

IX.

THE ORIGIN OF LANGUAGE.

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SINCE the early Greek philosophers began to speculate as to whether language was the result of mutual agreement or the spontaneous product of human nature, working the same effect in the case of each individual member of a race, it has generally been assumed in researches of this kind that language has always been as intelligible as it is to-day. Unintelligible language seemed to be a contradiction in itself. Language which is not understood appeared to lack the very qualities which, in analysing that wonderful union of sound and mind, we seek to explain in our attempts to discover the genesis of human speech.

But is it really altogether impossible that language, which in the mouth of the more gifted nations has ultimately become so perfect a medium for the expression of thought, before attaining to its present high degree of development, should have passed through many a more primitive and less perspicuous stage? Is it not, on the contrary, in accord with the gradual growth of the human mind, and the concurrent evidence of the history of man and men, that the traces of imperfect apprehension still found in the most highly cultivated tongues are the last remnants of an age, when the reasoning faculties were not sufficiently developed to serve all the purposes of distinct speech? In early Teutonic, things totally dissimilar were confused and denoted by a single sound. The Gothic root 'liub' stands for faith, love, and hope; the Gothic word 'leik' both for carcase and body. If we suppose

that, in addition to these meanings, 'liub' and 'leik' could have had a great variety of other significations having no apparent connection with each other, and that many, if not all, other Gothic words were equally multifarious in meaning, we shall have conceived an epoch in the history of speech which, judging it by modern standards, may be described as unintelligible. It is the object of the following sketch to attempt to show whether such a condition has ever existed, and whether it really did involve unintelligibility. The inferences drawn will be applied to the question of the origin of language generally.

For an inquiry of this nature, the Egyptian language probably offers greater facilities to the philologist than any other that could be named. The extensive period through which it may be traced—the longest, indeed, observable in any language—is in itself a great advantage. We have hieroglyphics as old as 3000 years before Christ, and Coptic writings dating from 1000 after Christ. Added to antiquity and a proportionately long course of recorded development there is a transparent simplicity facilitating analysis, which effectually displays all the more essential features of the original germ and its progressive expansion.

In its more ancient hieroglyphic period, Egyptian is so largely a language of homonyms, that we moderns may well be tempted to dismiss it as unintelligible. Here are a few instances. 'Âb'* means to dance, heart, calf, wall, to proceed, demand, left hand, figure; 'âp-t' means bread, corn-measure, jug, stick, part of a ship, or hippopotamus; 'uah' means to place, lay, work, garland, grain, and fish; 'uet' means green, plant, vessel, mineral, sacrificial cake, sceptre, eye-water, to hurt; 'bâ' signifies wood, palm, blade, mineral, holy bark, sacrificial bread; 'mâk' means to cover

* The hooks, points, and strokes on the letters, with which the Egyptian words are transcribed, refer to the pronunciation, *e.g.*, â is the Hebrew א, â long, a the common vowel; h is h, h=hh, t=t, t=î and ז, t=θ, dj, d, s=sh, &c.

(protect), consider (because, for), linèn, boat, to rejoice; 'hes' means jug, to contemplate, to penetrate, sing, be joyful, to command, refuse; 'χebχeb' means to open, beat down, and vase; 'χemt' means three, to lack, demand, go, fire, to heat, javelin; 'χer' means to overturn, pleasant, sacrificial bullock, myrrh, sepulchre, therefore, processional boat, to cry, enemy, rascal, subject, to bear, means of subsistence, in respect of, through, whilst; 'sensen' means to breathe, echo, smell, unification, happy, pleasant; 'šet' signifies to effect, separate (choose, save), a weight, to nourish, read; 'tebh' means useful (necessary, utensil), to request, shut, offering, grain, vessel, &c.

