CHAPTER VI.

ROOTS.

“Innumera linguae dissimilimae inter se, ita ut nullis machinis ad communem originem retrahi possunt.”—F. SCHLEGEL.

“Die Etymologie hat den vollen Reiz aller der Wissenschaften, welche sich mit den Anfängen und dem Werden grosser Erzeugnisse der Natur oder des Geistes beschäftigen.”—G. CURTIUS.

In the Welsh book of Taliessin, a manuscript of the fourteenth century, the bard declares that “there are seven score Ogyrven in song,”1 and Prof. Rhŷs points out 2 that these are the same as the “seven score and seven Ogyrven,” or roots, which, according to another Welsh writer, who lived a century or two later, “are no other than the symbols of the seven score and seven parent-words, whence every other word.” But the doctrine that all our words are descended from a limited number of primæval germs or roots is far older than the Welsh bards. More than two thousand years ago the grammarians of India had discovered that the manifold words of their language could all be traced back to certain common phonetic forms which they termed “elements.” Already the Prātiśākhya of Kātyāyana speaks of the verb “by which we mark being” as a dhṛtu or

2 “Lectures on Welsh Philology” (1877), p. 320.
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root, and before the Nirukta of Yāska was composed, a fierce controversy had begun as to whether these roots were all necessarily verbs. Yāska sums up the controversy, and after stating fairly the arguments on both sides, decides in favour of the Nairuktas or "etymologists," the followers of the philosopher Sākatāyana, who held that every noun was derived from a verb. Vain were the pleadings of Gārgya and the Vaiyākaranas or "analyzers" on the other side. They urged that if all nouns came from verbs, a knowledge of the verb would of itself make the noun intelligible, that whoever performed the same action would be called by the same name (all flying things, for instance, being called feathers, from pat, "to fly"), and that everything would receive as many names as there are qualities belonging to it, while the derivations proposed for many words were forced and unnatural, and as things come before being per se, that which comes first could not be named from that which comes afterwards. But the Nairuktas had their answers ready. All words, they said, really were significant and intelligible, while custom rules that agents and objects should get their names from some single action or quality, the "soldier" from the pay he receives, the "stable" from its standing up. If an etymology were forced, so much the worse for the etymologist, not for the method he pursued; and as for the last objection, no one can deny that some words are derived from qualities, even though qualities may be later than the subjects to which they belong.¹

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The question over which the Hindu grammarians contended has been revived in our own day. Comparative philology was the result of the study of Sanskrit, and the Sanskrit vocabulary had been ranged under a certain number of verbal roots. Both the term and the conception, indeed, had already been made familiar to the scholars of the West by their Arab and Hebrew teachers, the only difference between the Sanskrit and the Semitic root being that the one was a monosyllable, the other a triliteral. European philology began to recognize at last that words have a history; that we cannot compare Latin and Greek and English words together before we have discovered their oldest forms, and that the common phonetic type under which a cognate group of words is classed must be no mere arbitrary invention of the lexicographer, but be based on reality and fact. Roots are the barrier that divides language from the inarticulate cries of the brute beast; they are the last result of linguistic analysis, the elements out of which the material of speech is formed, like the elementary substances of the chemist. But we must be careful not to fall into the mistake of the Indian grammarians and their modern followers, and confound these roots with verbs or any other of the constituents of living speech. The roots of language are like the roots of the tree with its stem and branches; the one implies the other, but all alike spring from the seed, which in language is the undeveloped sentence of primitive man, the aboriginal monad of speech. Roots, as Professor Max Müller has fitly called them, are phonetic types, the moulds into which we pour a group of words allied in sound and
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meaning. Thus in the Semitic tongues, a root is the union of three consonants, out of which numberless words are created by the help of varying vowels and suffixes. *Kāṭal*, for instance, is “he killed,” *kotāl*, “killing,” *k’tol*, “to kill” and “kill,” *kāṭol*, “killed,” *kāl*, *kīl* or *kuṭl*, “a killing,” where the difference of signification is marked by a difference of vowel; and the whole series of co-existing forms presupposes a triliteral root or phonetic type *k-ṭ-l*, to which was attached the general sense of “killing.” Such a root could not, of course, have found any actual expression in speech; it was an unexpressed, unconsciously-felt type which floated before the mind of the speaker and determined him in the choice of the words he formed. When Van Helmont invented the word *gas*, he did but embody in a new shape the root which we have in our *ghost* and *yeast*. The primordial types which presented themselves almost unconsciously before the framers of language, which lay implicit in the words they created, must be discovered and made explicit by the comparative philologist. Just as the phonologist breaks up words into their component sounds, so must the philologist break up the groups of allied words into their roots, for roots are to groups of words what the letters and syllables are to each word by itself.

