

The Decipherment of the Hittite Hieroglyphic Texts

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THERE are the same recognized rules for the decipherment of an unknown script as there are for that of an ordinary cipher, and if they can be followed the script can be deciphered with as much ease as the cipher. Sometimes they cannot be followed, sufficient materials being absent; in this case, all we can do is to wait patiently until the materials are forthcoming.



At one time this was the case with the so-called Hittite hieroglyphic texts. But it has long ceased to be so. The materials for a scientific decipherment of them have been gradually accumulating, and verification has gone hand in hand with the determination of the value and meaning of the characters. We are no longer dependent upon a few fragmentary inscriptions, too often in so imperfect a condition as to make the forms of the characters upon them more or less uncertain.



It is now nineteen years ago since I laid my first results before the Society of Biblical Archaeology (*Proceedings*, 1903). From that time forward I have contributed to the *Proceedings* of the Society a series of papers on the same subject, correcting, improving, and adding to my first results, as fresh texts were discovered and misreadings amended. But it was, I know, difficult for other scholars to follow what was little more than a record of the private work of the laboratory in which the main facts were necessarily obscured by a mass of details. And the restrictions upon the use of the Hittite type increased the difficulty.

With the publication by Messrs. Hogarth, Woolley, and Lawrence of the inscriptions discovered at Carchemish, the chief hindrances to successful progress in decipherment have

been removed. At last we have a number of inscriptions of the same locality and age which are complete, and in which, above all, the forms of the characters admit of no doubt. The volume containing them was published just before the war, and I had time only to make a preliminary examination of its contents and contribute a short paper on some of the results to the *PSBA.*, 1915. Owing to absence from England I had to put the subject aside during the war, and it is only recently that I have been able to take it up again. What I now propose to do is to sum up my previous laboratory work and add a second chapter to my first paper. For the less important details and references those who are interested in the subject must consult my earlier articles. Where no proof is given of the value or meaning assigned to a character, it is in them that the evidence will be found.


METHOD OF DECIPHERMENT

The starting-point of decipherment has necessarily been the bilingual seal of Tarkondêmos. This, however, was not a simple matter, as the progress of my decipherment has shown that the inscription is not in two languages as we should have expected, but merely in two different scripts, the cuneiform representing the same language as the hieroglyphic, like the Cappadocian inscription of Kuaruwan, king of the Eneti, now in the Louvre. The seal, however, settled the signification of the ideographs for "king", "country", and "city", as well as the phonetic values of the character *me* and the ideographs *tarku* and *dime* or *time*. The rock-reliefs of Yasili Kaia had already given me the ideograph for "deity", and the proper names preserved in the Egyptian and cuneiform inscriptions made it clear that the nominative of the noun ended in *-s*, which consequently was the value of the sign  (*TSBA.*, 1881). Subsequently I pointed out in the *Academy* that the Bowl inscription in the British Museum showed that  must represent the accusative suffix which the analogy of the surrounding languages would suggest had the value of

-n, while Dr. Peiser discovered that C was used to divide words, though it was employed very irregularly. Then came the brilliant suggestion of M. Six that a certain group of characters occurring in the Carchemish inscriptions, where it is accompanied by the determinative of "country" or "city", the third character being *me*, must represent the name of Carchemish—a suggestion which has been abundantly verified by subsequent discovery. As in some cases the character following *me* is , which at Mer'ash takes the place of  in the nominative of a noun, I adopted the suggestion of M. Six and made it the basis of my future work.

It soon became evident that offo and || must be vowels, as they could be inserted or omitted freely in the same words. Since the second one follows *me* in the name of *Carchemish*, it was clear that it had the value of *i* or *e*, while other indications made it clear that the first character was *a*.

Then came the discovery of the name of Tyana in the Bor (Tyana) inscription, in which the values of *n* and *a* were already known. Since C and L frequently interchange with S , which I subsequently found to represent the word *uana*, *uan*, *in*, as well as the simple letter *n*, it was plain that the title of king of *Tyana*, to which the determinative of "capital-city" was attached, and the last five letters of which could now be read, must be *Tu(a)-a-n-a-n-s*. This gave the value of the first character, which depicts the body of a chariot.

Meanwhile, the interchange of *me* with the pot () and in certain cases with the foot, furnished a clue to the values of these characters, as well as of the character which denotes a city and its correlative D (*mia*, *mi*, "a place"). I was now in a position to read the several forms of the name of Hamath, Assyrian and Egyptian *Amatu*, *Amitu*, occurring in the texts from Hamath, and thus fix the values of some more characters. I was also able to detect the name of

Mer'ash (Ass. Markhaši) in the inscriptions from that district, though unfortunately I went wrong in what I believed to be one form of it, and imagined what is really a patronymic in *-si* to be a variant of the name.

The variant forms of the name of Carchemish, to which the publication of the recently discovered texts has contributed, together with the interchange of characters in words and grammatical forms, more especially the nom. sing., largely increased my syllabary. At the same time ideographs and determinatives were co-ordinated and explained, and the objects represented by the characters more or less determined.