The use of one sound, or one combination of sounds, for the most various things is not, moreover, the only source of confusion. There is the opposite practice of expressing one notion by any of a multitude of sounds, or combination of sounds. The second phenomenon is not less remarkable than the first. 'To cut,' for instance, is expressed by àseχ, àn, ten (tent, tenu, tenà, àtn), tem, (temu, tem), mtes, šâ, šât, šetâ, šet, nesp, peht, peχ, beχn, behi, sau, us, ush, ust, tes, χab, χeb, χebs, χet, hebt, hent, hesb, sek, seχ, usχ, aseχ, seha, kaša, &c.; 'to call' finds its equivalent in χen, semâ, šen, t'âuk, hun, âtu, âm, âmâm, akeb, âš, &c.; 'to anoint' is sesenau, skenen, sbek, telis, ûrhu, ûarh, urh, ur, uru, merh; for 'boat' or 'ship' we have karo, bari, kaka, kakau, kek, kebn, kebni, sehîr, t'a, t'ai, ti, u, uâ, uâa, uâu, iua, âaut, teks, tep, tepî, âtpa, âpt, menš, hâ, hâu, hâi; 'dirt' is sehu, seherâu, hes, het', âmâ, âmem, &c.; 'night' is us, uχa, uχau, uha, âχeχ, âχχû, χau, χaiu, t'âu, ut'u, mesî, kerh, kerhu, &c.; 'naked' is hauum, hauu, beka, beš, kaî, ha, sha, lha; 'mighty, strong,' is tar, tenr, tenro, ut'ro, neš, nâšt, next, nexî, nextâ, ken, &c. For nearly every ordinary idea, examples of this kind might be added almost indefinitely. These two phenomena taken together, the student may well ask in astonishment, on first looking into an Egyptian dictionary, whether every sound may have every meaning,

and, on the other hand, whether nearly every meaning may be expressed by nearly every sound? At first sight a considerable portion of Old Egyptian appears an impenetrable enigma.

There are, however, certain restrictions to the conclusive force of the quotations given. Not all meanings are certain; not all homonymous words have been used in all their meanings at the same period and in the same localities; not in all parts of the country has the same thing been looked at through the medium of so rich a nomenclature. At the same time, making every allowance for restrictions, the extent of which cannot in the present state of science be accurately defined, the fact of numerous homonyms occurring at the same time and place admits of no doubt or cavil. There rushes past our wondering eyes a confused current of words, of which many denote a multitude of objects, and many one and the same thing. In a word, we seem to have before us unintelligibility.

To enable us to apply the true solvent to our problem, let us remember how the present generation has penetrated the mystery of ages and rediscovered the art of reading hieroglyphics. After the first indispensable step of the discovery of the alphabet and syllabarium, achieved by the comparison of the Greek text in bilingual inscriptions, nothing so effectually helped the deciphering process as the explanatory pictures, which the Egyptians were wont to add to the alphabetic spelling of a word. All hieroglyphic writing is composed of text and accompanying illustration. Excepting certain grammatical abstracts, which, from constant recurrence, could not fail to be instantly intelligible, every word is first written by letter, and then explained by a supplementary picture, pointing out the order of conceptions to which the word belongs. Behind the name of a flower, written with the ordinary alphabet, there stands the representation of a plant; if the word denote a disease, it is illustrated by a

drawing suggestive of misfortune or uncleanness; or if any kind of work be designated, there is placed behind it the picture of a hand grasping an instrument, denoting activity. There being several hundreds of such classifying signs constantly recurring as so many standing illustrations, the reference of a word to its conceptual order is comparatively easy. In these pictorial additions we have, therefore, a ready clue to the general sense of a term, whatever its special meaning may be.

It is easy to perceive, that what applies to the modern reader with regard to the help given him by these pictures, must have applied likewise to the ancient Egyptian. Had Egyptian words been settled in their phonetic form, and had each idea been represented by one term only, the language would have possessed the clearness of modern tongues, and there would have been no occasion for what might be called a literature of picture-books. If to this conclusion it be objected, that the priestly style of writing being traditionally bound to primitive forms, unnecessarily continued a system which, to secure clearness, had been indispensable only in very early periods, the reply is, that although in historic times there exist many words sufficiently distinct for their sense to admit of no doubt without appended illustration, yet of others that do need such an explanation there is a vast multitude left. Determining pictures, therefore, are neither mere archaisms nor superfluous adornments. They are absolutely necessary aids to the reader. The very imperfections of the language which forced class signs upon the Egyptians have thus become the means of disclosing to us the signification of their words. What in most cases would otherwise have remained an impenetrable enigma is revealed to the epigones by the difficulty its deciphering presented to the inventors themselves.

