curious sounds are produced by clicking the tip of the tongue simultaneously with the pronunciation of a consonant, at least in Bushman and Hottentot, and the Bushman language possesses no less than five of them. The three easiest (the dental, the cerebral, and the lateral,) have been borrowed by the Kafirs from their Hottentot neighbours; the rest remain the peculiar property of the Hottentots and the Bushmen themselves. These clicks lead us back to the very commencement of speech, and, like Mr. Tylor's survivals in culture, serve to assist us in bridging over the gulf which separates the inarticulate cries of the

infant or the animal from the articulate utterances of the man. Clicks seem to have been once the property of all languages, and to have disappeared gradually with the development and simplification of speech; a few traces only of their former existence having been preserved to our own day, as in the Q'iche of central America, the Circassian of Asia, and notably in the dialects of southern Africa. Here, as might have been expected, their preservation has been accompanied by a consciousness of their original nature and use. Nowhere in the world has the beast-fable attained such proportions as among the Bushmen; as Dr. Bleek has shewn, the whole literary and intellectual activity of the people, such as it is, centres in the sayings and doings of animals like the mantis, the ichneumon, or the jackal. Even the heavenly bodies—the sun, the moon, and the Great Bear—are regarded as animals; and since we find the same view taken of the heavenly bodies by other barbarous tribes (like the Polynesians of Mangaia^c), it is, perhaps, open to conjecture that the animal-names we still give to several of the constellations are relics of a time when the Chaldean astronomers, from whom we derive them, looked upon the stars as living creatures.

The most curious fact about the beast-fables of the Bushmen is, that the different animals are made to talk each in a language of its own. Thus the blue crane inserts *tt* at the end of the first syllable of almost every word; and the tortoise turns the clicks into labials; while the jackal, as well as the moon and the hare, actually have each a peculiar and very unpro-

^c See Dr. Gill's "Myths and Songs from the South Pacific," pp. 40—50.

nounceable click assigned to them, neither of which is otherwise found in the Bushman tongue itself. We must leave it to the naturalists to determine whether the particular sounds ascribed to the various animals in these fables are real or imaginary; it is possible that M. Landois (of Freiburg), who has, it is stated, discovered that ants communicate with one another by a series of audible utterances, will find in them fresh confirmation of his opinions. At any rate, the fact is an interesting one, and shews the ever-living consciousness of language itself, that the Bushman clicks are an element alien from human speech, and belong to the brute rather than to man.

Bleek's researches illustrate a truth which applies to linguistic science no less than to all other sciences. In using the comparative method, we must first attack the phænomena which lie immediately before us, and can be tested by daily experience and observation. If we are to set to work inductively, we must begin with the better-known facts, and proceed from these to the less-known and more remote ones. The past can be deciphered only by the help of the present; if we wish to know the laws which regulated the growth and change of language two thousand years ago, we must first of all discover the laws which regulate its growth and change to-day. Just as Geology remained immature and unprogressive, until the origin and formation of the underlying strata of the earth were explained by the action of the same forces that are still at work, so, too, Comparative Philology remained little else than a collection of empirical generalizations, until the careful study of modern dialects, and of the vicissitudes that languages are even now undergoing,

placed it upon a firm and solid foundation. It is only in living speech that the laws of phonology can be observed and ascertained, and phonology is the basis upon which the science of language necessarily rests. To be content with the dissection of the dead skeletons of extinct speech, would be as fatal to the progress of Comparative Philology as confinement to the dissecting-room would be to Biology. The antiquarian study of language ought to follow, and not precede, the investigation of existing dialects. If we are to be scientific philologists to any purpose, we must have mastered the nature and relationship of individual sounds, and disabused ourselves of the notion that these are identical with the letters by which we symbolize them in writing. Fifty years ago it was possible to talk of the permutation of letters, of metathesis and synchresis, and various other unshapely inventions of the grammarians; but such a possibility ought now to be past. Philology, said Voltaire, is a study in which the vowels count for nothing, and the consonants for very little; and Voltaire's definition pretty accurately summed up the matter, so far as the philology of the last century was concerned. But such a philology is, or ought to be, wholly obsolete; the philology which has been created by the right application of the comparative method, is one in which every consonant and every vowel has to be accounted for. By a close examination of the vocal organs, by mechanical tests and contrivances, by an accurate observation of spoken language, and by the strict determination of the sounds which correspond to one another in allied dialects, we are now able to decide whether a change of one sound

into another is possible or not; and, if so, whether we may expect to meet with it in some special instance. For it does not follow that because a particular change of sound is possible in the abstract, that we should therefore assume it to have taken place among a particular set of speakers. In our own family of speech, for instance, a palatal letter comes from a guttural; in Malayan, on the other hand, it is derived from a dental. Prince Lucien Bonaparte has published an exhaustive list of the sounds the human organs of speech are able to utter, amounting in all to 385; but many of these, though pronounceable, are not found in any known tongue. Still less is there any single language or dialect which possesses more than a comparatively small selection of these different sounds; and while some languages, such as Gaelic, have as many as twenty-one distinct vowel-sounds, there is a large number, like the Spanish, the modern Greek, or the Illyrian, which have no more than five; while some of the Australian dialects can boast of only eight consonants. Sounds become simplified with age; and as language tends continually to lay greater stress on the content than on the form, on the meaning rather than on its phonetic expression, phonetic decay assails the harder sounds, and the innate desire of man to save himself unnecessary trouble causes them either to disappear altogether, or to be profoundly modified. We have lost or changed the rough guttural aspirate that our forefathers pronounced in *tho'* (Goth. *thauh*, Anglo-Saxon *theáh*), and *enough* (Anglo-Saxon *genoh*, Germ. *genug*), and there are few among us who would venture to reproduce the clicks of the Bushmen.