There was one name, however, of frequent occurrence which I could read only conjecturally. This was the name of the chief deity of Carchemish, after whom also the people of the district were named. The name consisted of two characters, the second of which was *mi* (or *wi*). The first character formed the first element in the name of a country with which the Carchemish rulers were in close connexion and which forms part of the titles of the kings of Tyana, the second element in this latter name being the character which I read *gha*, or, as I now know, *kuan*, *kan*. Other reasons which will be found in my original article combined to lead me to the conjecture that the unknown character had the value of *khal*, the country over which the kings of Tyana ruled being that of the *Khalkuan* or "Cilicians", while the name of the deity was *Khalmi-s*, which reappears in that of Aleppo, the Assyrian *Khalma-n*, the derivative *Khalmi-mi-s*, or, rather, *Khalbi-bis*, "he of *Khalmis*" or "*Khalbis*",¹

¹ *Khalbis*, I believe, was the older form of *Khêbê*, *Khubis*, "the queen of heaven" and goddess of Aleppo, whose name occurs so frequently at Boghaz Keui. *Khubis-na*, "the land of *Khubis*," the Greek *Kybis-tra*, took its name from her. She must be the original of the Lydo-Phrygian *Kybelê*, one of whose names, according to Hesychius, was *Κόμβη*, while another was *Κυβήβη*, corresponding with the *Khalbaba* of *Ordek-burnu*. *Κύβεβις* signified one of the eunuch-priests of the goddess, the *Κυβηηκοί* being "Korybantés", whence came *Κυβήκη* as a title of the deity. *Κύβεβις* is the *Kombabos* of Lucian's "De Dea Syria", who was the eunuch-priest and chief architect of the goddess of Hierapolis or Membij, the later Carchemish. In the epic of Gilgames *Kombabos* appears as *Khumbaba*.

being probably represented by the Akhlamê of the Assyrian inscriptions who are placed by Tiglath-pileser I in the neighbourhood of Carchemish. Subsequently I found that Holwân is still the name of the village immediately to the west of Jerablus, and that in the Ordek-burnu inscription *Khal-bi-bi* is written *חלבבי*.¹ The legendary Babylonian king Lugal-marda is said to have conquered Khalma in Northern Syria (Poebel, *Historical Texts*, p. 117).

If the values I assigned to the characters were correct, further study and the addition of fresh materials would verify them. And this in the majority of instances has been the case. Characters to which I had been led independently to give the same phonetic values have time after time been found to interchange with one another as new materials came to hand, e.g. *ku-TE-an-na* (M. ii, 7) and *ku-TE-ná* (M. xxxii, 5, corrected from the squeeze), *Ná-gu(s)-is-is* (M. xvi, A) and *Na-a-gu(s)-KUAN-wi-si* (C. A 11, a1), *Na-a-gu-KUAN-wi-si* (C. A 11, b1).² The correct local names, moreover, have resulted from my decipherment, the names belonging to the localities in which

¹ The name of the goddess is Khalmassuttum in the Boghaz Keui tablets, in which she is identified with Ilbaba (K.A.B. iv, No. 9, *Ob.*: 17). In a Liver-pool tablet (*Annals of Archaeology*, iii, 3, pl. xxviii, 7, 3) the name is spelt Khal-ma-su-tum. The form has been Semitized from Khalmas. The name of the goddess is ideographically written DUKH-SUM-SAR, "fertility—destroyed—renew," an appropriate title for the Earth-goddess. For the reading Ilbaba instead of ZA-MA-MA see Langdon, *JRAS.*, October, 1920, p. 515. Ilba-ba = Khalma-s, Khal-was. In some passages of the hieroglyphic texts we have to read Khubis instead of Khalmis. Thus an unpublished inscription seems to make it clear that in C. A 11, a4, 6, the reading is KU-*khu* (rather than *khal*)-*mis-k-is*, i.e. *khumis-kus*, "chief mason" or "architect". (It may be noted that Khalmi or Khalbi would appear as Akhlam in Assyrian, and that just as Tiglath-pileser I states that the army of Carchemish consisted of "Hittites and Kaskians", so Shalmaneser I states (*Keilschrifttexte aus Assur*, 16, p. 20) that the army of Khali-galbat consisted of "Hittites and Akhlamê".)

² We know from the way in which the name of Merash is written in M. xxi, 2, that KUAN-*gu(s)-is* and KUAN-*isi* are intended to represent the Assyrian *has, gas*; hence the name in the text must have been pronounced *Náhas*, or, rather, *Nághuwis*. This must be the Nukhassi of the cuneiform texts, Anuqas probably in Egyptian, which lay between Melitene and Carchemish. The form of the word in cuneiform makes it probable that the first syllable should be transcribed *nua* rather than *ná*.

the inscriptions have been found being met with in them. Thus we have Carchemish at Carchemish, Hamath at Hamath, Unqi at Kirsh-oghlu. Unqi was the capital of the kingdom of the Khattinâ according to the Assyrian texts, and in the Kirsh-oghlu inscription we have not only *Un-qi*, but also *Khat-ti-na*.¹ It is the same with the personal names; the king of the Emir Ghazi inscriptions, for example, is Mamias, a typical name of the district which appears in the Greek inscriptions as *Μαμίας* and *Μάμεις*. So, too, we have names which correspond with those found in the cuneiform texts, like Us-Khatti, Tuates, or Masnuan, Khalmuan from Masnis, the Sun-god, and Khalmis, exhibiting the same formation as *Τίρχων*, *Τάρκων*, or the cuneiform Kuaruwan from the god Kueras (in the Cappadocian inscription, now in the Louvre: *Kuaruwan SARRU Wantuwas* "Kuaruwan king of the Eneti").