If, then, literature could not have been understood without the accompaniment of elucidatory drawings, what, if

not gesture and facial expression, could have supplied the place of these in the spoken tongue? It is true, as an indicator, gesture is less certain than pictorial illustration; but the speech of a primitive people is even more simple than its literature. Its range of ideas being limited, and chiefly connected with sensuous objects, easily denoted by action, a very slender vocabulary and a proportionately small number of explanatory gestures suffices. Even in the very latest hieroglyphic period we find abstract ideas for the most part imperfectly expressed. Love, for instance, is conceived merely as desire; will as command; and honour as fear or praise. The further back we go, the more sensuous must everyday talk have been, the more easily understood from contingent circumstances, and the more readily explained by accompanying pantomime. From what we have seen of the extent to which one word might be used to denote many things, it is evident that gesture, the attendant mimetic picture, itself illustrated by the circumstances in which the interlocutors were placed, at first must have been quite as important a medium as the uttered word. But half understood as such, primitive speech required to be supplemented and interpreted by the intelligible motion of the body, the signal given by head, hand, or leg, the impression conveyed by nod, shrug, wink, glance, or leer. In the rare instances where the situation of the primeval speakers did not explain itself, where gesture was likewise inadequate, and the word uttered not fixed in meaning to the extent of imparting a distinct thought, there could have been little, if any, understanding. In fact, language had to grow.

An advanced stage is marked by the appearance of words definite in meaning and distinct in sound. Amid all its homonymic and synonymic confusion, such words are to be numerous found even in ancient Egyptian. There are many phonetic units which can have but *one* meaning, and many concepts which can only be expressed

by a single combination of sounds. The progress thus indicated can only have been the result of a particular combination of sounds ultimately commending itself to the ear, as better adapted than any other to denote a certain object or conception. Such definiteness, as we have seen, not being an original and necessary condition of speech, it must have been the result of a process of continued selection. It must have been the profit derived from an advance towards accuracy of thinking, and a gradually educated national sense of hearing, whereby certain thoughts were referred to certain sounds, simple or complex.

In its later historical aspects, the selective process can be distinctly traced. From amid the vast number of homonyms and synonyms occurring in the oldest surviving epoch by the side of fixed and definite terms, there arise, in the course of history, ever-fresh words, distinct in sound and meaning. The fact that hieroglyphic literature was more or less tied to an ancient vocabulary of the tongue, the so-called 'sacred dialect,' and so could be but little influenced by the growing language of everyday life, is, it is true, a great drawback to an inquiry into the gradual development of the idiom. Yet the gradual rise of new words may be plainly tracked in the papyri, until the sum-total of the changes wrought ultimately stands out with surprising clearness in the Demotic and Coptic periods of the long-lived tongue. The Copts, as the Egyptians were called soon after their acceptance of Christianity, together with the old religion gave up the ancient hieroglyphic writing and dialect cherished by the priesthood in pagan times, and translated the Bible into the vernacular. And behold! the vernacular had become an idiom essentially different from that handed down by hieroglyphic tradition, and so long reverently adhered to as the language of the old national science and faith. Of an immense number of homonyms and synonyms not a vestige remains in Coptic. Homonyms have either dis-

