KHITA AND KHITA-PERUVIAN.

## THE

# Khita and Khita-Peruvian ЕРосн : 

KHith, HAMATH, Hittite, CANAANITE, Etruscan, peruvian, MEXICAN, Etc.

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## PREFACE．

The following pages consist chiefly of a memoir read before the Royal Historical Society，for the purpose of giving a brief sketch of the work carried on by myself and others，for the investigation of a great epoch of culture，which preceded the Assyrian，the Semitic，and the Greek，and which，accord－ ing to my views，extended to America，and closed the period of ancient intercourse between the Old World and the New．

This essay will be found very imperfect and fragmentary， for it cannot deal with the whole of a subject so wide，and it cannot give exact information on new and obscure epochs，of which little is known，to which investigation is newly directed， and where the results present but a small relation to what remains to be discovered．Indeed，my chief object is to direct the attention of scholars as much as of the public，to these fields of research．

It will be noticed that all kinds of names have been used， shifted，and changed，and this must necessarily be the case for what is new and undeterminate．Akkad and Sumerian are as yet conflicting terms，and some most distinguished Semitic scholars deny that there is any Akkad language of a Turan－ ian class．Shifting my ground as circumstances suggest and permit，I have adopted the term Khita，from Dr Birch，but I give it a much wider application．

Indeed，the topics of these pages constitute the battle－fields of scholars，Akkad，Etruscan，Hamath，etc．I have extended the ground of controversy by bringing America into connection with the classic regions．If，however，so much controversy and so much difference of opinion exist，nevertheless the solid results are great．The discovery and determination of Akkad constitute an era in scholarship．The explorations of Dr Schliemann in the Troad and Mycenæ yield us material proofs．The newest researches of Dr Deecke of Strasburg，as to the derivation of the Cypriote and Phœ⿱㇒日勺心ician characters from the Assyrian cuneiform，give us facts of importance，and， as in all such cases，new means for further inquiries．It is such progress which encourages us to persevere in the de－ cipherment of Etruscan，Hamath，and Maya．

My own part in these labours, although a busy one, has been humble; it has been the task of an explorer, laying open ground for others. Although I have laboured hard on many points, yet if I had limited myself to the complete elucidation of any one, there would have been no one to carry out my work of a general exploration. In this course there is ample encouragement to persevere, because the detailed labours of others, as those of Dr Schliemann and Dr Deecke, have confirmed my preliminary investigations. Thus encouragement is given me to persevere in those portions of the inquiry, the more particularly the American, in which the sanction of scholars has not yet been accorded to me.

Much of what is here given has, of course, been printed by me before, because the subject is progressive, and because it is only in this way information can be accumulated. There is, nevertheless, even in the books and papers, portions of which are here repeated, much useful to inquirers, for tracing the development of the study, and the names are given of some few of my memoirs on the subject :

Ephesus. (Smyrna, 1863.)
Assyro-Pseudo-Sesostris. (Bengal Asiatic Society, 1865.)
Inhabitants of Asia Minor. (Ethnological Society's Journal, 7th March 1865.)
Proto-Ethnic Condition of Asia Minor, etc. (Ethnological Society's Journal, November 1865.)
On the Prehistoric and Proto-historic Relations of the Populations of Asia and Europe. (187r.)
Note on the Hamath Inscriptions. (Palestine Exploration Journal, 587 i ).
Relations of Canaanite Exploration. (Palestine Exploration Journal.)
Pre-Israelite Populations of Palestine. (Palestine Exploration Journal, 1870.)
On the name Britannia. (Society of Antiquaries, 187 I .)
Researches in Palestine, and Proto-historic Comparative Philology, Mythology, and Archæology. (Trübner, 1875.)
Prehistoric Names of Weapons. (Trübner, 1876.)
Siva and Serpent-Worship in Asia, Africa, and America, and the Bribri Language. (Trübner, 1877.)

HYDE CLARKE.

## CONTENTS.

PAGE
PAGE
Origin of Canaan, Ham, Havilah, Cush, ..... I
History of Hittites, ..... 2
Hamath or Khita Inscriptions, ..... 3
Comparison with Himyaritic, 8; Cypriote, 9; Warka, Albanian, 10 ; Etruscan, $\mathbf{I I}$; Libyan, $\mathbf{1 2}$; Hebrew, I4, ..... 8
Origin of the Alphabet and Syllabary-Square-Magic- Prehistoric Symbols, 16, ..... 15
Canaanite Population-Epoch and Migration of-Peru, ..... 17
Akkad Language--Sumerian-Georgian, 20, 23, ..... 18
Etruscan-Tables of Etruscan, Georgian, Peruvian, ..... 20
Georgian, Relations of-Quichua, 24, ..... 23
Negative Series-Red, Eve, 26, ..... 25
Khita-Peruvian Migration-Indo-China-Cambodia-India, ..... 27
Affinities of American Grammar—Aymara—Quichua-Othomi, 32-Mexico, ..... 29
Monuments and Culture in Old and New World-Calendar, 35, ..... 33
Topographical Nomenclature-Examination of Table of Town Names of Canaan, Asia Minor, Greece, Italy, and Spain, ..... 37
Town Names in America-Migration, 67 ; Traditions of Ancient Connection with America, 69, ..... 66
Appendix I.-
River Names of India, Italy, New Granada, Peru, ..... 73
Lake Names, ..... 73
Mountain Names, ..... 74
Town Names, ..... 74
Appendix II.-
Table of Sumerian Words, Akkad, Circassian, Georgian, Etruscan, Mon, Peruvian, Mexican, etc., ..... 81
Note on Dr Deecke's Identification of Cypriote, Semitic, and Cuneiform, ..... 85
Index, ..... 87

## ON THE EPOCH

OF

HITTITE, KHITA, HAMATH, CANAANITE, LYDIAN, ETRUSCAN, PERUVIAN, MEXICAN, ETC.

The Book of Generations, in chap. x. of Genesis, states that Canaan was a son of Ham, and consequently brother of Cush, of Mizraim, and of Phut. This is given again in the First Book of Chronicles, chap. i., ver. 8. Cush (Gen. x. io) held Babel, Erech, Accad, and Calneh, in the land of Shinar. The verse says: "And the beginning of his kingdom was Babel and Erech," etc. Again, verse II says: "Out of that land went forth Asshur and builded Nineveh, and the city Rehoboth, and Calah and Resen, between Nineveh and Calah; the same is a great city." Asshur (verse 22) was a son of Shem. Cush, therefore, was considered to be a dweller in Babylonia, and not in Africa. This is consistent with Havilah, son of Cush, being Havilah, chap. ii., ver. I I. Of the rivers of Eden, "the name of the first is Pison, that is it which encompasseth the whole land of Havilah, where there is gold." Khavilah has been well conjectured to be Kholkis or Colchis, and the river the Pshani, which, as I have pointed out in the Georgian languages, still means a river.

The interpretation with regard to Cush is, that he was one of the occupants of the great central kingdom, which included Babel, Erech, Accad, and Calneh, and which was afterwards occupied by Asshur, who issued forth from thence to make his
campaigns in the west. Gen. x. 15, goes on to say: "And Canaan begat Sidon, his firstborn, and Heth [the Hittite], and the Jebusite, and the Amorite, and the Girgasite, and the Hivite, and the Arkite, and the Sinite, and the Arvadite, and the Zemarite, and the Hamathite ; and afterward were the families of the Canaanites spread abroad." The Horite was a Canaanite (Gen. xxxvi. 2).

These people were closely related, politically, and probably ethnologically and linguistically, and as one or other took the leadership, so would its name be adopted to signify the whole league, as Hittite, Hamathite, Horite, in the same way as among the Germani, English, Saxons, Germans, Warings, etc.

These Canaanites were politically connected with the other members of the family of Ham, who are recognised as holding Western Asia. The Hittites, adopting the compendious account of Dr W. Smith, are the descendants of Heth or Cheth, the second son of Canaan. The notices in the Bible give us but scanty notion of their power, but the Egyptian annals tell us of a very powerful confederacy of the Hittites on the Orontes, with whom Sether I., or Sethos, fought about B.C. 1340, and whose capital, Ketesh, near Emesa, he captured. In the Egyptian annals the name of Heth is said to stand for Palestine.

Mr George Smith gave, in the Fournal of the Palestine Exploration Fund, for October 1872, an account of notices of Palestine in the cuneiform inscriptions. After referring to the invasions of Sargon in the sixteenth century b.C., he found no records until the time of Tiglath Pileser I., about B.C. II20. He reigned about the time of Eli, judge of Israel. He defeated some tribes of the Hittites, and captured the city of Carchemish, which has so lately been explored by Mr Smith, and the remains of which are justly regarded as of so much importance.

About b.c. 870 Assur-nazir-pal marched into Syria, crossed the Euphrates near Carchemish, and Sagara, king of Carchemish, paid him tribute. After five years of war, Shalmaneser,
B.C. 854 , advanced into Hamath, destroying the country and ravaging the towns. His advance was resisted by a league of kings of Syria and Palestine, under Benhadad of Damascus, whose armies included 14,000 men under Irhulena of Hamath. The battle took place on the banks of the Orontes, and it checked the march of Shalmaneser. This was followed, however, by other inroads down to B.C. 846 . In B.C. 842 Shalmaneser was more fortunate, and compelled King Jehu and the kings of Tyre, Zidon, and others, to give him tribute. The successors of Shalmaneser carried on frequent wars in Syria. Tiglath Pileser, B.C. 743, imposed a tribute on the king of Hamath. In 740 he attacked the city of Hamath. The people obtained the assistance of Azariah, king of Judah, but were defeated, and a large part of their country was annexed to Assyria. Hamath is a city on the river Orontes, in Syria, on the northern border of the Promised Land. It is mentioned at the time of the Exodus as one of the kingdoms, and was an original seat of the Canaanites (Gen. x. I8). Its king, Toi, yielded allegiance to King David (2 Sam. viii. 9). Solomon built stone cities in Hamath (2 Chron. viii. 4). Palmyra was one of those cities, it is said. By the prophet Amos it was called "great," and in 2 Kings xvii. 34, it is spoken of by an Assyrian king as one of the chief of his conquests. It still has a population of 30,000 .

The Hamath inscriptions appear to have been first noticed as early as 1812 by Burckhardt ("Travels in Syria," p. 145, quoted by Burton, "Unexplored Syria," pp. I38, 333). He says of them: "In the corner of a house, in the bazar, is a stone with a number of small figures and signs, which appear to be a kind of hieroglyphical writing, though it does not resemble that of Egypt." So, too, it turns out that a Hamath inscription had been previously seen in the south-eastern region of Asia Minor. It was in the same bazar of Hamath that, in 1870, Mr J. Augustus Johnson, the U.S. ConsulGeneral, and the Rev. S. Jessup, of the Syrian Mission, came upon a stone in the corner of a house, which contained an inscription in unknown characters, as Burckhardt had done.

They did not succeed in getting squeeze impressions, for fanatical Moslems crowded upon them when they began to work upon the stone, and they were obliged to be content with such copies of this and other inscriptions subsequently found on stones over and near the city gate, and in the ancient bridge which spans the Orontes, as could be obtained by the aid of a native painter. Mr Jessup endeavoured to purchase a blue stone, containing two lines of these strange characters, but failed to obtain it because of the tradition connected with, and the income derived from it. Deformed persons were willing to pay for the privilege of lying upon it, in the hope of a speedy cure, and it was believed to be efficacious in spinal diseases.

Such was the discovery of these remarkable inscriptions, and in such imperfect form did they come before the scholars of Europe and America. Mr Johnson, like many others, was of opinion the characters were allied to the hieroglyphic. Professor E. H. Palmer saw the copies in the possession of Mr Johnson at Beyrout, and he was so persuaded of their archæological importance that he induced the committee of the Palestine Exploration Fund to send Mr Tyrwhitt Drake to Syria in 1870 to obtain squeeze impressions and photographs of the inscriptions. Professor Palmer, concurrently with myself, engaged in their decipherment, but without success, as he informed me.

Between 28th February and 5th March 1871, Captain R. F. Burton visited Hamah or Hamath ("Unexplored Syria," p. 333), and at the request of Mr Walter Besant, secretary of the Palestine Exploration Fund, proceeded to inspect the inscriptions.

Herr Petermann published some details concerning the inscriptions in the Athencum (No. 2267) of April 8, 1871 (Burton). In 187I Mr Tyrwhitt Drake succeeded in getting good squeezes and photographs. The latter I found of little use. Mr Tyrwhitt Drake found an inscription in Aleppo. The material of the Hamath stones is compact black basalt (Burton), polished as if by hard rubbing. The characters are
in cameo, raised from two to four lines, separated by horizontal framings, also in relief. They are sharply and well cut. Mr R. Biddulph Martin confirmed this from inspection in the Museum of the Seraglio at Constantinople, when removed. "The first thing," says Captain Burton, "which strikes the observer is, that they must date from the metal ages, and that they are the work of a civilised race."

Minute descriptions of the first found stones are given in " Unexplored Syria."

Captain Burton thought that the Wusum or marks of the Bedawi clans might lead to the decipherment. Although I think it quite possible that some of the signs may be found among the Bedawi, it is not to be expected that such would afford any key to the meaning. The range of the Hamath characters includes not only the kingdom of the Khita, Khita or Khatti at Hamath and Helbon (Aleppo), but the inscriptions referred to at Ibreez in Lycaonia, and many relics in Babylonia, as the marks identified by me in the plates of Loftus, and the five seals discovered by Mr Layard in the record chamber of the palace of Sennacherib.

With regard to the statues at Nimphæ and the Ephesus road, Herodotus, as we now know, erroneously attributed them to Sesostris, and affirmed that they bore inscriptions in hieroglyphics, which they did not. It appears to me not impossible that these inscriptions were in Hamath or Khita character. This character has been already traced in Lycaonia; and it bears an actual resemblance to hieroglyphics in its features and dispositions, so much so that on the rediscovery of the Hamath inscriptions, Dunbar Heath and others were led to class them as Egyptian. There is generally some foundation even for a mistake of Herodotus.

It may be remarked that the statue in situ is of such friable materials, being cut in the rock, that I have declared, after careful examination, that it never bore an inscription. With regard to the other mutilated statue, rediscovered by Mr Spiegelthal in 1866, it is on a slab cast down, and it must be of very different material from the others. Therefore, it
occurs to me that one statue may have borne an inscription in Hamathite. This is of interest in reference to the extension of Khita and the relations. I long since stated it to have relations with Cypriote, Libyan, Himyaritic, and Hebrew.

The test first applied by me roughly, as stated, was the simple statistical or numerical method of counting the signs; and this, having obtained the transcripts from Captain Burton, I repeated more carefully after a better knowledge of the inscriptions from study. The number of signs in the five inscriptions is about 300 , and these are thus decomposed, allowing for the best classification our present imperfect knowledge allows, and using the most convenient type-symbols :
$\Theta, 27 ; \div, 26 ; \bigcirc$ and $C, 24 ; 99,21 ; L, 18 ; \downarrow 15 ; 1,11 ; \|$ II $; \nabla$ (crossed), II; O, 9 ; IL, $8 ; \nabla, 7$; knife form, 7 ; $\Sigma$ (exclusive of double letters), $7 ; 3,5$; ヨ. 4 .

Then there are many which cannot be represented by symbols. These may be subdivided into

| Single characters, frequently used, | . | 33 |  |
| :--- | :--- | ---: | ---: |
| Double letters, etc., | . | . | 5 |
| Characters used once, each, . | . | 15 |  |

The question then presented itself, What is the character of these signs so distributed? and undoubtedly they answered to the general nature of an alphabet or syllabarium, although we can be by no means assured. The other solutions that were proposed were that the signs are ideographic records or lists of the cattle marks and brands of Arab tribes (Captain Burton). Although some of the marks are used as brands, yet the whole composition does not answer to either description. On any liberal interpretation of them as ideographs, the types are not sufficient to afford any record of war and peace. If we allow them to include a register of cattle brands, then we want signs to indicate the names of the proprietary tribes or individuals, which, after all, would bring us again to some kind of record of words, and thereby to the solution that they are written signs.

Accepting the hypothesis of characters representing sounds as that most probable, and as deserving of further investigation, the next point is whether they belong to a limited alphabet of letters or to a system of syllabic characters. The number of about fifty types would admit of a syllabic system.

The general nature of the inscriptions on inspection is this: we have a variety of single signs, many of which are recurrent; we have some apparent ideographs; and we have a number of flourishes. These flourishes, however, are not made with a brush or pen casually, but cut in hard stone designedly.

It is permissible to consider that some of these flourishes may consist of several characters joined together. One group can be recognised so tied together, and also in its separate members. In the similar or seemingly allied alphabets, ligatures, monograms, and double letters are known to have existed, or to exist. The elements are consequently to be distributed as

> Characters, Ligatures, and Ideographs (real or supposed).

This is the gross result at which we must arrive from inspection under the numerical method, an approved process for scientific investigation.

The next mode of examination is by comparison with alphabets. The Phœnician or Cadmean used in the Hamath district does not correspond. The Himyaritic used in the same region does offer some similitude, so does the Cypriote. The cuneiform also shows correspondence. The Himyaritic or Sabæan character is chiefly known from the inscriptions found near our town of Aden in Arabia, and from the inscriptions at Axum in Abyssinia. Himyaritic inscriptions have also been found in Mesopotamia or Babylonia ; and there are characters on gems from Babylonia, supposed to be Himyaritic. The characters on these gems, and on the bricks from Warka, have a resemblance to the Hamath. The Himyaritic cha-
racter was represented in Ethiopia or Abyssinia by the Ethiopic, and is still represented by the Amharic or Abyssinian alphabet. A Sabæan grammar is given by Captain Prideaux (Trans. Biblio. Arch. Soc., vol. v.).

Many Himyaritic inscriptions are in the British Museum, and a large collection has been published by the authorities of that institution under the direction of Dr Samuel Birch and $\operatorname{Mr} \mathrm{A}$. W. Franks. These have been deciphered by the late Dr M. A. Levy of Breslau in the Transactions of the German Oriental Society. These inscriptions are generally in lines or divided by bands like the Hamath inscriptions, but the lines are of single characters, whereas in the Hamath there are rows of characters unsymmetrically set out. The Himyaritic characters are read from right to left. In one inscription there is a monogram (B. Mus., plate i., No. I), undeciphered by Osiander and Dr Levy. In two inscriptions there are hands. We find hands in No. 5 Hamath inscription, the hands being in each case displayed; but in the case of the Himyaritic inscription, the hands are outside the inscription, and in pairs. These Himyaritic inscriptions (B. Mus., plate vii., No. I I, and plate vii., No. 8) are dedicated to Almakah and Baal. Almakah I regard as equivalent to Moloch. They form the same sign as the blessing of the Cohenim among the Jews.

The main characters which correspond in Hamath and Himyaritic are:



The comparison with Cypriote suggests many more points of comparison, because in Cypriote there are arrowheaded or dart-headed characters, as in Hamath. Again we find $\psi, I, O, \Phi, \Delta, L, S$, etc. Of the influence of Hamath on Cypriote, as pointed out by me, no doubt at present exists, and every observer has confirmed it. As we have the syllabic sounds for some of the Cypriote signs, this ought to give us some help towards the sounds in Hamath, but as yet it does not. There is every appearance that in Hamath and in Cypriote the signs had a different value, as they had in Hebrew. Aleph, Yod, Caph, Ayin, and Wau can never have been the original values for the letters, the variant forms of which, no less than other circumstances, throw light on their real meaning.