Equally cogent is the fact that the grammatical forms yielded by my decipherment are always consistent and agree with those of the other Asianic languages which have been revealed by the cuneiform texts. The nom. sing. in *-s*, the acc. in *-n*, the plur. in *-s*, the poss. pron. *mis*, the part. in *-s*, the 1st pers. of the aorist in *-mi* and *wi(-bi)*, and the 3rd pers. in *-ti*, *-tu*, are all common to the neighbouring languages of Asia Minor. The sense, furthermore, of the inscriptions is that which we should expect. Take, for instance, the inscription discovered in 1906 on the base of a column at Nigda, which reads according to my system of decipherment: *yi-is-a agu-un es-tu a-na-š i-us-i-ti amiskus*,

¹ It was the hieroglyphic spelling in the Kirsh-oghlu inscription which originally led me to correct the false reading "Patinâ" for "Khattinâ" in the Assyrian texts, which up to that time had misled the Assyriologists. A re-examination of Mr. Anderson's squeeze of the Kara-burna inscription (M. xlvi) has cleared up completely the reading of the last line. It is D.P. *mi-MI-mi-a NUWI Twa-uan-a-na-i-yi UANA MISNA-si-[i] Khat-tu-na-is-mi atti-š KAN(?)wi a-na Mis-na-i | MISNA kuan-a-KUANA-na*, "for the people of the Tyanian king, son of the Sun-god of the land of the Hittites; I the prince have erected to the lord Sun-god his (or this) sanctuary."

“ This stone the king has erected in the temple (being) chief swordsman ” (M. liii) ; or the inscription on the base of the great statue of the god Agusimis at Carchemish, which begins : *yi-[a] uana-mi-a¹ A-gu-(gu)s-mi uan-na-wi yimes Masni-s ku-wi*, “ This divine place of Agusimis the god I the Sun-god have made ” (C. A 4, *d*). It will be noticed that the word “ god ” follows the name of the deity as it does in the Ordek-burnu inscription, and that here, as elsewhere, the king is called “ the Sun-god ”, as he is in the Hittite inscriptions of Boghaz Keui, the title being sometimes “ my Sun-god ” (*Masnis-mes*, C. A6, 1, 3), as also at Boghaz Keui.

The inscription of Ordek-burnu is a striking confirmation of my decipherment. Though written in the letters of the Aramaic alphabet, the language is not Semitic with the exception of the word “ god ” and the names of the deities Shemesh and Rekeb-el. Unfortunately, the greater part of the inscription is destroyed ; of what remains, however, the line describing the erection of the monument is preserved in full. This reads :—


ייהני אשם כין מתדא נב שמש אלה

This (with the exception of the last two words) is an exact transcription of my reading of similar hieroglyphic texts, which would be : *yisi-ani(n) es-mi kvin(is) my-tua nawi(s) Masni(s) uana(s)*, “ This stone I have erected, (being) high-priest of this country (and) king, the Sun-god.” Even the order of words is the same as my decipherment makes it in the hieroglyphic texts. As I have observed above, the name of the country, to which the erector of the monument belonged, is written חלבבה, which occupies the same place as *Khalmimi(s)*, or rather *Khalwiwi(s)*,² does in the texts of

¹ The phonetic value of the ideograph for “ god ”, which is usually followed by the complement *na* and *ni*, is settled by the Emir Ghazi inscriptions B 4 and C 2, where in the duplicate passage it is replaced by the character *uan*. On a coin of Tarsus the word appears as *Ana*.

² The interchange of *m* and *w* in Assyro-Babylonian was due to Asianic influence. The pot (𐎎) was more usually *wi* or *bi* than *mi* ; when *mi* was intended, 𐎎 or some other character denoting *mi* was usually attached to it.






Carchemish. The god Rekeb-el, which also occurs in the inscription, corresponds with the *Tuana* of the hieroglyphs, *tua-uana* being "chariot-god", while נב-כין הכפּהּהּ in ll. 4, 5 is the hieroglyphic *nawi-kuani(s) akumia* (or *akuwia*), "royal high-priest of the sanctuary" (literally "hinder-place"). It may be noted that the mosque of El-Qiqân at Aleppo, into the wall of which a Hittite inscription has been built, stands on a hill which bears the non-Semitic name of Akibi.

In 1914 I pointed out that the character , the origin of which I did not recognize at the time, must, if my system of decipherment were correct, have the value of *gus*. Since then I have discovered that it represents the horn of an ox mounted on a pole. Since then, also, the cuneiform tablets of Boghaz Keui have been published, from which we learn that at the entrance to a Hittite temple or city a pole was erected with an ox-horn on the top of it, which was called GIS *gusias* (from the Sumerian GIS-GÛ(D)-ŠÍ "wood+ox+horn")¹; the erection of a similar *gusias* in front of a temple is repeatedly mentioned in the hieroglyphic texts (e.g. C. A11, c5, *isy Tarku-wias-u-s Karka-mi-s-mi-i kimmia timia gusi-a-an ku-i*, "supreme over the land of Tarkus in the country of Karkamish a gate-way (and) consecrated place (i.e. altar) of the ox-horn-pole I have built").

It is more than a coincidence that in the Bulgar-Maden inscription (M. xxxii, 4) the object following the picture of the pouring out of a libation reads *wi-ni-n*, i.e. *oïvov*. As is well known, *oïvov*, the Heb. *yayin*, Ass. *înu* (*winis* in Boghaz-Keui Hittite), has no Indo-European or Semitic etymology, and was a word borrowed from Asia Minor. Similarly, the "vine-tree", which was planted by a king of

¹ *Keilschrifttexte aus Boghazköi*, i, 11, Rev. 29-32, where "the AN-ZA-QAR and GIS-*gusias* in the city of Khatti" are mentioned. The AN-ZA-QAR ("god+stone+tie") was a pole or column of stone to which a sacred stone was attached, and the two cult-symbols are similarly associated together in the Carchemish texts (e.g. C. A6, 8; M. xi, 5). The first of them seems to have been a Sun-pillar (M. lii, 5).