The influence of the Hindu tradition has introduced into European philology expressions like “a language of roots,” “the root-period of language,” and the like, and has made some writers even speak as though our remote ancestors conversed together in monosyllables which had such general and vague meanings as “shining,” “going,” or “seeing.” Prof. Whitney, the leading representative
of the “common-sense” school of philology, has not shrunk from stating clearly and distinctly the logical consequences of such language. He tells us that “Indo-European language, with all its fulness and inflective suppleness, is descended from an original monosyllabic tongue; our ancestors talked with one another in single syllables, indicative of the ideas of prime importance, but wanting all designation of their relations.”¹ Such a language, however, is a sheer impossibility—even for a body of philosophers or comparative philologists, and it is contradicted by all that we know of savage and barbarous dialects. In these, while the individual objects of sense have a superabundance of names, general terms are correspondingly rare. The Mohicans have words for cutting various objects, but none to convey cutting simply; and the Society Islanders can talk of a dog’s tail, a sheep’s tail, or a man’s tail, but not of tail itself. “The dialect of the Zulus is rich in nouns denoting different objects of the same genus, according to some variety of colour, redundancy, or deficiency of members, or some other peculiarity,” such as “red cow,” “white cow,” “brown cow;”² and the Sechuâna has no less than ten words to denote horned cattle.³ The Cherokee possesses thirteen different verbs to denote particular kinds of washing, but none to denote “washing” itself;⁴ and, according to Milligan,⁵ the aborigines of Tasmania

¹ “Language and the Study of Language,” p. 256.
⁵ “Vocabulary of the Dialects of some of the Aboriginal Tribes of Tasmania,” p. 34.
had "no words representing abstract ideas; for each variety of gum-tree and wattle-tree, &c. &c., they had a name, but they had no equivalent for the expression 'a tree;' neither could they express abstract qualities, such as hard, soft, warm, cold, long, short, round." The lower races of men have excellent memories, but very poor reasoning powers; and the European child who acquires a vocabulary of three or four hundred words in a single year, but attaches all its words to individual objects of sense, reflects their condition very exactly. We may be sure that it was not "the ideas of prime importance" which primitive man struggled to represent, but those individual objects of which his senses were cognizant. As M. Bréal observes,¹ "It is not probable that in the ante-grammatical period there were as yet no words to denote the sun, the thunder, or the flame. But the day when these words came into contact with pronominal elements, and so became verbs, their sense also became more fluid, and they dissolved into roots which signified shining, thundering, or burning. We can understand how the old words which designated the (individual) objects, afterwards disappeared to make room for words derived by the help of suffixes from these newly-created roots. We can better understand, too, the existence of numerous synonyms which signify going, shining, resounding; they are the abstracts or abstracta of former appellatives. The idea of shining, for instance, could be taken from the fire as well as from the sun, and so a considerable number of roots, from

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very different starting-points, have come to be united in a common term.” An elementary work on French etymology groups words like rouler, roulement, roulage, roulier, rouleau, roulette, roulis, round a root, roul, with the general sense of “circular movement;” yet in this case we know that this imaginary root roul is nothing else than the Latin substantive rotula. The error of the Sanskritists is really the same, though the loss of the parent-language prevents us from checking it with the same ease as when we are dealing with French. “Father” and “mother” must have had names in Aryan speech long before the suffix tar was attached to what we call the “roots” pa and ma, and Buschmann has shown that throughout the world these names are almost universally pa or ta and ma. Words like our door, the Latin fores, the Greek Sóφa, the Sanskrit dváram (dur), cannot be traced to any root; that is to say, a group of cognate words has either never existed, or else been so utterly forgotten and lost, that we can no longer tell what common type they may have represented. “A word like [the French] car,” remarks M. Van Eys,1 “could pass for a root if we did not know its derivation.”