appeared, trunk and stalk, or, where there is yet life left in the roots, it becomes manifest, for the most part, in altogether new words, derived from the old, but differentiated in sound. Synonyms, too, are largely reduced by the disappearance of a vast number of words and the contraction in meaning of those retained. In order to realise the magnitude of the revolution wrought, let us compare, as to homonymy, the many meanings given above for the hieroglyphic 'χer'—to overturn, beat down, pleasant, sacrificial ox, myrrh, burial, therefore, processional boat, to cry, enemy, rascal, &c., with the few to which the Coptic 'χer' is restricted—to knock out, throw out, destroy. As regards the diminution of synonyms, we need only put together the host of the thirty-seven above-named hieroglyphic words for 'to cut'—aseχ, ân, ten, tent, tenu, tenâ, âtn, tem, tem, temu, mtes, sâ, sât, šetâ, šet, nesp, peht, peχ, beχn, behi, sau, us, ush, ust, tes, χab, χeb, χebs, χet, hebt, hent, hesb, sek, seχ, usχ, aseχ, seha, keša, &c.; and then consider the ten of the same meaning in Coptic—nuker, fekh, fêkhi, šat, šôt, bôč, pah, četčôt, četčôth, čec (to which others might be added for the idea of 'cutting to pieces,' 'utterly destroying'). On the other hand, where roots equal in sound or alike in meaning have not absolutely disappeared, they are replaced by derivatives differentiated in sound and sense. The 'χer' which, in hieroglyphics, was promiscuously used to designate to overturn, strike down, pleasant, sacrificial bull, myrrh, burial, therefore, processional boat, to cry, enemy, rascal, subject, to carry, provisions, in respect of, through, whilst, with its collaterals appears in Coptic divided into 'χer,' to strike down; 'čreht,' destruction; 'šaar, čari, šoršer,' to destroy; 'holč,' pleasant; 'šušouši, kholkel,' sacrificial offering; 'šal,' myrrh; 'hrau,' clamour.* It is highly instructive that as far back as the hieroglyphic age we find attempts at employing some of these

* The said Coptic words can, according to the laws of Egyptian etymology, be traced back to hieroglyphic 'χer' and to root-affinities of 'χer.'

new words; but they were not in those tentative days able to make themselves sufficiently felt to force the comprehensive and indiscriminate 'χer' into narrower limits. In the same way, the synonymy of the words cited for 'to cut' has become more exact simultaneously with the limitation of the number of words. Now, if we can extend these observations, as might easily be done, to a large number of Egyptian roots, the course of linguistic evolution in Egyptian is detected in its essential features, and proved alike by the verbal monuments preserved and destroyed. In the beginning we have homonymy and synonymy lacking definiteness of thought and precision in sound. Then, as the mind advanced, as conceptions became better defined and sounds were more accurately distinguished, before the force of these enlightening agencies most homonyms had to vanish, or to content themselves with replacement by differentiated derivatives. Thousands of former synonyms were likewise swept away, or, being used in narrower and more accentuated meanings, ceased to be loosely synonymous. From vagueness of sound and uncertainty of sense clearness and precision were thus gradually evolved: to the illumination of the psyche was superadded a corresponding development of the sense of hearing, and the power of definite speech.

Though their history cannot be traced with equal exactitude, enough has been preserved of the original material of the most highly cultivated idioms to prove them to have passed through similar phases. On a close examination of the Aryan and Semitic families, linguistic phenomena analogous to those displayed in Egyptian are revealed to the student. With the wealth of undoubted Egyptian homonyms before him, the very diverse meanings of many a Sanskrit, Hebrew, and Arabic verb are easily understood, as having no affinities pointing to a common centre. The many ingenious metaphors employed by the modern interpreter in twisting opposite notions into some common idea are disposed of by the

discovery of homonymy, and its enormous share in the formation of languages.* Again, with our experience of the rank luxuriance of old Egyptian synonymy, none can call upon us to regard words of one meaning in any language as originally expressing two different shades of that meaning. But likeness of primitive structure in different languages involves likeness of evolutionary principle. Albeit the perception of sound which ultimately assigned distinct meanings to distinct phonetic types, as well as the means of differentiation employed for the attainment of this end, may have been more or less different, analogy of primary principle indicates a similar method of development.