Carchemish (M. x, 2, *is-is uan* D.P. *Aram-me*, "who has raised the vine of the Grape-god"), after the fashion of the Vannic kings, was called *uan* or *wina*, its phonetic value in the name of the Eneti (M. xxxiii, 3).¹

Equally conclusive, from a scientific point of view, is the translation (given above) which at once offers itself of the inscription on the base of a column from Nigda: *yi-is-a ani-in a-na-s i-us-i-ti A-mi-s-ku-s*, "This stone the king has erected, (being) chief prophet" (M. liii). The last word is written *A-mis-ku-is* in C. A 3, a 4, with a long tongue protruding from the mouth of the determinative A "man". It is, therefore, interesting that in the Boghaz Keui tablets the tongue of the inspired priest is said to be "protruded" before the deliverance of an oracle.² I will conclude with a verification which is especially cogent. Among the earliest results of my decipherment was the fact that , the numeral 3, had the value *kas*, and , the numeral 4, had the value *me*. Subsequently it resulted in showing that  is *ku* or *kê*,  is and , the bull's head, *mi*. Now comes an inscription from Carchemish of "Imuis³ priest of Khalmis, my Sun-god", in which the numeral 3 is glossed *kê-is* and the numeral 4 is glossed *mi* (C. A6, 6).




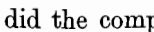
It is natural that I should have made many mistakes in my task of decipherment and assigned erroneous values to several characters. The nature of our materials made this inevitable. They were few in number, imperfect, mutilated, and often difficult to read. Characters in relief are especially liable to defacement. The inscriptions, moreover, belonged to different countries and ages, and might, therefore, be expected


¹ The name of the god Aramme, Aramis in the hieroglyphs, is represented by the picture of a bunch of grapes.






² An inscription from Assur translated by Ebeling shows that in Assyria also a similar belief prevailed. Offerings were placed before an image of "The Mouth and Tongue" of Istar, and the priest then implored it to intercede with the goddess (Ebeling, *Quellen zur Kenntnis der babylonischen Religion*, ii, pp. 2, 47).

³ Or Yamuis. It is probably the Greek Imois.

to exhibit variations in dialect, particularly as regards the vowels. Some of them were in a much more cursive hand than others, and my identifications of the forms were not always correct. Some, too, were carelessly written, and the example of the Egyptian monuments proves how readily hieroglyphic signs are miscopied by an ignorant engraver. An illustration of this is to be found in the very badly written inscription of Carchemish (C. A 2, 3), where the *ka* of "Carchemish" is omitted in one instance and the name of the king is written with the character *tua* instead of the somewhat similar *ná*, which we find in more carefully engraved texts. If all the texts were as well engraved as C. A 6, a large part of the decipherer's difficulties would be removed.

With the increase of better preserved inscriptions from the same locality, Carchemish, some of them still unpublished, I have been able to correct former errors and make new discoveries of importance. First of all, the name of the national god of the Kaskian Hittites (as I will henceforth call them) was not Sandes, but Tarkus. The symbol of the deity, , like the Assyrian  and , represented Tarkus, Sandes, Hadad, Rimmon, Tessub, etc., according to the district in which it was employed, and so probably did the compound ideograph  *Tar(ku)-ku*, originally intended to indicate the pronunciation *Tarku(s)*, but in later days regarded as a single whole, like similar compound ideographs in Assyrian. Hence the Kaskians or their princes called themselves, not "Sandians", but "Tarkuians", and the initial title of the Mer'ash kings must be read *Tarku-di-mi-ti-mí-i-is-s*, "he of the land of Tarkondemos." The suffix *-ti* denotes "belonging to", as in *Tua-tes*, "a charioteer," *Ni-mi-tis*, *Mi-ni-tis*, and *Mi-nissi-tis*, "belonging to the River-land."

"The River-land," the Naharaim of the Semites, is another discovery. The word *ni* denoted "water" in Kaskian; hence the value *ni* attached to its picture . *Nis* was

“river”, usually distinguished in writing from *ni* by a slight change in the form of the character , giving it the appearance of a stream rather than of flowing water. Consequently in M. iv, A, B, the reading is *mi-nis-ti-nas* and *mi-nis-nas* rather than *mi-ni*, “of the land of the rivers.” One of the royal titles is that of “lord of the nine rivers”, e.g. M. x, 4, 6, *nis-IX-ana* (followed in line 6 by *Khal-kuan-a Mi-ta-a-kan-is*, “of Cilicia, belonging to the land of Mita,” or Midas).¹ In M. xxi, 4, the place of the numeral is taken by the word *kuan-mi-[a]* and *kuan-mis* (preceded by *NI-S*), which is probably to be read *khammia*, the word for “river” in the first example being replaced by the ideograph of the River-goddess, which, as we have long known from M. vi, 2, is to be read *Na-na* or *Nina*, the *Nana* of the Greeks who described her as the daughter of the *Sangarios*. In M. xxi, 4, the ideograph is glossed by the picture of a reservoir  with the phonetic complement *-nas*, and in C. A4, 3, the latter is used to represent the syllable *nis* in the word *Tua-uan-ni--s-mia*, “the city of Tyana.” On the other hand, in the sense of “water-basin”  is represented by -*a-is-mi-i-yas* in M. i, 3, and simply *a-is-my-a-is* in M. xxxiv, C. In C. A 11, c 3, reference is made to “the River Khulani” (*Ni-is Khul-a-n-i-is*), the *Khulana* of the *Boghaz Keui* texts, which Dr. Forrer identifies with the classical *Iris*, the whole passage being: D.P. *Tarku-s* D.P. *Kar-ka-mi-s* D.P. *Khal-khalmi-mi-mi-s-mia atus amy kuan-ana-a-na-s-mia* D.P. *Tarku-s NI-is-Khul-a-n-i-is-mia Ni-my-mia Mi-ta-si un-ni-us*, “Tarkus-Carchemish of *Khalbib*, the lord of the city of