The Cypriote that we have at present is an Aryan adaptation, but we may yet find Cypriote characters with a language -allied to Khita. Cypriote shows no less than Libyan and other Western languages that an alphabet passed out first from a Khita source to the west, and that it was afterwards largely modified by Phœnician variants. The words in Cypriote are divided by stops. Many of the characters appear to be double letters, as in Hamath. Some of the inscriptions are read from right to left, but some appear to suggest a former arrangement from top to bottom.

Bricks were brought home by Mr Loftus from Warka, in . Babylonia ("Travels and Researches in Chaldæa and Susiana," London, 1859, p. 169), which bear peculiar characters. These have been supposed to be the rude and earliest form of cuneiform, and have accordingly been converted into cuneiform inscriptions, or accompanied by cuneiform renderings, and translations have been published. The Warka characters or hieratic, however, bear a resemblance to the Hamath and the Cypriote, more particularly to the former. The Warka inscription, if compared with Hamath No. 2, middle line, has this remarkable peculiarity. It also begins with $\Delta$, and has in its neighbourhood, next to it, $\Delta$ with a staff, again very near it is $=$ also. The same are found in No. 3 Hamath
second line. Characters nearly similar are found in the beginning or lowest line of No. 5 Hamath. This formula is found under a variant in each Hamath inscription. In the Warka we find a square reticulated or covered with cross lines ; in Hamath $\Delta$ with the staff so treated in Nos. 2 and 5.

An inscription at Abydos, in Egypt (Fournal de la Société Asiatique, series vi., vol. ii., 1868, No. 14), apparently bilingual, is for one portion allied in character to Warka and Cypriote. With Lycian there is a great conformity, the number of characters showing a correspondence with Hamath being nearly a score. They include :

$$
\vee, \wedge, \perp \text { or } T, I, O, \nabla \text { or } \Delta, \exists, \omega, z, 8, \square, \exists, \sqcap .
$$

There are two remarkable alphabets in use in Albania, and which are to be found in Dr Von Hahn's "Albanesische Studien" (Jena, 1854). At p. 280 is the long alphabet, and at p. 297 is a short alphabet. These are modern Albanian or . Skipetar alphabets. Dr Von Hahn has devoted much attention to the larger alphabet, considering that many of the elements of it are ancient. Of its fifty-two characters many, however, are evidently modern adaptations, but from independent investigation I concur with my friend Dr Von Hahn, that many are independent representations of ancient characters.

The Albanians are, in a general sense, an unlettered people, but there is no more difficulty in believing that they have preserved ancient letters than there is in accrediting, what admits of no doubt, the preservation, in a modified form, of the Libyan alphabet by the Berber tribes, which, like those of the Albanians, are unlettered. The Berber alphabet has undergone similar modifications to the Albanian, and particularly in the application of double letters and special sounds.

The peculiarities of the Albanian alphabets are so striking that a German savant in the "Zeitschrift der Deutschen Morgenländische Gesellschaft," published an essay on an attempt to decipher the Lycian inscriptions by means of the Albanian alphabet and languages. This does not appear to
be successful any more than that of interpreting Lycian, Etruscan, etc., by means of Armenian. The first point with regard to Lycian is to ascertain what the language is, for even supposing the transliterations we have to be serviceable, it does not follow that the Lycian language is an Indo-European language, notwithstanding the supposed genitives, because those genitives may be Caucasian. It does not follow because the modern Albanian alphabet has a resemblance to the Lycian that the powers of the modern Albanian alphabet are the same as those of the ancient Albanian. Still less does it follow, because there is a resemblance between some of the letters, that the Albanian language has any connection with the Lycian. It may be noted that the Albanian grammar shows many traces of resemblance to Caucasian.

The reason that we have already found so many points of resemblances in these alphabets is, that one race ruled and one political language was at one time employed in the several regions anterior to the Indo-European, and for this reason the supposed Phœnician or Cadmean influence is not sufficient to account for the phenomena.

With regard to Hamath and Albanian the resemblances are few. They include:

$$
\mathrm{V} \text { or } \Lambda, \mathrm{I}, \mathrm{O}, \Phi \text { or } \theta, \mathrm{C} \text { or } \mathrm{O}, 8 \text { or } 8 \text {. }
$$

There are several points worthy of study in the Celtiberian characters, but I have not been able to collate the materials.

The Etruscan also presents points of resemblance to Hamath, where it diverges from the Phœnician. The words, numerals, and case-endings of Etruscan, which have been preserved, are susceptible of explanations from the KhitaPeruvian group.

The Himyaritic characters having been referred to, and their employment in Ethiopia or Abyssinia, it is to be observed that Professor F. W. Newman, in his Berber studies long since, and Dr Judas of Paris, in his special studies of Libyan, made known points of resemblance between the grammars and alphabets of the respective districts.

The chief monument we have in Libyan is the Thugga Stone in the British Museum, a remarkable bilingual monument, from Thugga, near Tunis, in Phœnician and Libyan, but which has never been published by the Museum authorities. It has, however, appeared several times in print, as in Gesenius, the best copy being that published by Dr A. C. Judas, from a squeeze supplied to him by Dr Samuel Birch. There are also many Libyan inscriptions frōm Algeria, some with a Latin text published by the Academy of Constantine, or in the Revue Africaine, and commented upon by Dr Judas, Dr Reboud, etc. There is great diversity of opinion as to the value of the letters and the meaning of the inscriptions, the latest doctrines of the French school being that Libyan is to be interpreted by the Berber alphabets.

This is a very natural proposition, as the Berber alphabets, well exemplified in the Tamashek, in the grammar of that language by Colonel Hanoteau, show evidence of descent from the Libyan.

It does not follow that the Thugga inscription admits of interpretation by Berber, although it is possible some of the inscriptions of the Roman period are of Berber affinity. In the Thugga inscription we find two languages, one of the conquering Phœnicians or Carthaginians. The other language may be that of the aborigines, the Berbers, but it may be that of a former dominant race. Semitic influence certainly prevailed in North Africa, for it is proved by the family of what are called the Subsemitic languages, showing an abiding influence, testified to by the Himyaritic, and continued by the extension of the Arabic language even to the shores of the Atlantic. There are, however, ancient geographical names to be found in North Africa, which conform to the general geographical nomenclature of the ancient world, and which are consequently not Phœnician, and many of the names assumed to be Phœnician very probably do not belong to that class.

What the Libyan language was will much depend on the determination of the genitive in the genealogical portions of
the Hamath and Thugga inscriptions. Dr Judas takes this to be N in Thugga, and to be Berber.

The Thugga inscription is in single lines, and reads from right to left from the top, but there is some reason to believe that this is a special arrangement, consequent on the attempt to translate line for line the Phœenician, which is so arranged. Dr Judas has proposed, with reason, to read the Algerine Libyan inscriptions from bottom to top in columns, beginning at the right.

The Thugga and Libyan characters which show a resemblance to Hamath are nearly twenty, and include:

$$
V, I, O, \Phi \text { or } \theta, \mathcal{Z}, \square, \exists, \sqcap, \beth, \text { IL, } Z .
$$

It is very questionable whether the letters of the Thugga inscription are in the right position.

The Thugga inscription we know begins with a genealogy, and it was by means of this Gesenius discovered the symbol for son, which is $二$. This is the symbol we find in Hamath and in Warka, in a similar position, but in Hamath it is IIII. Each word is divided by a stop. The character $I I$ within another II, I consider to be a double letter. The Algerine inscriptions furnish us with some additional characters. Of the Kabyle or Tamashek modern alphabets we have three forms given by Colonel Hanoteau. These alphabets do not agree with each other, nor are they wholly Libyan. They consist partly of a system of dots.

To show its peculiarities the following are examples:

| B | se |  |
| :---: | :---: | :---: |
|  | " | $\times$ |
| D | " | ц, $\wedge$ |
| R | " | O, |
| T | " | $\exists$ |
| F | " | ][ |
| S | " | $\bigcirc$ |
| L | " | 11 |
| M | " | 1 |
| N | , | 1 |
| T | " | + |

There are various double letters formed with $+(T)$ final. The
only one that can be represented is for $I+(N t)+$, for $I I+(L t)$ we have $H$ with a cross bar, for $S t$ a circle $O$ with a cross + enclosed. The materials we may consider available for comparison with the Hamath inscriptions are :
Himyaritic alphabet and inscriptions.
Ethiopic ", "
Amharic or Abyssinian alphabet and inscriptions.
Warka inscriptions.
Cypriote ",
Lycian ",
Albanian alphabet.
Celtiberian inscriptions.
Libyan ""
Berber.

Of these, we have satisfactory explanations of the Himyaritic inscriptions of Aden, which are in Sabæan, a language allied to the Hebrew.

We have bilingual inscriptions of
Cypriote, in Phœenician and also in Greek.
Lycian, in Greek.
Libyan, in Phœnician and also in Latin.
It is worthy of consideration what relations exist between the Hamath and the square Hebrew alphabet. The chief forms recognisable are $\Pi, \boxed{\Omega}, \Gamma, \boldsymbol{N}, \boldsymbol{Q}$ but nothing like a considerable portion of the Hebrew alphabet. In the Hamath, however, and in the Hebrew, as in the Himyaritic and Libyan, square forms are to be found.

If we look at some old alphabets, as Hebrew, Himyaritic, Libyan, Hamath, Etruscan, old Italic, old Greek, Lycian, Cypriote, Albanian, we find such forms as these :

$$
\begin{aligned}
& \text { ИY W M z } \Sigma \Sigma \text { YK }
\end{aligned}
$$

and in rounded forms we have such as:

Then we have letters with a staff or tail, as in Phœnician and in $\rho(\mathrm{P}), \lambda, \mu, \phi$.

The shapes of the square letters suggest that they are parts of a square (perhaps of the square of Orion), thus $\lrcorner L \neg \Gamma$ are its four angles. $\Pi, \mu, \beth, \boxed{\square}$ are the three sides of a square in succession. $L$ is $L, 7$ is $\boldsymbol{\square}$ (Daleth) and $\urcorner$ (Resh), and $\Gamma$ is the Greek Gamma. $\boldsymbol{\pi}$ is $\boldsymbol{\pi}(\mathrm{He})$, and $\boldsymbol{\pi}$ (Cheth, Kheth), in Hebrew, and $\Pi(\mathrm{Pi})$ in Greek. ב is Beth in Hebrew. $\quad \square$ is Mem and Samech in Hebrew.

The A of the Phœnician, ב (Beth) of the Himyaritic and Hebrew, $\Gamma$ (Gamma) of the Greek, $\boldsymbol{\top}$ (Daleth) of the Hebrew ( $\Delta$ of the Greek), and $\boldsymbol{T}$ (He) of the Hebrew, are at the beginning of the alphabet in close proximity, and suggest that they belonged to a square, and formed part of a square, thus :

## $\ulcorner\sqcap \neg \wedge \Omega$.

There is a square alphabet in modern use known as a secret alphabet. It is formed by two lines ( $=$ ), crossed by two lines (II), and which, forming a double square, gives nine compartments. Each of these being separated forms a letter. This alphabet may be found in some books on secret writing and cipher, and is a masonic secret alphabet in England, France, etc. It may be founded on the Tau and Orion.

The alphabet is worked from left to right at top:

$$
\rfloor \text { is } A, \sqcup \text { is } B, L \text { is } C, \beth \text { is } D, \square \text { is } E, \Gamma \text { is } F,\urcorner \text { is } G, \Gamma \text { is } H, \Gamma \text { is } I \text {. }
$$

The characters are then dotted inside or otherwise. J. is J, $\omega . \mathrm{K}$, etc. A third series is obtained by marking the characters with three dots ( $\because$ ).

Rabbis and other Jews likewise use this mystic cross as a secret alphabet, but they begin from right to left at top :

$$
L \text { is } \aleph, L \text { is } \beth,\lrcorner \text { is } \lambda,[\text { is }\urcorner, \square \text { is } \pi,] \text { is } \downarrow \text {. }
$$

The second series is also obtained by a dot (.), and the third by $\therefore$ This carries out the whole Hebrew alphabet, including the final letters, and consequently provides the whole Hebrew numerals.

Instead of dotting the first series of nine to make a second
series, there is, however, another modification of the mystic alphabet, which provides for taking the second series from another double cross formed by crossing the two lines transversely. This gives $\vee \wedge$, etc. These geometrical alphabets are carried back to a more ancient date in the works on white magic, and thence still further back to the most ancient epochs of magic and the Cabbula. They may be termed the Cabalistic geometrical alphabet. The Arab and mediæval literature of magic, white and black, is a continuation of the ancient schools of magic, and preserves their traditions. Some of these are still practised in Moslem cities, from Morocco to the far East ; and occasionally characters derived from the cuneiform are employed by a Maghrebi magician in charms to cure a sick child, or to lure back the lover of an Arab or Osmanli girl.

It is the teaching of the Accad and Assyrian schools of Babylon and Chaldæa, which is made orthodox for the Jew by the great names of God, for the Christian by the invocation of the Blessed Virgin, for the Moslem in strict conformity with the potent and ineffable power which the votaries of Islam believe to reside in the form and sound of divine words, and which coerce genii, good and bad. The means to beatitude of one powerful sect of dervishes is the compression in sound of Allah Hoo. The characters are the attributes of divinity, and command the spirit world. Several of the magic alphabets exhibit forms adapting not merely the geometrical characters, but others found in the alphabets we have been discussing. Some of these are now casual, but they may be survivals. We find the $*$ of the Cypriote and Warka, but then a character much like it exists in cuneiform. The great Gelghether magic alphabet presents I A, - B, V $\perp \square$, the little Gelghether $\sqcup+-17-$. The Sabæan magic is most like a true alphabet, for its $B$ is $\square$, its $M$ is $M$, its $S$ is $M M, F$ is $\square$ crossed, R is V , Th is + . The great and little enchantment give the forms in $L \square \square \square$, which we find in Hamath and Warka.

Thus there appears to have been a continuity of the appli-
cation of these Cabalistic forms of a square or double cross (based on the Pleiades or Tau), which was in itself mystical, as it consisted of triads ; and there being further three triads, there was, besides the mystic number of three, the great mystic number of nine.

If we take a double cross, and then a transverse double cross, and begin according to the ancient method of Warka, Libyan, and Hamath, we begin at the right, but we begin at the bottom, and not at the top, as the Jews now do. The question may arise whether, having begun at $\Gamma$, we should not, according to the Hamath and later Libyan method, work upwards in columns, proceeding to $\sqsubset$ and $L$. The Thugga inscription suggests progress horizontally from right to left; and we may return boustrophedon or bull-ploughing in furrows, or as a serpent would wind, as we find on a Himyaritic altar inscription in the British Museum series. So, too, in the Hamath inscriptions.

In the attribution of sounds and powers to the characters at a most early date, nature-worship exercised a great influence. Thus in cuneiform a star figures as the determinative for a deity. In Chinese, Eye, Sun, Moon, Mouth are allied in character, as we find them philologically in the prehistoric period. In Hebrew we have Aleph, Waw, Yod, Caph, Ayin, Thau. In our own alphabets we have I, $O, \Phi$. In the African languages the hand and foot are male, and the palm of the hand and sole of the foot, female. In mythology we know that the hand is an emblem for man. In Hebrew the alphabet begins with the equivalent of the star, and closes with the Thau, the emblem of the Pleiades.

Upon the grand question of the population of Canaan, Professor Campbell gives us invaluable materials for forming a judgment, in his various and learned papers in the Canadian Fournal. This population most probably extended into Egypt, where Brugsch Bey has found four hundred parallel names, and in which I look for the "Turanian" element, for Thebes, and the other old names by which Egypt was known to the Greeks, are Sumerian. The intercourse with Caria, too,
long continued. The union of Sumerians with Semites explains the ethnological peculiarities of the Jews, who are evidently a mixed race with two elements.

With the absolute chronology of these successions I do not propose to deal. Three thousand years ago the Sumerian race had come in contact with the Semitic, to which it had to succumb. Seven hundred years later is perhaps to be taken as the epoch of conflict with the Aryan race. This, however, gives us no real instrument of measure. We do not sufficiently know how far the members of the Hamitic classes are to be regarded as synchronous.

Although the Sumerians were assailed by the Semites three thousand years ago, they were only overcome by the Spaniards four hundred years since ; and in Indo-China they still flourish. The question, therefore, is not the duration of culture in the form of language, but what are the spaces required for its development?

If the Sumerian settlement in Babylonia took place four thousand years ago (see Ernest de Bunsen, "Chronology of the Bible"), then the settlement in India would be of the same date, if the migration was from a common centre in High Asia, as the division of West and East Sumerian in pronouns, and other details, seems to indicate.

The settlements in Indo-China would shortly follow, and afterwards the occupation of Java and the islands.

It is quite within compass that Peru was reached three thousand years ago, or even four or five thousand. It is to be observed that the Malay occupation of Australasia must have cut off the Sumerian intercourse with America. Then it is to be taken into consideration that if the intercourse had been kept up at a time when large ships were used by the Phœnicians, Chinese, Greeks, Romans, or Arabs, we should have witnessed different conditions. Cattle and horses would have been carried across the Pacific. Had the intercourse from Indo-China to South America been fresh in the memory, the Arab navigators would have heard of it.

The Akkad, Accad, or Sumerian must be looked upon as
a main stock of the class with which we are now dealing. Of the cuneiform inscriptions, the Assyrian and the later Persian had been deciphered, while an early type, named after the kings of Accad, remained obscure. M. Oppert supported a non-Semitic and non-Aryan interpretation, and by the labours of Mons. F. Lenormant many of the characters have now been read, and the language is disclosed to the world.

What that language may be has been hitherto a matter or dispute. The learned M. Halevy has made himself ridiculous by asserting it is no language at all. The chief authorities upon it have shown many alleged relations with VascoKolarian and Ugrian, which, however, are not Ugrian, but prehistoric, while I have confirmed my own forecast (Fournal of the Anthropological Institute, 1871, pp. 53, 58), that it would be found to have Georgian affinities, and to belong to a Palæo-Asiatic class. I am now, however, able more distinctly to assign its position by showing that whatever its affinities may be, it is closely connected in language with the former monument and city building races of the old and new world.

In the tenth chapter of Genesis, already referred to, Accad is brought into the scheme of classification under the family of Ham. The early kings of Chaldea entitled themselves rulers of Sumiri and Accad. Dr Hincks, on the strength of inscriptions belonging to Accad, had proposed for the language the name of Accad, but M. Oppert directed attention to the fact that the people called themselves Sumir or Sumer, and urged the adoption of the term Sumerian. This appears worthy of support from the nature of allied forms. Samaria, a holy city and country, Semirus in Armenia, and Seumara in Iberia, are perhaps forms of Sumer. Raamah and Rama would be conformable. Armenia belongs to the same stock and epoch.

Smyrna (Smurna) and Samorna of Ephesus may also be assigned, as may be Asmurna of Hyrkania and Zimura of Aria. Ephesus and Smyrna must have been great seats of Sumerians. There we have Mount Sipylus (Sipula), with
the Suburu or statue (Akkad) of Niobe. There is, however, strangely enough, another possible explanation I can suggest in the relation of Sipylus to Sibu, Siva or Seba, and of Niobe to Nebo. The ancients were by no means agreed as to the attribution of the legend of Niobe. It is possible that both of these explanations may have been applied in succession, which is a common phenomenon in mythology. Near is another Lydo-Sumerian sculpture, the Pseudo-Sesostris of Nymphæ. Near Ephesus is Pygela or Pugela (Pucala, Pucara, the castle), the R changing to L in this district.