From what has been shown, it follows that the question why certain conceptions are expressed by certain sounds, why 'man' should stand for 'man' and 'boy' for 'boy,' instead of 'boy' for 'man' and 'man' for 'boy,' does not regard the time of the creation of language, but a much later period. From the numerous words originally invented, and tentatively used by successive generations for 'man' and 'boy,' a continuous choice was made until sounds most responsive to the national sense were fixed upon and universally adopted, to the exclusion of previous rivals. To what extent the creation of words, even at the early and more arbitrary period, was limited and locally diversified by national partialities for certain sets of sound, there is no evidence to show. Admitting that the linguistic sense was governed and restricted by such idiosyncrasies from the very first, it must nevertheless have been unsettled within certain limits, and have required a long process to bring it to maturity. The fact that there was a time when one idea could be expressed by a host of words, and when each of these rival words equally applied to a host of different ideas, opposes the hypothesis that

* In Egyptian, as in other tongues, disregard of homonymy has sometimes led to the assumption of the most impossible metaphorical transitions of meaning.

speech began as an outburst of uniform inspiration, or that the distinct linguistic sense, which to-day connects sound and meaning, had any original existence. Neither homogeneous ejaculation nor deliberate agreement made our dictionaries. What happened was the gradual development within nationally confined boundaries of the faculty of appropriating distinct sounds for distinct concepts. In Egyptian we have definite etymological evidence in proof of this gradual and continuous genesis; in other languages, besides the remnants of similar doings left, the demonstrable Egyptian process explains what is necessarily inexplicable where the growth of words can be less fully investigated—the assignation of distinct ideas to distinct sounds at a time when language, the medium of communication, did not yet exist.

The light thrown by Egyptian upon remote phases in the history of the human intellect is not confined to the area delineated. There are other features as marvellous as those already dwelt upon. There is, for instance, the inversion either of sound or of sense, or of both. Supposing 'good' were an Egyptian word, it might mean either good or evil, and be pronounced *good* or *doog* at pleasure. *Doog*, in its turn, might likewise denote good or evil, and, by a trifling phonetic modification—of which there are many examples—become, perchance, *dooch*. This again might be turned into *chood*, also representing any of the opposed meanings. What, at first sight, can be more incredible?

Since, in the appreciation of miracles, the first requisite is an inquiry into the facts, it may perhaps be stated that the author's Coptic Researches contain a list of such metaphyses to the extent of ninety pages. Even this list is only a selection from much more copious collectanea. Here are a few—(I.) Inversion of sound: 'abΛba,' stone; 'âmΛma,' come; 'ânΛna,' list; 'ârΛrâ,' to make; 'kenΛnek,' to strike to pieces; 'kenhΛhnek,' to flourish; 'penhΛχenp,' to catch, take; 'tebΛbet,' fig; 'sârΛraš,' to cut to

pieces, divide; 'fesΛsef,' to purify, wash; 'pehΛhep,' to go; 'šnāΛanš,' wind, to blow. (2.) Inversion of meaning: 'kef,' to take v to let lie; 'ken,' strong v weak; 'men,' to stand v menmen, to move; 'tua,' to honour v to despise; 'tem,' to cut to pieces v to unite; 'terp,' to take v to give; 'xen,' to stand v to go; 'neh,' to separate, cut to pieces v noh, band. (3.) Inversion of sound and sense: 'soš,' becoming, ◇ 'šes,' unbecoming; 'šeb,' to mix, ◇ 'peš,' to separate; 'hen,' to bind, ◇ 'neh,' to separate; 'hot,' to crumble, ◇ 'toh,' to make fast; 'ben,' not to be at hand, ◇ 'neb,' all; 'θerp,' to sew together, ◇ 'preθ,' to break to pieces, to divide, &c. As may be perceived from some of these examples, variation of sound may accompany inversion.