¹ Besides “the 9 rivers” we find also “the 9 states” and “kings” (M. xviii, B5, etc.), “the 9 sanctuaries” and “the 9 gods” (M. x, 3, 4). There were also the 9 sacred horses (*yuami*, M. xlvi, 2). In a Cappadocian tablet (*Cuneiform Texts from Cappadocian Tablets in the British Museum*, 113644, 4) mention is made of *Khana-Narim*, “*Khana* of the River” or “Rivers”. If it is “Rivers” it will be the name of a country, thus distinguished from *Khani-galbat* or *Melitene*; otherwise it would be the name of a city. Besides *nis* “water” *tutis* also meant “river”.

Hierapolis, Tarkus the god of the sons of Mita of the River-land of the River Khulanis."¹

Nina or Nana, "the River-born" goddess, was naturally the goddess of the great river-fortress Carchemish.² Hence, in the Carchemish inscriptions, the people of that city are repeatedly called *Ninatis*, *Nanatis*, "Niretians." This explains the name given by Ammianus Marcellinus to Carchemish, Ninus Vetus, "the old Ninus," which has been the subject of so much controversy. The name of Nina, Nana, as I pointed out in the *PSBA.*, January, 1915, p. 10, interchanges with the head of a horse, to which the phonetic complement *ana* (the three drops of lead or silver) is sometimes attached (e.g. C. A11, b 6). We are reminded of the kelpie or river-horse of the Highlands, as well as the hippocampus of the Greeks. In the Hamath inscription M. vi, 2, the "swordsmen of the people of Nana" (D.P. *Na-NANA-na-yis-mia*) mean the swordsmen of Carchemish. As we learn from the Carchemish texts, the consecrated "swordsmen" or "dirk-bearers" of Attys distinguished the religious cult of Carchemish, whose king accordingly bore the special title of "the Swordsman of Carchemish", just as the ruler of Melia (Malatiyeh) bore the distinguishing title of Akuanas or Akuana-nas, "Arch-priest" (in which I see the Phrygian title *akena-no-lavos*). Thus, at Gurun (Olmstead, *Travels and Studies*, xvi), ...*nais*, "the processionist of Khattu, Ma and the Sun-god, the priest of Khattu and supreme king," calls himself "Arch-priest of Melid, Swordsman of Carchemish, Arch-priestly [ruler] of the River-land (?), king of Oinoanda". At Emir-Ghazi (M. I, 1, 5) Mamoas is entitled "the Swordsman of the goddess Amma", or "Ma", in whose image on Mount Sipylus the Greeks saw that of the weeping Niobê.

But to return to *nis*, "a river." We find it again among the

¹ Cf. M. i, 3, D.P. *a-(i)s-mi-i-us khul-i-nas*, "basins of green," i.e. "spring water?" In the Boghaz Keui tablets the Khulana is interpreted the "Green" river.

² *Nana-AMEL-is*, "The Man of Nana," is the name of a son of the king of Carchemish in a Boghaz Keui text (K.A.B. iv, No. 4, *Obv.* 52, 58).

titles of King Imois (C. A6, 2), where it is written \diamond (*Nis*)-*MY-me-yu* D.A., i.e. *Nis-me-yu* "of the River-land". The name forms part of a sentence which, so far as I am able to read it, runs: *amis-wi kuan-wi* D.P. *Tarkuwis* D.P. *Aramáwis-mia* MASNI (?) -*mi-wi agussi-TE-amias-mia akuan-wi miás agu-wi uannais isi-mian agussi-TE-ana agu-i isan Nis-me-yu*-D.A. . . . -*me-mis wismiy* . . . -*ni*-D.A. . . . -*me-mis wisi-mia* MIA *Mi-š-yi*-D.A. *Mi-is-ka-yi*-D.A. *Kusy-mi-yi*-D.A. . . . -*me-wis amias*¹ *Masni-me naw*i; "I am swordsman, I am priest, a Tarkuian of Aram; in the land of the Sun-god (?) in the Northern domain (?) I have been consecrated ruler; places I have built for the gods in the highlands of the North (?) I have built a temple for the gods; I am supreme over the River-land, being supreme over the land of . . . ni in this place, supreme over this city, over the Misians, the Moschians and the Kusians, (even) the cities of my Sun-god, the king."



