

in Persian, &c. ; enclitics are used, though as rarely as in Persian ; collectives are used as plurals ; and the genitive may precede its nominative, as in Lycian, old Persian, &c. The Aryan, and more particularly the Iranian, affinities of Vannic speech are, in short, so clear that we may safely attribute it to the Medes, who were beginning to become powerful in the ninth century B.C., when the Vannic texts were inscribed. But, as we have seen, the older Minyans of the same region were Mongols, whom the Assyrians destroyed. Not a single Hittite word has been shown to exist in the Vannic language, and even a first glance at Hittite texts, with the highly pictorial emblems therein used, should convince any student that the character belongs to a much earlier period than the ninth century B.C., when the later and very conventional cuneiform script was in use, and was already beginning to be superseded by the still more abstract and artificial signs of the Phœnician alphabet.

As regards the Cappadocian inscriptions in cuneiform, which it was thought might prove to be in Hittite language, on account of the notice of Tarkutimme in one case, they are not earlier than the time of the Tell Amarna tablets, although the forms of the emblems are earlier than those in use in the eighth century B.C. They are now acknowledged to be Semitic, and, as we have seen, even the Mongol prince Dusratta uses a Semitic language, in the fifteenth century B.C., in all but one of the letters which he wrote to Egypt. The texts from Cappadocia have been mentioned in chapter iii. of the present work, and the two following may be given, from the transcription and copy published, as cited in that chapter :—

## BRITISH MUSEUM TEXT FROM CAPPADOCIA.

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| 1. <i>XX CU tina abarni bitu</i>  | Twenty cloths brought me here    |
| 2. <i>sipta SHIa X CU tina</i>    | wool blue. Ten cloths            |
| 3. <i>Nama CU tina sipta SHIa</i> | smooth, of cloth wool blue       |
| 4. <i>X CU SU a ci tube sipta</i> | Ten cloths other. As is good the |
| <i>SHIa</i>                       | blue wool                        |

5. <i>sa lubus saru napistu</i>	For dress of king's self,
6. <i>SHI tubu CU tina tanum</i>	a good blue, weave a cloth
7. <i>Sipta SHIa sa Elugar</i>	Blue wool, which to Elugar
8. <i>malala I ASTINa ana</i>	was promised, One asked for by
9. <i>Elugari sa umu</i>	Elugar, which now
10. <i>Mirtam LXXX CU tina</i>	Is needed. Eighty cloths
11. <i>Sipta SHIa ana</i>	wool blue for
12. <i>Elugari sa ama</i>	Elugar, which however
13. <i>ana ZALBA</i>	on credit.
14. <i>Usāslu assa uma</i>	Has been sent out this, to-day.
15. <i>XII mana V TU ta</i>	Twelve mana five shekels.
16. <i>AZAG ana Elugari</i>	Silver by Elugar
17. <i>isabit</i>	(He has got it?).

This seems, therefore, to be the letter of a Babylonian trader, buying the stuffs which, as we have seen, the Assyrians prized among the spoils of Asia Minor.

CAPPADOCIAN TEXT, BIBLIOTHÈQUE NATIONALE, PARIS.

1. <i>Amur AN UT ana</i>	God knows about
2. <i>Irisim GUM KASmala piam</i>	The giving. The man twice spoke,
3. <i>sibani akhi ma</i>	swearing to me, brother, this,
4. <i>umma Amur AN UT ma</i>	Thus. God knows it.
5. <i>AZAG I mana XI TU GAL</i>	The silver, one mana, eleven
	shekels,
6. <i>Riksamu su asakalu</i>	Its total. I had weighed (it)
7. <i>KUGI iliga</i>	He took the gold.
8. <i>Rikzim</i>	Altogether.
9. <i>Nakh rükzam</i>	It remained altogether.
10. <i>ma la rissasu me abada</i>	But "They did not give it ever"
11. <i>Akhi-na ma MIS</i>	our brother has written,
12. <i>Assa ma irisu</i>	This they had not given,
13. <i>Tatub Belu</i>	you assure, sir.
14. <i>Ana apitim</i>	About the affair
15. <i>Ani aKAS</i>	I repeat,
16. <i>SA GUM DUBBI nisu</i>	The assurance. The man bore
	letters
17. <i>GUM KAS rab itub ni akhi-</i> <i>ma</i>	The man twice assured me, brother,
	this.
18. <i>SAL. Pinisurim</i>	The woman Pinisurim
19. <i>sa asur sibukhini</i>	That it was true, swore to me.
20. <i>Nitubin</i>	We were both satisfied.
21. <i>SAL assurap</i>	I gave change to the woman.
22. <i>GUM KAS LAL diib</i>	The man made good a second sum.
23. <i>SAL dan azir</i>	I gave the woman all back.
24. <i>GUM KAS asur ista-</i>	The man, indeed, has twice
25. <i>kal</i>	Paid.

This dispute explains why tablets were written in connection with such transactions, to be produced as evidence. The Babylonian language, as we have seen, was easily

understood in Cilicia and in Cappadocia; but as these letters are Babylonian and Semitic, they do not cast any light on the Hittite. They are found in Cappadocia because they were sent there, to persons—probably Semitic merchants—who provided stuffs and other articles of native trade for Babylonian shops.

Having now reviewed all the available evidence affecting the question of language in the regions under consideration, we find that the known languages of the earlier period were Mongol. They are, indeed, not more than dialects of one great speech spoken by Sumerians, Akkadians, Kassites, and Hittites, as well as by smaller tribes, about 2200 B.C. The Minyan is a somewhat more advanced tongue of about 1500 B.C. The old Medic has been thoroughly examined by Dr Oppert in a special work, and need not be here further noticed. It shows, however, the natural changes which had come over the language by 500 B.C. Dr Oppert speaks of its connection with Turkish, as Dr Hommel also compares the latter with Akkadian. The Vannic, on the other hand, is a later Iranian inflected dialect, which can neither historically nor linguistically be expected to aid us in recovering the Hittite.

## APPENDIX III.

## NOTES ON DEITIES AND MYTHS.

THE close resemblances between the early pantheons of various races are worthy of notice, the principal deities being as below:—

	Akkadian.	Assyrian.	Greek.	Latin.	Hindu.	Egyptian.	Syrian.
Heaven	AN	<i>Ilu</i>	<i>Ouranos</i>	<i>Cælus</i>	<i>Brahma</i>	<i>Nut</i>	<i>El</i>
Earth	NANA	<i>Beltu</i>	<i>Ge</i>	<i>Terra</i>	<i>Devi</i>	<i>Seb</i>	<i>Baalath</i>
Ocean	EA	<i>Ea</i>	<i>Okeanos</i>	<i>Neptune</i>	<i>Vishnu</i>	<i>Osiris</i>	<i>Dagon</i>
Hell	NERGAL	<i>Bel</i>	<i>Hades</i>	<i>Pluto</i>	<i>Siva</i>	<i>Set</i>	<i>Baal</i>
Sun	TAMMUZ	<i>Samas</i>	<i>Helios</i>	<i>Apollo</i>	<i>Krishna</i>	<i>Horus</i>	<i>Shamash</i>
Moon	ISTAR	<i>Astaratu</i>	<i>Artemis</i>	<i>Diana</i>	<i>Parvati</i>	<i>Isis</i>	<i>Ashtoreth</i>
Air	MER	<i>Rimmon</i>	<i>Zeus</i>	<i>Jupiter</i>	<i>Indra</i>	<i>Shu</i>	<i>Hadad</i>
Herald	AK	<i>Nebo</i>	<i>Hermes</i>	<i>Mercury</i>	<i>Agni</i>	<i>Anubis</i>	<i>Eshmun</i>

The figure of the goddess of Love is conspicuous among the Aryans. The Hindu Venus is Parvati. Ashtoreth partook of her character. There is also a male Moon-god in some cases and a female Sun-god. The Semitic *Sinu*, the Akkadian *Aku*, the Indian *Chandra*, the Egyptian *Thoth*, are males. The Sun was female among Teutons and other Aryans, and apparently among Arabs. Wives were provided for the gods in addition, such as the infernal goddess *Ninkigal*, a form of *Beltu*, the Greek *Persephone*, Latin *Proserpine*, Hindu *Durga*, and in Egypt *Hathor*, and *Bast*, who were wives of Set, and the latter lion- or cat-headed. The Sun and Moon were the children of Heaven, either brother and sister or husband and wife. The fiery messengers of the gods, who are often

mentioned as sent to Hades, may have been meteors. The Semitic pantheon of later times converts many of the ancient Akkadian deities into planets, which are identified by classic authors:—

Jupiter	<i>Marduk</i>	. . .	emblems, the wheel and crown.
Venus	<i>Istar</i>	. . .	" cross and dove.
Mercury	<i>Nebo</i>	. . .	" caduceus.
Mars	<i>Nergal</i>	. . .	" three-pronged spear.
Saturn	<i>Adar</i>	. . .	" snake.

The thirty stars for the year were common to Babylon and Egypt.

The name of Set is peculiar to Egypt and to the Hittites. He appears to represent a very ancient god in the Delta, and was worshipped, as noted, by the Hyksos. As a god of night, and of the fiery region of sunset and Hades, he partook of the savage nature of Nergal. He was the enemy of the Sun, red-haired, evilly disposed, the lord of the West (sunset) as Horus of the East—the rising sun. He is described as lord of drought and fire, and of the deserts. Evil plants and beasts were created by him. Yet we have a representation of a double-headed figure Set-Horus, and he was the brother of the Sun. He is stated by Plutarch<sup>1</sup> to have been represented with the head of an ass; and the emblem of Set is a remarkable monster, with a head long-eared like Assyrian demons, whose ears are in some cases those of an ass. Another form of his name was *Sutekhu*, which may be the Hyksos form meaning "Prince of Fire." A statue of Set with human form comes from Egypt, the head, which is injured, possibly representing an ass. Among the Hittites Set was of primary importance as "Lord of Heaven and Earth." His name does not seem to occur among the Sumerians, where Nergal had the same character, both as the fiery Sun and as ruler of Hades and of the tomb. Nergal, however, was lion-headed.

The great antiquity of temples among the Asiatics is

<sup>1</sup> Isis and Osiris, §§ 12, 22, 30, 31.

witnessed by the remains of Zirgul. Here Bau, "eldest daughter of Heaven," was the chief goddess, and Gudea speaks of her festival at the beginning of the year, the gifts or sacrifices including calves, sheep, lambs, dates, cream, palm-spathes, swans, cranes, &c., with various robes. The temple was even then ancient. Gudea ordained annual offerings of wine, food, &c., by measurement. He erected a temple on pure soil, where no tombs had previously existed, showing a very early idea of uncleanness connected with death.

Pure water was as sacred as fire to the ancient Asiatics, and the "water of life" is mentioned, both in Babylonia and in Egypt, in connection with the unseen world of Hades. A curious later text relates to the purchase of holy water in Babylonia:—

"Sadunu has given to the Temple of the Sun ten shekels of silver, the balance of five-sixths of a *mana* and five shekels of silver, price of the water of the city of the Sun; in the month Sebat, first day; the year of accession of Nabonahid king of Babylon."

The antiquity of property belonging to temples is illustrated by another text:—

"One [acre?] of pure soil has been given to the Twin God, opposite the sesame fields of the river Agarinnu. Witness Amil Merra, the official of pastures. Fifth day of the month Elul, the year after the accession of Ammi-Zaduga."

This Semitic text, if not a later copy, is only a century later than the oldest known (time of 'Ammurabi), and dates about 2000 B.C.<sup>1</sup>

The religious texts are much more difficult than the historic, but those noticed in the first chapters are rendered easier by being bilinguals, and are certainly understood. In other cases we can only judge by the apparent intelligibility of the result. The legend of Adapa (or Adaru) has been very curiously interpreted, but the result is not satisfactory. I have given my

<sup>1</sup> See Proc. Bib. Arch. Soc., December 1895, April 1897.

rendering of this, and of the legend of Iris-ki-gal, in the translation of the Tell Amarna tablets (second edition). It has been thought that another tablet referred to the same story; and a myth as to "breaking the wings of the North Wind" was supposed to be connected with Adapa. The word *kappi* may, however, mean "deceits," not "wings," and *Adapa* is not marked as a personal name.

This tablet having been recopied, and being in itself very interesting, may here be given: <sup>1</sup>—

(1) *Umu suukin* (2) [*li*?] *ikbi summa su ip[pus]* (3) [*ma*]-*asba istu kalbi summa suu illama* [*ka*] (4) [*eli*] *AN Anu su ipsit AN Ea sa kisisi ikhma* (5) *ilani sa same u irzitim mala basu mannu kiam lukhu* (6) . . . *cibit su [utinu?]* *cima cibit AN Anu mannu attar* (7) [*AN Anu*] *adapa istu isid same ana elat same* (8) . . . [*su*] *palis-ma pulukhta su imur* (9) . . . *su AN Anu sa adapa eli su [pulukh]ta iskun* (10) . . . *ki sa AN Ea subara su iskun* (11) [*AN Anu*] *Bel ussu ana arkat ume su pi simtu [itu?]* (12) [*u*] *mi adapa zir amiluti* (13) . . . *nisurak ana kappi suti isbiru* (14) *ana same elu silu u kiam* (15) . . . *sakan u sa limnis ana nisi istaknu* (16) *murzu sa ina zumur nisi istaknu* (17) [*m*] *atu AN Beltu Karrak unakhkhu* (18) [*lib*] *ma simmu murzu listur* (19) . . . *suatu kharbasu limkut ma* (20) . . . *sittu khitu la isallal* (21) [*ma*] *lal pudu nuk libbi nisi* . . .

The meaning appears to be somewhat as follows:—

"When one is made to give evidence let him say if he himself has made oath from the heart. If he so informs [you], he himself has spoken before God, Ea who guards secrets, the gods of heaven and earth every one of them. Is he then innocent? His word is assured as the word of God. Can he escape? God who stretches from the base of heaven to the top of heaven [and the depth] beneath it knows his choice. [Watching] him, God who stretches over him has fixed his [choice]. . . . Ea has accordingly fixed his failure. God the mighty Lord has uttered the word of fate for his latter day far off. The

<sup>1</sup> Given without translation. Proc. Bib. Arch. Soc., November 1894.

contempt of men he is given . . . for the deceits that failed. He had invoked heaven above, and so it was fixed, and that he shall remain wretchedly among men, that he remain languishing in obscurity among men : wherever the lady of Karak has been given an abode, there let him expect plague and sickness. [For] this let destruction smite him. Having [drunk?] sin he shall not escape. To accomplish corruption he wrought folly among men. . . ."

This text, though it has nothing to do with any myth, shows the religious feeling of the Semitic race as to the sanctity of an oath.



## APPENDIX IV.

## THE HITTITE SYLLABARY.

THE syllabary is considered first, without any reference to the inscriptions to be read. The values and sounds being established, as far as possible, without considering the results on the readings, a foundation is formed by this means which cannot be regarded as arbitrary. The comparisons are, on the one hand, with what is called the "Asiatic syllabary," including the Cypriote syllables, and the extra letters of the Lycian and Carian alphabets, which are generally admitted to be of the same origin; on the other, by comparing the sounds and forms of the oldest known Sumerian emblems. In some cases the sign runs through all three systems, in others it is common only to two. The syllables with a preceding vowel—such as *ab*, *ib*, *ub*—are not used in Cypriote, nor does that syllabary contain any "closed" syllables—such as *tar*, *tur*, &c. The Cypriote vowels take an unwritten *n* after them, when needed. Thus *anthropos*, man, is spelt with *a* only, the *n* being no doubt sounded.

The Hittite emblems are taken from original copies of the chief monuments. The cuneiform is from the Zirgul texts, from the valuable work of MM. Amiaud and Mechineau, and from photographs of certain lists of emblems. The Cypriote is taken from the original paper of G. Smith,<sup>1</sup> with the subsequent plates of Dr Deecke, and

<sup>1</sup> Trans. Bib. Arch. Soc., vol. i.

from other sources. The oldest and most complete forms have been used for comparison, the later rough examples containing fewer lines and less formal shapes, and thus, by the "law of least effort," having become less distinguishable.

Considering first the commonest emblems, which are evidently used as syllables, and not generally as "ideograms" or signs denoting a particular word, we may compare as follows. The emblems are shown as in lines reading from the right, to compare properly with Akkadian:—

- No. 1. A. A pot. In Akkadian *a* means "water" (Turkish *ya*). The cuneiform *a* is a sign denoting water, similar to the Egyptian *n* for water. The emblem compared is one of the extra letters of the Carian script with the value *a*. The water-pot stands for water, but is used for the syllable *a*, in all cases.
- No. 2. E. A spear. The sign compared is an extra letter of both Carian and Lycian, with the sound *e*, or short *ä*. It probably signifies "missile," from a common root meaning "to move."
- No. 3. I. Probably "No. 1." The old Greek texts use the Phœnician *yod* for this letter, but in Carian and Lycian the straight stroke—probably No. 1—is used, and may be the true original of the Roman letter. In some of the extant Mongol dialects *i* is "one."
- No. 4. O. represents an herb. The Cypriote has the sound *o*, and also *ho*. In Akkadian *u* is an herb.
- No. 5. U. The most complete Cypriote form is given. Its sound is *u*. The emblem appears to be a flower. Probably from the same Akkadian word *u*. See No. 4.
- No. 6. BA. The Cypriote does not distinguish *ba* from *pa* (see No. 51). The cuneiform *ba* represents a "shrine" or pyramid.
- No. 7. BE. The Cypriote gives us only *pe* (see No. 52). The cuneiform sign has the values *be*, *bat*, and *us*, and is used for "death," "blood," &c. The pictorial meaning of the sign is doubtful. It seems to be the forked tongue of a serpent.
- No. 8. BI. A bottle. The Cypriote sign is not common, and has the sound *pe*, *be*, *pi*, or *bi*. The cuneiform sign signifies "drink." It has also the sounds *kas*, cup (perhaps Semitic), and *ul* or *vil*. It seems to have been early con-

- fused with the sign for "two" (two horizontal strokes). See No. 107 and No. 33.
- No. 9. BO. The emblem seems to be a whip, such as is still used by Tartars, and represented on Assyrian monuments. The root *bui* in Turkish is connected with words for "cord." The Cypriote sign compared is used for *bo* and *po*.
- No. 10. AB. Does not occur in Cypriote. The emblem compared in cuneiform signifies a "house." It is apparently one of the huts which take the place of tents among Mongol nomads. Several compounds can be made by placing signs inside the hollow of the hut (see Nos. 89 and 153), which confirm the comparison.
- No. 11. IB. The sound is conjectural. The sign is a cord. The word *ib* in Akkadian and Turkish means "to bind." The sound appears to suit the occurrence of the sign.
- No. 12. UB. The Cypriote sign has the sound *bi* as usually understood, but is not that commonly used for the purpose. The cuneiform sign has the sounds *ub*, *u*, and *ru*, but its graphic meaning is not known. It may mean "hollow."
- No. 13. GA, KA. The Cypriote sign has both sounds. The emblem is conventional, but might represent a reed in water. The cuneiform is a bulrush with the sounds *ga* and *de*.
- No. 14. GE, KE. The sounds are from the Cypriote. The emblem is not clear, but may be phallic (compare No. 43), and connected with *ka*, male.
- No. 15. GI, KI. The Hittite emblem, compared with the Cypriote, is rare, but seems to represent some plant (possibly a corn-ear). The cuneiform sign has the sounds *gi* and *sa*, and stands for a "stalk" or a "reed" of any plant.
- No. 16. GO, KO. The Hittite sign resembles the high caps on the monuments, but it may only indicate a cone or pyramid. This seems to be supported by the compounds formed (see Nos. 88, 90, 147), which compare with cuneiform. The sign appears to mean "high," as in Turkish speech, and probably in Akkadian. The comparison with the Cypriote is evident.
- No. 17. GU, KU, KUM. A similar emblem to the last. It may be a crown. The cuneiform emblem has the sounds *ku* and *kum*, meaning "top," "height," and also *ri*, to rise. The Cypriote comparison gives the sounds *gu*, *ku*.
- No. 18. AG, AK. This is not found in Cypriote. In Carian the emblem shown has the sound *g*, and the cuneiform *ge* signifies perhaps "hollow." The Akkadian *ak* means "to

- twist" or "bend," and the sound has that value in Turkish speech.
- No. 19. IG, IK. The cuneiform emblem *ik*, *gal*, seems to be a key. It signifies "to open." That keys were an ancient invention is shown by a bilingual text in Assyrian and Akkadian.
- The sound *uk* seems to be absent. In cuneiform it is only denoted by a compound emblem.
- No. 20. KHA. This is apparently absent as yet in Hittite, and is not known in Cypriote. The cuneiform *kha* is a "fish."
- No. 21. KHE. The meaning of the Cypriote sign is not clear. The Hittite sign compared is rare. In cuneiform the sound is only denoted by a compound emblem.
- No. 22. KHI. The cuneiform sign appears to be a vase, with which the Hittite vase is compared. The cuneiform seems to stand for "receptacle," and signifies "measure." It forms compounds not used in Hittite, which, however, show its original character.
- No. 23. KHU. A bird. The cuneiform *khu* means both "bird" and "prince" (the eagle being a royal sign, and the sound *khu* meaning "illustrious"); it has also the sound *pak*, bird. The emblem is only used in Hittite for one word (meaning apparently "prince") as a rule. The eagle is also the emblem of a deity in Hittite seal texts.
- No. 24. YA. The Cypriote sign is sometimes round, sometimes triangular, with the sound *ya*. The Hittite sign is rare. The roots *ya*, *a*, and *ai* signify "bright." In Akkadian the sounds are *i* and *ya*. In Turkish we have *ai*, white, and *ai* or *ye*, moon (Akkadian *aa*), connected with the idea of light. There is a similar sign in cuneiform for "light," but it has other sounds, such as *bir*, light; *lakh*, pure; and *nap*, daylight. The emblem probably is the full moon, as is shown by the cuneiform compound in which *bir*, with the sign for 30 inside, is the "month."
- No. 25. YE. This is doubtful, but the nearest Cypriote comparison available for the Hittite emblem of a snake. The cuneiform snake emblem has the sounds *sir* and *mus*, but *ye* ("the crawler") may be an old word for snake as well.
- No. 26. LA. The Hittite seems to be a tablet. The sign is rare, and the Cypriote comparison doubtful, but *la* or *lau* was an Akkadian word for "tablet."
- No. 27. LE. The bull. In Akkadian *le* is one of the words for the bull emblem, others being *am*, *gut*, and *khar*: the first (Turkish *öng*, to bellow) means "bull"; *gut* means "mighty" (Turkish *göt*); and *khar* may mean "cattle."