Using the term of Sumerian as a general term, we have Accad for Babylonia, and Dr Birch's term of Khita for Hamath, while we may use Sumero-Peruvian or KhitaPeruvian to cover the whole of the unclassified phenomena of race, language, culture, and mythology.

The Georgian languages afford an interpretation of some of the terms of the pre-Hellenic topographical nomenclature of the old world. These languages now include the Karthueli or Georgian, the Swan, the Lazian of Asia Minor, the Mingrelian, etc. One ancient representative appears to me to have been the Canaanite.

While the names of rivers and places are uniform in Asia Minor, the few remains of the language and inscriptions, except the Lycian, which is most likely Lesghian, appear to conform to a Canaanite or Georgian standard. To this, in compliance with ancient tradition, the Etruscan is by me annexed, as it was in 1870 and 1871 (Fournal of the Anthropological Institute, pp. 56, 58), although it must be stated that my materials of interpretation have as yet been scanty. The Rev. Isaac Taylor, who has published a book on a Ugrian hypothesis of Etruscan, at the Congress of Orientalists produced a further paper as to the connection of Etruscan with Accad, which is based upon and confirms my views. In illustration of the general connection, and of the interesting question of Etruscan, Tables I. and II. may be referred to. Mr George Smith, in the last moments of his life and discoveries, appears to have confirmed at Carchemish this conformity of Etruscan and Khita.

TABLE I.

|  | Etruscan. | Georgian. | Others. | America. |
| :---: | :---: | :---: | :---: | :---: |
| Boy, son, | agalletor, <br> maris, puii? | ```shwili (akhali, krma, young), bichi,``` | chvalay (Circassian), <br> bosheth (Canaanite), | akun (Mexican). butsi (Othomi). |
| Goat, Ape, Eagle, | kapra, arimus, antar, | tkhavi, <br> [iremu, stag], <br> arthsiri, | khapa (Mon), ...... | paka (Peruvian). <br> kondori (Quichua, Peruvian). |
| Hawk, | aracus, | kori (vulture), archagi (pelican), | $\ldots$ | .... |
| Beetle, | burrus, | buzi (fly), | ...... | ...... |
| Swan, | tusna, ginis, | sawat, <br> ikvi (duck), | ...... | ancana (Quichua ; |
| Heaven, | falandum, |  | vonafay (Circassian), | eagle, Peruvian). andvui (Misteca). |
| A pollo (Sun), | usil, |  | zal (Accad). | sillo (Aymara; star, Peruvian). |
| Diana (Moon), Ghost, shadow, | tala, <br> hinth |  | la (Burman), | citlali (Aztek). <br> llantu (Peruvian). |
| Helmet, <br> Black, | cassis, thapir, | chachkani, shavi, | shoonseh (Circas. | ..... |
|  |  |  | sian), |  |
| $\underset{\text { Strong, }}{ }$ | kiarthialisa, kahathial, | kardzi, | atta (Circassian) | $\ldots$ |
| Strong, <br> I, me, And, | kahathial, <br> me, <br> cei, | mi, | $\begin{aligned} & \text { high, } \\ & \text { mu (Akkad), } \end{aligned}$ | ga (Quichua, Peruvian). |
| Cupid, |  | gwar, love; shur, desire, | $\ldots$ |  |
| Vulcan, | sethlans, | tsetskhli, fire, | $\ldots$ | tletli, fire (Mexican). |
| Make, work, | kana, | qana, |  | kana, cut (Aymara, Peruvian). |
| Aurora, | thesan, | ...... | $\begin{aligned} & \text { tuna (Akkad), } \\ & \text { dawn, } \end{aligned}$ | ...... |

TABLE II.

| Etruscan. | Georgian. | Akrad. | Circassian. | Camb., etc. | Caname. | Peruvian. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. makh, | $\cdots$ | $\cdots$ |  | moe, | $\ldots$ | mai. |
| 2. thu, | .. | ... | oh, | $\ldots$ | $\cdots$ | yscay. |
| 3. zal, | sami, | essa, | shee, | htsan, | sam, | kimsa. |
| 4. huth, | othkhi, | ... | ... | ... | ... | ttahua. |
| 5. ki, kiem, |  | $\cdots$ | $\ldots$ | ... | ... |  |
| 6. sas, | ekusi, | as, | shoa, | sau, | ... | sojta. |
| 7. be[m]ph, | shwidi, | ... | ... | ... | ... | pakalko. |
| 10. alchl? | ... | ... | $\ldots$ | ... | $\ldots$ | kalko. |

In the following illustrations the same characteristics as in Etruscan are to be found :

|  | Asia Minor. | W. and E. Asta. | America. |
| :---: | :---: | :---: | :---: |
| Earth, | gissa (Lydian), | yatta (Circas.) ${ }^{\text {a }}$ khsach | labtayeh (Huastec) ; |
| Water, | vedu (Phrygian), | (Cambodian), pseh(Circas.); pi (Mon), | tepe (Aztek). |
| Rock, | taba (Carian), | pseh(Clircas.); pi Mon), | tepe (Aztek). |
| Garden, | ganos (Phrygian), | kana (Georgian) ; gana (Accad), |  |
| Village, town, | deba (Thracian), | daba (Georgian), | deba (Guarani). |
| Fat, oil, | pikerion (Phrygian), | $\begin{aligned} & \text { pshey (Circas.); pa? } \\ & \text { (Accad), } \end{aligned}$ | raccu (Quichua). |
| Sheep, | ma (Phrygian), | maylley (Circas.); me, goat (Cambodian) | llama (Peruvian). |
| Horse, | ala (Carian), | la, animal syllable (Accad), | - ...... |
| King, | gala (Carian), | ungal (Accad), |  |

One source of Etruscan, as of some other extinct languages, is to be traced to the same process of "survival" as in all anthropological departments. Latin will, when duly worked by analysis, form a rich mine.

## Survivals of Etruscan in Latin.



While Canaanite and Hamath come within the Hamitic scheme of Genesis, and are so far allied to Sumerian, which their character of culture supports (Fournal of the Anthropological Institute, 1871, p. 58), yet there are divergences of language and of culture so great that I cannot but regard the Canaanitic, Lydian, and Etruscan, as constituting a distinct
branch, at present to be assigned to Sumerian, but perhaps afterwards to be subdivided. It will most likely be found that Accad and Khita, being separate stocks, others are to be assigned to each of them.

Hamath, Carchemish, or some such local metropolis, most likely afforded the centre of a distinct development of civilisation, with tribal forms of language and mythology, and producing syllabic and alphabetic characters, afterwards attributed to the Phœnicians. Georgian and Akkad have double plurals, the remains of a prehistoric characteristic, and there are resemblances in the verbs and numerals, but there are dissimilarities. The Georgian double plurals $-n i$ and $-b i$ figure as third personal pronouns in Akkad. These particles are not without resemblance to negatives.

At an early period of the examination of Georgian, I was much struck with the propensity for sticking in or inserting consonants, as in Mexican and other languages. The immediate explanation of the $t l$ in Mexican is, however, to be sought in Circassian. In Georgian it is perhaps th.

The exact affinities of Georgian are not shown by the existing members of the Sumero-Peruvian or Khita-Peruvian class. Some are found in Ka , a language allied to the IndoChinese group, and some in Cambodian, yet Georgian is evidently related to Etruscan. Thus:

|  | Georgian. <br> Head, |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Coumbodian. |  |  |  |  |

The elements of Georgian are found in the numerals: $\mathbf{r}$, arthi, G. (trao, Ka) ; 2, ori (bur); 3, sami (tam); 4, othki (chin); 5, khouthi (Ka) ; 8, rwa (peh) ; 9, tskhra (tsar, Khong). Ka is found for 5 on the left hand in Mon. The Georgian numerals equal the left-hand Mon and Ka numerals.

## Comparison of Akrad and Georgian Grammar. Akrad. <br> Georgian.

$=$ Nouns more than one plural,
= Emphatic form ending in a vowel, .
$=$ Negative series,
$=$ Formation of persons of verbs,
= Formation of participle,
$=$ Formation of negative verbs by the prefix Nu ,
$=$ Resemblance of numbers,
$=$ Insertion in verb of pronouns governed,
$=$ Use of post positions,
$=$ Use of $\mathrm{Ni}, \mathrm{Bi}$,
N
$=$ Use of M, S,
The following table shows the comparison of Akkad:
Comparison of Akrad and Quichua Grammar. Akkad.
Noun, emphatic state, a
Dual $=2$ (kas)
pronouns postpositional
several plurals
pl. -ene

-mes
$=-$ cuna, -ntin.
plural by duplication
$=$
locative ta. $=$
ablative-na . $=$-nae wati
", $=-$ nae, wanting.
", opportune -gal . . . =? -ccepi (after, behind).
Verbs governed,
pronouns incorporated
persons not the same.
plural -une, -ne . . . =-un ? -mus, -s . . . -chic.
gan, to be, exist. . . = can, to be. [plural.
Noun, .
Adjective after noun,
numeral used without
Pronouns S. I? 2 ? 3, two forms, .
Pl. 3, . . . =

Demonstrative some resemble $=$
Conjunction Cama, with, and
= cama, according as,
Numerals, many . . . . = all.
ordinals -kam . . = nequen.

It is in what I term the negative series that one of the leading laws of prehistoric philology and mythology is to be found. Under this the negative No or Not is the equivalent of Night or Black (Niger). It is also the equivalent of woman, as the negative, man being treated as the positive. So all female names become negative, as wife, Eve, ewe, hound ( $=$ bitch), she-goat, cow, mare, etc.* Death, kill, executioner, have negative relations. So have egg and nit, and secondarily pea, bean, and nut (as resembling an egg). Ear and head appear to be negative. Nephele, in mythology, is one of the forms of Khaveh or Eve. Shadow is a negative, and in some cases equivalent to soul and night. In Guarani there is an ingenious distinction between the soul of the living and the dead; and so of a head, bone, skin. The soul of the dead man is supposed in many countries to lodge in birds. This may be one ground why the bird is negative, as bearing the soul of the dead. Blood is a negative apparently as related to death. Hence red is a negative, and some curious mythological and archæological conditions arise, for red is likewise the equivalent of the number two.

Dr Zerffi informs me that red was the second colour in various positions, as on dice and on temple terraces, but this requires closer investigation. Mr Park Harrison and Mr J. Jeremiah have observed the use of red as a colour widely prevalent in the regions now under consideration, for the purposes of this investigation. The red hand figures equally in Syria and in America.

The virtue of red as a preservative against the evil eye is referred to in Walter K. Kelly's "Curiosities of Indo-European Traditions and Folk Lore," p. 147. In Buchan, Aberdeenshire, the housewives tie a piece of red worsted round their cows' tails before turning them out to grass for the first time in the spring. It is, however, better shown in Germany (p. 229), where herdsmen lay a woman's red apron, or a broad axe covered with a woman's red stocking, before the threshold

[^0]of the cow-house, and make the animals step over it. The bringing together of woman, cow, and red, is noteworthy. The lady-bird seems to hold its place in folk lore as being red (p. 95). It is held unlucky to kill a lady-bird in Germany, as the sun would not shine the next day. It is possible that the robin redbreast owes his mythical place to the same characteristic, and it is also unlucky to kill him. The woodpecker has a red head or mutch (p. 86), and a black body. Bad is negative, as is naked. Sleep and dream are negative, as belonging to the night series. Salt is negative. Water, in some senses, is a negative, and appears to be connected with woman. Night was the negative of day, or the closing of the eye, and it had its own world of darkness, with its night sun, its sleep, and its dreams. It was the domain of shadows and the ultimate refuge of the soul. Its mythological relations in this respect will best be studied in the treatment of animism by Mr Tylor.

There are few prehistoric, protohistoric, or historic languages which do not display the negative series. Among such may be named: Wolof, Agaw, Vasco-Kolarian (very marked), Ugrian, Egyptian, Sumerian (very marked), Dravidian, Semitic (not strongly marked), Aryan (very marked).

For Aryan, a popular illustration is afforded by not, night, nut, nit, naked, nest, snow, Eve, ewe, egg, wife, cow, nox, nix, nex, nux, nec, non, nudus, nidus, nodus, niger, nubes, ovis, ovum, avis, uva, caput, auris.

The way in which the negative roots are distributed among the various branches of a class is peculiar, and affords a distinction.

Thus Latin uses N largely, and O (KR) sparingly ; Greek, M, O, largely, and KR or KL sparingly. Thus Aymara uses P, K, H ; Mon uses P (sparingly), K, H (sparingly), and T.

In reality, the dissyllables are chiefly the same, for the O (ovum, oon) is nothing but the $\mathrm{K}, \mathrm{B}$, and KB of the VascoKolarian and Sumerian Kaba, Paka, and the KR (Karua, Auris, etc.) that of the Sumerian Raka.

The words for woman, as Khaveh, Eve, Agave, Hebe, Ne-
phele, Wife, have descended through ages as the formula for verbal mythology, and hence figure so largely in the earliest records of Genesis, in the traditions of the Eastern Mediterranean, and among the Aryans.

A sufficient example will be afforded by the following :
Negative Series.

| Moon, | ab, | Aymara. paksi, | b , | Mon of Pegu. khatu. |
| :---: | :---: | :---: | :---: | :---: |
| Red, | ab, | pako, | ab, | hpakit. |
| Two, | a, | papaya, | a, | pa. |
| Ear, | ab, | (paoki,) | b, | khato. |
| Head, | ab , | phekai. | b, | katan. |
| Night, | be, | haipu, | b, | khatan. |
| River, | c, | hahuire, | a, | pi. |
| No, Not, | c, | hani, | c, | ha. |
| Salt, | c, | hazu, | a, | po. |
| Bad, | .. | ... | bc, | hakha. |
| Bitter, | c, | haru, | b , | katan. |
| Black, | $b$ ? | chamaka? | b, | katsan. |

The dissyllable is largely developed with the negative.
It should be mentioned that a negative is not necessarily a prefix or suffix, but in prehistoric grammar may be intercalated, as in Gondi (Khond), Vasco-Kolarian, and Sumerian Akkad or Khita-Peruvian. A middle negative may depend on the same principle.

The question may be incidentally considered, whether the Sumerian population of Indo-China was supplied from Babylonia, or from a common centre in High Asia. In my view, it was from the common centre, because although there are great affinities between the Sumerian or Akkad and the eastern analogues, yet there are greater affinities between these latter among themselves, and there are common points of dissimilarity from Sumerian. There were most probably two migrations in succession to the Agaw. One embraced the Akkad, Mon, Cambodian, Aymara, and Maya (and Toltek?). The other, the Georgian, Etruscan, Siamese, Quichua, and Aztek. The earliest may, however, have been the Circassian Otomi.

Proceeding onwards, Indo-China, or the southern districts of the further peninsula beyond India, may be treated as one linguistic area. They include Pegu in the west, Siam in the middle, and Cambodia in the east.

This region was known to the ancients as being held by populations in a state of advancement. Pegu is the country at the mouth of the Irrawaddy, and was formerly independent, but fell under the dominion of the Burmese empire. In 1852 the province, with the towns of Pegu, Prome, and Rangoon, was taken by the English. The people call themselves Mon, but are called Talaïn by the Burmese. The language is a most valuable member of the Sumerian for illustration. There are large ruins.

Siam lies in the middle of India, beyond the Ganges, and is the seat of a great and settled empire. The Siamese people and language are, however, of less importance to us in this inquiry, at this period, than are the others.

Kambodia, or Camboja (Kan-phu-cha, Chinese), is the western part of Annam or Cochin-China, on the Saigon and Cambodia rivers, bordering on eastern Siam. Of late years it has been attacked by the French, who have taken and hold Saigon.

The great marble ruins of the ancient capital of the Thinae, near Saigon, have long been known. The Cambodians were remarked by the early Arab voyagers as manufacturers of very fine linen. The natives call themselves Kammer or Khmer (=Aymara). Kitaya too, or Indo-China, may be only another form of Khita, equivalent to Kissii or Cissii, and to Quichua. It is to be observed that the explored monuments of Cambodia are not ancient like those of Babylonia, but rather modern and synchronous with those of Peru and Mexico, but it is probable earlier remains will be found.

Cambodia has been studied by M. Mouhot, by M. Garnier in his large and valuable work, and lately by Mr Kennedy in his paper read before the Indian Section of the Society of Arts (Fournal, 1873-74), when I presided, and had the oppor-
tunity of giving some early explanations of the linguistic relations as recorded in the journal of the Society.

The ancient kingdom of Camboja, in India, which gave name to the Gulf of Camboja, or Cambay, has engaged the attention of Indian archæologists, but not to the degree its importance merits. In the later history of this kingdom it was still considerable, but it was the representative of an ancient and perhaps the earliest civilisation of India, belonging to that epoch, which was universal, of which General Cunningham has found the examples.

The river names of India are repeated in New Granada, on the one hand, and in Etruria and Italy on the other. In conformity, as I stated in a note sent to the International Congress of Orientalists in 1874 (N. Trübner), the town names obey the same law. It was from India, and not from Babylonia, that we may, as said, assume that the stream of civilisation passed towards the Pacific, and in India will yet be found the origin and remains of early letters, the influence of which to this day will still be recognised. The two names of the hundred-streamed feeder of the Indus, Hesudrus (ioo, Georgian), and Zadudrus (ioo, Sanscrit), are worthy of note ; as also athasi (Iooo, Georgian), and athasi (88, Hindustani).

The affinities of grammar between the new world and the old, though dealt with by various writers, as in the "Mithridates," were only scientifically treated by a few, as by Humboldt, the Rev. Richard Garnett, and Dr Daniel Wilson ("Prehistoric Man," p. 594). Characters common to the Polynesian had been recognised, but Mr Garnett pointed out that besides these, others were to be found common to the languages of the Dekkan in India.

On the other hand, Dr Oscar Peschel, in his "Volkerkunde," 1874, p. 472, still maintains that the culture of Peru and Mexico was indigenous.

Mr Tylor also ("Early History of Mankind," p. 209) says: "No certain proof of connection or intercourse between Mexico and Peru seems as yet to have been made out." This expresses the state of prevalent opinion, and although the
materials for linguistic investigation are abundantly displayed in Dr Latham's valuable "Elements of Comparative Philology," such opinion has been little contested. In fact, although the languages are allied, yet that alliance has to be demonstrated from the outside, and until the disinterment and decipherment of the Sumerian or Akkad inscriptions, it was almost impossible to be proved.

The Aymara and Quichua languages of Peru, the Aztek of Mexico, and the Maya of Yucatan, are all allied with the Indo-Chinese, and thereby with the Akkad as Sumerian. Even to the negative series and numerals the points of resemblance are remarkable. Some of these resemblances between Akkad and Quichua had, on the perusal of M. Lenormant's works, struck Senor de la Rosa, a distinguished Peruvian scholar, and, on the reading of my paper at the Anthropological Institute, he referred to several examples lying on the surface. He also referred to resemblances between Quichua and Semitic and Aryan. These I treated as resulting from the influence of Sumerian and the older languages on Semitic and Sanskrit.