The Kusians, also written Kasians, occupied Northern Syria, extending westwards from Carchemish to the Gulf of Antioch, according to the Assyrian inscriptions. A letter from Nabu-sum-iddin, published by Dr. Pinches in the *PSBA.*, November, 1881, includes Karnê (the Atu Keren of the Egyptian lists), Dâna (now Dâna), Kullania (Calneh), Arpad and Ísana (now Isân) among their cities, and states that the horses exported by them bore the name of Kusâ or Kusian. "The country of Kassi" or "Kasse" or "Kaš", which has been erroneously identified with the *people* of the Kassi in Babylonia, is mentioned several times in the Tel el-Amarna tablets (Knudtzon, 76. 15, 104. 20, 116. 71) as an ally of Mitanni and the Hittites, whose territories it adjoined, and has left its name in the classical Mons Casius. At Emir-Ghazi Mamoas takes the title of "king of the land of Kusi" (*Ku-si-mi-a*), in accordance with the fact that the Kases (Byzantine Kasin) occupied the plain stretching east-

¹ The head of the ass which was usually *mias* had also the value of *anas*, *nas* (cf. Greek *ὄνος*); hence it could be used for *anas* "king".

ward from Emir Ghazi to Venata and Tyana, while another body of "Kassai" were on the frontier between Pamphylia and Isauria. In the first line of the larger Hamath inscription (M. vi, 1) the original in the Constantinople Museum reads clearly: "I am Ari(s)'atumian, chief swordsman, arch-priest of Yakhan, king of Hamath (and) the land of Kus" (*amistus akuannáwis*¹ *Ya-kuan-ná-a-na-D.A. nawis amia Ami-it-ti-mi-[a]-s Ku-is-mia- D.A.*). It is also a common title of the Carchemish kings, e.g. C. A6, 3, *Khal-kuan-an k(a)-kuan-n-i-s A-m-e-i-ME Kus-un-na akuan-ni ku-i-is at-(at)ta-mia*, "priest of the Cilicians, who has built a palace (*attamia*) for myself, the Kusian arch-priest"; C. A11, b3, *gus-mia Agu-gus-is-si-mi mi-(mi)-a-me-i-s Kus-un-ni-i-s . . . mes-wi*, "the ox-horn symbol of Agusimis I the Kusian citizen . . . have erected"; M. xi, 3, *na-wis Tuan-a-wis-mia Kus-wis*, "the king, a Kusian of Tyana."²

The Misians, who are conjoined with the Kusians and Moschians, are the Masu of the Egyptian monuments, the Misi of the Tel el-Amarna tablets (Knudtzon, 101. 4, 105. 27, 108. 38, etc.).³

One of the most important discoveries the Carchemish

¹ Perhaps we should read *akuana-nawis*, since the word is sometimes written with a second *na* or *nau* (e.g. M. xxxiii, 2). In the Asianic languages *l* and *n* so frequently take the place one of the other that I am inclined to see in *akuana-nawis* the Old Phrygian *akenano-lawos*, "High Priest." The initial *a* is the Kaskian word *a*, "man" (literally "the speaker"); the ideograph  *akuana* is a compound of the arm (*ku*), the numeral "one" (*ua*) and  *na*. Just as *ak(u)ana-nawis*, also written *ak(u)anana-nawis*, is the Phrygian *akenano-lawos*, so the Hittite *kuana-mia*, "consecrated place" or "temple", would be the Phrygian *kene-man*, "consecrated place" or "tomb".

² In a mutilated passage, *Keilschrifttexte aus Boghazköi*, iv, 17, 17 seq., we read: ". . . whatsoever matter below, at home, abroad (*mamian kuinki sapal biran khatrá*) . . . any Hittite or Arzawan (*Arzauwa*) . . . now do thou these Kusian people (*kuies kús D.P. Kusawanas*)."

³ In *Keilschrifttexte aus Boghazköi*, iv, 39, 56, the city of Mâsa is mentioned; it was in the neighbourhood of Winawanda (Oinoandos), also written Winianda (Oiniandos), the later Epiphancia, and Ussa or Issos (probably the Washash of the Egyptian texts).

inscriptions have enabled me to make is the reading of the name of the Sun-god. This is *Mias-nis*, written also *Masnis*, *Masnas*, and *Misnis*, *Misnas*. The phonetic spelling interchanges with the ideograph of the sun, to which is often attached the phonetic complements *-s-n* and *-n*. As in the cuneiform inscriptions of Boghaz Keui, the king is called "the Sun-god", and (as I have remarked above) as at Boghaz Keui he also gives himself the curious title of "my Sun-god" (e.g. C. A6, 1; in M. ii, 6, *MASN-š-ni mi-i* is "in the land of the Sun-god"). That the title was borne by other kings in the Hittite region besides those of the Hittite empire we learn from the impression of a seal on a tablet found at Boghaz Keui and published by Professor E. Meyer, "Reich und Kultur der Chetiter," p. 44. It contains two lines of cuneiform, which read: (1) *dup-sa-ar-[r]i-i-as-ma-as Khu-uz-zi-ya-us* (2) *Samsi-us Us-ta (?) - . . . -ku-wa-as*, "This is the seal of Khuzziyaus, (2) the Sun-god of Usta . . . kus" (which incidentally informs us that the name of the Sun-god in the Boghaz Keui texts is the borrowed Assyrian Samsi-us).