- Probably the Hittite sign may have had some of these sounds as well as the sound *le* derived from the Cypriote. See No. 39.
- No. 28. LI. The Hittite sign points the opposite way to *uu* (No. 154)—that is to say, away from the beginning of the lines. The sound is taken from the Cypriote. The meaning is not clear. The cuneiform sign has the sound *la*. The cuneiform *li* is represented by a compound emblem, not found in Hittite.
- No. 29. LO. The Hittite, as compared with the Cypriote, probably like the cuneiform, shows some kind of tablet (*lau*): the sound is found in Cypriote. The emblem is uncommon. Compare No. 117, also a tablet.
- No. 30. LU. The yoke. The Cypriote *lu*: the cuneiform has the sounds *lu* and *lal*, and means "yoke" and "restraint." It is used (Tell Amarna tablets) for "government."
- No. 31. AL. Two legs running. The cuneiform has the sound *al*, to return, also *du*, to go. The Turkish *yal*, to hasten, run quickly, may be compared. The sign clearly means "run." In Egyptian two legs also stand for the determinative of verbs of motion.
- No. 32. IL. This pot (see No. 1) is distinguished by having no marks inside it such as *a* has. The cuneiform *ili*, *li*, *i*, *ni*, or *zal*—for it has all these sounds—is clearly a pot. The Hittite sound is doubtful. In cuneiform *il* is only otherwise represented by compound signs not found in Hittite.
- No. 33. UL. This is one of the sounds of the cuneiform sign for "two." The common sign in that character (*ul*, star) is a compound not found in Hittite (namely, the sky sign and the bull, meaning "heavenly bull," or simply *u-le* taken syllabically for "star"). The sound of the Hittite is doubtful. Compare Nos. 8 and 107.
- No. 34. MA, VA. This seems to be a compound from No. 10, and the Cypriote *ma* and *va* are closely similar to each other, and also to the Lycian *wa*. The exact sign is found at Bulgar Maden in one of the latest Hittite texts. The cuneiform *ma* signifies "house," "home," "abode," and in Mongolic languages we find *ma*, *mi*, *mu* for "land," "earth," &c. Compare No. 153.
- No. 35. ME. The sound is taken from Cypriote. The pictorial meaning of the sign is not clear.
- No. 36. MI. The sound is taken from the Cypriote. The sign may represent two hills. See Nos. 34 and 111.
- No. 37. MO. The *kteis*, mentioned by Herodotus (ii. 106) as occurring on Syrian monuments. The cuneiform emblem is the same, and is the determinative for "woman." Its

- sounds are *muk*, *sal*, *rak*, &c. The sound *mo* belongs to the Cypriote emblem.
- No. 38. MU. A tree, sometimes with fruit shown, sometimes without. In the Ugric languages *mu* is a word for "tree." The cuneiform *mu* may also be supposed to be a tree. The sound is taken from the Cypriote.
- No. 39. AM. The bull (see No. 27), but somewhat differently represented with larger horns. The cuneiform sound *am* is usually represented, not by the simple sign for bull, but with the sign *kur*, country, inside, and meaning the wild bull (rendered *rimu* in Assyrian), which was found till the seventh century in Assyria. Its bones (*Bos primigenius*) occur in bone-caves near Beirut. The sign may also have the sound *au*, as the *m*, *v*, and *u* are little distinguished in Akkadian.
- No. 40. IM. This seems at present missing in Hittite. The cuneiform sign is supposed to be a "sail," and *im* meant "wind." In Egyptian we find the sign "sail" for "breath." It is remarkable that in Hittite there seems to be no sign for sea, or for fish, and only a doubtful one (No. 119) for boat. They were an inland people. The Sumerians had all these four signs.
- No. 41. UM. This is a tablet or monument. The cuneiform has also the sounds *dub* and *mus*, and signifies "document," "tablet," &c.
- No. 42. NA. This seems to be a compound, and is a rare sign. In Akkadian *na* means "to go forward" (and apparently in Minyan also), while the foot is here shown moving forward. The sound is from the Cypriote.
- No. 43. NE. Another phallic sign. The cuneiform sign *na* is believed to be also of this character. *Na* signifies "he" in the ancient and in the modern Mongol languages. The sound *ne* is from the Cypriote.
- No. 44. NI. The sound is from the Cypriote. The sign is not common, but on the Babylonian bowl it has exactly the Cypriote form. The pictorial meaning is not clear.
- No. 45. NO. This is not yet known in Hittite texts. It may stand for the negative (Akkadian *ni*). The cuneiform sign means "opposition"; its ordinary values are *kur* (probably "contrary"), and *bab* or *pap*, against. The Cypriote has the sound *no*.
- No. 46. NU, NUN. The cuneiform sign signifies "prince." The Cypriote may be derived from the tiara, which on the Hittite texts appears to stand for "king."
- No. 47. AN. The sign is a star. It occurs in Cypriote with the sounds *a* and *an*. The cuneiform is the same, and a five-rayed star occurs also in Egypt, sometimes mean-

ing "deity," though not the usual sign. The star (*An*) in cuneiform is the determinative for deity. On one of the Hittite seals from Aidin, in Lydia, a deity sits on a throne marked with a star (the compound emblem throne and star stands for *Bel* in cuneiform). In this case the determinative for deity appears to be established for the Hittite.

- No. 48. EN. The throne. In cuneiform it means "lord," and is probably also so used in Hittite.
- No. 49. IN. The Hittite is compared with the cuneiform—a vase with plants. The Cypriote has the sounds *i* and *in*, but the comparison may be doubtful.
- No. 50. UN. The Cypriote has the sounds *u* and *un*. This is another word for "lord," and may be represented by the tall cap.
- No. 51. PA, BA. In Cypriote the sign has both sounds. In cuneiform it is *pa* and *pam*, *par* or *pau*. It appears to be a plant with leaves, but is used for the verb "to proclaim." *Pa* is also supposed to mean "leaf" or "plant" in Akkadian.
- No. 52. PE, BE. The sound is from Cypriote. The meaning of the emblem is uncertain. It may be an augur's crook, from the root *ib*, or *bi*, bend, bind; or perhaps an outline of the "ear"—Akkadian *pi*, ear.
- No. 53. PI, BI. The Hittite sign is a suffix to nouns. The Cypriote may represent two small crooks or hooks (see No. 52). It appears to stand for the nominative definite ("the"). Both sounds belong to the Cypriote emblem.
- No. 54. PU, BU. The bud. The sounds are from the Cypriote. The cuneiform emblem is the same. The root *pu* signifies "to grow," hence "to be long." The cuneiform sign is also used for "young," and *pu* is a common word for growing things. In Finnic *puu* is a "child." In some variants of this sign the stalk is longer than in others. This variation also is found in the Cypriote *pu*.
- No. 55. RA. The Cypriote sign shown represents the most complete examples: it was more rudely sketched later, with a single vertical line. This sign presents the same variants in Hittite. As shown at Iasili-Kaia, it seems to represent a human figure with a large head. It occurs on Phœnician and other monuments (as far west as Carthage) as a luck sign. The cuneiform sign *eri* means a common man, a "slave," or a "worshipper." In Turkish *er* is the common word for "man."
- No. 56. RE. The sound is from the Cypriote. The sign may represent rays descending from the firmament. In Akkadian *ri* means "bright" and "high," and also "servant"

- (like *eri*, see No. 55). The cuneiform sign is *ri*, *ku*, bright, precious.
- No. 57. RI. The comparison with both Cypriote and cuneiform seems to establish the sound. The meaning of the sign pictorially is not clear. The compound (No. 60) also confirms this view. The cuneiform sign means "bright," "high," "firmament," &c. It has also the sounds *tal*, *di*, *es*, and *sa*.
- No. 58. RO. Probably a spear-head. The sound is from the Cypriote. The cuneiform *rū* or *rum* signifies a cutting instrument, "sword," "plough," &c. The broadsword shown on some Hittite sculptures has a blade like this sign. The cuneiform has also the sounds *gir*, to cut (Turkish *chir*), and *at*, probably "to strike," or "to hurl" (Turkish *at*, *it*).
- No. 59. RU. The sound is from Cypriote, and the emblem is found exactly on some of the more sketchy incised Hittite texts. The pictorial meaning is not evident.
- No. 60. AR. A combination of No. 57 and No. 65. It only occurs once. The common sign for *ar* in cuneiform presents the same combination.
- No. 61. ER, ERI. The sound is taken from the bilingual boss of Tarkutimme. The cuneiform *ir* may be the same. It signifies "fruit" and "spoil," and is rendered *sukal* apparently in Akkadian. The emblem may represent a basket for fruit. In Egyptian the fruit-basket is a well-known sign.
- No. 62. UR. The cuneiform sign represents a foot or hoof, and has that meaning. This foot is turned in the opposite direction to No. 78 (perhaps *al*, see No. 31).
- No. 63. SA. The sound is from the Cypriote. It represents a sickle or other cutting instrument. The roots *sa*, *sar*, and *sap* have the meaning "cut" in Mongol speech.
- No. 64. SĒ. The extended hand. In Akkadian *se*, *sez*, and *sem* mean "to give," "to be favourable" (Turkish *sez*, favour), and hence "to be well inclined" to any one. The sound is from the Cypriote. The hand is extended as a mark of favour on many bas-reliefs and gems.
- No. 65. SI. The sound from the Cypriote is confirmed by the cuneiform comparison, the sign in the latter script meaning "see" (Akkadian and old Medic), "eye," &c. It has also the sound *igzi*, probably for "eye," from the root *ak* or *ik*, to see. The Hittite may represent an eye. It is used sometimes syllabically, but often (at the top of a line) is apparently a determinative. The Akkadian *si*, Medic *sia*, a place, may show this to be the sign of place in Hittite.
- No. 66. SO. The sound is from the Cypriote comparison.



- The sign represents a sceptre or plant held in the hand, and appears to indicate "power." In Akkadian *su* has that meaning. The cuneiform sign has the sounds *sul* and *nun*, meaning "power," "lord," &c.
- No. 67. SU. This is perhaps only a variant of the preceding. The cuneiform sign compared has the sound *su*.
- No. 68. AS. It is doubtful if this is found in Hittite. The meaning of the cuneiform sign is obscure. The sign for "one" (see No. 3) has also the sound *as* in Akkadian.
- No. 69. ES. The sign for "No. 3," but with a stroke to show the difference. It appears to be used for "many," and as a syllable. The Akkadian *es* or *essa*, three, is found as *üs* in some of the Turkish dialects.
- No. 70. IS. The sound is taken from the bilingual seal in the Ashmolean. The sign is the head of an ass. In Turkish *isik* or *esek* is the "ass." The name of this animal is supposed to occur widely with similar sounds, such as *ass*, *asinus*, &c., in Aryan speech, and *athon* in Hebrew.
- No. 71. US. Apparently a monumental stone. In Akkadian we have *us*, basis (Turkish *es*). The cuneiform sign signifies "male"; and in like manner, in Semitic speech, *ziker* is both a "male" and a "memorial." In some cases in the Hittite this sign is attached to personal names or titles. It appears to be used as the determinative of such names.
- No. 72. DA. The Cypriote does not distinguish *d* from *t* (see No. 76), and the same applies to a certain extent in Akkadian. The emblem is the hand raised in the attitude of taking an oath—as shown on seals, &c.—and is the same as in the cuneiform *da*, which means "to compel."
- No. 73. DE. The Hittite sign is a flame, and is compared with the cuneiform *de*, a flame, the latter emblem having other sounds, such as *bil*, *ne*, &c., also meaning "fire" (compare the altar-flame in No. 92).
- No. 74. DI, DIM. The sound is taken from the bilingual boss of Tarkudimme. The cuneiform *di*, *div*, *dim* appears to be the same. The pictorial meaning is uncertain. The sign is explained by various abstract terms, such as "peace," "rest," &c.; but none of them shows its origin—perhaps a "seal."
- No. 75. DU, RA. The foot. It is used for "go," "come," "become," &c., and is clearly the same as the cuneiform. There is a variant showing the leg, both in cuneiform and in Hittite, which has the same sounds, but seems more particularly used for "go," while the foot is simply a syllable.

- No. 76. TA, DA. The sound is from the Cypriote. The hand and stick probably mean "beat," "compel," as in Egyptian. The root *da*, *tan*, in Akkadian means "to drive," "to cause" (Turkish *at*, drive).
- No. 77. TE, DE. The sound is from Cypriote, *te* and *de* not being distinguished. The emblem appears to show grass or a sprout. The word *te* signifies "to grow," "to become," in Akkadian. The cuneiform has the sound *te*, but the comparison is doubtful.
- No. 78. TI, DI, TIL. The sound is from the Cypriote (*ti*, *dî*). The cuneiform is an arrow with the sounds *ti*, *til*; it is used for the word "life" (*til* and *tin* in Akkadian, Turkish *til*, live; *tin*, life).
- No. 79. TO, TUK. The sounds *to* and *do* belong to the Cypriote. The cuneiform sign *tuk*, to take, have, possess, is apparently the same as the Hittite, representing the hand taking hold (Turkish *tek*, touch).
- No. 80. TU, TUM. The sounds *tu* and *du* belong to the Cypriote sign. The cuneiform *tu*, *tuv*, *tum* closely resembles the Hittite, and means "to make," "found," "be," "protect."
- No. 81. AD, AT. The two legs opposed. Compare the Turkish *at*, to stride. The cuneiform *at* may also represent the legs striding. The sign is used for "father" in Akkadian (Turkish *ata*, father).
- No. 82. ID, IT. The sign is rare in Hittite. In cuneiform it is found on a list of very ancient signs with the meaning "hand." The more usual cuneiform sign for *id* is a compound from No. 72, *da*. *Id* also means "power," hence the closed fist is represented in the Hittite, a common gesture in the East for "strength"—as indeed in England.
- No. 83. UD, UT. The Hittite emblem is found both as a lozenge and as a circle, with distinguishing marks the same in both. The cuneiform sign stands for the sun, and has many sounds. *Ud*, day (Mongolian *udi*, day); *tam*, sun; *par*, bright (Turkish *bor*, white); *lakh*, bright; *khis*, glowing (Turkish *khis*, glow); *sal* or *zal*, shining (Turkish *chal*, shine, Finnic, *sal*); also *sam*, probably "sun." Hence the names of the Kassite god *Sām* for the sun, and of the goddess *Sala*, the shiner. The same sounds may apply to the Hittite sun-emblem.
- No. 84. VE or ME. The sound is from the Cypriote, but the pictorial meaning is doubtful.
- No. 85. VO or MO. The sound is from the Cypriote. The emblem is a head, and may represent the Akkadian *mu* or *vu*, to regard.
- No. 86. ZA. Four strokes, "No. 4." The cuneiform stands

- for the numeral, with the sound *za* or *sa*. In the Yenessei Mongolian *sheya* is "four."
- No. 87. ZO. The Cypriote sound is given. The cuneiform has the sounds *su* or *sum*, also *lum* or *luv*, and *khuv* or *khum*. The pictorial meaning is not clear. Perhaps "lightning" is intended. The word *luv* probably means "to burn" (old Medic *luva*), and *su* means "fire" in various Mongol dialects.
- No. 88. ZU. The sign appears to represent a stepped pyramid. In cuneiform it has the sounds *su* and *la*. There is no known sound for *zi* in Cypriote, and the cuneiform *zi* does not seem to be recognisable in Hittite.

Thus far we have 85 Hittite signs (in absence of *khā*, *im*, and *no*) for simple syllables, including all those commonly used in Cypriote. In 58 cases they compare with the cuneiform. Others might be established if the pictorial meanings of the signs were more clearly indicated in the two systems. We now proceed to consider the "closed" syllables and "ideograms," which are not used in Cypriote with a few exceptions.

- No. 89. AGU or AKA. The cuneiform sign represents a hut with fire inside, but the meaning is "high," "exalted." The Hittite sign only occurs twice. The sign may signify a shining head-dress or crown, connected with *aka* or *aga*, chief ("high" or "illustrious," from *ak*, "high" and "bright," as in Turkish), and may be compared with the Turkish *agha*, chief. The name *Aku* for the Moon-god also means "the shiner." The sound *ram* also belongs to this cuneiform emblem, but is probably Semitic, meaning "height"—whence the places called Ramah in the Bible.
- No. 90. AGU. Perhaps a variant of the preceding. The sound is conjectural, but the sign seems to be a derivative from No. 16, *Ko*, having a cross within it (No. 92) which has the sound *bar*, meaning "shining." The words *ega*, *aka*, *agu*, crown (see No. 91), may be connected, all these signs meaning "high," and when connected with included emblems for light, "illustrious" (Turkish *ak*, high; *ak*, bright).
- No. 91. AMA. This seems also to represent some kind of high head-dress. It is compared with the cuneiform sign *ame*, *ega*, or *mir*, signifying "crown" or "turban."
- No. 92. BĀR. The Hittite sign seems to represent an altar

- with a flame on it. It is compared with the cuneiform sign *bar*, also having the sound *sar*, and meaning "altar," "sacrifice," as well as "king" or "prince." The Hittite is too common to be merely used pictorially, and is apparently employed as a syllable for *bar*, to be. The words *bar* or *par* (bright) in Akkadian, and *sar* (bright), which is the Turkish *sara*, bright, are explained by the emblem which represents the fire kindled on the altar.
- No. 93. BAR. The cuneiform sign has also the sound *mas*, and signifies "division," "half." It is used for several abstract terms, such as *bar*, people; *bar*, future; *mas*, spirit, &c.; and for the god *Bar*, otherwise called *Mas*, bright, *Khi*, holy, and *Ninib*, the lord, which in the Semitic translation is *Bel*, lord, and *Adar*, illustrious. This is a good instance of how far from the original meaning the later signification of a sign may be. It appears to indicate, by a cross, something cut in two. For the meanings given we may compare the Turkish *bar*, live; *bar*, people; *bor*, white or shining; and for *mas* we have *bis*, to divide; for *mas*, illustrious, *bas*, high. The sign is much used in cuneiform, but very rare in Hittite.
- No. 94. BUR. A bowl. The comparison may be doubtful. The Hittite sign is only as yet found once. The sound *pur*, to pour out, may be connected.
- No. 95. DAN. The emblem resembles those carried by the gods as sceptres at Iasili-Kaia. It seems to represent some kind of branch. In the Nimrud gallery of the British Museum (No. 78) is a priest holding a branch of flowers (compare Ezek. viii. 17), and the emblem is clearly religious. The cuneiform sign has the sounds *dan*, *kal*, *lab*, &c., meaning "strong," "great," "heroic," &c. (Compare Nos. 66, 67.)
- No. 96. GA, GAM. The sign is compared with a rare Cypriote emblem, having the sounds *ka* and *ga*. In Akkadian *ga*, bend; *gam*, subdue, conquer,<sup>1</sup> may be compared (Turkish, *jam*, bend). The Hittite sign is a *lituus* or crook. Compare No. 18.
- No. 97. GAR, ZA. The Hittite sign seems to be a quiver. The cuneiform *gar*, *sa*, *za*, may be the same, signifying a "receptacle" or "enclosure," and also used for the Semitic *irba*, four (*za* in Akkadian, see No. 86). In Akkadian *uz* is a "quiver."
- No. 98. GIZ, IZ. The cuneiform is a block of wood, and used as the determinative for vegetable objects (Turkish

<sup>1</sup> The original form of the cuneiform *gam* is unknown, but was probably a crook.

- ise*, stick). *Is* also signified a "record" or "proclamation" in Akkadian.
- No. 99. GO, GON. The sound is taken from a rare Cypriote sign. The hand bears a "mace," like those noticed in the text as peculiar sceptres of the Hittites, and of cognate tribes, and shown on their monuments. The cuneiform sign has the sounds *kun*, *pa*, and *khat*, and meant "sceptre." It was also used for *khat*, dawn (Finnic and Akkadian). The words *go* and *gon* signified "royalty" (Akkadian, *ku*, *ge*, *kun*, *khu*, *khun*, *kha*, *khan*, *kan*, are all words for "prince": Turkish, *kān*, *khan*, chief). The word *kun* also meant "day," "dawn" (Turkish, *gün*, day), and *pa* apparently a "stick."
- No. 100. GU. The Hittite is a head differing from No. 85, and commonly used as a verb at the end of texts. The cuneiform has the sounds *gu*, *ka*, *du*, &c., and means "face," "mouth," "speak," &c. (Turkish *chau*, call out). In Mongolian we find *agui*, mouth; *ge*, speak; and in Finnish *kai*, cry out; *ki*, speech. That the cuneiform represented a head is shown by No. 129, of which it is a modification.
- No. 101. GUG. The ram's head. In cuneiform the sign has the meaning "ram" or "sheep," and appears to be connected with the well-known symbol for Aries. In Turkish *koch* is "ram." *Guk* also in Akkadian meant "to make war," "to fight."
- No. 102. GUR, GA. The Hittite sign is rare. The cuneiform has the sounds *gur* and *ga*, but the meaning is not clear. The comparison is doubtful.
- No. 103. This seems to be a compound of No. 3 (I), and No. 18 (AK). It is used as a prefix, and seems to be the conjunction. In old Medic *iak* means "and."
- No. 104. KAR. The original meaning of the cuneiform is not known.
- No. 105. KAR or KIR. Apparently a fortress with two doors. Sometimes (as also in cuneiform) roads are marked up to the doors. It clearly signifies an enclosure. The cuneiform sign has many sounds (*kir*, *gar*, *khil*, &c.), meaning "enclosure," and it forms compounds showing its character (see No. 157). In Mongolian *gar* means "house."
- No. 106. KAS. A knife or dagger. The cuneiform emblem is apparently a sword (*kas* or *gas*), and means "to smite," "slay."
- No. 107. KAS. The cuneiform *kas* has also the sound *bi*, and means "two." Turkish *kos*, a pair.
- No. 108. KAT. The sound is conjectural. The hand in this attitude is shown on monuments, apparently meaning "to

- be propitious." In Egyptian the attitude has the same meaning. Akkadian *kat*, hand (Finnic *kat*, hand), and *kat*, good fortune (Turkish *khut*, luck). The sign is a rare one.
- No. 109. KAZIN. The emblem is a hare, and may be used to mean "swift." In Akkadian *kazin* or *kazinna* is the hare (a word curiously like the Sanskrit *cacin* for the "hare," from the root *kas*, to speed). The sign only occurs once on the Mer'ash lion.
- No. 110. KIP. The cuneiform is used for "region."
- No. 111. KUR. Mountains. The cuneiform signifies "mountain" and "country," and a similar sign for "land" is used in Egyptian. In Turkish we find *kera*, land, and in Finnic *kor*, mountain.
- No. 112. KURU. This is a compound of Nos. 65 and 83. In cuneiform it has the sound *kuru*, and means either an "overseer" (from *kur*, lord) or "propitious." It may also be read *si-lakh*, "of glorious appearance" (contrast *si-ur*, No 114, "of vile appearance").
- No. 113. KHIR. The sound is provisional, meaning "to write." The emblem shows the graving tool in the hand.
- No. 114. KHUL. The sign is a demon's head with long ears—in one case a goat's horn—and with a protruding tongue. It evidently means an evil being, demon, enemy, &c. (Turkish *ghoul*, devil). The cuneiform sign is probably not the same, but a compound of *si*, appearance, and *ur* or *lig*, dog. It has the sound *khul*, meaning "bad," "enemy," &c.
- No. 115. LIG. The head of a dog with lolling tongue. The cuneiform *lig*, "dog," *ur*, probably "lion," and *tas* (contender), means also "enemy"—the Asiatics, like the Egyptians, always calling their enemies "dogs."
- No. 116. LIT, LAT. The cuneiform is a sign for "month," and for *Ak*, probably "moon." It has the sounds *ab* and *u* as well.
- No. 117. LU. Compare No. 29. The cuneiform sign means "tablet," and is also used for *dib*, tablet; *lu*, flock; *dib*, sheep, and for "spoil," &c.
- No. 118. LUL. This only occurs once, and the sound is provisional. It seems to be a fawn's head. In Akkadian *lul* is a "deer" and a "ruler."
- No. 119. MA. The cuneiform sign for a ship. Its occurrence on one Hittite seal is doubtful.
- No. 120. MAKH. A person seated, and in one case perhaps holding a sceptre. In cuneiform the sign has this sound, and means "great" and "prince" (Turkish *makh*, great).

- No. 121. ME. The cuneiform sign of this sound signifies "battle," representing two foes and a central object of dispute. The Hittite shows two devils or foes (No. 114) round a city (No. 153), signifying either "battle" or "siege." There is a similar emblem in Egyptian.
- No. 122. ME. The sign is found on the bilingual boss of Tarkutumme with this sound. In old Babylonian a group of four strokes stands for the plural, and in Egyptian three strokes have the same meaning. The Hittite differs from No. 86. It is a suffix, and as numerals precede nouns it cannot mean "four." The sound *me* for the plural (as well as *ne* or *ene*) occurs in the Akkadian.
- No. 123. MI. The Hittite sign occurs only once. The cuneiform comparison is doubtful. The latter sign means "dark," "night," the "west," and has also the sound *gig*, shade, sunset, illness (Turkish *kiche*, evening; Finnic *kice*, ill).
- No. 124. NUM. The head probably of a wolf. The cuneiform *num*, *nim*, means "wolf," but is also used for "high," "heaven" (Samoyed *num*, heaven), and for *num*, to engrave.
- No. 125. RA. The cuneiform sign *ra*, *sa*, means "to irrigate," and shows a field and a water-channel. It is also used for *ra*, to enlarge, to possess. The Hittite sign may have the same meaning.
- No. 126. RAT, SIT. Only found doubtfully on one Hittite seal. The cuneiform has the meaning of an "arc."
- No. 127. RIM. The cuneiform sign, which has also the sounds *cabar* and *imi*, means "mound," "heap"; hence "sum," "price," and also "to descend." The pictorial meaning is not clear. Only twice found in Hittite.
- No. 128. SA. The centre, heart, middle, within. The cuneiform sign has other sounds, *sini* and *lib* as well as *sa*. The sign is very rare in Hittite.
- No. 129. SAK. Head. The cuneiform *sak* means "head," "face," "chief," or "first." It is also used as an Akkadian prefix for "condition," like our "-head" or "-hood." In old Medic *sak* is "son" (perhaps Finnic *sakko*, offspring, or meaning "the eldest son").
- No. 130. SAKH. Both the Hittite and the cuneiform emblem appear to represent the sacred tree, or trellise, of the Babylonians and Assyrians, so common on seals and bas-reliefs. The sound *sakh* means "good" (in Akkadian and Turkish), and is rendered in Semitic speech *asher*, good, holy, upright. The emblem is the Semitic *ashērah*. No doubt the name *Tin-Tir* or "Life Tree" would also apply.