The facts of Philology, like the facts of Geology, lie in the paths of our every-day life. They are literally to be found in the mouths of each one of us, and, if we choose, we can all alike observe and study them. An acquaintance with the main principles and outlines of linguistic science, would give a new interest to our lives. The words we utter, or hear others utter, may, if properly studied, contribute to the building up of Comparative Philology, and the recovery of the past intellectual history of our race. Every word, however commonplace and trivial, has a history, just as much as the stones and the fossils we tread upon; and that history may be full of precious information for the student of culture and civilization. Let us take, for instance, a word like the numeral *three*; it seems insignificant enough both to speak and to write, and yet it reveals to us a time when our remote forefathers were just beginning to be aware that there was something "beyond" *two* besides vague indefiniteness, and to elaborate the ideas of plurality and number. *Three* has the same root as *through*, the Latin *trans* and *terminus*, the Greek *τέρμα*, the Zend *taró*, "across," the Sanskrit *tarámi*, "I pass over." It was a day of high importance in the mental history of our race, when the conception was arrived at of something "beyond" *two*.

If we are really interested in the history and nature of the words we speak, we shall soon find plenty with which to occupy ourselves. Dialects still exist among us, and the careful collection of facts relating to the variations of pronunciation or usage observable in them, is still a work to be done. Little by little, with the spread of education and town-life, the literary dialect is certain to kill its

sister dialects that yet remain; but before this happens, it is of the utmost moment that their distinctive characteristics and features should be preserved. Experience will shew how difficult such a task is, if rightly performed, and how necessary it is for the student of our old dialects to have accustomed his ear to variations of pronunciation, and his mind to the method and results of scientific philology. Just as the past fortunes of a group or family of speech are to be learned from a comparison of the leading languages of which it is composed, so the past fortunes of those languages themselves are to be traced by a comparison of the dialects that depend upon them. What Grimm did so successfully for German, may be done for all the other branches of human speech. Even the literary critic will find such an enquiry furnishing him with precious materials. Thus the origin of the *Iliad* and the *Odyssey*, and of the other Homeric and Hesiodic productions of early Greece, has a flood of light cast upon it from the relics and traces of the *Æolic* dialect still to be detected in the poems. In spite of the strong *Ionic* colouring they have received, enough still remains to shew that some portions, at all events, of them first grew up in those *Æolic* cities which skirted the plain of *Troy*; and that the tradition which made *Smyrna* the birth-place of *Homer*, has truth and history in its favour.

The work now being done by the *Dialectical Society*, is a work to which all who have any love for their own language, or any curiosity concerning it, ought to wish success. The larger the number of the dialects compared, the safer and wider will be the conclusions we derive from them. The science

of language has, perhaps, suffered from nothing so much as premature generalizations, based upon an insufficient collection of facts. As natural colours are brought out by contrast, so, too, the colouring of a language, as it were, can only be discovered by abundant comparison. The attention which Sanskrit has monopolised, owing to the important place it holds in the study of our Aryan family of speech, has led to several one-sided conclusions, and consequent errors. It is time that Keltic, the western frontager of the family, should now be questioned for its evidence. It may yet turn out that the extreme West may throw as much light upon the history of the Aryan languages as the extreme East has done. Already the scientific study of Keltic has rectified some errors occasioned by the exclusive influence of Sanskrit, and suggested caution in the acceptance of other theories. Thus the Welsh *ynys*, the Gaelic *inch*, "island," prove that the Latin *insula* is no compound of *in* and *salio* or *salum*, no broken rock that has "leaped into" the sea, but derived, like the Greek *νησος*, from a common root *ins-*; and we have good reason to believe that words like the Greek *ὄνομα* and *ὄνυξ*, the Latin *nomen* and *unguis*, have attracted no "prothetic" letter to their beginning, but have descended from roots which began with a vowel. Even the characteristic *r* of the Latin passive no longer claims relationship to the reflexive pronoun *se* with the same certainty that it did a few years back; *r* is also the characteristic of the Keltic passive, and though a Latin *r* may come from *s*, a Keltic *r* cannot. Here, then, in those Keltic tongues which lie so close at our doors, there is a rich mine of fu-

ture research and discovery, and the Professor who is about to represent them in this University ought to find numerous and eager pupils.

But let us not forget that, whether it be the study of Keltic, or of any other branch of Comparative Philology, the work to be done requires hard labour and persevering application. The time has gone by when the facts of language could furnish material for the "Diversions of Purley;" Philology has become a science, and like all other sciences, demands no half-hearted labour. Comparative Philology, let it be confessed once for all, is as difficult a study as Chemistry or Physiology, and the preliminary drudgery to be gone through is as great as in the case of those two sciences. Old prejudices have to be laid aside, new habits of thought formed, and laws and principles impressed upon the mind, and, what is more, tested by actual observation. We must go to work like serious men with a serious purpose in hand, ready to give up our most cherished hypotheses, as soon as the weight of evidence bears against them. The mere results of philological research can, it is true, be imparted, and learned with as much ease as the results of any other study; but then it is not the student, but the outside world, that wants the results merely. The student must master the method and its application, must make himself acquainted with the successive steps that have led to the conclusions placed before him, and must qualify himself to test and control these whenever needful. The days are past when the Latin or Greek scholar could afford to neglect the assistance of Comparative Philology; but, in order to obtain this assistance, he must ac-