Masnis or Masnas is evidently the Lydian Masnês, Masanês, found on two coins of Sardes (Head, *Catalogue of Coins in the British Museum, Lydia*, pp. cxi seq.). One, of the time of Alexander Severus, represents two figures with clubs, one of whom holds out a herb, and with the names Masnês and Tylos attached to them. The second, of the time of Gordian III, represents a warrior striking a huge serpent with a club, and has the name of Masanês written over him. The reference is clearly to the Lydian myth quoted by Pliny (N.H. xxv, 14) and Nonnus (*Dion.* xxv, 451-551), from Xanthus how the hero Tylos was restored to life by a herb called Balis after having been bitten by a serpent, which was subsequently killed by Da-masen, son of Gê. A similar story has turned up among the Boghaz Keui tablets; here the serpent is named Illuyankas, who was slain by the god and his son (*Keilschrifttexte aus Boghazköi*, iii, No. 7). Masnês becomes Mannês, Manês, as well as Massês, by assimilation of

s to n and n to s; see Wilamowitz-Möllendorf, *Hermes* 34, p. 222. Mesna-bö and Mesna-wö are names found in the Karian inscriptions.¹

The correct reading of the word for "priest", *kuanis*, I owe to Dr. Cowley (see his *Hittites*, p. 63). The ram's head and horn, however, are not n, as he suggests, but *kuan*, *kuan*, *kan*, though in combination with other characters they could be used to express simply *ku*, *ka*, and *kha*. *Kuan* is evidently the Karian κῶν (Tzetzes, *Lykophron*, 644), connected with the Greek κῶας and κῶδιον. Another Kaskian word which has its analogue in the Karian glosses is *gus*, *gusi(s)*, "a stone," the Karian γίσσα (Steph. Byz., s.v. *Μονογίσσα*). The name of the city over which the Kölitolu-Yaila king claims rule (M. xxxv, 1, 3) now becomes intelligible. It is GUA-ku-(ku)ana, that is, Kuana or Ikonion. Kölitolu-Yaila was, in fact, in the district of Ikonion.²

The native spelling of the name of Ikonion, according to an inscription discovered there by Sir W. M. Ramsay, was Κῶαῖα. This corresponds very closely with the Kaskian *kuan(is)*, which is the same word as *καυειν* "priest" in the Greek Lydian inscriptions and *gaenas* "priest" in Boghaz Keui Hittite.³ The Hebrew *kohen*, which has no Semitic root (the Arabic *kahin* being borrowed from it), is a loan-word from "the sons of Heth", and we find the same word in the ΚΟΑΛΛΑΕΙΝ of the MSS. of Hesychius, which must be read *κοαειν*, and is said to be the Lydian word for "king". The initial vowel of Ikonion represents the Kaskian prefix *ä*, *i*, usually expressed by a man's head, from which we may infer that it was supposed to be derived from *ä*, "a man." Its

¹ The first of the three Lydian tribes whose names are recorded was entitled *Μασδύς*, which I should correct to *Μασνύς*, "that of the Sun-god." It would have been the royal clan.

² The photograph reads: ID.-a(?)-mî yis-mi-a atus (𐎠𐎢𐎡𐎠) A-atu-A-atu GUA-ku-(ku)ana-D.A., "ruler of this country, prince of the princes of Kuana."

³ Cf. Vannic *at-ḡanas*, "priest," *at-ḡana-we*, "consecrated," *at-ḡana-duni*, "he consecrated."

presence in the Greek form of the name of the city was probably due to the fact that the *k* was really a *q* followed by a semi-labial. At any rate, it gave rise to the story that the city was named from an image (*εἰκών*) of Perseus which stood at its entrance.¹

Kuana signifies "the priestly" or "sacred city", just as Tuana signifies "the chariot city" from the consecrated chariot of Rekeb-el, and thus is one of the many Hierapoleis or "sacred cities" that existed in the Hittite world. Not the least proof of the scientific soundness of my decipherment is that it results in finding Carchemish called not only Nina—the Ninus of Ammianus Marcellinus—but also Kuanas-mia, "the sacred city." The name occurs repeatedly in the Carchemish inscriptions by the side of Carchemish and Nina (e.g. C. A11, c 3, *atus amy kuan-ana-a-na-š-mia*, "lord of Hierapolis"; A6, 5, 6, *kui attamia k(a)-(k)uan-na-s-mi-a*, "I have built the palace of Hierapolis").²

In my first attempts at decipherment I identified the country over which the Hamath king claimed rule with the Yakhan of the Assyrian texts. My reading of the name, however, must be amended; it should be *Ya-quan-na-a-na*, Yaghanna-na, "the land of Yakhannas." The name of Yakhannas has now turned up in what is the earliest of the Carchemish inscriptions yet discovered, where it reads *Ya-quana-s* (C. A1, 1). Yakhannas claims to be the conqueror of various countries, and entitles himself "the protector (?)"³ of Carchemish (*Kar-ka-*

¹ Has the name of Perseus been derived from that of the Cilician city of Pursakhanda or Parsakhanda, which figures prominently in the legend of the invasion of Asia Minor by Sargon of Akkad, and appears again in the Boghaz Keui tablets? Perseus, the founder of Tarsus, is merely a Hellenization of the name of Tarsus.

² In the Aleppo inscription (M. iii, 3) Aleppo is called *Ku-GUANA-mi-MIA* (Kuana-mia), "the Sanctuary-city"; the Assyrian King Shalmaneser II similarly entitles it "the city of Hadad". The inscription in question reads: "This temple-court of my (*sic*) Sun-god Attys Ka-atus (Katys) king of the land of Tarkondemos . . . has built . . . being a Yanätian of Hierapolis."