Roots, then, are the phonetic and significant types discovered by the analysis of the comparative philologist as common to a group of allied words. They form, as it were, the ultimate elements of a language, the earliest starting-point to which we can reach, the reflections of the manifold languages framed by the childhood of our race. Each family of languages has its own stock of roots, and these roots are the best representatives

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1 “Dictionnaire basque-français” (1873), p. v.
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we can obtain of the vocabulary of primitive man. Like grammar and structure, roots, too, embody the linguistic instinct and tendency of a race; they are the mirror whereon we can still trace the dim outlines of the thought and mental point of view which has shaped each particular family of tongues. What the language is, that also are its roots; the roots of Chinese or Polynesian are as distinctively and characteristically Chinese or Polynesian as the roots of Aryan are Aryan. We have to extract them from the existing records of speech, and like the individual sounds of which words are composed, the character they assume will be that of the particular speech itself. "Unpronounced," says Prof. Pott,1 "they fluttered before the soul like small images, continually clothed in the mouth, now with this, now with that, form, and surrendered to the air to be drafted off in hundredfold cases and combinations."

They are, in fact, the product of the unconscious working of analogy, that potent instrument in the creation of language. The name given to an individual object becomes a type and centre of the ideas that cluster about it; sense and sound are mingled together in indissoluble union, and the instinct of speech transforms the combination into a root. Upon this root, or rather upon the analogy of the name that is the true source of the root, is built a new superstructure of words by the help of suffixes and other derivative elements. But the root and all the family of words that belong to it must remain the shadow and reflection of the original word from which it arose, and consequently display all the characteristics

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1 As quoted by Professor Max Müller, "Lectures," ii. p. 85.
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of the words itself, and the language of which it forms part.

Hence it is that the roots of a family of languages have the characteristics of the languages to which they belong. Thus the roots of a Semitic tongue are triliteral, consisting, that is to say, of three consonants, while the roots of the Finno-Ugrian dialects exhibit the same vowel-harmony as the developed dialects themselves.\(^1\) Hence, too, it is that the roots given by lexicographers merely represent the oldest forms of words of which we know, and do not exclude the possibility that these words are really compounds, or that phonetic decay has acted upon them in some other way long before the earliest period to which our analysis can reach back. In certain cases, indeed, we have good proof that such a possibility has been an actual fact. Thus the Arabic root 'ām, “to be orphaned,” is a decayed form of an older 'ālam, and such co-existent Aryan roots as vridh and rith, both signifying “growing,” imply the loss of an initial letter, while it is only within the last few years that the labours of Dr. Edkins and M. de Rosny have given us any idea of the roots of Old Chinese. By the help of the old rhymes, of a comparison of the living dialects and of other similar sources of aid, Dr. Edkins has restored the pronunciation of Mandarin Chinese such as it was 2,000 or even 4,000 years ago.\(^3\) Thus yi, “one,” was once tit; ta, “great,” was dap;
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ye, “to throw,” was tik. There are words in which we can trace a continuous process of change and phonetic decay, tsie, “a joint,” for instance, being tsit in the classical poetry, and since in Chinese k changes to t, and not contrariwise, while there is evidence that the word once ended in a guttural, we are carried back to a period earlier than 1100 B.C. for the time when tsit was still tsik. But even tsik is not the oldest form to which we can trace it back. Tsik is developed out of tik, and to tik, therefore, we must look for a representation of the root to which it and other allied words have to be referred.

Wherever ancient monuments, or a sufficient number of kindred dialects are wanting, the roots we assign to a set of languages will represent only their latest stage. The further we can get back by the help of history and comparison, the older the forms of the words we compare, the better will be the chance we have that our roots will reflect an epoch of speech, not so very far removed, perhaps, from its first commencement. The so-called “root-period” of the primitive Aryan, really means the analysis of the most ancient Aryan vocabulary, which a comparison of the later dialects enables us to make. Behind that “root-period” lay another, of which obscure glimpses are given us by the roots we can still further decompose. A series of words, for instance, like the Greek ἐξώμιν, and the Sanskrit yudhmas, presuppose a root yudh(a), but when we remember other sets of words presupposing the roots ju (“joining together”) and dha (“placing”), we are carried back to a time when the word signifying “battle,” which embodied, as it were,