- The Hittite sign occurs with No. 65, *si* (place), and with No. 71, *us* (man), and appears to be sometimes geographical. It would therefore probably represent the old "Holy City," or "City of the Tree of Life"; names for Babylon.
- No. 131. SAR. This is a king's head. The word *sar* appears to be Akkadian, though used by Semitic people (Assyrian and Canaanite *sarru*, found also in Egyptian as *sar*—a loan word): it is no doubt connected with *sar* and *sir*, to command. The sound is not important. The cuneiform sign has also the sounds *ungal*, great chief, and *lugal*, great man.
- No. 132. SAR. The cuneiform has the sounds *sar* and *khir*, and signifies "growth of trees and plants" (in a field or enclosure): it is also used for "enclosure," "writing," "name," "repel," "green," &c., from the sounds of the words *khir*, surround (Turkish *khar*); *khir*, write (Turkish *khir*, cut); *khir*, repel (Turkish *khar*); *sar*, yellow or bright (Turkish *sara*, bright, and other Mongol words for "yellow," "golden," green," &c.) Probably *khar*, write, was one sound, as in Minyan, for instance.
- No. 133. SET. The emblem is only twice known, and as it appears to have a long tail it cannot be a variant of No. 109 (the hare), but is so like the ordinary Egyptian emblem of Set that it may be supposed to be the name of that deity.
- No. 134. SHI. Compared with a rare Cypriote form. It appears to represent antlers—Akkadian *shi*, horn. The cuneiform sign (see No. 136) is not apparently the same, unless, as here supposed, two signs are to be distinguished—the one here given representing either a ram's horn or an elephant's tusk (also *shi*). The sign is used in cuneiform also for "blue," "ivory," and "establish." The first would have the sound *gug* ("ram" and "blue"; Turkish *koch*, ram, and *küek*, blue). It is also used for "enemy" (*gug*, to contend) and for "sky" (see "blue"—from the root *kuk*, to be arched), and again for "prince," and with the sound *shig* for "establish."
- No. 135. SHI. The comparison is with the Lycian *ch* or *sh* (also having the sound *ksi*). The Hittite sign is rare: it appears to be a tooth, which is also probably an Akkadian word.
- No. 136. SIG. The cuneiform sign (distinguished from No. 134) has the sounds *si*, *sig*, or *shi*, *shig*, and means "open" and "fill."
- No. 137. SIR. This seems to be a sign formed from No. 36, by adding horizontal lines. It is rare in Hittite. The



- cuneiform *su*, *sir*, is compared, but the original intention of the sign is not explained by its use for "skin," "body," "add," &c.
- No. 138. SIS. Only once found in Hittite as yet. It seems to be a child, and is like the Chinese sign for "baby." The cuneiform *sis* or *ur* means "a brother," "a helper," and also "light" (*ur*).
- No. 139. SU. The hand with palm upwards. In cuneiform the sign has the sounds *su*, *gab*, and *kat*, meaning "hand," "hollow," "power," "benefit." The attitude is that of holding a small object, or of submission to a superior. *Gab* for the "hollow" of the hand, *kat*, hand; *kat*, luck (see No. 108).
- No. 140. TAKH. Only once found in Hittite on the Mer'ash lion. The cuneiform sign (with a variant showing two such emblems) has the sounds *takh*, *tukh*, *gab*, and *du*. It means many things, especially "destroy" and "brick," but also "front," "breast," "strike," "deliver," "establish," "rival," "raise," "remove," "strike," "transfer," and "re-joice." *Gab*, rejoice (Turkish *khab*); *gab*, strike (Turkish *chap*); *takh*, establish (Turkish *tokh*, make firm).
- No. 141. TAR. The deer's head. In Akkadian *dara*,<sup>1</sup> deer. It is clearly used for *tar*, chief, and tribe. On the bilingual boss of Tarkudimme the head is more probably a goat—with a beard. But on all the other Hittite texts a deer is represented excepting once.
- No. 142. TAS. A lion's head on seals. The cuneiform sign stands for both dog (*lig*) and lion (probably *ur*), and for *tas*, heroic. The lion is also called *ur-makh*, big dog. It is thought that the Sumerians lived in a lionless country originally.
- No. 143. TIK. The Hittite sign is rare. The cuneiform with the sounds *tik* and *gu*, meaning "neck," "front," is used for abstract words, such as *tik*, total (Turkish *tek*, complete); *gu*, all (Turkish *chom*); also for "bank," "side," "district," "battle." The original idea appears to be "facing."
- No. 144. TIM. The sheep's head. In Akkadian *dib*, *div*, is "sheep." The sign occurs at Carchemish in the name Tarkutimme.
- No. 145. TIM. A chain. The cuneiform has the sounds *tim*, *dim*, *tiv*, *ti*, meaning "bond," "cable," "bundle" (Turkish *tem*, to enclose).
- No. 146. TIN. A two-handed vase. It is rare in Hittite.

<sup>1</sup> The original form of the cuneiform *dara* is not known, but was probably a deer's head.

- The cuneiform *tin* has only one handle. It appears to be one of the pottery buckets lowered into wells. It is used in Akkadian for *tin* and *din*, life, family (Turkish *tin*, life).
- No. 147. TUL. Apparently compounded from No. 16 by enclosing vertical strokes. The cuneiform *tul*, *dul*, and also *mul* signifies "mound." The idea of "height" is again shown by the cone.
- No. 148. TUR. This stands by itself on a seal. The cuneiform sign *tur* is apparently a compound of *ba*, shrine, and *nun*, prince. It may represent the royal abode, and stands for "rest" or "habitation" (Akkadian *dur*, Turkish *dur*, dwell).
- No. 149. TUR, DUM. The cuneiform signifies "child" (Turkish *torüo*, to be born). The emblem seems to represent two buds, but the meaning is doubtful. *Tur* also means "small." The Hittite sign is rare, but it occurs in a sentence, *Yak makh yak tur*, "both great and small."
- No. 150. UKU. The sign is indefinite. It may be a plant of some kind. It only occurs twice as yet. The cuneiform is also very indefinite. It is used for "brick" and "people," and has also the sounds *mur* and *mun*.
- No. 151. U, UN. This sign is very like the Egyptian emblem (*pet*) for "firmament," and appears to be a determinative of "superiority." The cuneiform *u*, *un*, *unun*, means "lord" or "king" (Turkish *oñ*, high). The cuneiform sign has also the sounds *bur*, high; *ge*, prince; and *u*, prince.
- No. 152. UN. "No. 10." The cuneiform has the meaning "ten," and in Egyptian a similar hoop stands for "ten." The Hittite sign occurs reduplicated (as does the cuneiform *man* or *in*, twenty) and also with strokes to as many as eight. It is clearly a numeral (Turkish *on*, ten).
- No. 153. UNU. This appears to be a modification of No. 10 by adding strokes, and signifies "many houses." The cuneiform has the sounds *unu*, *lab*, and *rud*, and means "city," being formed in the same way (Turkish *unne*, house).
- No. 154. URU. The cuneiform sign is supposed to mean a "seat." With the sounds *uru*, *vuru*, *mur*, *eri*, it is the sign for "city"—Turkish *auru*, an "enclosure" or "camp" of a tribe.
- No. 155. US. This may be distinguished from No. 122, as the strokes are not separated. It seems to be the cuneiform *us*, *vus*, or *mus*, signifying a "document," which is often confounded with the sign for "place"—a compound

- of No. 105, or a square enclosure with the sign for "many" inside.
- No. 156. VO. A rare Cypriote and a rare Hittite sign. Apparently a kind of crook.
- No. 157. ZAR. A compound formed from No. 105. Only once as yet found in Hittite. The cuneiform has the sign for "corn" inside that for "enclosure," and so signifies "store," with the sounds *zar* and *sar*.
- No. 158. No sound has been proposed for this sign. It has evidently the meaning of "supplication," the attitude being that of all supplicants on bas-reliefs and seals, and that still used all over the East by supplicants. The sign is used only as a noun. For purposes of transliteration it may be marked as *BIS* (Akkadian *bis*, reverence).
- No. 159. Probably only a variant of the preceding.
- No. 160. The Cypriote sign is rare and the Hittite is doubtful. Apparently a "house" like the cuneiform, which has the sounds *e* (Turkish *ev*), *ma* (place), *mal* (dwelling), *ga* (house), *gal* (living). *E* means not only "house" but "temple."
- No. 161. This sign shows two figures facing, and raising the hand in the attitude of No. 72. There is a similar sign in Egyptian meaning "alliance." It only occurs as yet twice in Hittite. It may be the word for allies, or even KHAT, ally, Hittite (Turkish *khat*, connection).
- No. 162. Probably only a variant of No. 50, *u*, *un*, lord. It is not a common sign.
- No. 163. The meaning of this sign is not clear—perhaps the same as No. 153.
- No. 164. Only once found. It is the head of a beast, but not distinctive. The face is too short for a horse, and is more like a camel. It may stand for "beast" only, or be a variant of No. 144.
- No. 165. Only once found. Indeterminate.
- No. 166. PAL or TAL, an axe, compared with the cuneiform sign for axe. (Turkish *beil*, axe.) It is used for "time," "year" (Turkish *beiyil*), and other words, from the root "divide."
- No. 167. This is a "stop," and is used to show divisions between words. It is very useful in reading. A similar sign in cuneiform is sometimes found. It requires to be carefully noticed, as it is most valuable in dividing words. It can be applied to any sign, and is usually made to join that to which it refers.

We have thus considered on their merits all the signs found on known texts, except a few variations and signs

either half obliterated or imperfectly copied in cases where only a copy is available. In 32 cases the sign occurs in both cuneiform and Cypriote with the same sound; in 4 cases the Hittite does not seem to have been yet found; in 120 cases the comparison is with cuneiform. There are only some 40 out of 160 Hittite signs which do not seem to be cuneiform. There are 10 cases where the emblem is a compound found both in Hittite and in cuneiform, which shows a marked connection between the systems.

It is not by questioning an emblem here and there that such a method can be controverted. It is surely impossible that so many comparisons can be found, if the wrong system and wrong language have been taken as a basis. The results are confirmed by what we know of the Hittite language from quite independent sources, as shown in Appendix II., and by the languages of cognate tribes.

It will be apparent that the language of a people so far advanced in civilisation cannot have been confined to 160 words. Others must have existed to at least 400. Hence the system is not a picture-writing but a syllabary, with ideograms and "keys" in addition. Words were made in two ways: (1) *Monosyllabic*, by using the emblem, as in cuneiform, for its sound only, without reference to its original picture value. Thus abstract ideas, generally cognate to the original meaning, are formed. (2) *Polysyllabic*, words spelt in syllables, to which a determinative for "king," "lord," "god," "place," "country," "city," "town," "man," "woman," may be added, these keys, however, being also, in some cases, used as separate words or syllables, generally with some distinction of position or otherwise.

The signs may be grouped as follows:—

Syllables	112	(4 missing. <i>An, en, si, us</i> also are keys).
Ideograms	46	(12 are compounds, of which 10 are found in cuneiform).
Keys	4	( <i>kur, sar, un, uru</i> ) eight in all.
Total	162	(Total system including the stop, 167).

The original cuneiform, or "linear Babylonian," as it is

called, included about 300 signs in all, of which we have only accounted for 120 in this list. The Hittite system was more archaic, and had fewer compounds than that used by the Sumerians. It is remarkable, however, that the signs not compared are either compounds or ideograms with a very special meaning. The simple cuneiform signs not recognised in Hittite are about 40 in all, as below. Some of these may be found in future texts.

1. *Ak*, to build. A sign of indefinite character.
2. *Muk*, building. The pictorial meaning is not clear.
3. *Us*, man. Of this *eri* (No. 55) is a variant.
4. *Khas*, split. Perhaps a six-rayed star.
5. *Zir*, meteor. See No. 25, *sir*, which is somewhat like.
6. *Nam*, a swallow. Used for the syllable *nam*.
7. *Gun*, growth, garden. A sign not clear pictorially.
8. *Ta*. Not possibly a compound sign.
9. *Gur*. Is possibly only a variant of No. 95, *dan*.
10. *Urud*, copper. A tablet, or a vase, of metal.
11. *Ip*, hero. The pictorial meaning is obscure.
12. *Tak*, brick. A special emblem.
13. *Gug*, tiger. Also special.
14. *Sibir*, harvest. A corn-sheaf.
15. *I*, bright. Possibly only "No. 5," or else "rays."
16. *Zag*, shrine. An altar-table.
17. *Na*, yoke. The pictorial meaning is obscure.
18. *Is*. A bundle of strokes. It may be the Hittite No. 69.
19. *Gal*. Either a "plume" or a "key."
20. *Dim* or *si*. Possibly a "ghost."
21. *E* stands for "house," but the picture is obscure.
22. *Lakh*. The meaning is not clear.
23. *Sa*. Apparently a "web" of cloth.
24. *Gc*. An emblem like the last; the picture is obscure.
25. *Ka*, gate. A house with open doors.
26. *Alal*, papyrus. A special sign.
27. *Lam*. Apparently a "plough." A special sign.
28. *Se*, to lay. Two corn-sheaves laid flat.
29. *Ban*, a bow. A special sign.
30. *Ka*, measure. A special sign.
31. *Kit*. The meaning is obscure.
32. *Kharran*, road. A special sign.
33. *Se*, corn. Two corn-sheaves erect.
34. *Ub*, region. Represents a rude map. Such a map has been found on an extant tablet.
35. *Ner*. Used for "yoke" or "government." It seems to be

a stag's head (compare No. 141), and forms six compounds for various species of deer.

36. *Alam*, image. A special sign.
37. *Pat*, bundle, baggage. Also a special sign.
38. *Pi*, ear. The pictorial meaning is not clear.
39. *Sig*. Possibly only a variant of No. 136.
40. *Zi*, spirit. The meaning pictorially is obscure.
41. *Gum*, official. A determinative.
42. *A*, water. Horizontal wavy lines.





























It will be seen that the absence of these signs tends rather to confirm the comparisons, since they are nearly all either special, and probably added by the Sumerians after the two systems separated, or not sufficiently clear for purposes of comparison. The remaining 140 emblems are compounded from the original 160 here noted.

The natural conclusion from this evidence seems to be that the Hittite signs are the same, to a great extent, as the cuneiform, but that differences developed after separation of the northern and southern divisions of the race. The Cypriote, on the other hand, represents the "hieratic," or later sketchy running hand, which we can see already forming in some of the later incised Hittite texts, and which was reduced to a small, and insufficient, syllabary, soon superseded by the alphabet.

It will be noticed that the sounds *akh*, *ikh*, *ukh* are omitted. In cuneiform one sign stands for all three, and is a compound, formed from *khi*, which does not appear in Hittite script.

The reader will, it is hoped, admit that the question thus rests, not on arbitrary conjectures, but on comparison, and consideration of principles.













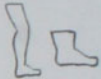



















Sound.	Asiatic Syllabary.	Hittite Emblems.	Linear Babylonian.	Akkadian Sounds.
1. A				
2. E				
3. I				
4. O				
5. U				
6. BA				BA
7. BE PE				BE BAT UŞ
8. BI PI				BI KAS UL
9. BO BU				
10. AB AP				AB AP ES
11. IB IP				
12. UB UP BI				U UB RU
13. GA KA				GA DE
14. GE KE				
15. GI KI				GI SA
16. GO KO				
17. GU KU KUM				KU KUM RI








Sound.	Asiatic Syllabary.	Hittite Emblems.	Linear Babylonian.	Akkadian Sounds.
18. AG AK	)			GE
19. IG IK GAL				IK GAL MAL
20. KHA				KHA
21. KHE	H			
22. KHI				KHI DHI
23. KHU				KHU PAK
24. YA	o			
25. YE	z			SIR MUS
26. LA	Δ			
27. LE GUT	8			LE GUT KHAR AM
28. LI	≧			LA
29. LO	+			SAR KHIR
30. LU	⊔			LU LAL NAS
31. AL				AL DU DUN
32. IL				ILI LI I NI ZAL
33. UL				UL BI KAS





























































Sound.	Asianic Syllabary.	Hittite Emblems.	Linear Babylonian.	Akkadian Sounds.
34. MA VA				MA
35. ME MEN				
36. MI				
37. MO				MUK SAL RAK
38. MU				MU
39. AM				AM
40. IM				IM MER-
41. UM				UM DUB MUS
42. NA				
43. NE				NA
44. NI				
45. NO				KUR BAB
46. NU NUN				NU
47. AN A				AN
48. EN				EN
49. IN I				IN
50. UN U				
























Sound.	Asiatic Syllabary.	Hittite Emblems.	Linear Babylonian.	Akkadian Sounds.
51. PA BA				PA PAM
52. PE BE				
53. PI BI				
54. PU BU				PU BU GID
55. RA				ERI
56. RE				RI KU
57. RI				RI TAL
58. RO				RUM GIR
59. RU				
60. AR				AR
61. ER ERI				IR
62. UR AL				UR
63. SA				
64. SE				
65. SI				SI IGI
66. SO				NUN SUL
67. SU				SU

Sound.	Asiatic Syllabary.	Hittite Emblems.	Linear Babylonian.	Akkadian Sounds.
68. AS				AS
69. ES				ES ESSA
70. IS				
71. US				US CUS
72. DA				DA
73. DE				DE BIL NE
74. DI DIM SA				DI DIM SA
75. DU RA				DU RA GUB
76. TA DA				
77. TE DE				TE
78. TI DI TIL				TI TIL
79. TO TUK				TU TUK
80. TU TUM				TU TUM
81. AD AT				AT AD
82. IT ID				IT ID
83. UD UT TU				UT UD TU

Sound.	Asiatic Syllabary.	Hittite Emblems.	Linear Babylonian.	Akkadian Sounds.
84. VE VEN				
85. VO				
86. ZA			 ZA	
87. ZO				SUM LUM KHUM
88. ZU				ZU LA
89. AKA				AKA RAM
90. AGU				
91. AMA				AME EGA MIR
92. BAR				BAR SAR
93. BAR				PAR MAS
94. BUR				BUR GUL
95. DAN				DAN LAB KAL
96. GAM GA				
97. GAR ZA				GAR SA ZA
98. GIZ				GIZ IZ
99. GON GO			 KUN KHAT PA	










Sound.	Asiatic Syllabary.	Hittite Emblems.	Linear Babylonian.	Akkadian Sounds.
100. GU				GU KA DU
101. GUG				GUG SIL TAR
102. GUR GA				GUR GA
103. IAK				
104. KAR				KAR
105. KAR KIR				KIR KHIL KHAB
106. KAS				GAZ KAS
107. KAS				KAS BI
108. KAT				
109. KAZIN				
110. KIP				KIP GAB
111. KUR				KUR
112. KURU				KURU
113. KHIR				
114. KHUL				

Sound.	Asiatic Syllabary.	Hittite Emblems.	Linear Babylonian.	Akkadian Sounds.
115. LIG				LIG UR TAS
116. LIT				LIT LAT AB
117. LU				LU DIB
118. LUL?				LUL
119. MA				MĀ
120. MAKH				MAKH
121. ME				ME
122. ME				ME
123. MI				MI GIG
124. NUM				NUM
125. RA				RA SA
126. RAT				RAT SIT
127. RIM				RIM
128. SA				SA
129. SAK				SAK
130. SAKH				SAKH SUKH

Sound.	Asiatic Syllabary.	Hittite Emblems.	Linear Babylonian.	Akkadian Sounds,
131. SAR				SAR LUGAL
132. SAR				SAR KHIR
133. SET				
134. SHI				SI SHI SIG
135. SHI				
136. SIG				SI SIG
137. SIR				SIR SU
138. SIS				SIS UR
139. SU				SU GAB KAT
140. TAKH				TAKH GAB
141. TAR				
142. TAS				TAS UR LIK
143. TIK				TIK GU
144. TIM				
145. TIM				TIM DIM

Sound.	Asiatic Syllabary.	Hittite Emblems.	Linear Babylonian.	Akkadian Sounds.
146. TIN				TIN GAL
147. TUL				TUL DUL
148. TUR				TUR
149. TUR DUM				TUR DUM
150. UKU				UKU MUR
151. U UN				U UN
152. UN				U UN
153. UNU				UNU LAB RUD
154. URU				URU ERI
155. US				US CU DUR
156. VO	Π			
157. ZAR				ZAR SAR
158.				
159.				
160. E	E			E MA MAL



Sound.	Asianic Syllabary.	Hittite Emblems.	Linear Babylonian.	Akkadian Sounds.
161.				
162.				
163.				
164.				
165.				
166. PAL				PAL TAL
167.				

## APPENDIX V.

## ORIGIN OF THE ALPHABET.

THE question of the alphabet is closely connected with our subject. The Hittites did not use it, and their script is probably older than the time of its invention, which cannot be placed later than 1000 B.C. It used to be supposed to have originated in Egypt about 1500 B.C., or earlier, but the oldest dated alphabetic text is the Moabite Stone, about 900 B.C., and we now know that, in the fourteenth century B.C., it was not in use in Phœnicia. Nor was the Hittite then the character used, for all the Tell Amarna letters, from Palestine and Syria, are in cuneiform characters.

The ancients knew that Egyptians and Babylonians had written characters long before Greeks or Latins. They usually attribute the alphabet to the Phœnicians, but they knew very little about its origin. The Phœnicians used twenty-two letters, and all these the Greeks adopted. The latter had, however, five letters which were not Phœnician, and they gradually discarded the Digamma (*Vau*), the Koppa (*Koph*), and finally the San (*Tsade*), which are found in the earliest Greek texts, thus forming an alphabet of twenty-four letters finally established. The names of certain Greek letters, Alpha, Beta, Delta, &c., indicate a Semitic derivation; but they are not all the same as in Phœnician, and the five extra letters have simple syllabic sounds. It is remarkable that all the letters of the Etrus-

can and Latin alphabets have similarly only syllabic names. The Greek names were unknown in Italy till very late. The Italians, therefore, show no signs of having obtained letters from a Semitic people.

Aristotle believed seventeen Greek letters (omitting *Zeta*) to be ancient, including fifteen Phœnician with *Phi* and *Upsilon*. It is known, from the existence in his time<sup>1</sup> of the Delphic tripod, that all these letters existed in 480 B.C.; but on that monument the *Khi* and *Psi* differ from the forms used later. *Eta* and *Omega* are absent, but *Zeta* and *Theta* occur. In coins of Thrace *Omega* is as old as 550 B.C., but on coins of *Potidea*, 432 B.C., the *Xsi* and *Psi* are not represented by single letters. Thus in the time of Aristotle the alphabet of Greece was not yet fixed, and the standard Ionian alphabet had not yet swallowed up the local varieties. The Asiatic Greeks were more advanced, and possessed *Eta* and *Omega* before the Europeans. The Etruscans also had the signs for *Zeta*, *Theta*, *Phi*, and *Khi*, but had not those for *Xsi*, *Psi*, *Eta*, or *Omega*. The extra letters originated apparently in Asia Minor, where alphabets used for Iranian languages required more distinction of sound than even the Greek. Thus the Lycians, whose speech was Iranian, in the fifth century B.C., though they had not the same signs, distinguished *phi* and *pi*, *t* and *th*, *xsi* and long *o*. They had yet other signs for the gutturals *a* and *añ*, for short *u* and *w*, for *h*, *ch*, hard *t*, and hard *d*. Their alphabet consisted of thirty-three distinguished sounds, but was never used by Greeks. The Lycian extra letters, such as long *o* (Cypriote *u*) and *ch* (Cypriote *se*), show a connection with the old syllabary of Hittite origin. The Greek *Upsilon*, *Phi*, *Khi*, *Psi*, and *Omega* can be traced to the same syllabary. Some other influence besides the Phœnician was at work, and the Greeks themselves knew that they only owed part of their alphabet to Phœnicia.

The question of the origin of the whole system thus arises. That it was hieroglyphic is generally admitted.

<sup>1</sup> See Rawlinson's Herodotus, vol. iii. p. 467.

That Ionians and Etruscans did not take any letters directly from the Semitic race is indicated by the syllabic names, as distinguished from Phœnician names of letters, which are descriptive of their hieroglyphic meaning. The probable solution is that the syllabaries, from which all letters (Phœnician, Aramean, Greek, Ionian, Carian, Lycian, Phrygian, and Etruscan alike) were derived, were those used by the Mongol race, and derived from our system of hieroglyphics—called Hittite. The Phœnicians, knowing the hieroglyph whence each sign was derived, named it accordingly. They taught the early Greeks of Europe. The Ionians, on the other hand, the Carians, Lycians, and Etruscans, came directly in contact with the original race which invented the syllabary; and thus (in the case of Etruscans at least) never used the Semitic names, and employed at least ten signs not used in Phœnicia.