If, then, we can have no doubt as to the fact, the next thing to be done is to seek a rational explanation. In the light of the homonymy observed, the explanation readily suggests itself that there has been no deliberate inversion of sense or sound at all; that, in fact, we have before us words which fortuitously happen to correspond to one another in these particular ways. This would especially seem to apply in the case of inversion of meaning; for at a time when homophonic roots abounded, it might well have chanced that the same word having so many different significations, the one meaning happened to be exactly the reverse of the other. If, for instance, 'ken' may have every possible meaning, why should it not accidentally mean 'weak' as well as 'strong'? This being so, there is apparently no need to assume any intentional or conscious inversion of sense.

Without denying that this may account for *some* inversions, it cannot be accepted as a satisfactory explanation of all. If, by reason of mere fortuitous homonymy, 'ken' had come to mean both 'strong' and 'weak,' the use of the word for one of these meanings would, in the interest of clearness, have been speedily discontinued, and some of the many other existing words for 'strong' and 'weak' would

have been substituted for it. Where no such substitution has been made, we are forced to the conclusion that, far from being fortuitous, the crowding of antipodal meanings into one word must have had a motive. The cause is revealed on reference to Egyptian writing. When 'ken' is used for 'strong,' we find behind the alphabetically written word a supplementary picture significant of strength; in the same way we may always know when the word stands for 'weak' from the accompanying illustration indicative of weakness. Here, then, we have the rationale of the phenomenon. On analysing our impressions, we shall find them to have been originally acquired by comparison and antithesis. Unnecessary as it may now be for us, in order to realise strength, to compare it with weakness, there was a time when the mind could not conceive the one notion without contrasting it with its opposite. No intellectual effort is demanded of a child in the nineteenth century to learn what strength means; the word being habitually applied by his teachers to certain things, persons, and deeds, its inherent idea is disclosed by the most casual observation of the circumstances in which it is uttered. But quitting the domain of daily life and its familiar language, and trying to form original ideas, or to adopt ideas rarely expressed, we are forced to call antithesis to our aid. To realise either an obtuse, or an acute, or a right angle, the schoolboy has in each case to observe the different characteristics of the three. Similarly, whenever some new instrument is invented, the readiest method to understand its operation is to mentally liken and separate it from similar but yet different utensils. Again, the simplest way of learning the exact signification of a foreign word is to mark its deviations from a corresponding term in our own idiom; and no student has ever taken in the logical and metaphysical categories without placing them in juxtaposition to each other. Egyptian takes us back into the childhood of mankind, when the most elemen-

tary notions had to be struggled for after this laborious method. To learn what 'strength' was, the attention had, at the same time, to be directed to 'weakness;' to comprehend 'darkness,' it was necessary to contrast the notion mentally with 'light;' and to grasp what 'much' meant, the mind had to keep hold simultaneously of the import of 'little.' Egyptian words, lapsing into their antithesis and including the two elements of the comparison originally instituted, allow us to conceive some idea of the intellectual effort by which the first and most indispensable notions—to-day the most ordinary and most easily acquired—had to be primarily achieved. It is plain that, in such circumstances, the rapid comprehension of gesture and attendant circumstances alone can have rendered spoken intercourse possible.

The number of surviving Egyptian words which undergo change of sense without any variation of sound is, however, by no means large. For the most part, antithetical meanings, in the words of the literate epochs whose language can be sufficiently traced, are marked off by phonetic modifications; at times, also, phonetic differentiation, not originally existent, is noticed to step in gradually. A good example of accomplished phonetic variation is 'meχ,' empty v 'meh,' full. To enable the reader to watch its rise we may mention 'men,' which, in hieroglyphic, means 'to stand,' and, reduplicated or in the form of 'menu,' 'to go,' but which, in Coptic, is superseded by 'moni' for the meaning 'to stand,' and by 'monmen' for 'to go.'

Fortunately for the student of language, proof of intentional inversion of meaning does not rest upon logical grounds only, but is made absolute by the recorded history of the tongue. Among Egyptian prepositions there are many in which the difficulty of grasping abstract ideas is sought to be overcome by reference to opposite notions. No more vivid illustration of the primitive practice of thinking by thesis and antithesis could be afforded.