The Rev. Professor Campbell of Montreal has furnished me with a large number of analogies between the Peruvian words cited by me and Celtic. In Peru and Bolivia the chief languages now are the Quichua, or Inca, and the Aymara. Of the Aymara, a copious and valuable memoir was on the 2 ist June 1870, communicated to the Ethnological Society (parent of the Anthropological Institute) by the late David Forbes, F.R.S., and this constitutes a text-book. The language of the Aymaras is spoken in southern Peru and northern Bolivia. They were conquered by the Incas. The Quichua is spoken in northern Peru and southern Bolivia. The Aymaras claim to have been a great people before the Inca conquest (IIOO), perhaps beyond any South American people. Ruins of grand palaces and temples are found at Tiahuanaca, on the south of Lake Titicaca (Forbes), the capital of the Aymara land. The conquest of it was completed in 1289, but was followed by serious revolts. Forbes says, too
(p. 4), that, according to Indian traditions from Aymara as well as Quichua sources, the Aymaras, even before the time of the first Inca, Manco-Capac (102I-IO62), possessed a degree of civilisation higher than that of the Incas themselves. Consul Hutchinson maintained before the Anthropological Institute a like doctrine as to the Chimoos.

The Aymara area has been supposed to be limited to that now occupied by them, but it is to be observed that the names found in the neighbourhood of Lake Titicaca are much better developed in New Granada. It is therefore evident that the Aymara, or perhaps pre-Aymara, occupation must have extended so far north. Mr Clements Markham considers that the Inca empire never reached so far northward, and Mr Forbes was not aware of such an extension of the Aymara as must now be allowed for. Aymara is possibly the equivalent of Kemer or Khmer, the name of the Cambodians, and of the Sumer, the name of the people connected with Accad. Quichua, in Peru, and Quiché, in Mexico, may represent the Kissii or Cissii, or Khita ; and these again may be connected with Cush or Akush. Of the Quichua or Inca language and people it is not necessary to say so much, as they are more familiarly known, and have been and will be incidentally referred to.

To the Quichua language Mr Clements Markham has devoted himself, and produced a grammar and dictionary which have been of very great service in these investigations. I have also employed the "Arte of Torres Rubio," on which his grammar is founded. This work of Mr Markham's is likely to be of more importance even than he anticipated, now that Quichua and Aymara must be studied for the comparative grammar of Akkad. Senor de la Rosa and Senor Pacheco are engaged on new Quichua grammars.

The Aztek culture of Mexico, as Humboldt well saw, was derived from the old world, as was its language, which is to be classed with Sumerian, but intermediate between Aymara and Otomi.

The Otomi, Cora, and Tarahumara, with perhaps the Huas-
teca, constitute a class under Sumerian influence, but allied with the Adighe or Circassian, which likewise exhibits Sumerian influence, and has a remarkable but distant resemblance with Etruscan.

In the Caucasian languages, I had long since traced what are called North American characteristics, and others I found in the Georgian, but the cause was unknown to me till of late. A considerable influence must have been exerted by the Agaw and Otomi migrations on the Indian languages of North America.

The presence of the Circassian-Otomi has to be accounted for. The higher Sumerians are marked as a city-building people, but the Circassian in the Caucasus is what the Otomi is in Mexico. The Otomis must have preceded the Sumerians in South America, or been driven forward by them as the Agaw-Guarani were into Brazil. The Otomis may have had connections or dealings with the monument-building races of North America. At a later date, on the Sumerian kingdoms in Mexico becoming weaker, they returned and invaded Mexico.

Dr Latham (" Opuscula Essays," 1860 , p. 395) gives "the result of a very hurried collation," for the Otomi, "said to be with languages akin to the Chinese en masse" (p. 397), and for the Maya (p. 398). The latter list is chiefly of Aztek words. He makes no remarks, but the tables show many affinities with Tonkin and Cochin-Chinese. Had Dr Latham followed this up, he might probably have obtained the clue to the relation of the Mexican languages, though he might have been baffled, as some of the affinities can only be illustrated by bringing together the Quichua and Aymara as members of the group, and the Akkad then undeciphered. It is, in fact, now a part of the evidence that Humboldt, Garnett, Latham, etc., are found to have contributed material for the true solution.

The history of Mexico is supplied from accessible sources. Its best known language is the Aztek. On the preceding Toltek, I can throw no light. The monuments and culture
of Mexico may, after the reference already made to them, be passed over. Sufficient to say, that the monuments are of great dimensions and highly decorated. Yucatan possesses similar remains, described by J. L. Stephens. The Maya, a language formerly cultivated, comes distinctly within the Sumerian class.

In "Incidents of Travel, by J. L. Stephens, in Central America, Chiapas, and Yucatan," vol. ii., are hieroglyphics, which are arranged in rows, and appear to present some of the principles of the cuneiform or hieratic, as III II III III $\square$ II.

The same is to be observed at Palenque (ii. 342, 424). These latter present even more resemblance to the Hamath inscriptions, as $\odot$ ©, also the extended arm (see also Hissarlik and Easter Island) is worth further examination.

The square hieroglyphics, or rather squares of hieroglyphics, found in Central America, are most probably only a modification of the row or column of hieroglyphics in the Yucatan and Hamath, and which has a representative in hieratic cuneiform. The carvings on the rocks at the Yonan Pass, in Peru, engraved by Consul T. J. Hutchinson (" Peru," ii. I74, 176), are deserving of study. Some of the characters are idiographs, but some likewise present a resemblance to Hamath and other characters; and Easter Island inscriptions, on which Mr Park Harrison has laboured, deserve attention. In Polynesia the remains of massive stone buildings have been found in Tongatabu, Easter Island, Rota, Tinian, Valan, and elsewhere (Wilson's "Prehistoric Man," p. IO9). To these may be added Java, Pegu, Cambodia, Peru, Mexico, and Yucatan.

Among the facts adduced by Mr Park Harrison for the migration from east to west, through Australasia, he refers to colossal heads in the east, and in Easter Island. Colossal heads will be found in Stephens' "Central America, Chiapas, and Yucatan," vol i., pp. I 39, I43, 150, 152, 153, and 328. They have been identified in Babylonia, Cambodia, Easter Island, and Peru.
M. Perrot, under the name of Lydo-Phrygian, and myself,
under the name of Lydo-Assyrian, and which I would now call Lydo-Sumerian, have pointed out the westerly extension of the monuments in Asia Minor, including the Niobe, near Magnesia ad Mæandrum, and the Pseudo-Sesostris, near Nymphæ, in the Smyrna district. To this may be added the colossal head from the outskirts of Smyrna, found by Mr F. Spiegelthal in I865, and identified by me, and brought to the British Museum by Mr G. Dennis. The name of LydoAkkadian is perhaps still better for these monuments.

The use of enormous blocks of admirably squared stone, without cement, is a feature common to both continents, and deserving of investigation, as well as the mode in which such blocks were quarried and transported. In South America there were no beasts of burthen available. The employment of bricks and cement, and generally the adoption of the building arts, are also worthy of careful examination.

Stephens, in his "Yucatan," vol. i., p. 134, gives a very remarkable engraving of a capital of a column at Uxmal, of old world character. At Uxmal there are buildings constructed on terraces and mounds, as there were at Babylon (i. I35). This is worth observing for further comment.

Burial towers are to be recognised in Syria, Persia, India, Siam, and Peru. The knowledge of bronze, goldsmiths' work, silver work, and other metallurgy, has not passed unobserved by writers. Gold dentistry has been recognised in Peru and Egypt (Tylor, "Early History of Mankind," p. 175).

The employment of bronze in America presents no difficulty under the acceptation of a Sumerian settlement. If the Agaws did not become acquainted with the large tin supplies of Malacca, the East Sumerians did, as they were acquainted also with the working of gold and silver ; hence they readily introduced these arts into America, or rather improved them, because the mound builders were acquainted with copper and bronze working. Although the Sumerians, as the topographical nomenclature shows, were acquainted with tin in Britain before the Phœnicians, it is probable Malacca, and not Britain, was the great seat of the early supply of tin.

Consul Hutchinson ("Peru," ii. 266) institutes a justifiable comparison between the masonry and pottery of ancient Peru observed by himself, and the prehistoric discoveries of Dr Schliemann in the Troad. In fact, if my views are correct of the Lydians, Phrygians, and Carians of Asia Minor, with the Etruscans and Sumerians, then there would be a positive identification of epoch and class between the Troad and Peru.

In Peru, drinking cups and other articles were buried with the dead, as in Etruria, Greece, etc. The Peruvian cups were supposed to be used for drinking at the funerals (Forbes, 49).

The woven fabrics are also to be noted in connection with Peru and the country of the Thinæ or Cambodia.

The quipu or knotted cord, as a record, is found in Peru, Mexico, Hawaii, Polynesia, the eastern archipelago, and China (Prichard, iv. 466; Tylor, "Early History of Mankind," pp. 156, i60).

The scape llama referred to by David Forbes (p. 45), may be compared with the scapegoat of the East.

Sacrifices of men to the gods were used by the earlier races, as the Dahomans, but it is to be noted that they were a practice also of the worship of Baal, and in Peru and in Mexico (Wilson, "Prehistoric Man," pp. 81, 91, 290), as well as in the East.

Von Humboldt long since noticed the connection of the Mexican calendar with the Asiatic, and deduced therefrom the Asiatic origin of the civilisation (see also E. B. Tylor, "Anahuac," 24I). The Yucatan calendar is allied to the Mexican. The subject of the calendars and inscriptions, together with the Peruvian and Central American languages, for a long time occupied the late Chevalier Bollaert, the author of the "Peruvian Antiquities," and of many memoirs, particularly on the Maya alphabet.

The half month in the early Maya or Yucatan calendar consisted of thirteen days (Stephens' "Yucatan," i. 439). The Siamese, likewise, use as an essential part of a date a half month. This now consists of fourteen days.

The dates in Siamese are arranged on a cross ( + ).
In Yucatan, part of the cycle was placed on a wheel divided into four, practically, N., E., W., and S. The two systems show a resemblance, and the cross may represent the spokes of a wheel. The Yucatan calendar, which was the same as the Mexican, has lucky and unlucky days, still a common system in the East.

The calendar and the alphabet are closely connected together by a symbology illustrated by Mr Narrien and Mr R. G. Halliburton.*

In the middle of November we have in a line :


The Pleiades, or Seven Dancers, are to this day in many countries, as of old, said to be the paradise of the souls of men.

This day of the conjunction of the Pleiades is, according to seasons, the beginning of the sacred or of the agricultural year, and the festival of the dead. This great and awful day has, too, in many ages and in many lands, been celebrated by human sacrifices.

Here is the natural basis of that symbology, which has played such a part in all times, and which supplies at natural intervals $\mathrm{I}, 3,5$, and 7 .

It is also, to all appearance, a basis of natural worship, and of syllabic or symbolic characters.

At the beginning of the alphabet we have the star (*), or its equivalent; at the end, the cross or Tau of the Pleiades (p. 17).

The straight line ( - ) of three stars in Orion, and the angle ( $<$ ) of the five in the Pleiades, have afforded models for characters, as the Tau has done.

[^1]As these furnished the straight and male elements, Sirius itself being probably an emblem of the sun at night, so did the moon afford the round and female elements for the combinations of the syllabacy.

In the Hebrew square alphabet, which bears evidence of preserving the prehistoric traditions, and which is probably older than the Phœnician and not newer, we have Aleph, Yod, Caph, Ayin, Pe, Tau; Aleph and Tau being beginning and end, and Yod and Caph being together in the middle of the alphabet. These two distinctly represent prehistorically male and female, and being described in Hebrew as the hand and the hollow or palm of the hand, as before stated (p. 17).

The cross has been found by Dr Schliemann in the Troad. The cross is derived from the Pleiades. The square cross is common among the Aymaras (D. Forbes, 39), and was observed by Stephens in Central America.

The red hand seen in the monuments of Yucatan (Stephens), Bollaert says he has seen as far as Arica in Peru ("Anthropology of the New World," p. II4). It is common in Syria and Morocco (Dr A. Leared's "Travels in Morocco ;" Rehlf's " Morocco").

The Honourable Mr Clay points out that the umbrella was a mark of dignity among the Peruvians, as it was in Babylonia, and is still in the Indo-Chinese countries.

Mr W. Chappell, F.S.A., states that an ancient Peruvian flute gives a scale, showing that the Peruvians used a scale illustrative of that used by the ancient nations of the old world, and giving evidence of a common origin.

The disposition of seven pyramids or mounds by four and three in Egypt and America is probably due to the four outside stars and three inside stars in Orion, but may refer to the Pleiades.

The traces of use of Kawa in Brazil, Chili, and Polynesia most likely belongs to the preceding migrations of the Agaw or Guarani race.

It is with a view of strengthening the chain of evidence that attention is now directed to the town names of Palestine.

These, down to the end of Chronicles, are about four hundred in number. It is possible that some Hebrew names may be embraced in the list, but exact identification is not yet possible, and a casual error is of no immediate importance.

The first step is to arrange these names, as far as may be, according to their roots, and it will be seen that they thus fall into a smaller number of classes than might be supposed, and into distinct classes.

The classification by roots may appear fanciful to some, the more particularly as the consonants are sometimes transposed. This is itself an important phenomenon of the prehistoric epoch, and which has been already referred to as used for the purpose of differentiation. It is possibly in reference to this that transposition is to be found in local names. The last part of Dr Carl Abel's great work, "Keptische Studien," largely deals with transposition or metathesis of the roots; and the fourth part, the "Comparative Philology of Hieroglyphic and Coptic," is greatly dependent on metathesis for many of its results.

It has been already stated that the Rev. Professor John Campbell of Montreal has for a long period assiduously devoted himself to the study of the personal, tribal, and local names of Scripture, with a view to determine the eponyms. Besides his papers in the Canadian Fournal, and the separate publication of them, his researches will be now better known by means of the paper contributed by him this year to the Biblical Archæological Society. In this he deals much with names in the Babylonian district, and shows great probability of their survival even to the present day. It is to be observed that the possession of a tribal name, or of a language, is no positive evidence of descent. Celts speak English. The Achaian Greeks apparently represented tribes of older and other Agaw race ; and if Cymry be continuous with Cimbri or Cimmerii, as Rawlinson and other scholars have taught, it may also be continuous with older forms, like Khmer, as proposed by Professor Campbell, but by no means of the same descent. The Emperor of Germany was King of the

Romans, as Agamemnon was King of the Achivi, and Malcolm of the Picts and Scots; but this did not involve descent, unless by an heiress.

For the purpose of comparison with the archæological regions referred to, the corresponding names are classified in four groups :

Ist. Asia Minor, including Armenia, and with Caucasia, Crete, Cyprus, and the Asiatic islands.

2d. Greece, with the northern regions, including Thrace and Illyria, and with the Greek islands.

3d. Italy, with Istria, Sicily, Sardinia, and Corsica.
4th. Spain, with the Balearic Isles.
The names here given do not constitute the full list, but they are given copiously, because the cases of identity are numerous and striking, and, if a few only were given, they might be suspected to be merely casual coincidences or freaks of language, such as may be picked out from the most discordant languages. Here it is not so, and careful examination will show that the results must be true, and what they ought to be.
Comparison of Canaanite Town Names.

|  | Palestine. | Asia Minor, etc. | Grefce, etc. | Italy, etc. | Spain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MRS | Mosera | Masora, Capp., Armenia | $\ldots$ | Mazara, Sicily | $\ldots$ |
|  | Moseroth | Masara, ", | ...... | ...... | ...... |
|  | Moresheth | Mazuri, Pamphylia | Mursinos, Elis | Merusium, Sicily | $\ldots$ |
|  | Mareshah | Marathusa, Crete | Mursinos, Elis | Merusium, Sicily | $\ldots$ |
|  | Sharaim | Seramana, Pontus | . |  | ...... |
|  | Rameses | Seramusa, Paphlagonia | ...... | Krimisa, Bruttium | ...... |
|  | Shamir | Sormasa, Pisidia | Ismara, Thr | ...... | $\ldots$ |
|  | Shimron | Ismaran ,, ${ }^{\text {a }}$, | Ismara, Thrace | ....... | $\ldots$ |
|  | Zemaraim | Sismara, Armenia Minor | ....... | ...... | ...... |
|  | Samaria | Eusemara , | ..... | ...... | ...... |
| MRD | Rithmah | Azamara, Cappadocia Rithumna, Crete | Kardamule, Laconia | Eretma, Sabini | Kertima, Tarraconensis |
|  | Ramath | Harurathus, Troad |  |  |  |
|  | Maarath | Marathus, Crete | Maratha, Arcadia | Maruvium, Sabini | Myrtilis, Lusitania |
|  | ...... | Marathesium, Ionia | , Phocis | ...... | ...... |
|  | Tamar | ... | Marathon, Attica | ...... | $\ldots$ |
|  | ...... | $\ldots$ | Thimarus, Epirus | $\ldots$ | $\ldots$ |
| MD |  | ...... | Domerus, Macedonia | ..... | $\ldots$ |
|  | Etham | ...... | Ithome, Thessaly | $\ldots$ | $\ldots$ |
|  | Edom |  | Amathia Macedonia |  | ... |
|  | Amad <br> Hamath | Amida, Armenia | Amathia, Macedonia | Amantia, Bruttium | .. |
|  |  | Amathus, Cyprus | Amathus, Laconia | ....... | .. |
| MDN | Temani | Timena, Paphlagonia | Taminæ, Eubœa | ...... | ...... |
|  | Dimonah | Timonitis | Idomene, Acarnania | ...... | ...... |
|  | ...... | Domona, Pontus | Macedonia |  |  |


Comparison of Canaanite Town Names-Continued.



ON THE EPOCH OF HITTITE, ETC.
COMPARISON OF CANAANITE TOWN NAMES-Continued.