This view has begun to take hold, since the failure to derive the alphabet from Egyptian symbols, or from the later cuneiform. It is here proposed to inquire into a possible Hittite comparison. But, as we have seen that so many signs are common to Hittite and cuneiform, this view does not altogether exclude comparisons with the latter script, although it is probable that the system in use on the borders of Phœnicia would be that adopted. The Cypriote forms generally have much closer resemblance to the alphabetic signs than either cuneiform or Egyptian characters. The only question is whether the comparison holds good throughout.

The weakness of De Rougé's proposal, to derive from the Egyptian, lies in four points: (1) The comparisons of form are very doubtful. (2) The Phœnician names of letters do not describe the Egyptian objects. (3) Only twenty-one letters are compared. (4) No attempt is made to account for the Greek extra letters. If a comparison is sound, it should apply all the more closely, the farther back we may go, to the original sign; but this is not the case with De Rougé's theory of the adoption,

by Phœnicia, of a foreign script, about the time when we now know that they were actually using another—namely, the cuneiform. The real succession appears to have been: Hittite hieroglyphs used 2200 B.C.; cuneiform, 1500 B.C.; alphabets, about 1200 B.C., in Syria. The three systems overlap historically, while Greeks, Arabs, and Arameans only learned the alphabet some centuries after its development in Syria, where the oldest dated text (that of Panammu I. at Samalla about 800 B.C.) already shows signs of long use for this invention.

That the Phœnicians should have taken Egyptian signs, and renamed them according to fancied resemblances to objects quite different from those represented originally, is most unlikely. Their names should indicate the true hieroglyphic form. De Rougé supposes that the rough hieratic sketches were accepted, but that their original connection with emblems then still in use for monumental texts was unknown to the Semitic traders, who must, however, have often seen them in Egypt itself. Thus he compares the hieratic *a* (eagle) with the Phœnician *a* (bull), the hieratic *b* (crane) with the Phœnician *b* (house), the hieratic *r* (mouth) with the Phœnician *r* (face), and the hieratic *s* (reeds) with the Phœnician *s* (tooth); and so on for the rest. Even the hieratic forms bear no convincing resemblance to the Phœnician letters, and the hieroglyphics were quite different. A Phœnician could hardly take a crane for a house, or an eagle for a bull, and had no reason for giving the new names, unless that he knew them to be those of the original emblems whence his letters had slowly developed. It will be apparent that an explanation which is not founded on such an improbable theory is to be sought, and can only be found, in either Syria itself or in Chaldea; for neither Arabs, Hindus, nor Etruscans are known ever to have had any hieroglyphics at all. They learned to write much later, and adopted Phœnician letters.

The following explanation of the attached plate will show how easily, through the Asianic syllabary, by means

of Mongol speech, the origin of the signs can be explained, in accord with their Phœnician and Greek names:—

1. *Aleph*, Greek *Alpha*, bull. The old *au*, *am*, bull, common to Hittites and Sumerians. The sign is rendered *Alpu*, bull, in Assyrian. It is not known in Cypriote, but it was used by Lycians and Carians.
2. *Beth*, Greek *Beta*, house. The old sign *ab*, house, in Hittite and cuneiform, rendered *Bitu* in Assyrian. The sign is not Cypriote, but is Lycian and Carian.
3. *Geemel*, Greek *Gamma*. The word is not *gamal*, camel, but *geemel*, crooked. This is the Hittite *ga*, *gam*, crook, the Greek preserving the full sound. In Cypriote *ga*. In Carian and Lycian this *g* occurs.
4. *Daleth*, Greek *Delta*, usually rendered "door." The cuneiform sign *du* is a pot rather than a door, and is rendered *daltu* in Assyrian. The root is *dalah*, to swing (whether of door or bucket), and *delu* is a Semitic word for "bucket." The letter is used in Carian and Lycian.
5. *He*, Greek *Epsilon* or "short *e*." The sound has no Semitic sense, but the Sumerian *e*, house (which is represented by *he* in Assyrian—*hekal*, temple, being the Akkadian *e-gal*, great house), may explain the sign. In the Carian alphabet the *e* has the required form exactly.
6. *Vau*. The Semitic rendering "hook" (*vav*) is doubtful. The Greeks called this letter (the Digamma) *Vau* or *Bau*. Possibly the Hittite *vu*.
7. *Zain*, Greek *Zeta*, supposed to signify "weapons." The Hittite *za*, "quiver," is compared. The sign *zain* evidently shows more than one weapon, bound together, or in a case.
8. *Kheth*, Greek *Eta*. The supposed meaning is "fence" or "protection." Probably the Hittite sign for a fortress. The cuneiform has the sound *khav* or *khav*, as well as *kir*. (Turkish *khap*, grip, hold, include.)
9. *Teth*, Greek *Theta*. Probably derived from *tath*, to roll, a globe or ball. Perhaps the sun. The cuneiform sun emblem is used for the sound *tu*.
10. *Yod*, Greek *Iota*, the hand. The hand emblem in cuneiform has the sound *idu* in Assyrian. In Akkadian *id* and *a* (or probably *i*), hand.
11. *Kaph*, Greek *Kappa*, the hollow of the hand. The cuneiform sign has the value *gub* as well as *tuk*, and *gub* may be pronounced *guv* or *gu*. The *g* and *k* are little distinguished in Akkadian.

12. *Lamed*, Greek *Lamda*. Wrongly rendered "ox-goad," from a single occurrence of the word *malmad*, which the Septuagint does not render "goad" but "plough instrument." In Akkadian *lam* is "plough," and *da* is "yoke." The yoke sign has the sound *lu* in Hittite and in Akkadian.
13. *Min*, Greek *Mu*, supposed to mean "water." The Hittite *mi* may mean "the west," which was called by Semitic peoples "seaward." The Phœnician form is not original. In Carian the letter *m* is the same as the Cypriote *mi*, and represents an earlier form than the oldest known Phœnician.
14. *Nun*, Greek *Nu*. This need not mean "fish," and *nu* would certainly not. Possibly the Assyrian *numu*, lord, is intended—the word was derived as a loan from the Akkadian *nun*, *nu*, lord. The sign compared is the cuneiform *nu*, *nun*, lord—a hand with sceptre—and it is conceivable that the Phœnician is the same.
15. *Samech*, Greek *Xsi*. The word is supposed to mean a "prop." Probably the emblem of the tree trunk or "log," which has among other sounds that of *san* or *zan*, which indicates an original *sa* or *za*.
16. *Ain*, Greek *O-micron*, little *o*. In Greek the Semitic name is not retained, but it means "eye." The Cypriote *ya*, bright, is compared, the sign being that for "light."
17. *Pêh*, Greek *Pi*. The spelling of the name is not the same as *pêh*, mouth. The Phœnician name might equally well come from the root *pah*, whence the word for "corner." The emblem is not like a mouth. The Cypriote *pe* compares well, and the meaning is apparently a "bend" (Turkish *bai* and *pai*, bend).
18. *Tsade*, the Greek *San*. This letter was peculiarly Semitic, and soon disappeared in Greek, where the shape was confused with that of *Sigma*, and the sound not known in Aryan speech. *Tsade* is supposed to mean a "hook," and *tsin* has the same meaning. The comparison with the Hittite has yet to be found. The emblem is not found in Cypriote.
19. *Koph*, Greek *Koppa*. This also was soon disused in Greece, but, through the Etruscans, became the Latin *Q*. The meaning of the name is very doubtful. Probably the Hittite *ku*, *gu*, speech, is to be compared, which in Assyrian is rendered *kabu*, which is tolerably near. The roots *kuph*, *kapha*, in Hebrew, however, mean "to gird" and "to contract," and the sign might be a "noose." Compare the Akkadian *gub*, to grip (Turkish *khap*). The symbol *gu*, however, is so common that it

- was likely to find a place in the alphabet, and no "noose" emblem is known in Hittite or cuneiform.
20. *Resh*, Greek *Rho*. The Semitic name means "head." The emblem is like the Cypriote *ra* in its later forms. The Hittite *ra* is a small human figure with a large head.
  21. *Shin*, Greek *Sigma*. The Semitic name is supposed to mean "tooth," the Lycian *ch* or *sh* is compared, and one form of the Cypriote *se* is much the same. The derivation is supposed to be from the Hittite *shi*, tooth, and the word *sigma* would mean "biting."
  22. *Tau*, Greek *Tau*, means "a mark" in Hebrew, but this may come from the letter. The Cypriote *ta* is a possible comparison, from the Hittite *ta*, beat.

The remaining letters are Greek only :—

23. *Upsilon*, short *u*. The later forms of the Cypriote *u* compare. The earlier ones lead us to the Hittite *u*, plant, commonly used for the syllable only.
24. *Phi*. Probably *pu*, as found in Cypriote, Hittite, and cuneiform—a bud.
25. *Khi*. In Carian and Lycian the letter *h* is a cross, whence the Greek may come. The sound *khi* in Akkadian means "good." The cross is commonly found in the hands of deities on seals, and was an Assyrian sacred emblem.
26. *Psi*. Supposed to be the Cypriote *se*, derived from the Hittite *se*, to give.
27. *Omega*, great *o*. The sign *u*, in Hittite and in cuneiform, supplies the proper form. This is not found in Cypriote.

It appears, therefore, that the whole alphabet can be found in the Hittite system (excepting as yet *Tsade*), and that the Mongol syllables describe the same symbols which are to be inferred from the Semitic names of the letters. The Greek names, whether the same with or varying from the Phœnician, equally point to the same hieroglyphic signs. The investigation of the origin of the alphabet thus strengthens our case for twenty-six signs of the Hittite, by giving a bilingual check on the meaning and sound required by the signs; but only on the assumption that the originators of the system were Mongols, whose short words were easily represented by



Letter.	Names.	Greek.	Hebrew.	Syllables.	Hittite.	Cuneiform.	Sound.
1. A	Aleph Alpha	Α	א				AV Alpu
2. B	Beth Beta	Β	ב				AB Bitu
3. G	Gimel Gamma	Γ	ג	𐤂			GAM GA
4. D	Daleth Delta	Δ	ד				DU Daltu
5. E	He Epsilon	Ε	ה	𐤄			E
6. V	Vau Vau	Υ	ו	𐤅			VO
7. Z	Zain Zeta	Ζ	ז				ZA
8. KH	Cheth Eta	Η	ח				KHAB
9. T	Teth Theta	Θ	ט				TU
10. I	Yod Iota	Ι	י				ID Idu'
11. K	Kaph Kappa	Κ	כ	𐤆			GUB
12. L	Lamed Lamda	Λ	ל	𐤇			LU Niru
13. M	Mem Mu	Μ	מ	𐤈			MI
14. N	Nun Nu	Ν	נ				NU Nunu
15. S	Samech Xsi	Ξ	ס				SAN
16. O	Ain Omicron	Ο	א	𐤉			YA
17. P	Pe Pi	Π	פ	𐤊			PE
18. TS	Tsadi San	Σ	צ				
19. Q	Koph Koppa	Φ	ק				KA Kabu
20. R	Resh Rho	Ρ	ר	𐤋			RA
21. SH	Shin Sigma	Σ	ש				SHI
22. TH	Tau Tau	Τ	ת	𐤌			TA
23. U	Upsilon	Υ	י	𐤍			U
24. PH	Phi	Φ	פ	𐤎			PU
25. X	Khi	Χ	כ				KHI
26. PS	Psi	Ψ	פ	𐤏			SE
27. Ō	Omega	Ω	א				U

single syllabic signs. These comparisons are indicated for the first time in these pages, and have not, to the author's knowledge, been made by others, though some coincide with Mr Ball's proposed derivation from cuneiform direct. The signs are all common syllabic emblems in Hittite; and to this race the origin of the alphabet is due, though the actual invention of twenty-two letters was Phœnician, and some ten others were taken by Aryans from the syllabary, which is known (from one text remaining) to have been used at Xanthus in Lycia, as well as at Troy and in Cyprus.

Having thus laid a foundation for study of the texts by historical research, examination of all the possible languages, and detailed examination of the symbols by themselves, we are prepared to proceed to translation; and it will appear that the result is the recovery, on coins and texts, of historic Kassite names, which is a further confirmation of the soundness of the conclusions reached by various means.

## APPENDIX VI.

## THE HITTITE TEXTS.

EVEN after finding the sounds and determining the language, we must encounter the same difficulties in attempting translation of these inscriptions which are found by scholars in reading the early cuneiform. These difficulties are graphic, phonetic, and linguistic. In some cases the form, in some the sound, in some the meaning of the sign, must at times be doubtful on account (1) of the imperfect condition or bad copying of the text; (2) because the sign has often more than one sound, and it may be doubtful whether it is a syllable, an ideogram, or a key; (3) because there are many words of the same or very similar sound, and the system does not distinguish the finer shades of distinction between these.

On the other hand, we are helped by the keys, and stop, and other devices, intended to make the meaning plain; we are also controlled by the grammatical structure of the language; and are aided by the meanings which can be obtained from living speech. In translation of any ancient text the result must read consecutively and grammatically. It must be a sensible result, for the ancients did not write nonsense; and it must be something worth recording, for such labour as is represented by the carving of hard basalt blocks into reliefs was not undertaken for nothing. The object will either be religious—a very important one in the eyes of early Orientals

—or historic; and if historic, recording success and victory, not defeat, which remark applies to all ancient records. If these requirements are met, we may feel some confidence in our conclusions.

The texts found on slabs and rocks which are mostly decipherable amount to thirty-five in all. To these we may add those on thirty-seven seals. We may begin with those which are most probably to be ascribed to the Hittites themselves, at their great cities Mer'ash, Carchemish, Hamath, and Aleppo, and take afterwards those from Cappadocia and Cilicia, with other outlying examples.

#### MER'ASH.

No. 1. The inscribed lion discovered by Dr Gwyther in 1882 bears the longest and most complete Hittite text yet known. The original is in the Constantinople Museum. The drawing is from a photograph, the signs having been examined throughout on the cast in the British Museum. The text begins on the back and covers the left side and front, ending between the paws. The ends of the lines to the right are injured, and the sixth line is broken and partly defaced. The following translation shows the "ideograms" in capital letters and the syllables in small type, as is usual in rendering cuneiform texts. The passages in brackets are rendered doubtful by the indistinctness of the emblems. The first word is carved on the shoulder, and is a full figure of the same meaning as No. 158 of the list given in Appendix IV.

Line I. *BISnemeke IPRA a Sira ke LU US AMA pi*  
 supplications region to ordering as subject man the crown  
*Rim ak ne tar UDUD ak gam neke tar NUN ko*  
 high who of, ruler established who conquest it of ruler king for  
*ra ke LU US gar gam u ke yak lugur kaske sir*  
 made subject man causing conquest, I as also slaves smitten order,  
*yak se ne ka IPRA a si ra ke u Tar gon bu*  
 and submission to region it having commanded I P.N. this  
*Sir mo ra*  
 order my [make?]

- Line II. . . . . *ke ZAB sulu SAR mo gam te*  
 as host commanding district my conquest made,  
*bu er AM ne kasis u tar yak takh a pi kasalu yak*  
 this it people of smiter, I rule, and securing what smitten, and  
*su mo IN pi gam ma NUN Zabū IPRA a sig*  
 might my the mastery conquering, king Zabū region it secure  
*rake u tar yak bu tum ne ak pe.*  
 made I rule, and this protection its who makes.
- Line III. *Yak zo sane lu yak AM ne ka u sir [er?]*  
 and of thee trusted also people thereof I rule, it  
*kassig yak se sane sane yak US Ligga bu*  
 having smitten, and favour much trusting, and man dog this  
*u ke KAZINlu kas yak zo yak mo bu a SI sa ra*  
 I as quickly smote, and thee and me this it city in for,  
*sir ka RE barsak ra zo . . . ke*  
 ordered submissive thee . . . .
- Line IV. *Makh-me tar ke NUN bu Khul Makh-me lu yak dan*  
 powerful rule as Lord this foe power with, and strong  
*NUN ka US me re yak KURU NUN lu Pam ne ra.*  
 Lord to, man serve, and favour king with recorded this for.  
*Bu gam<sup>1</sup> yak SI pi kas ne MUS bu ke tul*  
 This conquest and city the smiting of a memorial this as raise  
*ra ke yak ne a sir yak ke MUS e yak khirra ce*  
 made and it to order, both as memorial its, and a writing saying  
*SI ak ke sirka bar ne AKA bar yak ne MUS*  
 city what order to is, it raised is, and of this a memoria.  
*khirra ke yak EN ke rees<sup>2</sup> ra ke PAL ke re Pam*  
 written, and a lord as a servant, made rebel, as servan record  
*ne barak yak er ne yak [uru?] ne bar sa barak er zo pi*  
 his was, both him of, also city he living in was, it of thyself  
*ke re.*  
 as a servant.
- Line V. *BAR mo ne yak zo pi gam ke bar ne gam*  
 in future mine it, and thy own conquest as being, this conquest  
*mo dan NUN ko tum mo SIIP pi bu ra ke SI*  
 my great king for protection my, province the this is made, city  
*sig lu ra mo SET US ra yak ne re*  
 whole yoke towards my Set a servant for, also of him a servant  
*barak yak AKA te bu SI . . . ra ke pe yak ke NUN*  
 was, and [adoration?] this city [is] made make, and as lord,  
*mo ke te KURU US ra bu ke yak ke es*  
 me as, adores: Favouring servant towards this as, and as those

<sup>1</sup> *Bu gam* is doubtful.<sup>2</sup> *Kerees* might be a proper name.

*ne sa ka er barak* [yak ne NUN pi bu pi ne  
 this in to his has been, [and him the lord this same, him  
*sa ne a TUR mo ke gar er bar* [ʔ] mo . . . . .  
 trusting, a son me as causing his to be . . . my

- Line VI. *US mo yak er* [ʔ] pi ra ke yak e bar yak ne NUN  
 servant my and him the made and good is and he Lord  
*dan . . mo si yak pe* [tum ʔ] ka [til ke ʔ] SI gargar  
 great . . me before and makes protect entirely city treasure  
*yak* [tuk ʔ] bar yak ke bu te a ne re ke SI-IS  
 also possession is, and as this causing his servant as, city master  
*rake bu u bar*] yak e ka ne yak tim e es yak  
 become, this I am,] and it to this, both [a form?] and  
*ke* [tik ʔ] lu khirra yak ne barak  
 carving with cutting, also it was

- Line VII. *Yak sir MUSE khirra til.*  
 and order record writing entirely.

This being rendered in the syntax of our own language, which differs entirely from that of Mongol speech, appears to read as follows:—

- Line 1. "Commanding the homage of the district, as one who is a subject of the exalted crown, a ruler established who rules a conquest, for the king, as a subject who has made a conquest, I command also a smitten slave-people, and having commanded submission of the district, I Targon [make] this my command.
- Line 2. . . . . As having command of an army, my region being conquered, a smiter of this people, I rule; and my might conquering the mastery, I rule a region of King Zabü, made secure; and he it is who protects it.
- Line 3. And being trusted by thee also, I rule the people thereof, having smitten it. And much favour being intrusted, also as having speedily smitten this dog, both for thee and for me in this city reduced to subjection for thee I have ruled.
- Line 4. I rule, powerful with the power of this king [who was] a foe, and [am] strong; a servant of the king,

and for this remembered [or proclaimed] favoured of the king [or an overseer with the king]. As a memorial of this conquest, and of smiting the city, I order this to be erected. It is raised both as a memorial, and to write saying what the city has been ordered [or, and as a memorial which also the city is ordered to raise]; and a lord made a servant was remembered [or proclaimed] as a rebellious servant; and his, and the city he dwelt in,

Line 5. is in future mine [or, is my share] as thy own servant. And thine is this conquered province: my great conquest for the king who protects me, it has become. The whole city which I govern, being a worshipper of Set, also serves him; and this city is caused to render worship; and, like me, adores as lord, as he has shown favour to this servant, and to those therein [and trusting this same lord he makes me his [son?]] and this my . . .

Line 6. my servant, and made him. . . . And he was good and a great (Lord?) in my sight and (protects?) all: and the treasure of the city is a possession, and I am the master of the city because, as his servant, I did this.<sup>1</sup> And for this cause an image is carved and also sculptures besides for it; also writing [or cutting] a record of all that is commanded."

In this translation the meaning attached to each word is taken from the Akkadian language—as is explained in the index of Hittite words. The signs are given only those values which they are known to have borne in Akkadian from bilingual texts, and from lists of cuneiform emblems which have the translation of the Akkadian words into Assyrian in parallel columns. The lion is thus apparently an image (*dimes*, "form," in the nominative indefinite) erected by Targon to record the conquest of the town of Mer'ash, in the reign of Zabû, the third king of the 1st Babylonian dynasty (2201-2187 B.C.), and his own name suggests that he may have been a Hittite.

<sup>1</sup> Rendered doubtful by defacement of the symbols.

No. 2. A rude bas-relief on rock representing two long-robed persons seated facing each other, with a table or altar between them. The larger figure to the left holds a cup, and a sceptre with the peculiar "mace"-head noticed by both Egyptians and Assyrians as peculiar to Hittite and allied tribes. Assyrian kings on bas-reliefs bear a similar sceptre, but the mace-head is much smaller. The smaller figure to the left has also a sceptre; both have high cylindrical caps or crowns. The text is very irregularly written, but appears to read—

NUN IPPI ra ne LU ra Zomoepi US mo ra er vo  
 King region of him yoke for, Sumuabi, servant me for him towards  
 garli sirlu ES mo barak bu aksa sara  
 causing to be ruled, it mine having been, this which in, ruling  
 a mo [me?], Yak bi NUN Makh ne re sa-ak  
 it mine [is?], and this king great, of him servant speaker  
 Kesir [US?] me. Yak mo ne ee bara [bi mo barak?]  
 Kesir man is. and me he speaking being, [this mine has been].  
 Kesir Makh.  
 Kesir Prince.

"The king causing this province of his government to be ruled by me a servant of him Sumuabi, what was mine is mine to rule. And the speaker is Kesir, a servant of this great king, and he having spoken of [or named] me it is mine,<sup>1</sup>

PRINCE KESIR."

The last words (*Kesir Makh*) form a separate text written by the smaller figure to the right. It would appear that Kesir was a prince owning as overlord the king, whose name may be read *Zomoepi* or *Summoabi* (the first king of Babylon, 2251-2236 B.C.), which means "child of the god Sumu." The text thus rendered agrees with the picture, and forms a declaration of Kesir's nomination by the suzerain.

<sup>1</sup> The arrangement of the last four emblems is not quite clear. They are in a separate line. Perhaps we should read *bar ak a mo*, and regard this as also a separate text, "He who is my lord" (*bar*, chief), like the text *Kesir Makh*, which belongs to the other figure. In this case the main inscription will end, "Servant of the great king, he also having spoken to me" (or nominated me).



No. 3. A stela representing a bearded man standing and looking to the left, with a stick in his hand. It was photographed and sketched by Herr Puchstein, but the emblems as copied are too indistinct to be read with any certainty.

The text begins on the left, and consists of six lines, of which the last is much defaced. As far as can be ascertained from the indistinct photograph and the imperfect copy,<sup>1</sup> the following passages are legible:—

Line I. *BIS me ke bu ne ra ka [te ?] lu dub bu man khir ne pi bar*  
Homage this to make rendering tablet this written it which is  
. . . *ne aka er . . . ne ke lu.*  
raises it thereof with.

Line II. *ne khir lakh-lakh gam mo ko ne khir aka . . . .*  
to write establishing conquest my for to write raising  
*sikke . . . . . kar uppe ne gam . . . a ne.*  
setting fort which it conquest it of.

Line III. *lakh-lakh a . . . . NUN ZUM U . . . . mo is UN . . .*  
establishes king Sumu . . . . me here lord  
*ra kassa ne Pal mo de gu ne mo . . . mo gu*  
conquering he chief me made word this my my saying  
*bara . . . . yak . . . mo . . . . mo . . . nekhir . . . mo*  
is and my my to write me  
*la.*  
grant.

Line IV. *neke ak ka . . . men ne gam mo bu gam ke yak*  
thereof which being conquest my this conquered and  
. . . *ne mo bar . . . a mo gar bar . . . LA mo ne . . .*  
it my is me makes be tablet my it  
*sa mo . . . SI up pi . . . mo.*  
in my place which my.

Line V. . . . *SI mo [am ?] ra is mo . . . . ne mo [ka ?]*  
place my [people?] for here me me to  
. . *ra mo ne bar yak a pi ra . . . UN ka ne . . . yak . . . ke*  
me of is and what for lord to its and  
*mo Sir rum mo a ke . . . ne kas ke lu.*  
my orders record me to as it conquered.