Hieroglyphic 'm' means alike 'into something,' 'toward something,' and 'away from something,' according to the context; 'er' means not only 'away from something,' but also 'toward something,' and 'together with something;' 'hr' and 'χeft' mean both 'for' and 'against;' 'χont,' 'in,' 'under,' &c. In Coptic, 'ute' and 'sa' denote both 'away from something' and 'into something;' 'kha' is 'over' and 'under;' 'ha,' 'over,' 'under,' 'toward something,' and 'away from something;' 'hi,' 'toward something,' 'away from something,' 'into something,' &c. Though this is nothing more than the polar change of meaning observable in other words, it yet conveys stronger evidence of intentional inversion. If, in the case of other words, it might be objected by the sceptical that, bearing in mind the multifariousness in meaning of Egyptian roots, it might well happen that antithetical sense should, without any internal connection, be expressed by identical sound, this possibility is inadmissible as regards prepositions. If, of such difficult conceptions as prepositions express, any two directly antipodal had accidentally happened to meet in the same sound, one or the other must, for the sake of clearness, have been given up, and by the rank creative faculty of the language have been replaced by some other word. None would subsume 'for' and 'against' in the same word without a purpose, and unless it were found impossible to think of the one without at the same time thinking of the other and pitting it against its opposite. The logic of this remark is confirmed by an allied and conclusive phenomenon preserved in the transmitted material of the language. Besides its simple prepositions, Egyptian has a large number of compound ones, whereof not a few unite two simple prepositions opposed in meaning, in order thereby to bring the sense expressed by the one or the other to a clearer understanding. This thoroughly establishes the fact that antithetical conceptions were intentionally placed in opposition in order to facilitate

the comprehension of either. For instance, the preposition 'ebol,' made up of 'e,' 'toward something,' and 'bol,' 'away from something,' means 'away from something.' The preposition 'ebolken,' composed of 'ebol,' 'away from something,' and 'ken,' 'into something,' signifies 'away from something.' 'Ebolute,' made up of 'ebol,' 'away from something,' and 'ute,' both 'away from something' and 'into something,' means 'away from something,' 'before something.' 'Ehraiim,' formed of 'ehrai,' 'in, toward something,' and 'im,' 'in something,' becomes 'in' and 'away' from something. To these pregnant examples, which really solve the problem, others might be added.

Analogous processes may be detected in other languages. Arabic has polar change of meaning in great abundance; in Chinese the literary period marked by the Tiu Li (2000 B.C.) is characterised by the same phenomenon; and even now, when the Englishman says 'without,' is not his judgment based upon the comparative juxtaposition of two opposites, 'with' and 'out'? And did not 'with' itself originally mean 'without' as well as 'with,' as may still be seen in 'withdraw,' 'withgo,' 'withhold,' &c.? Is not the like metamorphosis still observable in the German 'wider' and 'wieder' ('against' and 'together with'); the German 'boden' ('groundfloor' and 'loft'); the Latin 'contra' (cum + tra), &c.? That but few instances of this primeval dulness should have been handed down to the modern and highly cultivated stage of European idioms is readily understood.

As regards inversion of sound, though we can more easily transfer ourselves into the psyche than the sensorium of antiquity, we are likewise enabled to explain this part of our subject by the preserved traces of Egyptian linguistic growth. In many cases, indeed, these topsyturvy words, which, direct opposites in sound, contradict or else correspond to one another in meaning, may be simply an accident, occasioned by the original superabundance of roots; the more so as they often do