Comparison of Canaanite Town Names-Continued.

|  | Palestine. | Asia Minor, etc. | Greece, etc. | Italy, etc. | Spain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BDS | Ishtob | Passanda, Mysia <br> Pisonos, Capp., Armenia | Stoboi, Macedonia | Stabiæ, Campania | Astapa, Bæetica |
|  | Tiphsah |  | Astibon, Thisbe, Bœootia | Stabia, Campania | Sætabis, Tarraconensis |
| BSN | Bashan |  | Pasinum, | Phausania, Sardinia | $\cdots$ |
|  | Zaphon |  | Siphnos (I) |  | ...... |
| BD | Shophan |  | Siphnos (1.) | Sæpinum, Sabini | ...... |
|  | Eboda | Abydos, Mysia | Hippotai, Boootia | Aufidia, Sabini | Badia, Lusitania |
|  | Oboth | Beudos, Pisidia |  | Vatia, ,, | Biatia, Tarraconensis |
|  | Thebez | Iotape, Cilicia | Thebæ, B¢, ${ }^{\text {Thetia }}$ | Bodetia, Liguria | Adeba, ", |
|  | Taphuah | Taba, Phrygia | Dipaia, Arcadia |  | Dipos, Lusitania |
| BDN | Padan | Taba, Caria Pitane, Mysia | Bithonæ, Thrace | Pitinum, Picenum | Bedunia, Tarracon. |
|  | Beden |  |  | ,, Sabini | Bed |
|  | Betonim | Petenissus, Lycaonia Bitoana, Caria | Pudna, Macedonia Puthion, | Fidena, Latium | ...... |
|  | Aphinit |  | Apidna, Attica | Phintias, Sicily | Pinetus, Lusitania |
| BL | Abel | Abala | Phænike, Epirus Pulla, Macedonia |  | Pintia, Tarraconensis |
|  | Abila | Piala, Pontus | Pialia, Thessaly | Abella, Campania <br> Abolla, Sicily | Aboula, ", |
|  | Bula | Pyla, , ${ }_{\text {Pre }}$ | Phelloe, Achaia | Pallia, Etruria | Obila, Lusitania |
|  | Baala Balah | Phelles, Lycia | Boleoi, Argos | Palla, Corsica |  |
|  | Eleph $\}$ | Lapha, Crete | Olpe, Acarnania | Pela, Istria |  |
|  | Heleph |  | ...... | Alba, Latium | liba, Tarraconensis $\ldots \ldots .$. |
|  |  |  |  | Allife, Sabini |  |
| BLD Bealoth |  | Ablata, Pontus | Philiaida, Altica | Elavia, Sicily |  |


Comparison of CanaAnlte Town Names-Contimued.

|  | Palestine. | Asia Minor, etc. | Greece, etc. | Italy, etc. | Spain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BN | Nobah | Niobe, Lydia (a dripping stone) | $\ldots$ | $\ldots$ | Novium, Tarraconensis |
|  | Nophah |  | ....... |  |  |
|  | Nephtoah (well) | Nymphæ, Lydia |  | Nepete, Etruria | Onoba, Bœtica |
|  | Anab | Anave, Phrygia | Anaphe (I.) | ...... | Anabis, Tarraconensis |
|  | Janobah | Anabon | Ænope, Laconia |  | Onoba, Bœtica |
|  | Punon | Pionia, Mysia | Panion, Thessaly | Bononia, Gallia Cisalp. | ...... |
|  | Ophni |  | Hupana, Achaia | Opinum, Lucania <br> Aufena, Sabini | Baniana, Botica |
| KR | Achor | Icaria (I.) | Aigura, Achaia | Agerræ, Gallia Cisalp. | Agiria, Tarraconensis |
|  | Gerar | Cargura, Caria | Icaria, Attica | Cariara, Etruria | Caurium, Lusitania |
|  | Jagur | Carus, Bithynia | Achavrai, Thessaly | Acara, Gallia Cisalpina | ...... |
|  | Rechah | Rocca, Crete | ...... | Rhegium, Bruttium |  |
|  | Jericho | Acharacha, Caria |  | Arikia, Latium | Orgao, Botica |
|  | Arka |  |  | Akre, Sicily | Orkia, Tarraconensis |
|  | Karkor | Gargara, Mysia | Kerkas, Bœotia | Kirkeii, Latium | Karruka, Bœtica Kurika |
| KRL | Rachal | Argela, Caria | Argule, Attica | Regillum, Sabini | Arakeli, Tarraconensis |
|  | Rogel | Bargulia, , | Krokulion, Ætolia |  | Vergilia , |
| KRD | Kartah | Kardasa, Caria | Khuretiai, Thessaly | Kroton, Bruttium | Karthago, Tarracon. |
|  | Kerioth | Gordes, Lydia | Skiritis, Laconia |  | Karnago |
|  | Kirjath | Krade, Caria |  |  |  |
|  | Kartan | Gortuna, Crete | Gurtona, Thessaly | Cortona, Etruria | Kretina, Lusitania |
|  | Kitron | Khutrion, Lydia | Kitron, Macedonia | Kroton, Bruttium | ...... |
|  | Geder | Gebara, Albania | Leuktra, Bœotia | Ekebra, Latium | $\ldots .$. |
|  | Gerah | Cadra, Cappadocia |  | Nikotera, Bruttium | $\ldots .$. |
|  | Gederath | Cedreæ, Caria | ....>3 | Skidrus, ," | $\ldots$ |
|  | $\cdots$ | Cyborus, Paphlagonia Kotuora, Pontus | . | . $\ldots \ldots$. | $\ldots$ |


Comparison of Canaanite Town Names-Continued.

| Palestine. | Asia Minor, etc. | Greece, etc. | Italy, etc. | Spain. |
| :---: | :---: | :---: | :---: | :---: |
| KRM Gomorrah | Commoris, Cilicia | Comaros, Epirus | Camarinum, Umbria | $\ldots$ |
| ...... | Chimæra, Lycia | Chimæra, Epirus | ...... | $\ldots$ |
| ..... | Cameira, Rhodes |  | $\ldots$ | $\ldots$ |
|  | , , Crete |  | $\ldots$ | ...... |
| Rekem | Rhegma, Cilicia | Orkhomenos, Bœotia | $\ldots$ | $\ldots .$. |
| Machir | Orukhomenos, Rhodes <br> Megara, Pontus | ,, Arcadia Megara, Megaris | Megara, Sicily | $\cdots \cdots$ |
| Mechirath | Macrasa, Lydia | Amorgos (I.) | Himera , | $\ldots$ |
| KBN Mearah | Magarsa, Cilicia |  |  |  |
| KBN $\begin{gathered}\text { Gibeon } \\ \text { Cabbon }\end{gathered}$ |  |  | Capena, Etruria | Cepiana, Lusitania |
| Cabbon Nekeb |  |  | Xiphonius, Sicily | Equabona, ," |
| KBD $\stackrel{\text { Nekeb }}{\text { Gibbeath }}$ | Anakba, Cappadocia | Nikaia, Doris | Capution ${ }_{\text {Sicil }}$ | .... |
| KBD $\begin{aligned} & \text { Gibbeath } \\ & \\ & \text { Gibbethon }\end{aligned}$ | . |  | Capution, Sicily | $\ldots$ |
| KB Gaba | Abgabes, Pontus | Caphuai ${ }^{\text {* }}$ | Capua, Campania | .... |
| Aphek |  | Pheka, Thessaly | Gabii, Latium | $\ldots .$. |
| Aphekah | Phokaia, Lydia | Phokis | Pauka, Corsica | $\ldots .$. |
| KL Keilah | loe, Lydia | Phegeus, Attica Khalia, Bœotia | Gela, Sicily | Kale, Tarraconensis |
|  | Kaloe, Lydia | Aigilæ, Laconia | Celia, Apulia | Okilis, <br> ," |
| Gilgal | Golgoi, Cyprus | Chalcis, Eubœa | Aquila, Sabini | Okils, |
| Hachilah | Kekulion, Mysia | Oichalia, Thessaly | Halikuai, Sicily | $\ldots .$. |
| Hogla |  | ,, Ætolia | Aquileia, Etruria | ..... |
| KLD Gilead | Alb | Calyaon, Atolia | Agylla, ${ }^{\text {Galata, Sicily }}$ | $\cdots$ |
| Galeed |  | Challidai, Attica | Calatia, Sabini | $\ldots$ |
| Gelloth |  | Echelidæ, , | Tigullia, Etruria | $\ldots .$. |
| Giloh |  |  | Cliternum, Sabini | $\ldots .$. |
| Makheloth | Megalassus, Capp., Arm. |  |  | $\ldots .$. |


Comparison of Canaanite Town Names-Continued.

|  | Palestine. | Asia Minor, etc. | Greece, etc. | Italy, etc. | Spain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| KND | Hannathon | Knidos, Caria <br> Adana, Cilicia Thiana, Cappadocia Magnana, Pontus Akmona, Phrygia Ikonium, Lycaonia | Panakton, Attica |  | $\ldots$ |
|  | Daanah |  | Donakon, Bœotia |  | ..... |
|  | Taanach |  |  | Catana, Sicily | $\ldots$ |
| KMN | Mekonah |  | Migonion, Laconia | Catana, Sicily | $\ldots$ |
|  | Gannim |  | Mykenai, Argos | Engyum, Sicily | $\ldots .$. |
|  | Janum |  | Mykones (I.) Makunia, Ætolia | Comini ${ }^{\text {c.... }}$ | .... $\ldots$ |
|  | Camon | Comana, Pontus | Alkomenai, Thessaly |  | Kanama, Bœ...ica |
|  | Jokneam | ,, Armenia | ,, Macedonia | $\ldots$ | Samna, Balearic Isles |
|  | Maon(?) | Haamonai, | Haimoniai, Arcadia | $\ldots .$. | ...... |
| KS | Gaza | Assos, Mysia | Casos (I.) | Agasus, Apulia | Oeasso, Tarraconensis |
|  | Azzah | Kissa, Pontus | Kissa, Thrace |  |  |
|  | Gaash | Kussus, Lydia | Hessos, Locris | $\ldots$ | Kaus, Tarraconensis |
|  | Keziz Hosah | Kuzikos, Mysia | Kissos, Macedonia | . |  |
|  | Jahaza | ,a, Cappado | sial, Argos | $\ldots$ | $\ldots$ |
|  | Azekah | Mosega, Albania |  | Askia, Sabini | Ossigi, Bœtica |
|  | Socoh , | Suke, Cilicia |  | Sukkeianum, Bruttium | Ossigi, Botica |
|  | Shocoh |  |  | ..... | $\ldots$ |
|  | Seiacah | $\ldots$ | Sikinos (I.) |  | $\ldots$ |
|  | Shihon |  | Sicyon, Greece |  | $\ldots$ |
| KD | Kattah | Kuta, Colchis | Ægitium, Etolia | Akidii, Lucania | .... |
|  | Gudgodah | Cadyanda, Lycia | Guthion, Laconia | Acgida, Istria | $\ldots$ |
|  | Juttah | Kotuaeion, Phrygia | Dikaia, Thrace | Caudium, Sabin | Tukkia, Bœ.tica |
|  | Techoa | ${ }^{\text {c }}$ Citium, Cyprus | Tegea, Arcadia |  | Tugia, Tarraconensis |
|  | Athach | ( $\ldots \ldots$ $\ldots$ | Attica, Greece | Othoka, Sardinia | Attakum, Attegua, Bœetica |


| Aagai，Lycia | Sarta Macedonia | $\ldots$ | Akki，Tarraconensis Akkatukki，Tarracon． |
| :---: | :---: | :---: | :---: |
| Sardis，Lydia | Sarta，Macedonia | $\ldots .$. | ．．．．．． |
| Arsarata，Armenia Major | ．．．．．． | ．．．．． | $\ldots$ |
| Saratra，Lycaonia | ．．．．．． |  |  |
| Sardene，Caria |  |  |  |
| Sardeva，Armenia Major | Zortane，Thrace | Saturnia，Etruria | $\ldots$ |
| Khasira，， |  |  | $\ldots .$. |
| Asdara，Cappadocia | Stiria，Attica | Ostra，Umbria |  |
| Sataros，Lycia |  | Astura，Latium |  |
| Astura，Mysia | ．．．．．． | Subrium，Etruria | $\ldots$ |
| Setara | ．．．．．． |  | $\ldots .$. |
| Sotira，Pontus |  | Pistoria，Etruria | $\ldots .$. |
| Ostrus，Phrygia |  | Testrina，Sabini | $\ldots .$. |
| Marathusa，Crete | Eresidai，Attica | Rosetum，Etruria | $\ldots .$. |
| Masora，Cappadocia，Arm． | Oresthasia，Arcadia |  | $\ldots .$. |
| Mazuri，Pamphylia |  |  |  |
| Tarsos，Cilicia | Eutresis，Bœotia | Taurasia，Sabini | $\ldots .$. |
| Darsa，Pisidia | Thruoessa，Achaia |  |  |
| Sura，Iberia | Serrai，Macedonia | Assorus，Sicily | Seria，Bœ⿺尢丶ica |
| Zara，Capp．，Armenia | Assera，＂， |  |  |
| Zara，Capp．，Armenia | Issoria，Epirus | ．．．．．．． | $\ldots$ |
| Azora，Armenia Major | Azores，Thessaly |  |  |
| Sakoena，Cilicia | Schoineus，Corintia Sicyon，Greece | Kasena，Gallia Cisalp． | Asseconia，Tarracon． |
| Gazene，Phrygia | Sikinos（I．） | Kisauna，Sabini | $\cdots$ |
|  | Sikinos（I．） | Kasinum，Latium | ．．．． |
| Saruena，Cappadocia Sourion，Pontus | Serrion，Thessaly | Esernia，Sabini Sarsina，Umbria | $\ldots$ |
| Sauronisena，Pontus |  | Ursaria，Istria | Siarum，Bœ．．．． |
| Asarinum，Cappadocia |  |  |  |
| Amasia，Pontus | Messa，Laconia | Massa，Etruria |  |
| Amuzon，Caria | Mases，Argolis | ．．．．．． | $\ldots$ |
| Zama，Cappadocia | Same，Cephallenia | $\ldots .$. |  |


| K | Accho |
| :---: | :---: |
|  | Hukkok |
| SRD | Zared |
|  | Sarid |
|  | Zeirath |
|  | Zaretan |
|  | Zartanah |
|  | Hazeroth |
|  | Ashteroth |
|  | ．．．．．． |
|  | ．．．．．． |
|  | Beshterah |
|  | Beshterah |
|  | Moresheth |
|  | Moseroth |
|  | Mosera |
|  | Tirzah |
| SR | Zoar |
|  | Zer |
|  | Zorah |
| SKN | Ashnah |
|  | Kishion |
|  | Gizon |
|  | Kazin |
| SRN | Sharon |
|  | Sharuen |
|  | Sharaim |
| SM | Massah |
|  | Mozah |
|  | Shema |

Comparison of Canaanite Town Names-Continued.

|  | Pailestine. | - Asia Minor, etc. | Greece, etc. | Italy, etc. | Spain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SM | Azem | Samos (I.) <br> Syme (I.) <br> Salamis, Cyprus <br> Salmalassus, Armenia <br> Soluma, Lycaonia | Oisume, Macedonia | $\ldots$ | $\ldots$ |
|  | Ezem |  |  | $\ldots .$. | $\ldots .$. |
| SLM | Salem |  | Salamis (I.) |  |  |
|  | Shalom |  | Salmydessus, Thrace |  | Salmantika |
|  | Zalmon, Mount |  | Salmone, Elis | Sulmo, Sabini | Salmuka, Tarraconensis |
|  | Shillim |  | Selymbria, Thrace Solymnia (I.) | ,, Latium | ..... |
|  | Leshem | Klazomenæ, Lydia |  |  | .... |
|  | Mashal | Mesylame, Pontus |  | Massilia, Gaul | ...... |
| SN | Zenan | Sana, Armenia Major | Sane, Macedonia | Sena, Etruria | $\ldots .$. |
|  | Eshean | Sinna, Cappadocia | Aisonis, Thessaly | ,, Umbria | $\ldots .$. |
|  | Shen | ,', Galatia | Sane, Macedonia | Suana, Etruria | $\ldots$ |
|  | Zaananim | Soana, Cappadocia | Saniana, Thrace | Sinuessa, Latium | $\ldots$ |
|  | Ashan | Azani, Phrygia | Asine, Laconia (3) | Ausona, Latium | $\ldots$ |
|  | Jeshanah | Osiana, Cappadocia | Azenia, Attica | Sinonia (I.) | $\ldots$ |
|  | Shunem | Sanua, Albania | Sunium, ,, | Suna, Sabini |  |
|  | Sansannah | Saniseni, Paphlagonia |  | Susonnia, Venetia | Sanisera, Bœtica |
| SDN | Sidon | Nazianzene, Cappadocia Sidena, Lycia | Sithonia, | . | ...... |
|  |  | ,, Mysia | Sosthenis, Thessaly | Sestinum, Umbria |  |
|  | Aznoth | Sunnada, Phrygia |  |  |  |
| SDL | Eshtaol | Satala, Ármenia Minor Astale, Crete | Castalia | Statule, Sabini | Setelsis, Tarraconensis |
|  |  | Kastolos, Lydia |  |  | Castulo, Tarraconensis |
|  |  | Sedala, Armenia Minor |  |  | ...... |
|  | Thelasar | Artaleson, Armenia |  | Telesia, Sabini |  |
| SL | Zela | Zela, Pontus |  |  | Sellium, Lusitania |
|  | Sela | Sala, Armenia Major | Lessa, Argos |  | Solia, Bœtica |
|  | Laish | Ozzala, Cappadocia | Eleusis, Attica | Laus, Lucania | Lesa, Tarraconensis |


Comparison of Canaanite Town Names-Continued.

|  | Palestine. | Asia Minor, etc. | Greece, etc. | Italy, etc. | Spain. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DD | Hadattah | Adatthai, Cappadocia | Theutia, Arcadia |  |  |
| DR | Doroa | Doron, Cilicia | Thuria, Messenia | Tiora, Picenum |  |
|  | Adoraim |  | Ithoria, Ætolia | Tharra, Sardinia | Udura, Tarraconensis |
|  | Dor | Hydara, Capp., Armenia | Derai, Sicyon |  | ...... |
|  | Eder | Teria, Mysia | Ithoria, Attolia | Adria, Gallia Cisalpina |  |
|  | Ataroth | Thuateira, Lydia | Theudoria, Epirus | Turrita, Etruria | Uttaris, Tarraconensis |
|  | Ariath Arad | Rhoeteum, Mysia Rhedos (I.) | Erition, Thessaly | Arretium, ${ }_{\text {Erete, Sicily }}$ | Aritium, Lusitania |
| LM | Millo | Mala, Colchis | Malaia, Arcadia | Meles, Sabini | Malia, Tarraconensis |
| LN | Allon | Olane, Armenia | Olenos, Ætolia | Olonna | Alonæ, , |
|  | Elon Hali |  | Elone, Thessaly | Luna, Etruria |  |
| LL | Halhul | Halala, Cappadocia | Elis, Arcadia Halias, Argos | Elea, Lucania | Alia, Tarraconensis |
| B | Japho | Appia, Phrygia | Abai, Phocis | Oppia, Sabini | Hippo, Tarraconensis |
|  | Japhia | Aipeia, Cyprus | Abia, Messenia | Eubœa, Sicily | - |
| VD | Avith | Pida, Pontus | Aphetai, Thessaly | Veii, Etruria |  |
| N DD | Ono | Annaia, Caria | Oinoe, Attica | Noai, Sicily | $\ldots$ |
|  | Dothan | $\ldots .$. | Dodona | ..... | $\ldots$ |

The identification of these names does not depend on simple general resemblance. They will be found to afford details of relationship, which again become of great importance to prehistoric investigation.

The prefixes are-M, T (D), S, B (P), K, L, Y, O, etc., being the ancient series and extending beyond the Semitic.

The words in the Hebrew transliteration are generally in a crude form without a final vowel. They commonly consist of three consonants, with or without a prefix. Many are dissyllables, which in Greek and Latin transliterations are trisyllables. This latter seems to be the Caucasian form for town names, but in Asia Minor there are tetrasyllables. The tetrasyllables in Italy are mostly caused by the addition of a Latin termination.

The vowels conform to a great degree in the Hebrew and the other transliterations, though not always in the same order. Thus, to take a few cases from the earliest in the list:


| Kanah, | . | . | . | Kana, Ganos, Cannæ. |
| :--- | :--- | :--- | :--- | :--- |
| Sharuen, | . | . | . | Saruena. |
| Zaananim, | . | . | . | Saniana. |
| Sansannah, | . | . | . | Saniseni. |
| Idala, | . | . | . | Idalæa. |
| Dilean, | $\cdot$ | . | . | Delion. |
| Adadah, | . | . | . | Adada. |
| Hadattah, | . | . | . | Adatthai. |

Where vowels are interchanged in transliterations they are commonly the middle vowels ( $\mathrm{I}, \mathrm{E}$ ), and the female vowels $(\mathrm{O}, \mathrm{U})$. The male vowels are usually represented by A .

The representation of the double vowels is another marked point.