Line VI. *E . . . . . lu . . . . . ne lu . . . . . ra ne lakh*  
with to appear  
*gar . . . menne . . .*  
makes being

<sup>1</sup> Humann and Puchstein, Reisen, Tafel xlix.

The general meaning of the text appears to be therefore: "To render homage this tablet which is inscribed is raised, showing by writing the . . . thereof, raised to describe my conquest and establishment [in] the fortress where it appears. King *Sumu* . . . my lord having made me chief here, as having subdued [it], my words tell that it was . . . and to write my . . . the grant thereof which is . . . this my conquest being won, and being my . . . my tablet in my . . . in the place which is my . . . my place, for the [people?] here . . . of me is . . . and for that which . . . to its lord . . . and my . . . ordering a record as of me [it has been] subdued . . . causing to appear. . . ."

No. 4. This text, broken at the top, is written round a small torso, and consists of four lines.<sup>1</sup> The copy is in places uncertain, but the general meaning seems to be as below:—

Line I. . . . [Ka?] mo [SI?] ip pi bu . . . ne re dan ne re  
my province this it serving much it serving  
a? ne?] up pi [tur?] ka bar  
it of who born was

Line II. bar ak SI bu ke e ke mo yak ne gar [tar?] Ini  
has been place this carving my also it makes set Master  
man kas sa ne ra NUN pi khir ne Pam mo ne aka  
subduer it for king the writing of proclamation my to-raise  
ne ne gar yak kas Makh mo ne [dup?] pi  
them causing and smiting great my of the tablet

Line III. [Me?] lu kas US a ne gar aka Ini yak . . . ane  
P.N. D.A. it he makes raise Master and it of  
kar . . . UN ne lu ke me pi gar  
fortress lord his with as one who causes

Line IV. sa sa bar ak . . . ra aka a ne si.  
command he was raised it of behold.

This is the statue of a local ruler like the preceding, the general rendering being: "This province being obedient, very obedient, to my . . . who am a native of it, also here erects this my statue—its victorious master: the king causing my written proclamation to be set up by

<sup>1</sup> Humann and Puchstein, *Reisen*, p. 391, Tafel xlvi. fig. 3.

them, and the tablet of my great victory. [*Melukas?*] is the man who causes it to be erected, and is . . . of the fortress; as one who has been its ruler with his king, he raises the . . . that you behold."

There are three other small fragments from Mer'ash, given on the same plate with the preceding; but the only words which are at all complete are on the third—namely:

*Ad pi ni ra su me gar ne ke.*

"For his father the taking thereof."

The remaining sculptures known at Mer'ash include those representing the goddess Ma and the infant Sun-god and a chief adoring a large personage (deity or suzerain) already described; also another torso, a horse and chariot, and two other bas-reliefs like No. 2. They are not inscribed.

#### CARCHEMISH.

Three texts on basalt blocks, cut, like the preceding, in relief, were sent by G. Smith with other fragments to the British Museum. They are the best carved of all those yet known. The drawings are made from the originals, which are unfortunately damaged in parts:—

No. 1, line I. *BISnemeke* . . . *nelu* *Ridemetekalu* *NUN* *Zumalu*  
 supplications this with glorifying, Lord Zumalu

*SI ak ra gam* *gukamelu ne GUT* . . . . .  
 city who for conquest, uttered,

Line II. . . . . [*eressa?*] *yak bu KURUKHU* *alu*  
 [demands?] and this prince it with

*Ridemetekalu UNSAR tumlu sepi ra yak idis*  
 glorifying, king protecting favour for, and power

*ne GUT me ere.*  
 mighty his it.

Line III. *er kare yak er tura LU is GUT a ne*  
 him causing, and him weak government here power it of

*er RO da Makh er yak Makh yak tur US is*  
 his makes — strong, him both great and small, man here

*tim a ne er turda er yak* [LUL?] *mo LU ra ka*  
 region it of him born, him also [people?] my yoke made to,  
*US . . . .*  
 man . . . .

Line IV. . . . . *ne tuk yak er yak Makh til er mo. Yak*  
 to have, both it and prince every him my. And  
*bu mo te ne tuk er GUT er bu mo te ne tuk*  
 this me renders to have; it power his this me renders to have;  
*yak er BAR ne gar mo til ne US is er KURUKHU*  
 and of him division to cause my, all of, man here his, a prince  
*a sa yak Ride-*  
 it in, and one glori-

Line V. *-meteka NUN da UNSAR tum da [yak] [da ak] Yak*  
 fied king by, king protected, and [therefore?] also  
*Zo Pam ne mo ne ra er a lu er khiarra US karak pi*  
 thee record of my it for desiring, it writing Man citizen who  
*Sakh US is tim mo ne ra . . . . .*  
 good, man here region me it for

(At least fifteen emblems are broken off here.) The translation appears, therefore, to run—

Line 1. "Homage being hereby uttered, glorifying king Zumalu, for whom the city is a conquest, mighty . . . .

Line 2. . . . . he desires; and the prince hereby renders praise. The favour of the suzerain, and his mighty power, being

Line 3. the cause; and the rule of one who here [was] weak [or small] his power makes strong. Him both great and small native to this region, him also my obedient [people?]

Line 4. . . . . to possess. Both it, and every great man of mine; and this it is that gives it me: his power gives me it; and through him I distribute all things, a servant here of him, a prince therein, and one extolled by the king, protected by the suzerain. And thou [therefore?] also art desired, by the writing of my record [or proclamation] being a good citizen, a man of this my region" . . . . .

As regards the name of the suzerain, it appears to be the same as that of Zūmelu found at Hamath. It might

be rendered *Summelu* ("the servant of Sumu," the Kassite god). The second king of Babylon is only known from one list of kings (see Appendix I.), and the Babylonian scribe renders his name *Sumu-la-ilu*, or *Sumu-la-an*. The change of a single dot would give *Sumumailu*. If the Hittite sign *lu* had, like the cuneiform *lu*, also the sound *lal*, the name might read *Zumelal*. Not improbably we have here the name of the Babylonian king who reigned from 2236 to 2201 B.C.

No. 2. On a small black basalt bas-relief of a king now in the British Museum.<sup>1</sup> It is the most distinct of all the texts. The royal figure and some of the lines towards the right are much injured.

Line I. [*BIS*?] *khi Rideme Tarko timme ama* [or *unu*] *KURUKHU*  
[Homage?] glorious Tarkotimme tribe [or city] prince

*KHAT.*  
Hittite.

Line II. *Ne tarmeke khirra Man MU. SI SAKH me sak ra*  
of, all writing this it records. Babylonia head for  
*UN Zabü.*  
Lord Zabü.

Line III. *KURUKHU se es Ri* [*detekala*?].  
Prince gracious, having exalted.

Line IV. . . . *Khirra meke lig gar zo es khir.*  
writings as to causing information writes.

Line V. *KHAT es is rakal . . . . .* [*SI*?].  
Hittites' master made city.

Line VI. *me e Yak Yak* [*MI*?] *ne tuk. bu e ra LO ra*  
[plural], and also [land?] he has. This it for record for  
*zo es khir ud gug ne.*  
information writes, day contest of.

Line VII. *Kasme ne guglu khirra ke e ne* [*a*?] *su* [*lu*?].  
Smiting he fought, writing he cuts, he it ordering.

Line VIII. *ne NUM khir Yak khirra me ke.*  
to engrave write, and to be written.

The meaning, therefore, appears to be—

"This inscription [or carving] is to the honour and glory of Tarkotimme, the tribal chief of all the Hittites

<sup>1</sup> Four feet high and two feet wide.

[or confederates], a gracious prince exalted by Zabu the head of the Babylonians. . . . The inscriptions giving information thereof he writes. Having become master of the Hittites [or confederates], . . . he holds cities and [land?] also. Therefore he writes a tablet of information ; having fought victoriously in the contest, the inscription [or carving] he cuts, ordering it to be hewn and inscribed."

The name Tarkutimme was a common one, but the prince in question appears to have been the contemporary of Targon of Mer'ash in the reign of Zabu (2201-2187 B.C.)

No. 3. A grey basalt stela<sup>1</sup> with a curved surface in front, which is the inscribed side. At the back is a full-face figure, the head of which is lost. It has a long striped (or pleated) robe, and holds a sceptre. The text is broken on the left, and the emblems are so much worn as to be occasionally doubtful. The first line is conjecturally restored :—

Line I. . . . . [Tarkotim]me KURUKHU [SI] Karkum[is]  
P. N. prince city Carchem[ish]  
ra [si]ra.  
for ruler.

Line II. . . . *li bi mo ne GUT yak khul gugkasak khi vo da du.*  
by it my mighty, and foe contest which about it is.  
*Pam mo Rideme tara [ke?] NUN KUR Turda me*  
Record my glory establishing, as lord land son from being,  
*ne da NUN puda su keeke mo li i khir a ne rosa ke*  
it at, lord far-powerful, carving my by, it text it of is made, as  
*mo . . . . .*  
me

Line III. . . . . *tuk US Rideme te eko UNSAR deguglu*  
having : a man praised for, king warrior  
*Zumalu dan lu gukka ro at ka mo keeke mo*  
Zumalu power with fighting, making, [father for my?] carving my  
*ne men yak MA [or KO] e pu ne mo ee. MUS*  
it is; and land [or all] it this of my speaking. Record  
*BISpi koda erisda alalme . . . .*  
supplication all from desired, return

<sup>1</sup> Five and a half feet high, two and a half feet across.

- Line IV. . . . *KURU lu meda [UKU?] ak khul gargug*  
 favour with made, a people which a foe, making war,  
*zotarraka ra, a ne SI zo tillu de rosa; TUR*  
 information for it of, city knowing all become done; son  
*lik ka da ur de ra ak a ne, AL pi ke til*  
 dog from repulse made which it of; flight the as completed  
*ra vo ak ne er LO tuk US tillu gargug. . . .*  
 is, regarding which of it record has, man every war making
- Line V. . . . . *u . . . [UKU?] ak keeke ra zoane*  
 [my own?] people whom a carving for, information  
*ak ka [kar?] yak khulpi NUN is tillu ka SIS rara*  
 which [making?], and the foe's king here all to, aid raising,  
*yak khula raa ne is KIP Karkumis tarlu*  
 and hostile coming, he here, region Carchemish ruling,  
*KURUKHU bu ME [ne?] lu me ne men khir*  
 the prince, this battling him with being, it this of writing,  
*SI sa da mo [tur?]*  
 city midst at my [stands?].

The meaning appears, therefore, to be—

- Line 1. [ . . . . "Tarkotim]me the prince (ruling the city) Kar[chemish],
- Line 2. . . . by means of my powerful . . . . And it concerns the contest with the foe, as my record [or proclamation] declaring glory. Lord of the native land, a lord widely powerful, by me a sculptured inscription is made, as of me . . . . .
- Line 3. . . . . possessing. For a man celebrated—my father—making war by aid of the warrior king Zumalu, my sculpture is made, and all that I say thereof. A record of homage due from all . . . . .
- Line 4. . . . with the favour that was. A hostile people having made war, by this notification the city is informed of all that [was] done. How the son of a dog was repulsed, how he has fled altogether, as to which it is recorded that every man who makes war . . . . .
- Line 5. . . . . which is [also] a record to inform my own [people?], and all who raise help for the hostile king, or come as foes, that there was such battle with

the prince who was ruling the region of Carchemish.  
It being written stands in the midst of my city."

This text shows us that the name Carchemish meant the "topmost" or "capital" city. If the writer's name (of which only the last syllable is left) was Tarkutimme, and if the monument refers to his father (*At*), it would follow that Zumalu was the same as Sumulailu of Babylon (see No. 1, Carchemish), the predecessor of Zabu.

No. 4. Mere fragments of a similar bas-relief, but representing a god with wings. The upper part of the figure is lost. He holds in his hand a basket, such as deities hold on Assyrian sculptures. These fragments, also in the British Museum, are of black basalt. The few emblems left are as follows:—

Line I. . . . . *NUN* [*Aku palab e ?*]  
King

Line II. *Rapal e pal*  
serving

Line ? *Khirra e*  
writing its

Line ? *TIL ra*  
complete

Line ? *rake gal is un ke gal*  
makes be here lord as being

This might apply to a deity or to a human lord. Compare the name of 'Ammurabi's father Akumupalab (2169-2139 B.C.)

No. 5. Another fragment in the British Museum of which no consecutive reading is possible. The symbols *Khu*, prince; *khirra*, writing; *SI pi*, the city; *mue*, my; *nelu*, with it; *er yak Tar*, him and the chief; *neka*, thereof; *SI kar tuk* [holding the city fort?], alone remain.

Other small fragments also have been brought to the British Museum from Carchemish, but in the absence of consecutive groups they give little information.



- A. *La ke Nun gukke*, a tablet, as a chief fighting.  
 B. *Nu-un er*, his lord . . . *sak*, head.  
 C. *E gal til e gal*, It is, it is complete.  
 D. . . . *Moka*, to me . . . *Pam ne [Man?]mu*, its record is recorded.  
 E. . . . *Am ak ke yak NIR is Kas* . . . *US*, which people and the ruler here smiting.  
 F. The first line refers to fighting. In the second we find—

*Ne gut is VO . . . lu . . . lu pi e eris yak SUTuk yak*  
 Mighty here it will and having power and  
*ne gut . . .*  
 mighty

In the third line we find—

*Keeke er tuk yak ka . . . US . . . ne . . .*  
 Carving its having and

- G. It is uncertain which was the lines read.  
 H. . . . *Un ura sir*, . . . Lord I for ruling.  
 I. . . . *ane er yak gu*, thereof and says.  
 J. The emblem *er* only.  
 K. Mere suffixes and conjunction.  
 L. The sign *Ka*.  
 M. The signs *Ne* and *er*.  
 N. May read either way.  
 O. *Yak . . . er . . . sir . . .*  
 P. The statue of a king apparently refers to fighting. In the second line *Sak UN mo [gam?]*, my victorious suzerain (?). In the third line *Ke gal -ra [ku?] ne til*.  
 Q. In the first line . . . *Khir er [Dup?] pi tarra*, fixing the tablet of his writing. In the second, *Yak MEe*, and battle.  
 R. . . . *Tur me lu*, with sons.  
 S. Only the emblem *er* is distinct.

All these texts seem to point to the Hittite invasion of

Carchemish having occurred at the time when the Kassites first began to rule in Babylon, about 2250 B.C.<sup>1</sup>

## HAMATH.

Four basalt blocks found by Burckhardt in 1812 are now in the Constantinople Museum. The plates are from the casts made by Rev. W. Wright in 1872. The texts Nos. 4 and 5 are on two sides of one stone, but are separate, though referring to the same writer.

No. 1, line I. *BISme Namemelu ENu Kassalu SU ak*  
 Supplications uttered with, lord conquering might whose

*lu ka.*  
 with, to.

Line II. *NUN pi mo, ak re ka Tin a me ne ak lu*  
 King the my, whom a servant to, life it be who with,

*NUN Zom u me lu ke.*  
 king, Zomumelu, as.

Line III. *Tilka keekeme ta mo ne IPRA a ne ak man.*  
 all to, sculpture so me of, region to his who [am?].

The translation apparently means—

“With homage expressed to the lord through whose might I smite—my king whom I serve, may he live, Zomumelu, being king of all, so I who am his countryman inscribe.”

The meaning of *Ipra* is discussed in the list of Hittite words (Appendix VII.) The king's name may be *Sumumelu* (“man of the god Sumu,” see Carchemish, No. 1) or *Zuumelu*, like the previous *Zumalu*.

No. 2, line I. *BISme Namemelu ENu Kassalu SU ak*  
 Supplications uttered with, lord conquering might whose

*lu ka ke gam me ne ak NUN ma*  
 with, to, as conquering this who king here,

Line II. *Kas ne gu en NUN pi mo ka gu NUN pi mo*  
 smiting he saying, as king the me to saying, king the my

<sup>1</sup> Another text of four lines (see sketch in Perrot & Chipiez ‘Art in Asia Minor,’ vol. ii. p. 259) still lies in the ruins. It accompanies the figure of a seated personage, but cannot possibly be read with any certainty from the drawing.

*ak re ka sig de ne ak re mo ne NUN Zom-*  
whom servant to, hostile he who servant me of, king. Sum-  
*u me lu, ke.*  
umelu as.

Line III. *Tilka keekeme ta mo ne ak AMA gamlu man.*  
all to, sculpture so me of who crown conquering am.

This is practically the same as the preceding:—

“With homage expressed to the lord through whose might I smite, as one who has conquered, he commanding to smite the king here, calling me king—he the king whom I serve; he who was hostile becoming my servant; as Zumumelu is king of all, such is my inscription, who have conquered a crown [or, the people].”

No. 3, line I. *BISme Namemelu ENu Kassalu SU ak lu ka ke gamme*  
*ne NUN ma ne gu.*

Line II. *Gulu NUN mo ka gu Nun pi mo ak re ka ENu ak a ne [mo ?]*  
*re NUN Zomu RE tilka keekeme.*

This text is the same as the last, but condensed into two lines. The king's name would at first seem to be different. The scribe having no room for the two syllables *melu* (man or servant), substitutes the ideogram *RE* (servant) to be read *melu* as in his other texts. This confirms, therefore, the meaning of this emblem (Akkadian *ri*, servant), and the text reads—

“With homage expressed to the Lord through whose might I have smitten, as he spoke and commanded the conquest of the king here, calling me king—the king whom I serve: the lord who [was] here [being] my servant, Zomumelu [being] king of all, [is] the inscription.”

As the inscribed part of this stone was cut off, it is possible that an emblem has been lost at the end, but the whole is greatly condensed.

No. 4, line I. *SI a mo u Dutar a ne SI Karka gu MUS ka gos*  
City to my I Totar it of city Karak word record to, chief  
*raka DUB mo.*  
become tablet my.

Line II. *me ka mo ne shi ka SU me ta Pal pi bara akke barak*  
 this to me of fixed, power from, rebel the, chief who was

*EN uppi en ma a*  
 lord who so here to,

Line III. *Ke me mo ne NUN pi u ka kas sa ka gal NUN pi u*  
 as being, me of king the I to smitten become king the I

*re ne tar*  
 servant of rule

Line IV. *SI Karak ke SI ak gam gal bu barak BISA*  
 city Karak as city which conquest become this was, supplication

*ne gu MUS ka shi ka.*  
 its word record to have fixed.

The word *Dutar* may be a proper name or only mean "made to rule." The meaning appears to be as follows:—

"To my city. I, Totar, as a record addressed to the city Karak [Hamath], having become chief, therefore set me up my tablet: since the chief who rebelled from government, who was lord here, was smitten of me for my king, I the king's servant rule; as the city Karak [Hamath] has become a conquered city [I] have set up a record speaking of its homage."

The name Karak, "fortress," is evidently the old Mongol name which the Semitic peoples afterwards translated Hamah or "fortress."

No. 5. This text is remarkable because the third and fourth lines both read from the right—the emblems all pointing to the right—which is not the case in any other known Hittite text.

Line I. *BIS me ENu kassa sak khirlu SU ak ne lu*  
 Supplications Lord's, conquest writing power whose it with,  
*ka ke gukkas ne ak NUN [Ab-i-su-ne?] u pi*  
 to, as warrior his who, lord P.N. . . . I who, . . . .

Line II. *MUS ka en BIS mo gu NUN lu mo gu*  
 a record to, as supplication my speaks, king with my word

*MUS khi sasa gu SI a ne ak [ke khir mo*  
 record what ordering, speaking city to, it which [as writing my

*te sa ?] zo pi LU sa keeke mo ka a ne zo pi LU sa*  
renders?] thy self yoke in, carving me to, it of, thy self yoke in  
*SI a mo u US AT mo ke*  
city to my, I man father my as

Line III. *ne is SI a mo u Dutar ke [khul?] gam ka*  
of it master, city to my I become lord, as [foe?] conquering  
*mo gu u UN ka KAT mo ka MU ra zalu . . . . .*  
of me speaks, I king to, hand my, to, year for complete  
*gamka En . . . mo ka ne sa mo me tur gu*  
conquering, lord[ship] me to, it in, of me establishing speaks,  
*[til?] a ne SI IP barak [tur? ne? lu?]*  
all it his province having been [abiding, him with?]

Line IV. *mo ka ta [Pal pi?] bara akke ru shi me ne barak*  
me to so [rebel the?] chief which for, hostile he was:  
*SAKH pi EN mo sa gi [bar?] bar ka su mo*  
Babylonian lord me in again having caused to live, power my,  
*[kat?] mo shisa shisa [En?] ko [ne? ka] kas mo ne*  
prosperity my, makes firm: lord for thereof smiting me of  
*Am ubba [URU?] a sa EN uppi . . . . .*  
people, which to city it in Lord who

Line V. . . . . *lu kas Tum gar mo*  
with smiting protection causes me  
*SU e sa gi pi [NUN?] gar barak ka mo ne*  
power its in again which king causes to have been, me he  
*SAKH pi EN [KURU?] gu.*  
Babylonian lord gracious speaking.

This text being much damaged, and perhaps purposely defaced in the 5th line, its meaning is more doubtful. It appears, however, to run as follows:—

Line 1. "With homage to him by whose might I write of a Prince's conquest, as one who fights for him, King [Abisum?] . . . . .

Line 2. as a record speaking of my homage, saying that which I with my king command. To this city which [as my writing states<sup>1</sup>] is in thy own government, my inscription this [is]. To my city subject to thyself I, like my father,

Line 3. the master of my city, I Dutar [or, I become ruler] as having conquered the foe, of me it tells.

<sup>1</sup> Perhaps *SU*, not *khir*, "as my power establishes."

I for the king, to my hand a year ago having subdued . . . . . establishing for myself my lord[ship] therein it says. The whole province having been his, an abode for me

- Line 4. with him, the rebel who was its chief having been hostile, the lord of the Babylonians [or the rightful lord] having caused me again to live there, securing my power [and] my prosperity, smiting the lord thereof. To the people who were in the city the lord who . . . . . by me . . . . .
- Line 5. . . . . smiting, he gives protection: that the king again has caused me to be powerful therein graciously says, of me the Babylonian [or, rightful] lord."

The text refers, therefore, to a reconquest of Hamath, by aid of the king, whose name is much damaged. If it be, as proposed to be read, Ebisum, it refers to the eighth king of the 1st dynasty (2059-2034 B.C.) The conquest of Hamath is likely to have occurred later than that of Carchemish.

## ALEPPO.

Two texts existed here, both of which have been destroyed. One of them has been copied by various explorers, but was apparently much defaced, so that the copies vary considerably, and the reading is therefore very doubtful. That made by George Smith is the best defined.<sup>1</sup>

Line I. *U ke SI mu a* [*da ?*] [*NUN SI KHILBI ?*] *Eriaku ne sa a*  
I as city my it at [Lord city Aleppo?] P. N., this in it  
*pe zu* [*SI ? IP ? PI ?*]  
make know, province

Line II. *UN* [*Makh ?*] . . . [*khir khir li ?*] *IV. [Pal ?] yak*  
Lord great causing to write; fourth year and  
*VII. LIT* [*sa ?*] *tara ka kar ne UN tul.*  
seventh month in, rule to, fortress this lord raises.

<sup>1</sup> Proc. Bib. Arch. Soc., June 1883.

The state of the text renders most of this very doubtful ; but the name of the writer, " worshipper of the Moon-god," appears to be clear, and occupies the chief position in the inscription, which would mean—

" I [Eriaku], as the lord of this my city of Aleppo,<sup>1</sup> hereby make known [as] lord of the province causing it to be written ; in the fourth year and seventh month of rule, this fortress the ruler erects."

The name Eriaku (Arioch) was no doubt common among the Kassites and Elamites, and no date can be established ; but the text appears to refer to the building of a fortress (or perhaps a temple, since the sign is doubtful, and might be *L* instead of *kar*) in the city of Aleppo.

## BULGAR MADEN.

We next turn to texts beyond the limits of the Hittite country, of which the finest is found at Bulgar Maden. It is carved on rock, on the borders of Cilicia and Cappadocia, north of Tarsus, and has been carefully copied by Mr D. G. Hogarth. The writing is more sketchy than that of preceding texts, either because it is incised or because it is of later date. Some of the characters approach very closely to the Cypriote. It appears to have been intentionally defaced at a time when the writing was understood, probably by the writer's enemies.