neither. Take, for instance, 'ma,' 'to see;' it can have nothing to do with 'ma,' 'to come.' Now, why cannot 'ma,' 'to come,' have arisen just as independently as 'ma,' 'to see,' without being derived by metathesis from 'am,' 'to come'? And yet, as regards the great majority of transposed words, correspondence in meaning is so usual, and extends to such rare phonetic combinations, that it would be difficult to renounce the belief in logical affinity, even if it could not etymologically be accounted for. But the explanation of the conceptual connection is found in a method of forming secondary roots peculiar to the Egyptian idiom. Egyptian roots are almost without exception capable of development by repetition of the initial consonant at the beginning or end of the word, or by the repetition of the terminal consonant at the end. That is to say, $\sqrt{\text{fes}}$ may become either $\sqrt{\text{ffes}}$, $\sqrt{\text{fesf}}$, or $\sqrt{\text{fess}}$; $\sqrt{\text{met}}$ may become $\sqrt{\text{mmet}}$, $\sqrt{\text{metm}}$, or $\sqrt{\text{mett}}$, &c. A change of meaning by no means always accompanies these new formations. They are simply instances of the full play given to the speech-making faculty in the first glorious flush of its exuberant spring. By repeating and transposing their component sounds, the liquid material of roots was being poured into ever-varying forms, the sense of emphasis and euphony prompting a desire for iteration, and giving words a musical finish, while making them more pointed and expressive. Among the forms produced by this luxuriating growth, the one in which the initial consonant is repeated at the end paves the way for absolute inversion. 'Fes' having been developed into 'fesf,' produces, by a slightly emphasised pronunciation, 'fesfef,' *i.e.*, 'fes-sef,' or the root and its inversion. When this can be historically proved, it is easy to comprehend that the idea contained in the whole—this whole being a reduplication—came to be likewise expressed by each of its constituent parts. As soon as ever 'fes' had expanded into 'fes-sef,' 'sef' naturally came to be a synonym of 'fes,' and both might be used promiscuously. The two

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limbs of the entire word according like a rhyme, and each completing the other like premise and conclusion, either acquired the value and significance of the two combined. It may be added that the two first stages of this process, 'fes, fesi,' are also known in the Aryan languages, where they are designated by the name of the 'broken reduplication.' We refrain from discussing why this explanation only apparently contradicts the metathesis of the three-consonant words.

Phonetic metathesis in words logically related abounds in the Aryan and Semitic languages. By those regarding these families of speech as akin to the Egyptian, the Aryo-Semitic phenomenon, however unaccountable in the petrified condition of modern languages, will be readily explained in the light of an ancient and less fixed idiom, with sounds and thoughts still unsettled, and in a state of liquid and fitful transition. A few Germanic illustrations are easily collected: Fisch \wedge Schiff; Stamm \wedge Mast; Kahn \wedge Nach-en; Top-f \wedge pot; Berg \wedge Grub-e; Lich-t \wedge hell; täuw-en \wedge to wait; Ruh-e ∇ hurr-y; boat \wedge tub; rise \wedge soar; grip-e \wedge prig; top ∇ pit, &c. If the comparison is extended to the wider range of the various Indo-European tongues, examples, though necessarily restricted to primitive notions, rapidly multiply: Lat. cap-ere \wedge Germ. pack-en; Griech. ῥίω \wedge Lat. nar; Lat. ren \wedge Germ. Nier-e; Lat. tog-a \wedge Griech. χιτ-ων; Russ. χreb-et \wedge Germ. Berg; Lettoslav. pol-a \wedge lap-as, lup-en, Germ. Laub; Eng. the leaf \wedge folium; Russ. dum-a; Griech. θυμ-ος \wedge Sanser. mêdh \vee mûdh-a, Germ. Muth; Griech. πηλ-ός \wedge Sanser. lip (to soil); Lettoslav. palk-a \wedge klep-ati, klop-f-en; the rav-en \wedge Russ. vor-on; Germ. Rauch-en \wedge Russ. kur-iti; Russ. ves \wedge Serb. sav (every one); Germ. kreisch-en \wedge to shriek; the leech, Russ. lek-ar, leč-iti \wedge to heal, heil-en; Lat. clam-are ∇ Russ. molč-ati (to call ∇ to be silent), &c.

Forgetful of the difficulties surrounding its infancy, mankind, through Egyptian grammar, is afforded an idea of the labour expended in rearing the wondrous edifice called Language.