Of the terminations, one of the first to be noticed is that in H . This, as lengthening the syllable, is represented in sixty-six cases by an additional vowel. A few examples are given:

Mithcah, . . . Medokia, Modikia.
Nimrah, . . . Anemurium, Anemoria.
Mizpah, . . . Messapia, Messapium, Mopsion.
Berachah, . . . Ambrakia, Bergium.
Bozrah, . . . Perusia, Bruzcia, Bursao.

| Shebah, | . | . | Siphæum, Zobia. |
| :--- | :--- | :--- | :--- |
| Balah, . | . | . | Piala, Velleia. |
| Shiloh, | . | . | Saloe, Selia. |
| Suzah, . | . | . | Suissa, Suessa, Suassa. |
| Doroa, . | . | . | Thurium, Tiora. |
| Hachilah, | . | . | Akilium, Aquileia. |
| Canah, | . | . | Chuniæ, Genua. |
| Hadashah, | . | . Dasea, Tisia. |  |

It is possible that $i$ represents the vowel in the ordinary form, as in Greek and Latin it is I, the vowel now used in Georgian.

H changes to N , as Ummah (Homana), Mozah (Amuzon), Socoh (Succeianum), Dimonah (Timonion), Hormah (Hermione, Hurmine), Gomorrah (Camarinum), Arumah (Ariminium), and about twenty cases.

H changes also to S , as Bozrah (Bruzus), Tirzah (Tarsus), Rabbah (Rhupes), and in about twelve cases.

H as a final changes to K , but it is then a radical, as in Sirah (Sirika).

As an intermediate letter and radical it also changes to K , as Haresheth (Keressos, Kharissa), Sihor (Sakora), Anaharoth (Anaguros), Hazar (Chasira), Bilhah (Balkeia), and in about twenty-five cases.

H as a final is represented, as other finals are, by a plural. This takes place in sixteen cases, as Hosah (Husiai), Zartanah (Zortanæ), Hadattah (Adatthai), Berachah (Pharugai), Hachilah (Aigilæ).

The termination th follows the same general laws as that in H .

It represents a lengthening vowel but in a few cases, as Moresheth (Merusium), Baalith (Pæsula).

Th also changes to N , as in Timnath (Temenion), Mephaath (Mevania), and in six cases.

Th changes to $S$ more freely in about twenty-three cases, as Chisloth (Acalissos), Mechirath (Macrasa), Boskath (Abaskus, Phuskus).

Th preserves its form as a final and as a radical in many
cases, as Amatha (Amathus), Kenath (Kunaitha), Maarath (Maratha), but is represented also by D, DD, and T. It is possible that the D in Greek transliteration was sometimes a Dhelta (as in Romaic), and not a Delta.

Th as a final is represented also by a plural in twenty cases, as Gibbeath (Kaphuai), Avith (Veii), Moseroth (Mazuri), Gelloth (Khallidai).

N is a terminal. Its peculiarity is that in about twenty examples it is represented also by N , as Shihon (Sicyon), Sharon (Serrion), Kartan (Kroton), Kitron (Khutrion), Pelon (Peleon, Belon). In most cases, however, it is represented with a vowel added. Occasionally the N is mute, as in Shimron (Simara), Punon (Pionia), Pirathon (Paratheis). It is also represented by a plural form, as Dilean (Tellenæ), Rakkon (Eregenæ).

It is to be noted that N is a terminal in other transliterations, as Galeed (Calydon), Helkath (Elkethion), Maroth (Marathon).

M is a terminal.
M as a plural is not always represented as a plural in other transliterations. The best examples are Akrabim (Akraiphai, Kekropai), Betonim (Bithenæ, Potniai), Zaanim (Azani), Gebim (Gabix), Bochim (Bagæ).

The plural forms of the ancient town names of the several regions is perhaps to be thus accounted for. A Caucasian capital would consist of three parts, representing the middle, male, and female. The middle town was the citadel, with the residence of the king and soldiery, with the fire-temple on the hill; the male town contained the residence of the governor and the priests, of the artisans and tradesmen, with the temples and groves of worship; and the female town was the seaport or river suburb, with its population of persons devoted to the water, fishermen, boatmen, sailors, aliens, slaves, etc. In case of a summer town and a winter town, the winter town would be the middle town on the hills, and the summer town the town on the river and plain. To express all the towns the plural of one form, the middle town,
for instance, might be used; and this practice begun in Caucasia, would be adopted by Hebrews, Hellenes, Latins, Iberians.

Looking to the terminations in $\mathrm{N}, \mathrm{P}$ or $\mathrm{V}, \mathrm{S}, \mathrm{Th}$, it is most likely they represent the two Caucasian plurals, and the locative and dative cases.

Sh as a radical and terminal is represented by $S$ and $Z$. It is found as Z in Shebah (Zobia), Bashan (Bizana), Eshean (Azenia), etc.

As Sh has no character in Hellenic and Latin, it appears to have been specially represented in Greek and Latin by Ss, or S with a vowel, in about twenty-five cases, as Kadesh (Kudissos), Hadashah (Hudissa, Edessa), Bashan (Abassos), Haresh (Keressos), Lachish (Leugasia), Gaash (Kissa), Mashal (Massilia), Shaarim (Siarum), Ashen (Osiana). It is conceivable that Si would be convertible into Sh , but the Ss must have had a like property in some Hellenic dialects.

Another noticeable transliteration is the representation of Sh by Sk, Ks, of which we have about twenty examples, such as Ashnah (Sakoena, Skhoineus, Aixone), Mareshah (Morosgi), Shalom (Askolum), Ashan (Oxynia), Shebarim (Skarpha).

Z is transliterated by Z in several examples, as Zela (Zela), Azem (Zama), Gizon (Gazene).

In all the forms of transliteration the full vowel is occasionally transposed and made the initial letter, as in Eshtaol (Astale), Ishtob (Astapa), Suzah (Assessos), Aznoth (Sunnada), Nimrah (Anemurium).

A peculiarity in Canaanite town names, that of alliteration, is to be found in the other transliterations. Thus Madmenah and Sansannah, neighbouring and assonant names, are parallelled by Methymna, Saniseni, Sanisera, Nazianzene, Susonnia. So Hazazon, Hukkok, Gudgodah, Zaanim, Halhul, Elealah, are parallelled by Assissium, Suessula, Sisaraka, Akkatuki, Perperina, Pompelon, Alala. (See also the American names.)

It is worth while to regard some of the names, which are common to Palestine and the other regions, and some of which are familiar enough.

In Greece we see :

| Athens. | Sicyon. | Chalcis. | Æmathia. |
| :--- | :--- | :--- | :--- |
| Thebes. | Phocis. | Eleusis. | Ithome. |
| Argos. | Marathon. | Messapia. | Pharsalus. |
| Mycenæ. | Methone. | Pharsalus. | Pydna. |
| Corinth. | Mantineia. | Leuctra. | Pelle. |
| Megara. | Salamis. | Cyllene. | Idomene. |
| Sparta. | Tegea. | Dodona. | Rhamnus. |
| Lacedemon. | Platea. | Calydon. | Perga. |
| Messene. | Pallene. | Nemea. | Cyparissa. |
| Elis. | Cheronæa. | Tanagra. | Abdera. |
| Pisa. | Æegina. | Ambracia. | Hermione. |

In Asia we find :

| Sardis. | Tralles. | Temnos. | Amida. |
| :--- | :--- | :--- | :--- |
| Ephesus. | Ancyra. | Methymna. | Chimæra. |
| Smyrna. | Ikonium. | Rithymna. | Cebrene. |
| Miletus. | Priene. | Cnidos. | Patara. |
| Phocea. | Abydos. | Cyzicus. | Mygdala. |
| Mytilene. | Lebedus. | Gortyna. | Azani. |
| Rhodes. | Colophon. | Comana. | Adana. |
| Tarsos. | Amasia. | Idalæa. | Amathus. |

We recognise in Italy:

| Rome. | Gabii. | Tusculum. | Camerinum. |
| :--- | :--- | :--- | :--- |
| Pisa. | Veii. | Telamo. | Croton. |
| Sena. | Tarquinii. | Cære. | Misenum. |
| Parma. | Catana. | Aquileia. | Arretia. |
| Verona. | Mazara. | Lavinium. | Cannæ. |
| Syracusa. | Ancona. | Genua. | Regillum. |
| Capua. | Nuceria. | Ariminium. | Caudium. |
| Mantua. | Cremona. | Bergomum. | Eugube. |
| Mutina. | Assissium. | Fidenæ. | Reate. |
| Bononia. | Patavium. | Nomentum. | Clusium. |
| Massa. | Cortona. | Amiternum. | Marnia. |
| Luna. | Sybaris. | Stabiæ. | Puteoli. |

In Spain we may select :

| Gades. | Mentesa. | Equabona. | Vergilium. |
| :--- | :--- | :--- | :--- |
| Hispalis. | Barcine. | Telobis. | Subur. |
| Hippo. | Carbula. | Egelasta. | Araceli. |
| Bætulo. | Salmantika. | Ossonoba. | Olcades. |
| Carthago. | Laminium. | Collippo. | Gebala. |
| Sarteia. | Astapa. | Talamina. | Salacia. |
| Tarraga. | Toletum. | Turbula. | Spartavia. |
| Mago. | Myrtilis. | Roboretum. | Onoba. |
| Castulo. | Basilippo. | Scalabis. | Bedunia. |
| Gerunda. | Nardinium. |  |  |

Thus the most ancient seats of civilisation, and many great cities of this day, are included in our list.

If the Canaanite serves as a test for the other regions, and enables us to ascertain what are radicals and what terminals, and to decide in the essential characteristics, it follows in the concrete that the other transliterations give the like aid for Canaanite. Thus the names of Etruria, Armenia, or Hellas become criteria for Palestine, to decide what is Caucasian and Canaanite, and what is Hebrew.

If the names of Etruria or Attica are taken, the Canaanite canon will assist in their decipherment, as they in return throw light on the names of Canaan.

The proofs above given are purely philological, but they point to material results. If, for instance, there was at one time a population in Canaan, a population in Kholkis, one in Lydia, another in Bootia, one in Etruria, and a population in Lusitania, using the same language in the same way for naming their towns, then there must in all these regions have been populations using not only the same language, but the same mythology and the same arts. Their rude stone monuments, their castles, their citadels, their town-walls, gates, foundations, sewers, tombs, arms, utensils, would present points of resemblance and comparisons as assured as those to be found in the community of words.

Thus the exploration of Palestine under the auspices of the Palestine Exploration Fund, if pushed far enough, and deep
enough, and if adequately supported by contributions, must throw the greatest light on the archæology of Asia and Europe. The Bible tells us that the Israelites invaded a settled population holding walled cities, and, as it is here proved, those cities were built by the same ruling race as that which raised the walled cities of Caria, Attica, and Latium, so will the exploration of Palestine be effectually a classic exploration, as well as sacred, and as much as if conducted in situ in Caria, Arcadia, Apulia, or Hispania Tarraconensis.

In the case of Hellenic exploration, we are confused as to what is Cyclopean, Pelasgian, or Hellenic; in Etruria, we hardly know what is indigenous and what is posterior; in megalithic monuments we look for the Druidic, but in Palestine we are free from these sources of confusion. There we shall not be disturbed by Leleges, Pelasgi, Hellenes, Sabini, Iberi, Celtiberi, or Druids. We have one danger, that of distinguishing between what is Phœnician of the Caucasian period, and what is Phœnician of the Semitic period ; but altogether we have less confusing elements.

With regard to Spain, it is already evident that the conclusions of Wm. Von Humboldt with regard to the Iberians must be materially modified. The important discovery of that philosopher of the relation between ancient local names in Spain and modern Basque gave us a Turanian population as an element in ancient Europe, but the value of that element was exaggerated by himself and by others, and, among these, by myself in my paper on the Iberians in Asia Minor. It appeared to follow from Von Humboldt's discovery that all which was not apparently Celtic or presumedly Phœnician or Carthaginian in Spain must be Iberian. One serious consequence of this assumption was that names in Italy, Hellas, etc., resembling those in Spain, were held to be Iberian and evidence of an Iberian population in those countries. It also followed that the ancient civilisation was considered to be Iberian. From the Canaanite test it appears that terms in Spain having Basque affinities are not Iberian in this sense, and many others supposed to be Iberian are not so.

Astura, a name found in Spain and Italy, is one of the strong points of the system of Von Humboldt (see his " Researches on the Primitive Inhabitants of Spain "), and yet his derivation of Astura from asta, rock, and ura, water, as signifying " Rockwater," is most suspicious. Astura is, however, by all linguistic evidence, the analogue of Ashteroth and Beeshterah in Palestine, and consequently not only of Astura in Latium, of Astura in Mysia, but of a dozen names of allied form scattered over the ancient world. Astura, too, as a river name, is not dependent on the Basque ura, water, but is formed from a radical DRS, as the town names are. Asta, another key of his system, is not formed from asta, a rock, but is a recognisable Caucasian town name. It is Palestine which affords the touchstone in these cases. We may pause as to Astura and Asta in the European peninsulas, but we have no Basque influence to disturb our opinions in Palestine. It follows as a remote consequence, even with regard to the population of Britain, that besides the Iberian element which has been recognised in the Silures and in Western Ireland, there must have been an anterior population of the same alliance as the Canaanite. At the same time there must have been river, and possibly town, names Vasco-Kolarian and Agaw.

It is thus the connection of archæological science, as of physical science, and of all science, extends to the remotest consequences, and the displacement of one atom will immediately and ultimately affect others. Indeed, so far as concerns ourselves, it is within the limits of probability that the present expeditions to Palestine and explorations in the Mediterranean lands may throw a light on the megalithic monuments of Britain, and on the gold ornaments of Hibernia. Earlier inscriptions, in characters as yet unrecognised, may yet reward the explorer, and consolidate and harmonise the relics of ancient history.

The Accad cities mentioned in the Bible, in Genesis x . Io, II, I2, besides Babel, Accad, and Rehoboth, are:

America.


Many cities in Palestine are closely represented in America.
A circumstance worthy of remark, and which may indicate Sumerian influence in Brazil, if not that the Sumerians had settlements there, is that the Guarani word for town is Taba, that is Tabæ, Thebes, etc., of geography, the Daba of the present Georgians. If the Sumerians had at any time a settlement on the great river-mouths, the passage of the Atlantic would be credible, and the knowledge of the Atlantic Ocean by the geographers of Pergamos and Babylonia accounted for.

Under this head of topographical nomenclature, as just stated, a course of investigation is being pursued by the Rev. Professor John Campbell, which can be consulted with great advantage.

In the Canadian fournal, and under the titles of the " Horites," and of "The Shepherd Kings of Egypt," Professor Campbell has adopted as his basis the genealogies of the Books of Genesis, Kings, and Chronicles. With the help of the Egyptian and classic data, he has brought to bear a flood of light upon the Sumerian epoch of civilisation with regard to the genesis and migration of nations, and the mythology of the period. All tends to illustrate the importance of the protohistoric era.

Much of his work is necessarily tentative, and although there are few illustrations with regard to America, these memoirs can be profitably consulted by the investigator, in common with those of Lenormant and the Egyptologists. Of course in Bryant, and some of the old mythologists, many of the collateral facts may be found, but treated in a manner incompatible with our present knowledge.

As to the ancient extent of the Sumerian region in America,
it cannot yet be determined, for it must have been wider than at the Spanish Conquest ; but with regard to the names here given for the new world and the old, it must be borne in mind that some are Agaw, and extend into Brazil. The consideration of the Brazilian river names gives us a test in relation to those of Europe, and they confirm the opinion I have given of an Agaw influence in Canaan, in Asia, and in Europe, anterior to the Sumerian, and which will have to be taken into account by the craniologist. He has to provide for the Vasco-Kolarian, the Agaw, and the Sumerian migrations.

The whole of the phenomena of man in America represent an arrested development of civilisation, cut short as compared with Europe and Asia, not by climate as in Africa, and yet quite sufficient to include the two epochs of great stone monuments, and of palatial works with inscriptions-epochs which embraced the first spiritualised religion, that of the worship of light; a time of thousands of years so remote, that, in the old world, it has now only its scanty votaries among the Parsees of Bombay; time, too, so remote, that the great religions of the globe-Judaism, Christianity, and Islam-had, with Buddhism, got time to expand and to cover the eastern hemisphere, while, until the Spanish Conquest, the Americans had, in the flux of centuries, never heard their revelations. Few things so strongly portray the deep, dark gulf of separation as this, when associations which had been commonly shared from the beginning of mankind, were snapped in the time of their deepest interest and moment, and it was hazard, rather than the design of man, placed the Indians that perished and the Indians who have survived under the teaching of the missionaries of Spain and Portugal, and which all have not yet known.

The evidence of language comes in support of this arrest of development, for there are no languages in America of the later and higher forms. When the early Akkad stopped there, all stopped. This it is which gives the false impression of there being a peculiar and special American grammar. This
has been so specially studied and treated, whereas, the languages in America, which cannot be rightly called American languages, are under the same conditions of prehistoric grammar as the eastern languages of the old world. The grammar of Omagua may be as truly called Caucasian as American, and, if we choose, that of Abkhas might be as rightly named American as Caucasian.
As there was in the furthest or prehistoric days a stream of emigration continuously from the old world to the new, the question arises whether this set back again, and whether a knowledge of the new world was carried to the old.

The first set of population appears to have been over Behring's Straits, or across the narrow seas, and migrations which could cover the eastern world, even with Akkas and Bushmen, from Lapland to South Africa, would be able to fill America from the snowy pole to Tierra del Fuego, as there is witness enough to show, in blood, in speech, and in folk-lore.

It is very questionable whether at any time there was regular intercourse over the Atlantic, for that would have needed ships; and a trade once set up, other animals besides dogs, and other plants than those now found, would have followed man.

In what we know of the historical period under the Greeks and the Romans a lively knowledge of America was lost. The Greeks could not reach it from the west, and the Romans, when they settled on the shores of the Atlantic, had other cares than to risk the wide, dark sea.
A dead knowledge lingered, not only of the geography of the Americas, but of Australasia, which is of no less interest with regard to the latter region, because that exhibits, philologically, evidence of early migrations of the Mincopie or Pygmean in Borneo, of the Sandeh or Niam-Niam of the Nile in Tasmania, and of the Agaw in Galela, and in the other languages recorded by Wallace.

There was indeed a system of geography long prevalent among the ancients, and in the dark ages, which is referred to in the Timeus of Plato, and was notably maintained by

Crates of Pergamos, I 60 b.c. (Reinaud, Fournal Asiatique, vol. i., new series, 1863, p. 140), and also referred to by Virgil in the Eneid. Four inhabited worlds were treated of, and there appears to have been, in traditions, an imperial title of Monarch of the Four Worlds. This I connect with the statement of Mr George Smith, that Agu, an ancient King of Babylonia, called himself King of the Four Races. Again, with Prescott, who, in the "Conquest of Peru," book i., ch. ii., says: "It is certain that the natives had no other epithet by which to designate the large collection of tribes and nations who were assembled under the empire of the Incas than that of Tavintinsuzu, or Four Quarters of the World." He quotes Ondegarde, "Rel. Prim. MSS.," and Garcilasse, " Comentarie Real," ii. II. This title was perhaps a prerogative of the middle king, or monarch of the middle kingdom of the great civilised empire of the world. The Chinese preserve the tradition of the middle kingdom, the trinary having followed the quaternary system. Thus in Genesis there are three sons of Noah. The Vedas refer to three worlds.

The nomenclature of Ptolemy and the other geographers is of the Akkad epoch, and that of the early Biblical books Akkad or Babylonian.