Line I. *Gudenemekeli yak IPpi e khulpe yak eri maaklu yak*  
 Proclamation by, both region it hostile, and him abiding and  
*IP pi ne saaklu yak khirka de ne pe yak ne*  
 region the of, addressing, and writing making to make, also he  
*a gar ne kur lu agu ra UN gu [de ?] . . . . lu*  
 it causing, this land yoke crown for lord, proclaims, with . .  
*ne tillu sa ne barak gu ne me yak LO ak*  
 its completion in it having been : word these, and record which  
 [keke ?]  
 is cut,

<sup>1</sup> The best copies (by G. Smith and C. F. T. Drake) show remains of the sign *NUN* and of *kar* (otherwise sounded *khi*l), with *bi* inside—a compound ideogram for the city name.

- Line II. *Ne a gar ne US Eri-Aku rake sakh ne [ID? pi?]*  
 He it causing, he man P.N. made, of right the power  
*mo ka ne dede SI Larasa dera sa MAN barak yak ne*  
 to me he gave, city Larsa ruling in, king having been; and that  
*ni sa Siippi ka KURUKHU aa UN mo a sa tik gar*  
 it in province, to prince it to lord, me it in all makes  
*tum yak ne tum [gal?] yak ese mo yak Pal*  
 protect, and of it protection [there is?], both these my, and former  
*ne sir pi yak vo ke mo yak de tum ke.*  
 of possession also regarding as mine, also giving protection.
- Line. III. *e ni pi ko mo a sara tumtum mo khul me ra.*  
 these the for me to ruling, making protection my foes among.  
*yak Ma sa ra yak khul me Us [Re?] mo er yak LU me ven*  
 And abode royal; and foes' man servant my him, and obedient  
*mo ese LU ra yak ko akke LU a ne SI Makh ra pal*  
 of me those yoke toward, and all who yoke to its city princely, long  
*rabi sakh ne de rake yak gu mo ke LO*  
 serving, prosperous, to become was made; and word my as record,  
*UN . . . gu ke UN a tum de mo te yak*  
 lord . . . spoken; lord it protection causing, me establishes, and  
*. . . me mo pe ne tum er LO ak sa ne*  
 my makes; of it protection his a record which in he  
*a gar ne sa eri ne de-*  
 it causing, it in, him of made
- Line IV. *-delu PAM bu mo yak gude ne ak lu*  
 do. Proclamation this my, and utterance it which with  
*dede [khi?] lu pi es pi bi Rimka-ka yak*  
 made, [the doing?] these things demands: [tribute?] and  
*Zar gargar Manko ne . . . US ne . . ne [ke?] . . rake*  
 store treasure, king for its, man as made,  
*dera mo ne raka ak ene yak . . . sarake yak eri*  
 rule me of made, who them, and . . . have ordered, and man  
*ne Siip sa khul ka LU ka ka SI sa si khul ma ak*  
 him province in foe to bound to, city in facing foe's home which  
*ul bi ul gar de [khi?] pi sa lakkhisa*  
 is, demand to be made [notice?] the in, is made clear,
- Line V. *ne lakh barak yak dera US ne ake siake*  
 it clear having been and ordering: Man it who beholding,  
*yak ne ko ak yak ra ne ke akka . . . a ne barak*  
 both him for what, and [concerning?] what . . . to, it was,  
*eri [Tar?] go e e lu tik guke yak ke khul*  
 him [the chief?] speaking with, all has said; and as foe  
*. . . UN ra a sa Siip ka SI ak mo*  
 [conquering?] king towards it in, province to, city which mine,  
*yak tik yak kar ru SI be a ne sa SI ak de*  
 both mound and fort making, city ruined it in, city which new



*ven SI mo LU a UN sa ra . . . ID . . . SI pi ud a*  
 is, city of me yoke to lord ruling power[ful], city the when it  
*ne . . . ne tukke.*  
 of it holding.

It will be noticed that references to the success of the writer and to defeat of the enemy seem to have been erased, and four or five emblems missing in the first line may have contained the name of the conqueror, which, unless it be recognised as *Targo* (or *Tarkun*) in the fifth line, is absent. The word *Targo* may, however, mean only "chief," and both signs are doubtful. Rendered into English syntax from the peculiar Mongolic and agglutinative structure which is strictly followed in the original, this long text reads as follows:—

"By proclamation addressing both the hostile region and him who abides in this region, and causing it to be written, he who so does—lord of the country subject to the crown—announces, this. . . . having been completed, Eriaku has caused these words, and the tablet which is cut, to be made. He gave to me the power for good [or of Babylon<sup>1</sup>], being king ruling in the city Larasa [Larsa]; and me, the prince of the province, he causes to protect all that is therein, and it is protected [or, and he protects it]; and he regards these and my former possessions as mine, and gives protection, and is my protection among foes for those that I rule. And the royal land and the foreigner who serves me and is obedient [or subjected]: he who is my subject, and every one who has long served subject to the great [or princely] city, has been made prosperous; and as a record of Lord . . . my word is uttered, the lord who gives protection establishing me and making me . . . and that which is in the record of his protection he has caused to be stated. This my memorial [or proclamation], and the publication made thereof, demands that these things be [done?]. Tribute, and treasure of store-houses for its king, men . . . decision being made by

<sup>1</sup> The word *sakh* has, however, here no determinative of place.

me, who have ruled them and . . . and to him in the province subject to the foe, in a place facing the enemy's country, the demand which will be made is made clear in this [notification?], it being clear and decisive. The chief, speaking to the man who sees this, has told all that concerned him and what has been. . . . And as having [conquered?] the foe of the lord of this province, which place is mine, building both mound [or fortification] and castle in the old [or ruined] city, it is a new city, a city subject to me—a power[ful] ruling lord since the [conquest?] of the city holding possession of it."

The writer would appear to have extended his dominions and placed his notice on the frontier, which was formed by the great spur of the Taurus dividing Cilicia from Cappadocia. The date (under Eriaku of Larsa) would be about 2150 B.C.

## IBREEZ.

The sculpture on a rock north-west of Tarsus in Cilicia has been already described. The figure of the god, who holds corn and wine, and is girt with flames, is 20 feet high, and that of the worshipper about 12 feet. The base of the bas-relief is some 9 feet above the stream flowing by the rock. There are three short texts—one before the god's face, one behind the worshipper, and a third beneath the bas-relief, the last being almost effaced.

No. I, line I. [Ka?] ne Siipe LU gamkalu ka UN pi  
This of province yoke conquered to lord the

Line II. ne a gar ne te lu ne RA me du se  
him causing to adore, he possession to be grants,

Line III. LU mo is sa gar lu.  
yoke my here in causing.

The sign *LU*, as elsewhere, stands for "yoke," "government," "subjection," as in the Tell Amarna letters.

"Of this, a conquered province, the god, whom I cause to be adored, has given possession, causing me to rule it."

No. 2, line I. *Ne du ab ka*  
He coming house to

Line II. *ne re a*  
him service

Line III. *ne gar lu sar pi*  
he making, king the

*Tu us ka.*  
Tuska.

“He who approaches, worshipping his temple, is King Tuska.”

As *ab* also means “father,” it may mean that the deity is the king’s father.

No. 3. . . . . *Ne ne mo gar tim sa UN Alussa aka vo*  
He it me causing, region in lord, Alosha which name

*manvo.*  
is named.

In the decayed state of the text this rendering is doubtful. It is, however, to be remarked that the region called Alasiya (Elishah) in the Tell Amarna letters, is called *Alosha* on the docket written on one tablet by the Egyptian librarian. Alosha was a maritime region near the Hittite country, and appears to have been in Cilicia, where the present text occurs. There are two or more emblems in the second line which are not intelligible, but the rest seems to read, “By his will I am lord of the region called Alosha.”

#### MT. SIPYLOS.

The text on the so-called “Niobe” was copied by Dennis in 1881, and afterwards by Prof. Sayce. The copies do not entirely agree, and the emblems are apparently much worn. They appear to read—

*Ma a Nun Amrabe,*

which might mean “Amrabe [dedicates] to Ma,” or else “*Maa* is the goddess of the race.” The name *Amrabe*, if it refers to a king (*Nun*), reminds us of ‘Ammurabi.

Ma is the Earth goddess, and the name was well known to the Greeks as that of a deity in Asia Minor.

#### KARABEL.

The inscribed figure was discovered by Renouard in 1839, and described by Texier in his travels. One copy is given in Rawlinson's 'Herodotus' (vol. ii. p. 174), and a photograph is given in Dr Wright's 'Empire of the Hittites' (Plate xviii.) The figure is 140 feet from the ground, and the copies of the emblems show that they are much decayed. Dr Sayce's copy, made in 1879,<sup>1</sup> gives an additional emblem as half effaced. The second line, indeed, appears to be extremely illegible, and it is doubtful whether it contained two or four emblems. Comparing the two copies and the photograph, the emblems appear to be—

*Us am ma*  
*SI khu Pal;*

or, if the emblems *si-khu* are a compound, as in cuneiform, we might read *Us Amma mut tal.*<sup>2</sup> This may be a personal name ("son of the race of Sikhu," the Kassite name of Marduk), or may be variously rendered, according as *pal* is understood to stand for "smote" or for "crossed over"—"One who has smitten the place of this people;" or, "One who has marched over the place of this people." The renderings, however, are very doubtful, from the state of the text.

According to Herodotus, there was a text in hieratic Egyptian characters on the breast of this statue, which did not give the name of the hero but only the words, "This country I have subdued by the power of my arm" (Herod., vol. ii. p. 102). This is very close to the suggested translation; but the text is not on the breast of the figure, nor is it Egyptian. Herodotus speaks of the costume as partly

<sup>1</sup> Trans. Bib. Arch. Soc., vol. vii. p. 265.

<sup>2</sup> Compare the name *Mutalli* for a Gamgum chief.

Ethiopian, partly Egyptian. He supposed the person represented to be Sesostris.

## DOGHANLU DERESI.

The emblems of the bas-relief at this site in Phrygia, between Koutahiah and Sevri Hissar, are also extremely rude and indefinite. They were sketched by Professor Ramsay.

## BOR.

The upper half, found by Professor Ramsay at Tyana, of a stela with a royal figure, the lower part being still uncopied at Bor. The characters are incised, and well formed. They have been carefully copied by Mr D. G. Hogarth.

Line I. *Yak ne a gar ne lu sa yak mene ne ak lu*  
Both he it causing this with to say and those him who with

*Zu ma lu ra Man ak lu [ka?] kaspi tillu*  
Zumalu for, king who subject to, smiting complete

Line II. *ven yak mo [Tar?] neka pe yak ne dede*  
made, and me chief this to making, also he causes make,

*yak ud gam [me?] yak karsalu yak [SU?] aklu yak [gu?] lu*  
and now conquering, both lawfully and powerfully, and word with  
*mo er gu yak ne*  
me it telling; and this

Line III. *yak [Makh?] Tim pi ven ne reka yak gudeme*  
also [of prince?] allegiance, him servant to, and utterance,

*er ke UN mo ka si ne ke Tim pi ven ne te sa yak*  
him as lord me to before, thereof, allegiance establishes; and  
*Siippi e sa*  
province it in

Line IV. *yak ne Aku alal me yak US ne gamlu barak*  
also of him crown restored is, and man its conquering [life?]

*er ka pu.*  
him to long.

The differences of the two copies give rise to some doubts as to parts of the text, but its meaning appears to be—

“Both he who hereby causes to speak and those who

are with him, who are subject to Zumalu the king, have made end of smiting, and he has caused me to be made chief thereto and now victorious, both lawfully and powerfully, through his command spoken to me; and this also establishes the allegiance [or obligation] of a prince who is his servant, making proclamation of him as in presence of my lord, and his crown is restored in this province [long may he live conquering his people?].”

## GURUN.

At this site in Southern Cappadocia, north of Mer'ash, two texts were found by Sir C. W. Wilson, and carefully copied by Mr D. G. Hogarth. One of these is too fragmentary to treat. The other appears from the copy to run as follows,<sup>1</sup> the emblems being incised:—

- Line I. *UN SI me UN SI UNa UN SI . . . . ba e NUN ko*  
 lord city [pl] lord city lord to, lord city it king for  
*UN SAR yak [galʃ] yak . . . SI-UN ZAB gu[deʃ] Rideme*  
 suzerain both great, and city ruler proclaims glory,  
*ke NUN [naʔ me] iak . . . .*  
 as lord and
- Line II. *u Tarka dimme e zu NUN NUN ko ne . . . .*  
 I Tarkatimme it acknowledge lord lord for his  
*URU e Ko ru mo LA . . . e . . . . .*  
 city it Gurun, a tablet
- Line III. *LA mo LA dim er . . .*  
 tablet my tablet as him
- Line IV. *ne . . . . ko ne . . . . Pal VIII ne mo yak NUN ka e SI*  
 year eight it my, and lord to it city  
*ak e XVIII PAL ke ne . . . VIII ne UD ka IV ne LIT ka*  
 which eighteenth year his, eighth day to, fourth month to,  
*Tarka te mo.*  
 chieftainship my.
- Line V. *. . . IP ka e UN . . . . al lu lu . . . gam ko UN*  
 region to it, lord conquest for, lord  
*. . . XXVIII UNSI me raa raa gude dim*  
 twenty-eight, lord city (pl.) making possess, saying as  
*er mo.*  
 it my.

<sup>1</sup> The copies not being very certain, are not reproduced.

This text, though much damaged, is fairly clear, and valuable as giving the best examples of the numerals. It appears to mean—

“To the lord of the most royal city of royal cities, the royal city . . . . for its king, a suzerain both great and . . . the lord of a city speaks, in his honour proclaiming, as king, and . . . I Tarkadimme acknowledge. The king's king . . . the city *Gorumo* [*i.e.*, Gurun] a tablet . . . my tablet, as a tablet . . . him . . . my eighth year . . . and the eighteenth of the lord [whose the place is?], the eighth day of the fourth month of my establishment as chief . . . to the region, the lord . . . having [brought back?] . . . [as] a conquest for . . . twenty-eight royal cities of lord . . . being proclaimed mine.”

It appears that Tarkadimme had been established eight years three months eight days in the city Gorumo or Gurun in the eighteenth year of a suzerain whose name was perhaps purposely erased, together with words referring to conquest.

## IZGHIN.

At this place, on the right bank of the Khurman Su, about half-way between Yarpuz and El Bistân, Mr Hogarth found a limestone obelisk 8 feet high, with a text in seventy short lines running round the four sides. It was hastily copied, and the photographs are not clear, while the original is much defaced. The emblems, however, are in relief, and therefore better formed than those of the incised texts. The following appears to be legible:—

*BISme ra LUke, e zo mo ne barak is a tuk . . . ka er*  
Homage for subject, it thy me of, has been; here it holding

. . . . *lu . . . e . . . is NUN ka . . . NUN NUN ko ke*  
here lord to lord lord for as,

*NUN dim ke zo ne . . . neke mo is zo NUN NUN*  
lord like as thee of thereof my here thou, lord lord

*ka At gar es is ne AB er tur . . . er . . . til*  
to, father's dwelling here of, house his sets him all

. . . . *pe sirke mo zo MI til a es ke mo gu*  
 makes, order my thou land all to those as mine sayest,  
*Tar [NUN NUN?] khi ko ragal UN . . . . a sa til ke*  
 chief, lord lord, who for, am made, lord it in all as  
*mo MI . . . ne yak e ko ke mo e ra ak sa ak ta ro e*  
 mine land of, and it for as me it for what in ; which so doing,  
*a u [Makh?] a ne me EN ke AMA e a ne is rede er*  
 it I prince it of being, lord as, people its, it of, here, service it  
*zo ko a ne e ke sasa US LU u kara e ne mo*  
 thee for it of speak, as ordering ; man subject I acting, it of mine  
*[AKA?] lu UN ra UN . . . . ne . . . ka ke mo e [bu ud?]*  
 [crown?] subject lord to, lord as mine it this day,  
*ta kee ke me ko me US tum.*  
 so sculpture carving man makes.

A consecutive reading of parts only is possible in the first seven lines. The subject is the same as on other texts, and the latter part appears to run—

"Thou the king's king hast set me . . . here in the abode of my father's dwelling thou callest all those of this land mine, who am made chief for the king's king, a lord . . . therein all the . . . land, and what is in it being mine, whereby I, being its prince as lord of the people, here acknowledge duty to thee, I acting as a subject, my crown being subject to the lord [who is] lord of . . . as the sculptor makes my sculpture [to-day?]."

Here also later enemies seem to have erased the personal names. The copy, being uncertain, has not been reproduced.

#### PALANGA.

This text is on the front, left side, and back of the lower part of a basalt statue of a seated figure, the writing being incised, and beginning on the left. The copy, which is not reproduced, is again uncertain, but seems to read—

Line I. *Ride ne EN yak EN de gamlu Zobu ma pe NUN pi Makh*  
 glory of lord, and lord conquering, Zobumape lord the, great,  
*[gam?] er dup pu kee ke*  
 conquest his tablet, has been carved.



Line II. *Pi er Aku mo ra ke yak . . . re bar mo ne mo yak*  
 who it crown my made, and . . . service me of: me also

*Naa ne eri ka [de?] gam ko ne er SU me ke IP ni er e.*  
 Nanaeri to, conquests for, he it subduing, region this his it.

Line III. *bu lu tuk US til Pal ke bu yak SI ak ke SI IP*  
 this with has every rebel this and city which Province

*tukra SI sakh me Siip dim yak gammemelu yak re*  
 taking, city Babylon's province as, both conquered, and subject,  
*yak ra [bi?] a [u gam?] melu gam ra pi ne er.*  
 and servile? it I having conquered, conquest for which it his.

Line IV. *Aku gar mo ra e pi Yak besa ka ke LU pi*  
 Crown causes me for which, and homage to, as the yoke

*takh yak UN er a ra bi a karka NUN ka neke ka*  
 is set; and lord him it for praying, fortress king to there of, to,  
*yak tilde neko me a pi a mo AB yak a ne mo*  
 also completion for is, which it of me house, and it this mine

*LIT X lu kaspe e ye [til?] yak ne bar ra*  
 tenth month with, smiting the its finished, and it is finished,  
*yak XII a udesa [LIT pi] a rake tillu*  
 and twelfth day in [month the], to making is finished,  
*tu garlu ka.*  
 made caused,

The text, therefore, applies to the statue of the suzerain set up by Nanaeri.

“Lord of glory and conquering lord, Zobumape [or Suvuvape] the great king his tablet is carved who made my crown; and, [because of?] my being his servant, of me also Nanaeri [“the servant of Nana”] he subduing this region for a conquest possesses it; every rebel and city that the province holds, as a province of Babylon, being both conquered and subject and obedient; I having conquered it as a conquest for him, he gives me the crown and homage; the government being established, and wishing for him as lord; also on the completion of the royal fortress which is my abode; and in the tenth month the smiting being ended, and in the twelfth day of the month the making is finished of what was done.”

As the letters B, V, and M are little distinguished in Akkadian, it is possible that Zubuvape was the same person as Sumuabi, the first king of Babylon in 2250 B.C.

## ARSLAN TEPE.

This place ("the lion mound") is a large mound near the village of Ordasu, some three miles north-east of Malatiya, and appears, according to Mr Hogarth, to be the oldest site of the city of Malatiya, which we have seen to be mentioned by Tiglath-Pileser I. as early as 1130 B.C. It stands in Matiene, the country of the Minyan king Dusratta, who in the fifteenth century B.C. wrote in the same language found on these monuments.

A limestone block 4 feet long is carved in high relief, and two other fragments were found with a figure of a seated deity and traces of an archer and a chariot. These formed part of a building now buried in the mound. Under the goddess is a broken text in relief, of which only a few words remain—

. . *garreka nekoka ne* . . .

Perhaps "to erect a fortress he" . . .

The larger block, with a bas-relief representing a conqueror, has two lines of inscription in relief, of which Mr Hogarth gives a copy. The emblems are apparently in part erased, but the text appears to run—

Line I. *KA Nina [Ma?] si UN sa ka IPRA a khu UN*  
 House Nina's abode before lord in to, region to prince lord  
*du lu, khul khi dim [gam?] Tarkodimus US SU kar*  
 being foe who made conquer, P. name, man powerful, fort  
*Man ni.*  
 royal of.

Line II. *LA [de tur?] [khir ne gar lu keke?].*  
 Tablet makes fix, writing this causing carve.

Which would mean—

"Before the house of Nina's abode to the god therein Tarkodimus, who is lord of the region, one who has conquered the foe, the man ruling the royal fortress, has set up a tablet, causing this to be written."

The sign *Man* is doubtful, but *kar-Manni* might mean "the Minyan fortress."

## IASILI-KAIA.

The bas-reliefs at this place, east of Pteria, have been described; but only four emblems are found beside the figures, one of which is much defaced. They might read, *SI-is-khi-li*, "This place here is holy," as a notice to intruders. Humann and Puchstein (*Reisen*, p. 64) give another group *SI pi du sakh*, "This place is made holy."

## KÖLITOLU YAILA.

The text here found is much injured. It is cut in a red calcareous stone, the emblems being in relief and well carved. A copy was made by Mr Hogarth, but the reading is very doubtful.

As far as can be judged from the copy, and from the photograph, this text—much injured in the first line—reads somewhat as below:—

- Line I. *Is e [khir?] ra ke . . . me . . . a gurda UN ra guk ko me ke*  
 Here it written record lord for wars  
 . . . UN . . . . . ko me UN kas ka  
 lord all lord smiting
- Line II. *til til lu [MUS?] un kas-gug lu khir Sar*  
 completed record his victorious he writes. The king  
*sir gug ra ke rum me US me ke [a] dim me ra ka*  
 commanding war making records servants to peaceful made  
*SI pi . . . me li me*  
 place the . . . by is
- Line III. *khir a bu sir til til . . . me man guk ko*  
 he writes: this order fulfilled is having fought  
*su me su me sa UN Du tar is [sa?] ke UN kar a men ne*  
 overpowering: lord Totar here in as lord fort to is

This is also apparently a record of victory. "What is here written is a record [or sign] . . . of the king's wars: Lord . . . lord of all, having completed the subduing, writes his memorial of victory. By command of the suzerain having made war, he records. The place having been made peaceful for subjects by means of . . . he writes, that the command is fulfilled. Having fought victoriously, Lord Totar, has become lord of the fortress here."

## SAMOSATA.

An imperfect example is given by Puchstein, but the copy does not allow of any reliable reading. It includes nine short lines of writing on a bas-relief representing a long-robed figure.—(*Reisen*, Tafel xlix. 1-3.)

## BABYLON.

The bowl from Babylon, now in the British Museum, is of rather coarse basalt. It is 13 inches in diameter and  $8\frac{1}{2}$  inches high, with a foot or base  $7\frac{1}{2}$  inches across and  $2\frac{1}{4}$  inches high. A single line of incised writing runs round the outside. The forms of the emblems are conventionalised, and the text may be considered late.

*Khe keeke mo KURUKHU A AMAR PI SI UN ka yak*  
 This carving mine, prince Amarpi, city lord to, and  
*ne US epi ra desa yak yak ni eri UN gam*  
 of him man whom for given, and also him adoring lord, conquest  
*BUR sa SIIP rake kee ke me ne ven tar yak neke*  
 river in province made, carving this it is cut, and thereof  
*til ka yak UNSAR yak ne targu ra barak gam tim*  
 all to also suzerain, and its chief to having been, conquest as  
*a ne ven sap pi ne UN mo be ka pe ud ke re*  
 it his is, hosts the its lord, of me slain made, now as subject  
*tim es lu mo*  
 regions with my.

The bowl, therefore, was dedicated to a temple as a votive offering on occasion of victories in the region of *Bur*, a word which signifies "flowing"—probably that near the river Euphrates. The name of the prince is doubtful, as the signs *Am* and *bi* are ill formed. A-Amarbi would mean "son of glory." It is somewhat like that of 'Ammurabi, which, however, is differently explained in Assyrian. It also recalls the Amrabe of the Sipylos statue, apparently a king's name. The rendering in English syntax will give the following:—

"This is my carving, Prince Āmarpi, lord of the city,

and servant of him to whom it is offered, him also worshipping [as] lord. Conquest having been made in the river region, this carving has been cut; and being suzerain both of all herein and of its chief [*Targu*], as having conquered it, the lord of its army having been slain by me, it [is] now subject with my other regions."

If the prince in question was the well-known Hammurabi (or more correctly '*Ammurabi*'), the victory in question was that over Eriaku of Larsa about 2140 B.C. It is not impossible that Hammurabi only adopted the Sumerian script of other inscriptions after conquering the south, and here uses the Kassite characters.

## SEALS.

Eight seals found by Layard at Nineveh in 1851 are now in the British Museum, and bear characters found on the preceding texts. There is in such cases no certainty as to where the seals were originally used. They may have been collected by the later Assyrians from other places. They do not appear to be royal signets, as no sign for king occurs on any of them. They are given in Dr Wright's 'Empire of the Hittites,' Plate xiii. Another is given, Plate xx. Three are alike, and read *Khilibape* ("child of God"), a name formed like *Sumuabi* ("child of Marduk"). The fourth has the single sign *tur*, probably "chief." The fifth perhaps *Lakh-bu* or *Sa-bu* (the sun emblem having both sounds in Akkadian). The sixth is injured (*Ipra*?). The seventh has the figure of a king with indeterminate markings. The eighth is also injured (perhaps *Khilib-melu*). The ninth appears to have the word *KURUKHU*, "prince."

In addition to these, eighteen terra-cotta seals or tokens belonging to Mr Schlumberger were published by M. G. Perrot,<sup>1</sup> and photographs are given in Dr Wright's work (Plate xvii.) These are said to have all come from Asia Minor. They are much worn, and difficult to read. The

<sup>1</sup> Revue Archéologique, December 1882.

first has the words *AN u ra tas* or *AN u uru tas* ("the servant of the god Uru"—the Kassite name of Bel). The second shows a deity standing on a lion, as at Carchemish, &c.; the signs are not clear—possibly *UN Melisumo . . UN. . .* The third has two hands bearing sceptres like those of the priest at Iasili-Kaia, and perhaps is not really inscribed, or else to be read *Sulume*. The emblems on the fourth are irregular and not clear, perhaps *UN Tassama*. The fifth seems to show a worshipper with the winged sun and the syllable *ra*, "worshipper of the Sun." The sixth is also rudely cut, perhaps reading *Zomolaelu eerika*, "servant of Sumulailu"; but this is doubtful.

Three other seals of this set (Nos. 7 to 9) are the same, but are all much worn. They are arranged with a double symmetrical text, like the boss of Tarkudimme. The probable reading is *AN Khilibape KUR Nu-un*, "Khilibape king of the country." The tenth seal is also symmetrically written, perhaps *NUN Sirra Sumute es*, "the reigning king Sumutes" ("worshipper of Sumu"). The eleventh may not be really inscribed. It has a large central emblem, probably a temple, with the sun inside, and two sceptred hands. The twelfth is much decayed, and shows the figure of a worshipper, with two crowns and other emblems not clearly defined. The thirteenth is also not easily legible; but the fourteenth is remarkable for its griffon, resembling the *Set* monster, but with wings. It might read *UN Zabme Ammisetane*, "lord of battle Ammisetane," this being the name of the ninth king of Babylon (2034-2009 B.C.) The fifteenth seal may read from the left *NUN Tarkasirumaa*. The sixteenth has a symmetrical text, perhaps *NUN TUR sirgammaa* (or *Yegammā*), "the king son of Yegamma." The seventeenth is also symmetrical, apparently *Zomo ma ra ba ne*, "servant of the house of Sumu." The eighteenth apparently has only *Ipraa tar*, "chief of the region."

In addition to these twenty-seven seals there are others already noticed, including the bilingual from the

Ashmolean, which has the signs *Isgar raba*, "servant of Isgar," as already noticed, and one of which a drawing is given in Lejarde's 'Culte de Mithra.' This has on one side the winged horse, and probably the name *Ammi sa tu ga*; on the other, the winged sun and the words *KURUKHU SISA KH*, "prince of Babylon." Ammi-zaduga was the tenth king of Babylon (2009-1988 B.C.) Mr Hogarth has published two seals from Tell Bashar (which we have seen to have been a Hittite fortress). One of these seems to read *Ammisaduga*, with the signs *NUN Kas* ("Kassite lord") above. The signs on the back are not clear. The other seal of this set has a double text on one side, (probably) *Am-sa-tu-ga*, and on the other, *Am sa [tu?] ga Babilu Nun*, "Amsatuga king of Babylon."

The seals from Aidin in Lydia have been already noticed — one having five deities and the words *adda* (father), *ye [Ea?]*, *mu* (mother?), *se* (gracious); while the other is only inscribed with the word *negug* (fight) over the two demons. The seal showing human sacrifice<sup>1</sup> bears the word *Tur sak*, "first born." Another from Lycaonia (p. 245) has a central figure of a worshipper, with five emblems, of which only the first two (*du us . . .*) are clear. The fourth inscribed seal, given by Perrot on the same page, has already been noticed above; but the longest text is on a fine specimen (p. 278 of the same volume), which, however, is not easily read, as the emblems are not always distinct. There is an inner circle, on which the signs *raba* are clear (possibly *Khilib Same raba*, "servant of the god Sām"). The outer circle certainly indicates a royal seal by the sign *UN-NUN*, "overlord"; but the reading is not very certain. Probably it runs, *Sarpi Ammi sa-ta a ne-li*, *UN pi*, *TUR US Abisu[um?]*, *Makh*, *Khu dub bu man de*, which will mean, "By the suzerain Ammisatane, son of Lord Abisum the Great, this seal is given." Considering that Ammisatana<sup>2</sup>

<sup>1</sup> Perrot, *Hist. Art. in Asia Minor, &c.*, vol. ii. p. 258.

<sup>2</sup> Or Ammiditana, which may also be the true sound on the seal.

was son of Ebisum, whom he succeeded about 2034 B.C. as the ninth king of the 1st Babylonian dynasty, the translation is at least probable.

These thirty-seven seals, therefore, though few are royal, contain Kassite names and titles, and seem clearly to refer to the succession of Kassite kings in Babylon (Ebisum, Ammisatana, and Ammizaduga) between 2059 and 1988 B.C. They strengthen the case for the other inscriptions, in which the names of Sumuabi, Sumulailu, and Zabû (2251-2187 B.C.) have been recognised.

We have at present, therefore, thirty-five texts and thirty-seven inscribed seals, in the character popularly called "Hittite," but which was common to various tribes acknowledging the 1st dynasty of Babylon as suzerains. We find in them records of conquest, of which the earliest are at Mer'ash and Carchemish, extending probably later to Hamath, and to the far west of Asia Minor, and including victories recorded in Babylon itself. It is practically almost an impossibility that a system of 160 emblems could first be established on its own merits, and then applied to texts varying from three or four symbols to long inscriptions, such as the Mer'ash lion and the Bulgar Maden rock text, and applied, moreover, in accordance with the very peculiar grammar of an agglutinative language, if any serious fallacy existed in the method employed—a method confirmed not only by the identity of its principles with those recognised in the reading of a kindred language in another script (the Sumerian in linear Babylonian), but also justified by the historical result, which agrees with those independently established by Sir H. Rawlinson and his successors for Kassite history. It is true that attempts have been made to prove the Kassites to have been a Semitic people, but these must be considered to fail in face of the evidence that has been given, by the Babylonian translation of Kassite names, which can only be understood if they are regarded as being of Mongol origin.

It remains, therefore only necessary, in conclusion, to



show that the words as rendered in these texts exist in the Akkadian language (as proved by the bilingual texts and by the bilingual lists alike), and that they can also, for the most part, be discovered still to survive in the pure Turkish speech of Bactria and Siberia, in our own times.<sup>1</sup> The attached vocabulary (Appendix VII.) will give the necessary evidence on this point; and in conclusion it may be noted that the results here detailed are not likely to suffer from the future discovery of bilinguals, because such bilinguals (as is already known) would most probably be in "Hittite" and cuneiform, whereas the present method already takes as its basis the original identity of cuneiform and Hittite emblems, giving to the latter only those values and sounds which are derived from the former.

In a valuable grammatical tablet comparing Semitic and Mongol pronouns (B.M., 81-8-30), translated by G. Bertin,<sup>2</sup> the colophon appears to read in Assyrian as follows: "Before the Babylonian equivalent, I Kisil Marduk have written what a man speaking *SU* language would say, in Assyrian speech." The words are the same as Akkadian, but *SU*, among other meanings, is rendered *eribu*, "the West," and the reference may be to the Hittite.

<sup>1</sup> The Akkadian words are determined by personal study, and in accordance with the views of competent scholars, but the position is secured by reference to living speech.

<sup>2</sup> Journal of Royal Asiatic Society, 1885.

## APPENDIX VII.

## HITTITE VOCABULARY.

- A*, it. Akkadian and Minyan *a*, Turkish *au*.  
*A*, son. Kassite *a*.  
*Ab*, house, abode. Akkadian and Minyan *ab*, Turkish *oba*.  
*Ab*, father. Akkadian *ab*, Turkish *eb*.  
*Abisum*, proper name of a king. Kassite *Ebisum* and *Ebisun*.  
*Ak*, crook, hook. Turkish *ek*, Akkadian *ak*, twist, bend.  
*Ak*, who, which; *akke*, what. Old Medic *akka*.  
*Aka*, crown; *ako*, crown. Akkadian *ega*, *aka*, or *agu*.  
*Aka*, raise; Akkadian *aka*. Turkish *ak*, high.  
*Akate*, exaltation, adoration (high render). See *Te*.  
*Al*, going back. Akkadian *al*, backwards.  
*Al*, flight (see preceding). Perhaps Turkish *yal*, run, hasten.  
*Alalme*, a bringing back. Causative from *al*, with *-me*, abstract noun.  
*Alussa*, (probably) name of a country, *Alosa* (Alasiya, Elishah).  
*Am*, *au*, bull; Akkadian *am*. Turkish *oñg*, bellow.  
*Am*, tribe, people. Turkish *am*, *aim*; Kassite *am*.  
*Am*, *ama*, crown, turban. Akkadian *ami*.  
*An*, god; Akkadian *an*. Turkish *oñ*, high; Akkadian *-an*.  
*At*, *ad*, stride. Turkish *at*, walk, stride; Minyan *at*.  
*At*, *ad*, father. Akkadian *at*, *ad*; Turkish *ata*.  
  
*Ba*, shrine. Akkadian *Ba*.  
*Ba*, this. Akkadian *ba*. See *Bu*.  
*Babilu*, Babylon. On a seal from Tell Bashar.  
*Bar*, altar, sacrifice. Akkadian *bar*.  
*Bar*, to be, to live. Akkadian *bar*, *var*; Turkish *bar*, *var*.  
*Bar* (or *mas*), part, division, future. Akkadian *bar* (or *mas*).  
*Bar bar*, to cause to live, frequentative and causative.

- Bara*, chief. Akkadian *bar*, chief, lord, lady.  
*Be*, *pe*, make, cause. Akkadian *ba*, old Medic *pe*, Minyan *pe*.  
*Be*, complete. Akkadian *be*.  
*Be*, dead (*pe-beka*, put to death). Akkadian *be*, dead, destroyed.  
*Besa*, homage. Akkadian *bis*, reverence.  
*Bi*, two; Akkadian *bi*. Turkish *bi*, other.  
*Bi*, they, them. Old Medic *pi*, Minyan *bi*.  
*Bi*, *pi*, this, the. Old Medic and Minyan *pi*.  
*Bi*, ask, want, wish. Akkadian *bi*.  
*Bu*, *pu*, this. Akkadian, Turkish, and Minyan *bu*.  
*Bur*, *pur*, flow, pour, stream. Akkadian *bur*, *pur*; Turkish *bur*.  
  
*Da*, at. Akkadian *da*, *ta*; Turkish *da*, Minyan *ta*.  
*Da*, suffix of abstract nouns. Akkadian *-da*, Turkish *-it*.  
*Du-ak*, perhaps, "therefore" ("to which").  
*Dan*, strong, very. Akkadian *dan*, Turkish *tan*, great.  
*De*, flame. Akkadian *de*.  
*De*, go out. Akkadian *di*, Turkish *tii*, reach (*gude*, utter).  
 See *Gu*.  
*De*, probably "new." Akkadian *de*.  
*Deilipe* (or *Delipi*), doubtful—saying, telling, notification?  
 Akkadian *da*, speak; Turkish *di*, speak; *dil*, word (*-pi* case ending).  
*Dera*, ruling, deciding. Akkadian *tir*, judge. See *Tar*.  
*Dim*, *tim*, sheep. Akkadian *dib*.  
*Dim*, *tim*, like, as. Akkadian *dim*, Turkish *tiñ*, Minyan *tim*.  
*Du*, come, become, be; *dulu*, becoming. Akkadian *du*, Medic *du*.  
*Du Tar*, perhaps a personal name at Hamath.  
*Dub*, tablet. Akkadian *dub*, old Medic *dipe*.  
*Dur*, *tur*, stay, dwell, set fast. Akkadian and Turkish *dur*.  
  
*E*, it. Akkadian.  
*E*, perhaps good. Turkish *ayi*.  
*Ee*, speak. Akkadian *e*, Turkish *ayi*.  
*En*, *enu*, lord. Akkadian *en*, *inu*; Minyan *inu*. See *An*.  
*En*, as. Akkadian and Minyan *en*, *enna*, so.  
*Ene*, they. Akkadian.  
*Er*, *eri*, man, servant. Akkadian *eri*, Turkish *er*, man.  
*Er*, him. Akkadian *ir* (an incorporated particle).  
*Ere*, willing, *eris*, will. Minyan *erus*, Turkish *er*, will.  
*Es*, these, those. Akkadian *es*.  
*Es*, three. Akkadian *es*, *essa*; Turkish *vus*, *üs*, *utch*.  
  
*Ga*, *gam*, crook, bend (see *Ak*). Turkish *jam*, bend.

- Gal*, key, opening. Akkadian *gal*.  
*Gal*, great. Akkadian *gal*, Turkish *khalin*.  
*Gal*, be. Akkadian *gal*, Turkish *khal*, to remain.  
*Gam*, subdue, bend, conquest. Akkadian and Minyan *gam*:  
*gamlu*, conquering; *gamma*, *gammelu*, conquering;  
*gammemelu*, conquered.  
*Gar*, to cause, to make; Akkadian *gar*. Turkish *kayir*, make.  
*Gargar*, treasure (as used in Dusratta's lists of presents).  
*Gi*, reed. Akkadian *gi* and *ga*.  
*Gi*, again. Akkadian *gi*, return.  
*Go*, *gon*, sceptre. Akkadian *kun*. See *Ku*, *Kun*.  
*Gu*, word, speak; Akkadian *gu*; *gulu*, speaking. Turkish  
*kul*, sound.  
*Gud*, *gut*, power. Akkadian *gud*, Turkish *göt*.  
*Gude*, proclaim. Akkadian *gude*, from *gu*, word; *de*, issue.  
*Gug*, ram. Akkadian *gug*, Turkish *koch*.  
*Gug*, fight. Akkadian *guk*, war.

- I*, one; Akkadian *a*. Turkish *ai*, single.  
*lak*, and. Old Medic *yak*.  
*Id*, power. Akkadian *id*, Turkish *ida*.  
*Iede*, month. Akkadian *idu*, Minyan *yed*, Etruscan *ide*,  
Turkish *eida*.  
*Ik*, to open. Akkadian *ik*, Turkish *ach*.  
*Inpi*, the mastery. Akkadian *in*. See *En*.  
*Ip*, cord, bind. Akkadian *ib*, Turkish *ip*, *ib*.  
*Ip*, region. Akkadian *ip*.  
*Ipra*, region; from *ip*, and *ra*, to possess—*i.e.*, dominion. In  
Minyan *ipri* appears to mean a "ruler," "possessor."  
*Is*, master. Akkadian *es*, *isse*; Turkish *es*.  
*Is*, ass. Turkish *isik*, *esek*.  
*Is*, here. Minyan *issi*, Mongolian *isi* (compare *Si*).  
*Iz*, *giz*, block, Akkadian. Turkish *ise*, stick.

- Ka*, *ga*, reed, Akkadian. See *Gi*.  
*Ka*, *ga*, to. Akkadian and Turkish *ga*.  
*Ka*, house. Akkadian *ga*.  
*Ka*, verbal adjective, and past participle (also *ak*), as Akkadian  
and Turkish.  
*Kar*, *kir*, fortress. Akkadian *kar*, *kir*; Turkish *kir*.  
*Karak*, probably "townsman." Mongol *ger*, house, enclosure.  
*Karak*, a city (Hamath).  
*Kare*, making (compare *Gar*).  
*Karkumis*, chief city, Carchemish.  
*Karsalu*, lawfully, with law. Akkadian *garza*, law.  
*Kas*, smiting. Akkadian *kas*, *gaz*.  
*Kas*, two, pair. Akkadian *kas*, Turkish *kos*, pair.

- Kassasak*, condition of making smite—victory.  
*Kat*, hand. Akkadian *kat*, Finnic *kat* (hence "power"); and good fortune. Akkadian *kat*, Turkish *khut*.  
*Kazin*, hare, Akkadian.  
*Ke*, as. Akkadian and Turkish *ki*.  
*Ke*, cut. Turkish *ki*, cut. Hence *heeke*, carving; *ketik*, cutting.  
*Khar*, *khir*, write. Akkadian *khir*, Minyan *khar*, Turkish *khar*, *khir*, cut.  
*Khe*, *khi*, *khu*, this, he who, that which, Akkadian.  
*Khi*, good, holy. Akkadian *khi*.  
*Khilib*, god. Akkadian *khilib*, Turkish *chelep*.  
*Khilupt*, the doing. Minyan *khil*, Turkish *khil*, do, make.  
*Khir*, region; Akkadian *khir*. Turkish *khar*, to surround.  
*Khu*, *khun*, prince. Akkadian *khu*, prince, illustrious; Turkish *khan*.  
*Khu*, bird. Akkadian *khu*.  
*Khul*, evil, foe; Akkadian *khul*. Turkish *ghoul*, fiend.  
*Ko*, high, tall. Akkadian *ku*.  
*Ko*, for. Akkadian *ku*, Turkish *ichun*.  
*Ko*, all. Akkadian *ku*, Turkish *chom*.  
*Korumo*, a place, now Gurun.  
*Ku*, *kun*, prince. Akkadian *ku*, *kun*. See *Gon* and *Ko*.  
*Kur*, country, mountain. Akkadian *kur*, Turkish *kor*, *kerä*.  
*Kuru*, governor. Akkadian *kuru*.  
*Kuru khu*, governing prince. See *Khu*.  
*Kuru*, favour. Akkadian *kuru*. Hence *kurulu*, favoured.
- La*, tablet. Akkadian *lav*. See *Lo*.  
*Lakh*, clear. Akkadian *lakh*. Hence *lakhkhisa*, explanation?  
*Le*, bull. Akkadian *le*.  
*Li*, by means of. Akkadian and Turkish *li*.  
*Lik*, regarding. Akkadian *liku*, Minyan *lik*.  
*Likga* (or *ligga*), dog. Akkadian *lik*, *likku*.  
*Lit*, *lat*, month, Akkadian.  
*Lo*, memorial. Akkadian *lu*.  
*Lu*, yoke; hence "rule," "submission." Akkadian *lu*.  
*Lu*, with. Akkadian *lu*, Turkish *ailan*.  
*Lugur*, (possibly) "servile people." Akkadian *gur*, *kur*, foreigner.
- Ma*, place, abode. Akkadian *ma*.  
*Ma*, this, here. Akkadian *ma*.  
*Makh*, prince, great. Akkadian *makh*, Turkish *magh*.  
*Man*, king; Akkadian *man*. Turkish *mañ*, foremost; *manaf*, a chief; Minyan *man*.  
*Me*, *men*, being. Akkadian *men*, Minyan *ma*, make.

*Me*, many. Akkadian *me*, Turkish *-mek*.  
*Me*, battle, Akkadian.  
*Meke*, abstract termination. Turkish *-mek*, *-mak*.  
*Mi*, probably "land." Ugric *ma*, *mi*, and *mo*.  
*Mo*, me, my, mine. Akkadian *mu*, Turkish *-m*.  
*Mu*, tree. Akkadian and Tartar *mu*.  
*Mu*, record. Akkadian *mu*. Hence *man-mu*, as a record.  
*Mus*, perhaps to be read *um*, document, memorial, Akkadian.

*Na*, go out. Akkadian and Minyan *naa*.  
*Nane-eri*, worshipper of Nana. A man's name.  
*Ne*, male, he, it. Akkadian *na*.  
*Ne*, of. Akkadian *-na*, Turkish *-n*. Also *ni*.  
*Neke*, thereof. Akkadian *nak*.  
*Nene*, they, them; Akkadian.  
*Ni*, reverence, Akkadian.  
*Nine*, Nina, a goddess.  
*No*, not; Akkadian *nu*. Turkish *ne*, nor.  
*Nu*, *nun*, king, lord. Akkadian *nu*, *nun*.  
*Num*, wolf, Akkadian.  
*Num*, engrave, Akkadian.

*Pal*, division. Akkadian *pal*, Turkish *pal*, cleave.  
*Pal*, axe. Akkadian *pal*, Turkish *beil*.  
*Pal*, time, year. Akkadian *pal*, Turkish *beiyil*, year.  
*Pal*, schism, revolt; *palpi*, rebel. From *pal*, to divide.  
*Pa*, flower, leaf. Akkadian *pa*, *ḫam*.  
*Pam*, *pa*, record or proclamation; Akkadian.  
*Pu*, *bu*, bud. Akkadian *pu*.  
*Pu*, long; *puda*, far. Akkadian *pu*, *puda*.

*Ra*, towards, among. Akkadian *ra*, Turkish *ara*.  
*Ra*, possession, increase, seizure, Akkadian. Hence *raaraa*, increasing, or giving possession.  
*Rab*, servant; *raba*, *rabi*, serving. Akkadian *raba*.  
*Raka*, rake, making, creating. Akkadian *rak*.  
*Rara*, raising or making approach. (See *Ra*.)  
*Re*, servant. Akkadian *ri*. Hence *rebar*, being a servant; *rebarsak*, servile state.  
*Ri*, meaning doubtful. Akkadian *ri*, bright; *ri*, rise.  
*Ride*, glorious. From *ri*, bright; *de*, going out. Hence *rideme*, glory; *rideme tekalu*, glorifying.  
*Rim*, accumulation, mound—from *ri*, to rise; Akkadian.  
*Rimkaka*, apparently "collection making"—*i.e.*, taxation.  
 From *kak*, make; *rim*, gathering: Akkadian.  
*Ro*, *rum*, point. Akkadian *rum*.  
*Ro*, *ru*, make, build. Akkadian *ru*.

- Sa*, knife.  
*Sa*, say. Akkadian *sa*, proclaim. Hence *saak*, speaker; *sasa*, causing to say.  
*Sa*, in. Akkadian *-sa*.  
*Sa*, *sab*, middle, in centre, heart; Akkadian.  
*Sa*, *za*, quiver. Akkadian *uz*.  
*Sakh*, good, upright, holy. Akkadian and Turkish *sakh*.  
*Sane*, trusting, believing. Minyan *zan*, Turkish *san*, to believe, consider, trust. Hence *sanesane*, causing to trust.  
*Sar*, ruler. Akkadian *sar*. Hence *sara*, ruling.  
*Se*, giving, favourable; Akkadian *se*, *sem*. Turkish *sev*, favour.  
*Shi*, *shik*, horn. Akkadian *shi*.  
*Shi*, set up high. Akkadian *shi*, *shig* (see preceding). Hence *shisashisa*, causes to set up.  
*Shime*, probably "hostile." Akkadian *shi*.  
*Si*, see. Akkadian and old Medic *si*, see.  
*Si*, place. Akkadian *si*, country; old Medic *sia*, place.  
*Si*, before, in sight of—a suffix, as in Minyan.  
*Si*, *sig*, tooth. Akkadian *shi*.  
*Si*, *sig*, full. Akkadian *sig*.  
*Sip*, province. From *si*, place, *ip*, district, as in Minyan.  
*Sir*, snake. Akkadian *sir*.  
*Sir*, to order. Akkadian *sira* (see *Sar*), Medic *sera*.  
*Sir* (or *su*), a possession, Akkadian.  
*Sis*, help, Akkadian.  
*Su*, hand, power. Akkadian *su*.  
*Sue*, people. Turkish *soi*, race.  
*Sulu*, commanding. Akkadian *sul*, chief.  
*Sume*, power. Hence *sume sume*, overpowering. Akkadian *sum*, *zum*, to overthrow.
- Ta*, beat. Akkadian *da*, drive.  
*Ta*, so. Minyan *taa*, Turkish *ta*.  
*Takh*, establish. Akkadian *takh*, Turkish *tokh*, firm.  
*Tar*, buck. Akkadian *dara*.  
*Tar*, tribe. Turkish *tar*.  
*Tar*, ruling. Akkadian *tur*, Turkish *tore*, chief.  
*Tar*, cut, cleave. Akkadian, *tar*, Turkish *tir*.  
*Targon*, *Tarkotimme*, *Tarkatimme*, *Tarkodimus*, men's names.  
*Tarmeke*, total. Akkadian *tar*, all.  
*Tas*, lion, hero; Akkadian.  
*Te*, to render, to found, to make. Akkadian *te*.  
*Te*, to worship, to establish. (Found in Elamite.)  
*Ti*, *til*, arrow; Akkadian *ti*. Turkish *it*, shoot.  
*Tik*, all; Akkadian *tik*. Turkish *tek*, complete.  
*Tik*, mound, Akkadian.