The school of Pergamos taught that the world, which must have been treated as a sphere, contained four worlds. Ours was one of these ; and as is true in Asia that it does not cross the line, so it was supposed that Africa does not cross the line, and the Babylonian geographers were well acquainted with Southern Asia but not with Southern Africa. This northern world was balanced by an austral world, and this is so, depicting thereby the Australasian Islands, the scene of Sumerian migrations, and Australia, which was known to them. Australia was, by the Sumerians, as by far later geographers, supposed to extend from opposite Asia, as a terra incognita of the maps, to opposite Africa.

A not less remarkable affirmation was, that the northern world and that of Australia were balanced on the other side of the globe also by a northern world and continent, and
by a southern world, and this is so in North and South America.

It was said, being nigh the truth, that these four worlds were cut off by belts of ocean, one running from north to south, and by another running round the middle of the world from east to west. Such ocean we know shuts off Asia from Australia ; and those ancients might be forgiven who drew a sea over the narrow necks between North and South America, which must then as now have been passed by canoes at portages on the Atrato and on other rivers.

These four worlds were alleged to have their men, as we know they had and have ; but to account, amid so much truth, for intercourse not taking place between them in their days, a fable was got up that the seas were made impassable. The philosophers, however, forgot to tell us how the knowledge of these other worlds and the men in them was gained. Gained too, it was, and lost by the cessation of intercourse, after the Sumerians, with the Americas. This was perhaps owing to the rise of a great power in China, which disturbed the road from India, and the seats of kingdom in Southern Asia.

How that dream of a true globe and its continents and people reached the Greeks and Romans, and how it suggested to the flatterers of Augustus a title of monarch of those four worlds, is here accounted for. It must be traced beyond Pergamos to those older schools of learning, known to us under such a name as Chaldean, but which had flourished in protohistoric epochs from the dawn of civilisation.

There must at one time have been in the olden world men who could bring back this knowledge of the Americas from their Nineveh to its Nineveh and Babel, where the empire of the four worlds got centred, and where one language was spoken and written for the government of the earth. How truly was it then said of Babel, "And the whole earth was of one language and one speech" (Gen. xi. I).

The fall of that power was indeed confusion of nations and of tongues. After a time the tradition alone of these other worlds lingered as a theory of cosmography.

Attached to an ancient map of the world accompanying the Commentary of Bicetus on the Apocalypse, and which may date from the eighth century or an earlier period, is a note. This note, inserted in the south of the map, observes that, independently of the three points of the known world, there is beyond the ocean a fourth part, which is unknown to us, on account of the heat of the sun, and on the confines of which, it is fabled, adds the author, that there are antipodes.*

The tradition lingered, to be condemned by the Christian Church as a thing that men of learning ought not to learn, but reproduced in our own language by Sir John Mandeville. He insisted that the world was a globe and could be circumnavigated, and he tells a tale of a man from Norway, who had gone so long by land and sea that he had environed all the earth, that he was come about to his own marches.

The intercourse in times of yore between the new world and the old, now again brought to light, rests upon no slight evidence, although the whole of it cannot be included here. It comes in confirmation of the labours of those who have gone before me, and of my own, carried on step by step for some time. $\dagger$

## APPENDIX I.

The river names, as already stated, are most probably not Sumerian, but possibly Agaw or Vasco-Kolarian. It is, however, useful to examine them, as showing the identity of precedent migrations and languages in the two hemispheres.

The following shows the river names of New Granada in comparison with India and Italy (Etruria):


[^2]| New Granada. | India, etc. |  | Italy, etc. |
| :---: | :---: | :---: | :---: |
| Cusiana, | Acesines, | . $\quad$. | Casuentus. |
| Catarumbo, | Catabeda, |  |  |
| Cibao, . | - ...... |  | Gabellas. |
| Garigoa, . | Gouraios, |  |  |
| Cauca, | Cacathis, | - | Caicus, A. Minor. |
| $\underline{\text { Ite, }}$ - |  |  |  |
| Humedea, | Namadas, |  |  |
| Lengupa, |  |  | Longinus. |
| Ariguani, | [Rhogomanus, Persia], |  | Rigonum. |
| Meta, | Andomatis, ${ }^{\text {a }}$ |  | Medoakus. |
| Margua, | [Margus, Margiana], |  | Nikia, Nato. |
| Nachi, |  |  | Nar, Nure. |
| Nare, | . ...... |  | Anapus. |
| Napipi, |  |  | [Enipeus, Macedonia]. |
| Neusa, | . ...... |  | Anassos. <br> [Nessos, Macedonia]. |
| Upia, |  |  | [Abus, Britain]. |
| Paute, | Spauto (lake), . | . | Padus. <br> [Boetis, Spain]. |
| Togui, | Tokosanna, | . . | Togisonus. |
| Tamar, | - Tamarus, [Tamyrus, Syria], |  | Tamarus. <br> [Tamaros, Britain]. |
| Tachira, | [T |  | Ticarios. |
| Tiguanaqui, | Temala |  | Digentia. |
| Tumila, | Temala, . | . . |  |
| Onzaga, |  |  | Sekies. |
| Zulia, | - Sadus ${ }^{\text {- }}$ |  | Silis, Silarus. |
| Suta, | Sadus, | - . |  |
| Sarare, | Serus, | - . | Sarius. |
| Suarez, | Sarabis, . | . | Siris. <br> Æsurus. |
| Sisigua, | Suasius, . | . | Sossius. |
| Semindoco, | Tokosanna, | . |  |
| Sumapia, | Sittokakis, |  | Sumathus, Sicily. |
| Sichiaca, Sube, | Sittokakis, | . $\cdot$ | Sekies. |
| Sube, | Sobanus, Sapara, . |  | SAsopus, Greece]. |
|  |  |  | Sinnus. |
| Sinu, | Sonus, | - $\cdot$ | Asinarus, Sicily. [Sonus, Hibernia]. |

## Other river names are:

| America. | India and Eas | West. |
| :---: | :---: | :---: |
| Caca, Bolivia, | Cacathis, I., | Caicus, A. Minor. |
| Cachy, Peru, . |  | Caicinus, Italy. Creina Italy. |
| Chira, Peru, . |  | Akiris, Italy. |
| Curaray, Peru, |  |  |
| Aguan, C. America, | Kainas, I., |  |
| Ulua, C. America, . |  | Ollius, Italy. |
| Guapai, Bolivia, | Kophos, I., . | Gabellus, Italy. |
| Montagua, C. America, | ...... | Mitua, Macedonia. <br> Modoacus, Italy. |
| Mira, Ecuador, |  | Merula, Italy. |
| Marona, Ecuador, | ..... | Himera, Sicily. |


| America. | India and East. | West. |
| :---: | :---: | :---: |
| Mayo (river name), Peru, Mexico, |  |  |
| Mantaro, Peru, | Manda, I , | Munda, Spain. |
| Mapiri, Bolivia, | Mophis, I., |  |
| Lempa, C. America, | Lombare, I., | Lambrus, Italy. |
| Lacantum, C. America, . |  | Alukus, Italy. Helicon, Italy. |
| Nasas, Mexico, |  | Anassus, Italy. |
| Nape, Ecuador, |  | Anapus, Sicily. |
| Pita, Ecuador, | Catabeda, I., ex | Enipeus, Macedonia. |
| Piti, Mexico, |  | Boetis, Spain. |
| Putu (mayo), Ecuador, | Spauto (lake), | Pitanus, Corsica. |
| Panuco, Mexico, |  | [Benacus (lake), Italy N.]. |
| Babo, Ecuador, |  | Bæbe (lake), Greece. |
| Babispe, Mexico, |  | Fevos, Italy. |
| Paso (mayo), Peru, | Hyphasis, India, Phasis, Colchis, | Poesus, A. Minor. |
| Yapura, Ecuador, |  | Hipparis, Italy. |
| Rimac, Peru, . |  | Rubiko, Italy. |
| Arispe, Mexico, . | Zariaspis, Bactriano, |  |
| Sirama, C. America, | Serus, India, . | Siris, Italy. |
| Ohosura, Mexico, . |  | Æsurus, Italy. |
| Samala, C. America, Sintalapa, C. America, | Sabalaessa, India, Sandabalus, India, |  |
| Sintalapa, C. America, | Sandabalus, India, | Sontinus, Italy. <br> Ossa, Italy. |
| Sumbay, Peru, | Sambus, I., . |  |
| Zacatula, Mexico, |  | Sekies, Italy. |
| Tepitapa, C. America, | Attabas, I., | Tolenus, Italy. Tobios, Britain |
| Tabasquillo, Mexico, | Tava, I., | Tavis, Italy. |
| Tambo, Peru, . | - ..... | Timavus, Italy. |
| Tula, Mexico, |  | Tolenus, Italy. |
| Dauli, Ecuador, |  | Tilurus, Illyria. |
| Tamoin, Mexico, | Temala, I., extra, | Tamion, Britain. |
| Yavari, Peru, . | Chaberis, India, . |  |
| Ica, Peru, |  | Axios, Macedonia. |
| Huasa, Peru, . |  | Æsis, Italy. |

With regard to lake names, they appear to be related to river names:

America-Lakes.
Parras, Mexico,
Patzcuaro, Mexico, Chapala, Mexico, Fuquene, Mexico, Peten, Central America, Amatitan, Central America, Tamiagua, Mexico,
Titicaca, Peru, .
Chinchaycocha, Peru,

Old World-(R.) River.
Prasias, Thessaly; Prasiane, India W.
Gouraios (R.), India.
Copais, Bœotia.
Fucinus, Italy, Sabine.
Pitanus (R.), Corsica.
Andomatis (R.), India.
Tamion (R.), Britain.
Caicus (R.), A. Minor ; Cacathis (R.), India.
Cainas (R.), India.

The identifications of Fuquene and Peten are striking.
In the reduction of mountain names very little fortune has ever
attended me. The cause appears to be that few are Sumerian, that some are Agaw, and that some are most likely older.

| America. | Old World. |
| :---: | :---: |
| Cotopaxi, Ecuador, | Cottia, Alpes. |
| Cotocha, | Pactyas. |
| Sangay, Ecuador, | - Syngaras, Mesopotamia. |
| Tancitaro, Mexico, | Cithæron, Greece. |
| Orizava, Mexico, | Oropeda, Spain. |
| Apanecas, Central America, | - Pangæus, Macedonia. |
| Assuay, Ecuador, | Ossa, Greece. |
| Pulla, Ecuador, | - Pelion, Greece. |
| Ambato, Ecuador, | - Idubeda, Spain. Boetios, Drangiana. |
| Atitlan, Central America, | ©ta, Athos, Greece. Ida, Asia Minor, etc. |
| Alausi, Ecuador, | - Alesion, Greece; Olgassys, Asia Minor. |
| Pasto, Ecuador, | - Phœestus, Greece. |
| Perote, Mexico, ${ }_{\text {Merendon, Central America, }}$ | - Pierius, Greece. |
| Cadlud, Ecuador, . . | Cadmus. |

Some of these must be identical, but many are doubtful.
The town names are, however, those which are of most value for our purposes, as many of these are evidently Sumerian (* marks resemblance):

| Peru. | Mexico and Central America. | Old World. |
| :---: | :---: | :---: |
| *Arica, | ...... | *Arakha, Susiana. |
| *Recuay, | ..... | Arakhosia, Persia. |
| Urcum, - | $\ldots . .$. | Arikaka, Arakhosia. Araxa, Lycia. |
| ", | ... | ${ }^{*}$ Erech, Accad (Bible). |
| ", | ...... | *Rechah (Bible). |
| " |  | Aricada, Drangiana. |
| Arequipa, | ..... | Aragorasa, Armenia. Archabios, Colchis. |
| " |  | Arukanda, Lycia. |
| " ${ }^{\prime}$ |  | Argos, Greece. |
| *A ${ }^{\text {arapa, }}$ | *Trapuata, Mexico, | ${ }^{*}$ Arubath (Bible). |
| , . | Rabin, Central America, | rabissus, Cappad rbaka, Arakhosi |
| Yüa, | Yoro, Central America, | Ora, India E. |
| Huaura, |  |  |
| *Oruro, | Ariare (R.), Central America, Arispe (R), Central America, | *Oruras, A. Minor. <br> Zariaspes (R.), Bactriana. |
| Astobamba, | Iztapalapan, Mexico, . . | *Hasta, Liguria. |
| *Huasta, | ...... | Asta, Liguria, and Lusitania. Ashdod (Bible). |
| ", |  | Astasanna, Aria. |
| ", |  | Asthagura, India E. |
| " ${ }^{\prime}$. |  | Astakapra, India E. |
| Ambato (M.), | Ambalema, New Granada, | *Corombo (R) Carmania. |
| *Acoramba, <br> Illampe (M.), |  | Cosamba, India S. |
| Cosapa, . | *Cosuma, Yucatan,. | ${ }^{*}$ Cosamba, India S. |
| Casma, |  |  |


| Peru. | Mexico and Central America. | Old World. |
| :---: | :---: | :---: |
| Cuzmo, |  |  |
| *Chosica, | *Cuisco, Mexico, • | *Cuzikos, A. Minor. |
| * Cuzco , | Chuscal, New Granada, | ${ }^{*}$ Gauzaka, Paropamisada. |
| Quisco, |  | Choastra, Media. |
| Congata, - | Concanu, Yucatan, . | Concana, Spain. |
| Canchari, . | Conagua, New Granada, | İonium, A. Minor. |
| Chancay, . | Conchagua, Central America, | Xoana, India. |
| Conongo, . | ...... | Gain, Palestine. |
| Acañ, |  | Aquinium, Italy. |
| Quinoa, <br> *Cacary, | Cacahuamilpa, Mexico, | *Acharacha, Caria. |
| Caquiaviria, | Chiquisa, New Granada, | Gaggra, Paphlagonia. |
|  |  | Gagasmira, India E. |
| Chiclayo, | Cochilha, New Granada, | Cocala, India S.! |
| *Chepen, . | * Copan, Central America, | *Cabena, Media. |
| ", | *Coban, Guatemala, | ${ }^{*}$ *Capena, Etruria. |
| " |  | ${ }^{*}$ Cabbon, Palestine. |
| ", |  | Cepiana, Lusitania. |
| ", | Caparrapi, New Granada, | Caberasa, Media. |
| " | *Chipata, New Granada,. | Capution, Sicily. |
|  |  | ${ }^{*}$ Cibbeath, Palestine. |
| *Chipaya, | *Kabah, Yucatan, . Chepo, New Granada, | - Cuba, India S. |
| " | Chepo, New Granada, | ${ }^{*}$ Capua, Italy. <br> *Gaba, Palesti |
| " | ...... | aba, Pales <br> Gabii, Italy. |
| " | * Chapala, Mexico, | *Capula, Venetia. |
| ", . | *Chapul, Mexico, . | Cubilia, Lycia. |
| " . | Acapulco, Mexico, . |  |
| ", | ...... | *Cabale, Media. |
| Talcanta, ${ }^{\text {a }}$ | undinamarca, New Granada, . | Cabul, Palestine. Conta, India E. |
|  |  | Aricanda, A. Minor. |
| Quillo, | *Akil, Yucatan, | *Aquileia, Italy. |
| " | hollolan, Mexico, |  |
| " | ...... | Kaloe, Lydia. |
| ", | ..... | Keilah, Palestine. |
| ", . | ...... | Agylla, Etruria. |
| Chilca, |  | ${ }^{\text {A Chalcis, }}$ Beeotia, |
| Quellca, Colca, | *Chalco, Mexico, | Gilgal, Palestine. |
| Colca, | Chalcicomula, Mexico, |  |
| ", | *Colosa, New Granada, | *Colossai, Phrygia. |
| *Chumu, | Chalisco, Mexico, | ${ }^{\text {Akalissos, Pontus. }}$ |
| **Chumu, ${ }_{\text {* }}$ Caime, | Comayagua, Honduras, | *Cume, Mysia. |
| *Caime, . | *Cuame, New Granada, | *Cumæ, Italy. |
|  | Chima, New Granada, | ${ }^{\text {Choma, Pisidia. }}$ |
| ${ }^{*}$ Combapata, | ...... | *Cambe, Gedrosia. |
| Combapata, |  |  |
| Chicamo, | ucumba, New Granada, | * ${ }^{*}$ Cocambo, Gedrosia. |
| *Camana, | aman, Mexico, . | * Comania, Caria. |
| ", |  | Cominium, Samnium. |
| " | Guaymas, | Chemosh (Bible). |
| " | ...... | Gimza (Bible). |
|  | ...... | Camisa, Cappadocia. |
| ${ }_{*}^{*}$ Chimeroo, |  | *Kimara, India E. |
| *Catari, . | *Chatura, New Granada, | *Cytorus, Armenia. |


| Peru. | Mexico and Central America. | World. |
| :---: | :---: | :---: |
| $\begin{gathered} \text { *Catari, } \\ , " . \end{gathered}$ | *Cadereita, Mexico, <br> Catarumbo (R.), New Granada, | *Coddura, India S. Cottiara, India S. Cotuora, Pontus. |
|  |  |  |
|  |  |  |
| Quito, | *Cuaita, New Granada, | Kattah, Palestine. |
| *Coati, | Oicata, New Granada, | *Cuta, Colchis. <br> *Caudium, Sabine. |
|  |  |  |
| Chatuna,. |  | Catana, Sicily. |
| Costaparaca, |  | Cotobara, India |
|  |  |  |
| Curaray, (R.), <br> *Ocaruro, | *Carere (R.), New Granada, . | ura, Caria, and Ind |
|  | Charala, New Granada, . | Curula, India S. |
| *Charasani, |  | *Caresena, Mysia. |
| Charcani, | Chiriguana, New Granada, | Corcobana, Ceylon. |
| ${ }^{*}$ Chuana, | Chanaco, Mexico, | Kanah, P |
| " | Canipauna, New Granada, Cunacua, New Granada, . | Kana, Mysia. |
|  |  | Køne, Cappadocia. <br> *Canagara, India S. |
|  | ...... |  |
| aracona, |  | *Aganagara, India extra. Khoana, Parthia. |
|  |  |  |
| Ocona, *Ascona, | Ocansip, Yucatan, | Aganagara, India extra. <br> *Oskana, Gedrosia. |
|  |  | *Oskana, Gedrosia. <br> *Assecona, Spain. <br> *Acarra, Susiana. |
| *Acora, |  |  |
| *Acari, |  | * Achor, Palestin |
| Acoramba, |  | *Cora, Lalutus. <br> Agiria, Spain. <br> *Ancona, Italy. |
| Corocuero, |  |  |
| * Ancon, |  |  |
| Hancane, |  |  |
| *Colan, | Calan, Yucatan, | Calneh, Accad (Bible). <br> *Gelan, Palestine. |
| Calanacoche, | *Oculan, Mexico, | Calindoca, India S. Calinaxa, India S. |
| *Calasnique, |  |  |
| ," |  | Okelum, Lusitania. Akelanum, Sabine. |
|  |  |  |
| Cailloma, | Caluma, Ecuador, Jalapa, Mexico and C. Amer., Jutigalpac, America, | Gallim, Palestine. Calpe (M). |
| Calupe, |  |  |
| Challapa, |  |  |
| Ocharan, . | *Garupa, New Granada, <br> *Labna, Yucatan, <br> *Labhakhabpha, Yucatan, | Haran (Bible). <br> Acharna, Attica. <br> *Gariphus, India. <br> *Labbana, Mesopotamia. <br> *Labaca, India S. |
| , ${ }^{\text {a }}$ |  |  |
| Caropango, |  |  |
| Llapo, - |  |  |
| Lambayeque, | Lampa, Salvador, . Liborina, New Granada, ....... | Alambatesa, Comaria. Lampsacus, A. Minor. Lombare, India. |
| Illampo (M.), |  |  |
| Larecaja, . |  | Lombare, India. <br> Lariaga, India E. |
| Mantaro, | Huamantla, Mexico, Mani, Yucatan, | Mendola, India S. |
| *Manani, | Mani, Yucatan, | *Maniæna, India E. Amana, Media. |
| Mani, |  |  |
| Mirinavis, | Merindon, Honduras, | Morunda, Media. |
| Marona, |  |  |
| Machurana, <br> 99 | . Macaranita, New Granada, <br> . Mogorontoque, New Granada, | Magaris, India S. <br> Mogarus, Pontus. <br> Makrasa, Lycia. <br> *Megara, Gr., Sicily. <br> Maxere, Hyrcania. |
|  |  |  |
| cari, |  |  |
|  | Mozca, Mexico, |  |