- Til*, all, Akkadian. Hence *tillu*, completed.  
*Til*, living, Akkadian. Turkish *tıl*, live.  
*Tim*, *dim*, region. Akkadian *tim*.  
*Tim*, bond, Akkadian *tim*; Turkish *tem*, enclose. Hence *timpiven*, obligation.  
*Times*, a form, likeness. See *Dim*, as, like.  
*Tin*, life. Akkadian and Turkish *tin*.  
*To*, *tuk*, take. Akkadian *tu*, *tuk*.  
*Tu*, down. Akkadian *tu*.  
*Tu*, *tum*, make. Akkadian *tu*, *du*.  
*Tul*, mound, heap; Akkadian.  
*Tum*, protection, Akkadian. Hence *tumlu*, protecting; *tum-da*, protection.  
*Tur*, son, Akkadian. Turkish *torüo*, to be born.
- U*, I. Minyan *u*, Old Medic *u*, *hu*.  
*U*, herb. Akkadian *u*.  
*Ub*, apparently "hollow," Akkadian.  
*Ubba*, *ubbi*, which, whom. Old Medic *appo*, whom.  
*Ud*, day, when, since. Akkadian *ud*, Mongol *ude*, day.  
*Uku*, (possibly) people, as in Akkadian.  
*Ul*, to be (future prefix). Turkish *ol*, Minyan *ul*.  
*Un*, *u*, lord. Akkadian *u*, *un*.  
*Un*, ten. Akkadian *uvun*, Turkish *on*.  
*Unu*, city. Akkadian *unu*. Turkish *unne*, house.  
*Ur* (perhaps to be read *al*), go back.  
*Uru*, city. Akkadian *uru*. Turkish *auru*, camp.  
*Us*, phallus, monument, male. Akkadian *us*.  
*Us*, man. Akkadian *us*, man, servant.
- Ve*, *ven*, to be. See *Me*, *Men*.  
*Vo*, regarding. Akkadian and Minyan *vu* or *mu*.
- Zab*, host. Akkadian *zab*.  
*Zar*, store, granary, Akkadian.  
*Za*, *sa*, four. Akkadian *za*, *sa*; Yenessic *sheya*.  
*Zo*, thee, thou, thy. Akkadian *zu*.  
*Zobumape*, *Zomoepi*, name of a king.  
*Zoes*, *zoa*, knowing. Akkadian *zu*, know.  
*Zomalu*, *Zomelu*, *Zomolaclu*, *Zomumelu*, names of a king or kings.  
*Zo-mus* or *zo-um*, apparently, "record of information."  
*Zu*, a pyramid, as shown by the Akkadian sign.

In this list of 250 words about 60 of the sounds are taken from the Cypriote syllables, and are independent



of the cuneiform sounds. The sounds of the ideograms, or emblems for a whole word, are of no importance. The words of more than one syllable serve to confirm the readings of the monosyllables, and the meaning is supported by the existing speech of the Turks of Central Asia, and by Medic (the third language of the Behistun texts), which are both quite independent of Akkadian, but agree with the sounds of the latter, as given by Rawlinson, by Lenormant, and by more recent German specialists, such as Delitzsch and Hommel, from works cited in the list of authorities.

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PLATE I.—MER'ASH TEXTS. No. 1. From cast in British Museum.



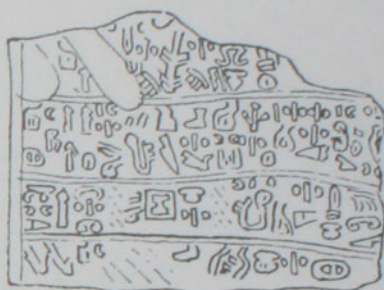


PLATE II.—MER'ASH TEXTS. No. 2. From copy by D. G. Hogarth.



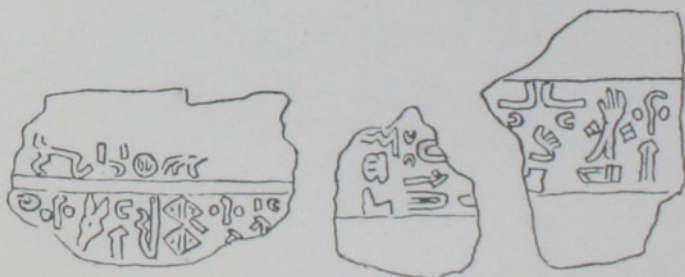


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MER'ASH TEXTS. Nos. 3 and 4. *From copies by O. Puchstein.*



MER'ASH FRAGMENTS. *From copies by O. Puchstein.*







PLATE IV.—CARCHEMISH TEXTS, No. 1. From the Original.



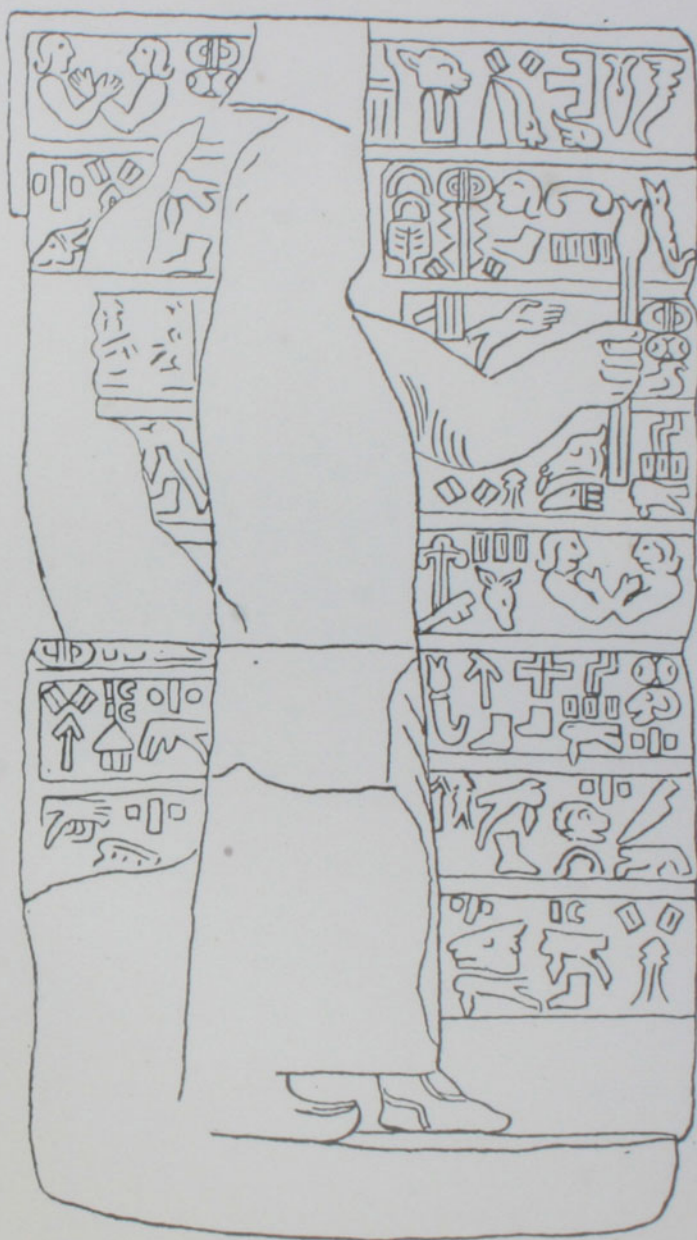


PLATE V.—CARCHEMISH TEXTS. No. 2. *From the Original.*



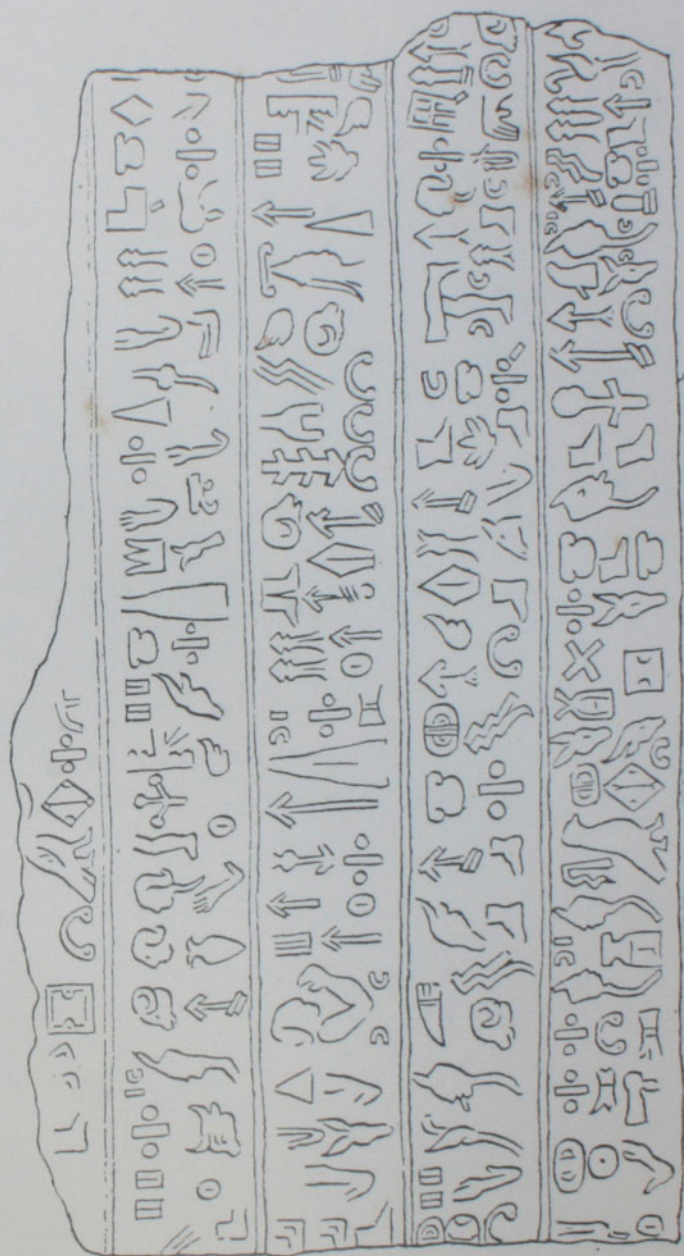


PLATE VI.—CARCHEMISH TEXTS. No. 3. From the Original.



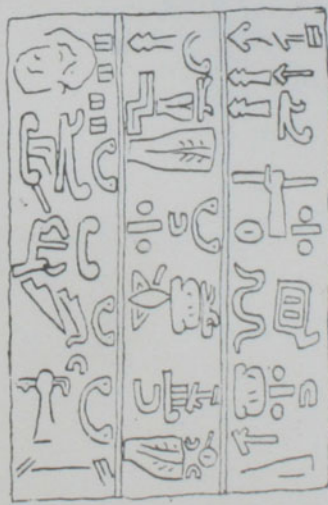


PLATE VII.—CARCHEMISH TEXTS, Nos. 4, 5, and Fragments. *From the Originals.*

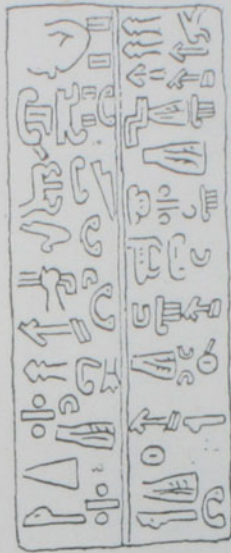
No. 5.







No. 1.



No. 3.



No. 2.



No. 4.



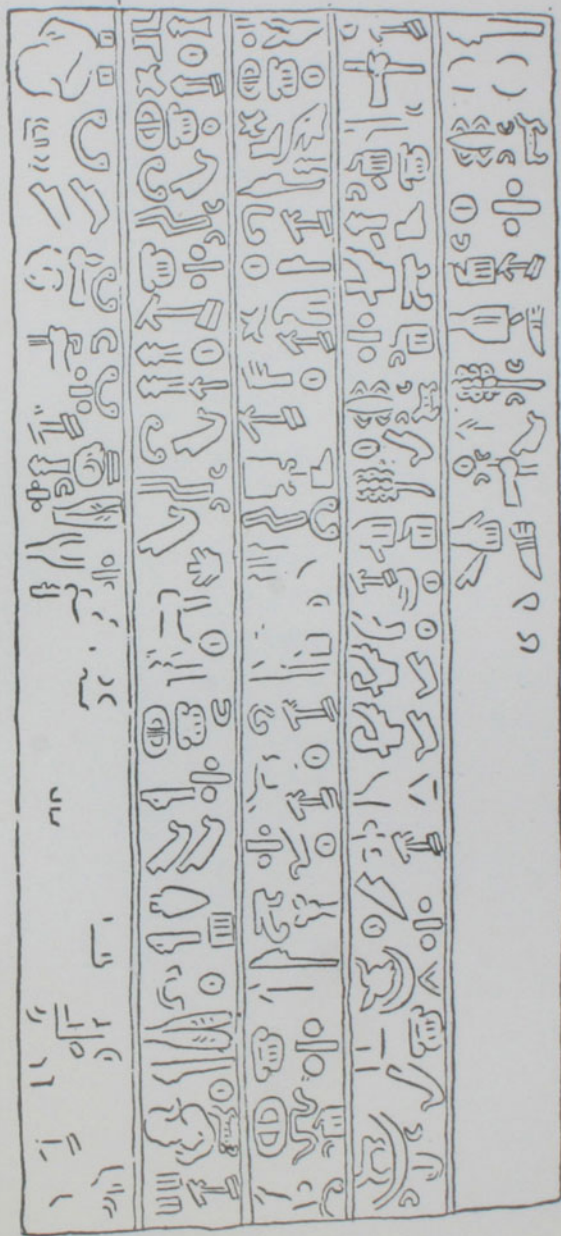


PLATE IX.—HAMATH STONES, No. 5. From the cast by Dr. Wright.



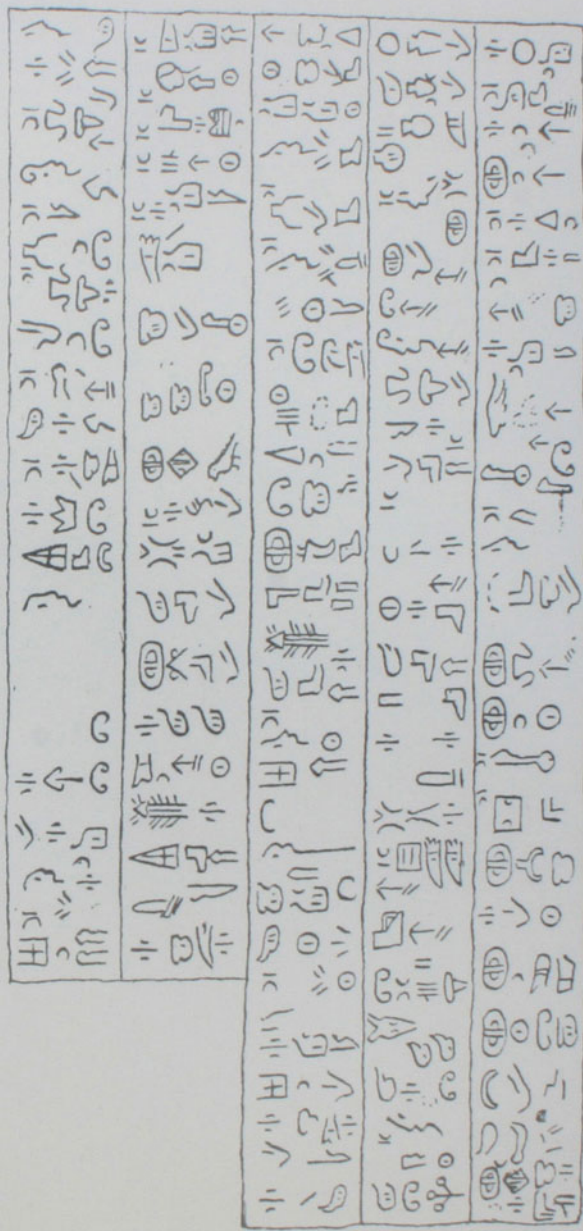
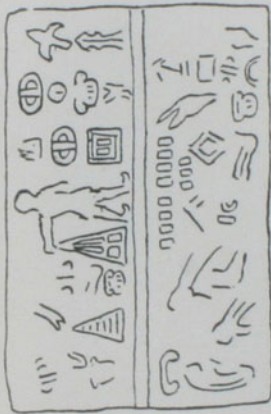
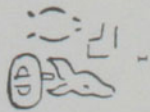


PLATE X.—BULGAR MADEN. From copy by D. G. Hogarth.





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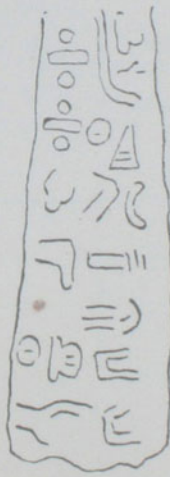


4

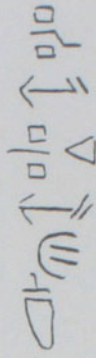
PLATE XI.—1. LASHI-KAIA. 2. ALEPPO. 3. SIPYLOS. 4. KARABEL. 5 and 6. IBREZ. From copies.



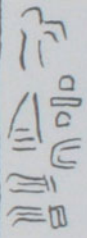




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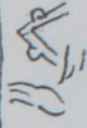
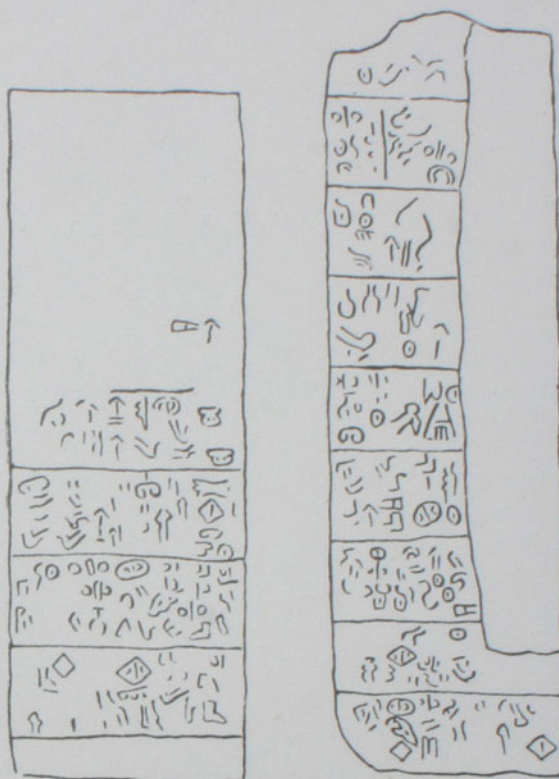
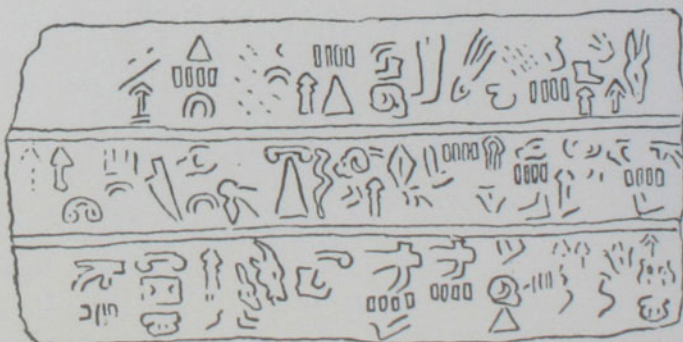


PLATE XII.—I. IBREEZ. 2 and 3. ARSLAN TEPE. From copies by D. G. Hogarth.



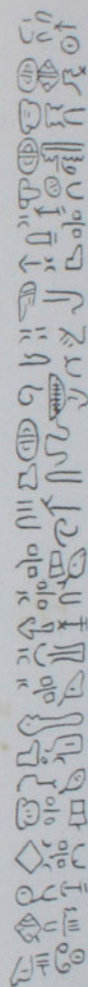


SAMOSATA.



KOLUTU YAILA.





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PLATE XIV.—1. BOR. From copy by D. G. Hogarth.  
 2. BILINGUAL BOSS OF TARKOTIMME.  
 3. BABYLONIAN BOWL. From the Original.



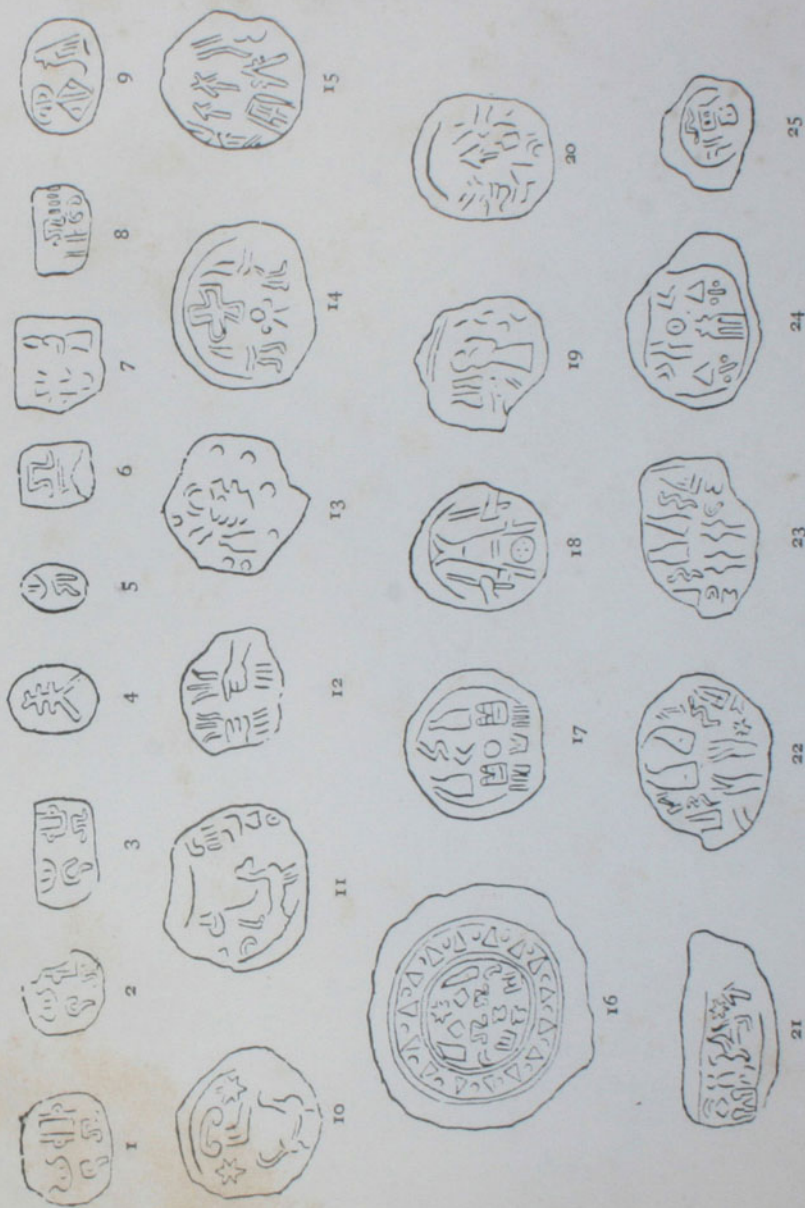


PLATE XV.—SEALS. 1 TO 9, LAYARD'S SEALS FROM NINEVEH. See Wright's 'Empire of the Hittites,'  
 10 TO 25, SCHLUMBERGER'S SEALS. From photographs in the same work.







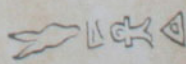
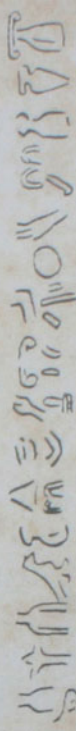
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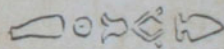
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PLATE XVI.—SEALS. 26, 27. SEALS FROM TELL BASHAR. Copied by D. G. Hogarth.  
 28. SEAL FROM CULTE DE MITHRA. Copied from Wright's 'Empire of the Hittites.'  
 29. THE HITTITE EMBLEMS ON THE ASHMOLEAN BILINGUAL SEAL OF ABD ISKHARA.  
 30. HITTITE EMBLEMS ON LACHISH SEAL. From the Original.  
 31. SEAL FROM LYCAONIA. From Perrot's 'Hist. of Art.'  
 32. EMBLEMS ROUND A SEAL. From the same work.