| Peru. | Mexico and Central America. | Old World. |
| :---: | :---: | :---: |
| *Macari, . | Mescala, Mexico, |  |
|  | *Mogote, New Granada, | Maguda, Mesopotamia. |
| *Malla, | .. | *Mala, Pontus. <br> Millo, Palestine. |
| Amiloe, |  | Amilos, Arcadia. |
| Mantaro, |  | Manda, India. |
| ${ }^{*}$ Marcara, |  | ${ }^{*}$ Margara, India E. |
| * Marcomarcani, 99 | Cundinamarca, | *Margana, Ceylon. <br> Maricada, Bactriana. |
| ", | *Margua (R.), New Granada, | *Margus (R.), Margiane. |
| ", | *Masaya, Yucatan, | ${ }^{*}$ Massah, Palestine. |
|  |  | * Amasia, Pontus. |
| Masin, |  | *Messana, Sicily. Messene, Greece |
| *Mäpiri ( $\mathrm{R}^{\text {. }}$ ), |  | *Mapura (R.), India. |
| *Napo, | *Neyba, New Granada, | *Nebo (Bible). |
| ," | - ..... | Nebah (Bible). |
| *Nasca, |  | * Nepea, Phrygia. |
| *Nasca, ${ }_{\text {Nasca, }}$. |  | *Nasica, India S. <br> * Nanaguna, India S. |
| Nanasca, . | Nicaragua, C. America, | Nuceria (?), Italy. |
| ", . |  | Anaguros, Greece. |
| ", . | Nimaima, New Granada, | Nommana, Carmania. |
| ," . | Nare, | aly. |
|  |  | nara, Indi |
| Unanue, |  | *Ninue, Nineveh. |
| ", |  | (Accad) Bible. Ophia, Sabine |
| ", $\quad . \quad$. | Oiba, New Granada, Upia, | Ophia, Sabine. <br> Aphia, Phrygia. |
| ${ }^{(P u c a r a, ~ C a s t l e), ~}$ |  | [cara, castle, Akkad]. |
| *Pucara, | *Bucaramanga, New Granada, | *Begorra, Macedonia. |
| *Pucala, | ...... | *Pygela, Ionia. <br> Pegella Iyceonia. |
| Azangari, |  | Agara, Susiana. |
| - |  | ,, India S. |
| Patapa, | [Patawi, Siam], | Patavium, Bithynia. |
| Patavilca, |  | , Italy. |
| Pataz, |  |  |
| ${ }^{*}$ Paita, | Pauta, New Granada, | * Bata, India S. |
| ${ }_{*}$ Aypapata, | ${ }^{*}$ Pitu, Mexico, | Beda, Mesopotamia. |
| *Pita, | Peto, Yucatan, | ${ }^{\text {Pida, Pontus. }}$ |
| Putu, | *Ubate, New Granada, | *Eboda, Palestine. Pitueia, Mysia. |
|  |  | Phauda, Pontus. |
| *Putina, | *Peten, Yucatan, | Pitane, Mysia. |
| ", | Potonchan, Yucatan, | ${ }^{*}$ Padua, Palestine. |
| Piura, |  | Bitoana, Caria. |
| Piura, Yapura, | Perote, Mexico, | Pieria, Greece. Syria. |
|  |  | Phiarasa, Pontus. |
| *Pitura, | *Paturia, New Granada, | Patara, Lycia. |
| ,, . . | Necopetara, Mexico, | Badara, Carnithia. |
| ", . |  | Sobatra, Lycaonia. |
| ", . | Zupetara, C. America, - | *Opetura, India. |
|  | Sopetran, New Granada, |  |
| ," | Paracheque, | Pyrrha, Caria. |





## APPENDIX II.

## Table of Sumerian Words.

The following is a brief list of words divided into three•regions, the American including two columns, and while in some cases a root may be traced throughout, it will be seen that more commonly the western and American roots or types cross in the Indo-Chinese region. This table may be much extended.

| Ak., Akkad. | Cam., Cambodian. Aym., Aymara. | Mex., Aztek. |
| :---: | :---: | :---: |
| Cir., Circassian. | Mon, Peguan. Qui., Quichua. | Oth., Othomi. |
| Geo., Georgian. | Bur., Burmese. <br> Ann, Annam. | Tara., Tarahum- |
|  |  | Huas., Huasteca. Poc., Poconchi. |





| Great, | Western. makh, Ak., anta, Ak., atto, Cir. | Indo-Chinese. miat, Bur., tau, Karen, | Peruvian. | Mexican, etc. nim, Poc. na, ndi, Oth. |
| :---: | :---: | :---: | :---: | :---: |
| Give, . | . she, Ak., <br> ga? Ak. | sho, Ann., ka, Mon, | chu, Aym., | caa, Maya. |
|  | mu, Ak., | pekya, Bur., |  | kia, Tara. <br> maka, Mex. |
| Run, . | . riati, Ak., | $\begin{aligned} & \text { garita } \\ & \text { Mon, } \end{aligned}$ | huayra, Qui. |  |
| Flow, | . rli, Georg., | pre, Bur., | [puri, Qui.] |  |
|  |  | aara, Mon, | . [humi, Aym., | ] huma, Tara. |
| Speak, | kaka, Ak., laparako, Geo, | nikay, Cam., |  | ynqui, Poc. |
|  | laparako, Geo., | hankai, Mon, chho, Bur., | arusi, Aym. <br> rima, Q. |  |
| Eat, |  | hanmarai, Mon. |  |  |
|  | . ka, Ak., . ja, Geo., | chhan, Cam., cha, Bur., | mancana, Ay | $\qquad$ [Tara. qua, Cora, Mex., |
|  |  | au, Ann., . | ..... | hanal, Maya. |
| Drink, | . ka, Ak., nak, Ak., | kenn, Siam., thou, Mon, | ...... | hindi, Mixteca. |
|  | sua, Geo., | sok, Bur. . |  |  |
| $\begin{aligned} & \text { Die, } \\ & \text { Kill, } \end{aligned}$ | khan, khut, A | , mathi, Karen, | amaya, Aym. | muechit, Cora. |
|  | be, ba, bat, Ak. sikua, Geo., | , kha, Siam., |  | miquiz, Mex. mukiki, Tara. |
| Cut, Break, | . kud, khas, Ak., |  | cuta, Aym. |  |
| Cry, . | - re, Geo., ${ }^{\text {d }}$ | rei, Cam., | rutu, Qui. |  |
| Weep, | . tuq(a), Ak., | toui, Cam., | huaca. |  |
|  | ka, khash, Ak | khok, Ann. |  |  |
| Place, Put, | . ko, thsqo, Geo., |  | cancha, Qui |  |
|  | . ri, Ak., . . | mhrang, Bur., | hatari, |  |
| Raise, | - aka, Ak., . | heka, Karen, | hucaro, Qui. |  |
| Many, | - mes, Ak., | husamia, Bur., |  | miec, Mex. |
| All, | ka, Ak., | ahmah, Karen, | [naka, Aym.] |  |
|  | koweli, Geo., |  | [kuna, Qui.] |  |
| No, not, . nu, Ak., |  | pnoom, Cam., | hani, Aym. |  |
| Negative, nu, Geo., |  | ma, Bur., etc., na, Kumi, | ma, Aym., Q | mao, Maya. |

The pronouns are of such varied type and distribution that only a few selections are offered.



Professor John Campbell has found Celtic affinities for many of these Peruvian examples, and that for a good reason-that Aryan words of culture descend from the same prehistoric stock, and, in some cases, through Sumerian channels.

## NOTE ON DR DEECKE.

Dr Deecke has just published "Der Ursprung der Kyprischen Sylbenschrift" (Trübner, 1877), and an article in the Zeitschrift der Deutschen Morgen. Ges., vol. xxxi., part i., p. 162 (Trübner, 1877) -another article on the origin of the old Semitic alphabet. Both the latter and the Cypriote he traces to forms of the New Assyrian cuneiform. Dr Brandis
in 1873 had already shown the identity of $p a$ in Cypriote and cuneiform. Many of these identifications are clear. With regard to others, I am inclined to assign values different from those attributed by him. It will be seen that this is a capital discovery, as it gets rid of the difficulties consequent on the commonly accepted derivation of the Phœnician alphabet, and brings us nearer to unity in the development of syllabaries and alphabets, ultimately to bring us to that common relation of cuneiform, hieroglyphic, and Chinese, advocated by me, p. 33.

The date of the introduction of the selected Assyrian syllabary into Cyprus, Dr Deecke considers cannot be earlier than I330 B.C., and must be placed much later, perhaps as late as the names of Cyprian kings recorded in cuneiform, say 700 B.C., and in use down to a later date.

The bearing of Dr Deecke's discoveries on Hamath or Khita is likely to be immediate. I have long since pointed out (p. 6) the relations between Khita and Cypriote, and have advocated researches for the derivation of Khita from hieratic, which I think I have supported in the $\Delta$ characters.

With regard to some of the hieratic characters, I regard them as showing a relation between the numerals and number of strokes, as in $b i, p a, s a$.

## NOTE ON M. OPPERT.

M. Oppert writes me, in consequence of its being alleged that he had denied the existence of Turanian cuneiform, that he regards the Sumerian character as Turanian, and Akkad as Semitic, and distinguishes in epoch between them.

## NOTE ON THE CIRCASSIANS.

The Circassians, Abkhas, etc., are now at war with Russia, asserting their time-honoured spirit of warlike independence.

## I N D E X.

Abel, Dr Carl, 38.
Abkhas, 68, 86-s. Agaw.
Abydos inscription, IO.
Accad, Accadian-s. Akkad.
Achaian, 38-s. Agaw.
Agaw, 26, 27, 32, 34, 37, 38, 65-67, 74 -s. Guarani, Omagua.
Akka, 68.
Akkad, 16, 18, 21, 23, 24, 27, 65, 69, 81.
Albanian, IO, II, 14.
Aleppo, 4.
Alliteration, 6 I .
Alphabet or syllabary, 8, 9, 15, 36, 86-s. Albanian, Cypriote, Chinese, Cuneiform, Hebrew, Himyaritic, Libyan, Lycian, Yucatan.
America S., Brazil, Guarani, Mexico, Peru, intercourse with, $18,29,32,66$, 68 ; traditions of, 68 ; river names, 7 I ; town names, 74 ; languages, 8 I s. River, etc.

Armenia, 19, 39, 63.
Aryan, 18, 26, 27.
Assyrian, 2, 16-s. Cuneiform.
Asta, 65.
Astura, 65.
Australia, 68, 69.
Aymara, 2I, 26, 27, 30, 37, 81, 85.
Aztek, 21, 22, 27, 30, 3I, 8r, 85-s. Mexico.
Babylonia, 18, 65-s. Akkad, Assyria.
Basque, 64, 65-s. Vasco-Kolarian.
Berber, IO-I2.
Birch, Dr, v, I2, 20.
Black, 17.
Brazil, 67-s. Guarani.
Britain, vi, 34, 65, 73.
Bronze, 34.
Bull, 36.
Bunsen, Ernest de, 18, 36.
Burial towers, 34 .
Burton, Capt. R. F., 4-6.
Bushmen, 68.
Calendar, 35.
Campbell, Rev. Prof. J., I7, 30, 38, 66, 85.
Cambodian, 21, 23, 27, 28, 35, 8r, 85 .
Canaan, $1,37$.
Canaanite, vi, I7, 20-22-s. Khita.
Carchemish, 2, 20, 23.
Caria, $17,22,35$.
Caucasian, 32,68-s. Circassian, Abkhas, Georgian
Celtiberian, II.

Celtic, 30, 85 .
Chaldea, 17 -s. Babylonia.
Character-s. Alphabet, Symbol.
Chinese, 17, 32, 33 .
Cimbri, 38 .
Circassian, 2r, 23, 27, 32, 8r, 85, 86.
Clarke, Hyde, vi, 6, 19, 20, 22, 28, 29, 32.
Cohenim, blessing of, 8.
Colchis, $1,63$.
Colossal heads, 33 .
Cora, 3I, 8I.
Cross, I7, 36, 37-s. Tau.
Cross alphabet, 15,17 .
Cuneiform, $16,33,86$.
Cush, I, 3 I.
Cypriote, v, 6, 9, 14, 39, 86.
Deecke, Dr, v, vi, 85, 86.
Dravidian, 26.
Easter Island, 33.
Egg, 17.
Egypt, 17, 26, 66.
Ephesus, vi, 19, 20.
Etruscan, 11, 14, 20-22, 27, 29, 35, 39, $63,82$.
Etruscan tables, 21 .
Eve, 25, 26.
Eye, 17.
Five, 36-s. Hand.
Foot, 17 .
Four worlds, 69.
Forbes, David, 30, 35.
Georgian, $1,19-24,27,29,66,81,85$.
God, names of, $16,26$.
Greece, 39, 62, 72.
Greek, 26, 57.
Guarani, 22, 25, 32, 37-s. Agaw.
Halliburton, R. G., 36.
Ham, I, 2.
Hamath, 2, 3-s. Khita.
Hamath inscriptions, vi, 3, 5, 33 .
Hand, symbol of, 8, $17,25,37$.
Hand, male and female, $17,37$.
Harrison, Park, 25, 35.
Havilah, I.
Heath, Dunbar, 5.
Hebrew, 5, 9, 14, 17, 37, 38, 57
Herodotus, 5.
Heth, 2-s. Khita.
Himyaritic, 6, 7, 8, 14
Hittite-s. Khita.
Horite, 2, 66.
Human sacrifice, 35.
Hutchinson, Consul, 31, 35.

Iberian, 64.
Ibreez, 5 .
India, 18, 29, 71.
Indo-China, 18, 27, 28, 32, 73, 81, 85.
Indus, 29.
Ireland, 6I, 72.
Italy, 29, 39, 62, 7 I .
Java, 18, 33.
Jeremiah, J., 25.
$\mathrm{Ka}, 23$.
Karen, 8 I .
Kawa, 37.
Khita, v, I, 2, 3, 20, 22, 28, 31, 33, 86-
s. Sumerian.

Khita-Peruvian, 20.
Kumi, Kami, 8r.
Lake names, 73.
Latham, Dr, 30, 32.
Latin, 22, 26, 57.
Leared, Dr, 37.
Lenormant, i9, 66.
Lesghian, 20.
Libyan, 6, 10-13.
Lycian, 10, 11, 14, 20, 35 .
Lydian, 22, 33, 63 .
Magic alphabets, 16.
Malay, 18.
Markham, Clements, 3 I.
Martin, R. Biddulph, 5 .
Masonic alphabet, 15 .
Maya, v, 27, 30, 33, 81, 85 .
Mexican, 21, 23, 31, 32, 73, 81, 86-s. Aztek.
Mon-s. Cambodian.
Monument building, 29, 32, 33 .
Moon, 17, 25, 37.
Mountain names, 73, 74.
Mouth, 17, 25.
Mythology, vi, 17, 25, 27, 36, 66.
Nature-worship, 17.
Nebo, 20.
Negative series, 25, 30.
New Granada, 7 I .
Newman, F. W., II.
Night, 25, 26.
Niobe, 20, 34 .
Not, 25.
Numerals, 21, 23, 30, 86.
Omagua, 68.
Oppert, M., 19, 86.
Orion, $17,36$.
Othomi, 21, 27, 31, 32, 81, 85.
Palestine- $s$. Canaan.
Palmer, Professor, 4.
Parsees, 67.
Pegu, 28.
Pergamos, 68, 69.
Perrot, M., 33 .
Peru, 18, 33, 35, 37, 66, 69, 72.
Peruvian, 2I, 22-s. Aymara, Quichua.

Phœnician, v, 7, 11, 12, 18, 34, 64, 86.
Phrygian, 22, 35.
Pleiades, $17,36,37$.
Prideaux, Colonel, 8.
Quichua, 21, 22, 24, 27,.30, 31, 8I, 85.
Quipu, 35.
Rabbinic alphabet, 15 .
Red, 25, 37.
River names, 12, 20, 29, 71 .
River names, table of, 7 I .
Rosa; Senor de la, 30, 3I.
Sabæan, 16-s. Himyaritic.
Samaria, 19, 40.
Scape-goat, 35 .
Secret alphabet, 15 .
Semitic, 18, 26, 57, 86-s. Phœnician.
Serpent, vi, 17.
Sesostris, vi, 5, 34.
Seven, 36, 37 .
Siamese, 27, 28, 35, 81, 85.
Sibu, vi, 20.
Silures, 65.
Sirius, 36 .
Siva, vi, 20.
Smyrna, 19, 34.
Soul, 25.
Spain, 39, 63, 72.
Square alphabet, 15 .
Sumerian, 12, 18, 22, 28, 3I, 66, 86-s. Akkad.
Sumerian words, table of, 81.
Sumero-Peruvian, 20.
Syllabary-s. Alphabet.
Symbol II, 13.
Symbol *, 16, 17, 36.
Symbology, 36.
Tamashek, I2, 13 ,
Tarahumara, 8I, 85 .
Tau, 17, 36-s. Pleiades.
Taylor, Rev. Isaac, 20.
Thebes, 17, 22, 46, 66.
Thinae, 28.
Thracian, 22.
Three, $\mathbf{1 7}, 36$.
Thugga, 12.
Tin, 34.
Toltek, 27, 32.
Town names, 20, 37, 60.
Triad, 17.
Tylor, E. B., 26, 29.
Ugrian, 19, 20, 26.
Vasco-Kolarian, 19, 26, 27, 65, 67-s. Basque.
Waring, 2.
Warka, 7, 9, 13 .
Wilson, Dr Daniel, 29, 35.
Wolof, 28.
Woman, 17, 25, 26, 37.
Yona, 25, 26, 37.
Yucatan, 33, 35-s. Maya.


[^0]:    * In another relation woman becomes the equivalent of the Yona and mouth, and by her periodicity, resembling that of the moon, the equivalent of that body.

[^1]:    * See my " Prehistoric Comparative Philology and Mythology," appendix ; W. F. Blake's "Astronomical Myths," p. III, and the work of Ernest de Bunsen, now in the press.

[^2]:    * Article of my friend Mons. E. Cortambert, quoted in Nature, Jan. ir, 1877, p. 235 .
    + See various papers of mine in the Journals of the Ethnological Society, of the Anthropological Institute, of the Palestine Exploration Fund, etc.