³ Represented by the picture of the winged genius with the head of an eagle, which was a symbol of the Assyrian god En-Urta. It was pronounced *Amuis* or *Amois*.

mi(as)-a-s-mia), the Hittite (*Khat-tu-mias*), supreme over the lands, Yakhannas, of the Kaskian (*Ki-is-KAN-ka-a-ni-in* D.A.) Tarkuians in the city of Carchemish (*Ka'-ka-KUAN-mi-is*) here in the River-land (*Nā-mi-a*) the god, the Sun-god" (*MISN-i-š-n-i-is*).

In the Aleppo inscription (M. iii, A2) the place of "the land of Yakhān" is taken by *Ya-nā-a-tis*-D.A. "of the land of Yana." In an unpublished inscription from Carchemish this is written *Ya-ni-mi-yi* "of the country of Yani", which is termed "the land of Tarkus". Yani or Yana must be the Uan of the Egyptians, which, according to Amon-em-heb, the officer of Thothmes III, lay to the west of Aleppo, and since the name of the vine is written *wi-na* in M. xxxiii, 3, it will have signified "Vine-land". A town of Oiniandos (Winianda in the Boghaz Keui tablets) was situated one day's journey from Mount Amanus according to Cicero (*Ad Fam.* xv, 4), where its later name of Epiphaneia is applied to it. In an Assyrian geographical list (W.A.I. ii, 53-8) the country of Ya-e-na is given as adjoining Khilakku or Cilicia in the direction of Malatiyeh.¹ Here we have the explanation of the statement by Stephanus Byzantinus that Iônê was the original name of the Syrian Antioch, and the further statement of the *Periplus Maritima* that Ionia was the district at the mouth of the Pyramus. The name is written Uan-na-s in M. vii, 1, 1.²

The fertile plain running westwards from Carchemish to Antioch is still known as "the Lowland of Umq", the "Amyces campus" of classical geography, which, as was first noted by Conder, is called Amiqu in the geographical list of Thothmes III (No. 308). Umq is the Unqi of the Assyrian texts, the Unqi (*Uan-ku-KU(an)-i*, *Uan-UAN-kuan-is*, *Uan-UAN-kuan-ni-is*) of M. vii, 1, 1, and vi, 4, 5.

¹ Yaena stands in the same relation to Uana that the Hittite *gaenas*, "priest," stands to *kuanis*. The passage of *u* (*w*) into *i* (*y*) was a distinguishing feature of the Hittite languages.

² The first syllable is represented by the ideograph of "god", which interchanges as a phonetic with *uan* (*wan*, *yin*).

But the Semitic Emeq is also used in the Carchemish inscriptions to denote the "Valley" or "Lowlands" in contradistinction to the "Highlands"; thus we have (C. A2, 6) *Ami-ku-KUAN-ti-mi-i mi-ana* "city-lord of the Low-lands", and in an unpublished inscription D.P.-*isi-is-ian-D.A. Ami-kuan-tu-is-ian-mi-i*, "in the land of the Highlanders and Lowlanders." Here the word *amikantis* (or *amikandus*) will be a derivative from the borrowed Semitic *emeq*. It is evidently "the land" or "lands of Amki" of the Tel el-Amarna tablets.

Mitanni is written *Mi-it-ta-an-a(an)* in M. xi, 2, and *Mi-ta-a-na-s-D.A.* in C. A4, 1, 2. Mitanni or Mitanna signifies "the land of Mita" whom Winckler has identified with the Greek Midas. The Carchemish princes boast of their descent from him; thus in unpublished inscriptions we find *Mi-ta-kan-is* "of the race of Mita", and in M. x, 7, *Mi-ta-a-kan-is*, while in C. A3, 3, the god Tarkus is called *A-amis-ku-is-na-a-s-mia Khal-kuan-(ua)n-s-mi-i Mi-tua-s-mi-i*, "of the Chief prophet's land, in the country of the Cilicians and of Midas." Mita, it may be observed, is associated throughout with Cilicia and not with Mitanni, and accordingly in M. xxxiii, C. 8, we read "king ruler of [the land of] Mita (*Mi-MI-i-tua-na*), the supreme" (*isi-mi-s*). In M. xlvi, 1, however, which is an inscription of . . . -khattis from Hissarjik, not Erzerûm, *mi(a)-tua* is "chariot-place" and not a proper name (*mi(a)-tua ni-i-ni tua-a-uan si-nas-mi-an nismi-wi-s gua-uan-na (?) -s*, "to the chariot-place I have given a chariot of bronze (and) water-basins of stone"). The city of Mita is mentioned in one of the Boghaz Keui tablets (K.A.B. ii, 31, 22).

Among the countries conquered by King Yakhnanas was that of the Kanisians (*Ki-a-ni-is-mi-ian-mi-a-D.A.*; C. A1, a2).¹ This must be the Kanes of the Boghaz Keui texts which, according to Dr. Forrer, was the primitive capital of the

¹ The photograph shows that the other place conquered by the king was *MIA-mi-a Yi-uan-na-uan*, "The city of the Yuanians." Are the Ionians meant?

Hittites. It is the Ganis of the Cappadocian tablets, now represented by Kara Eyuk or Kul-tepé, 18 kilometres north-east of Kaisariyeh. The name also occurs in one of the Hamath inscriptions (M. iv, A2), which reads: (1) *a-me-i isy TI-me-s Ari(s)-'atu-mi-ian-s akuan-na-wi-s Ya-khan-ná-a-na-D.A. nawis* (2) *amia-a A-mi-it-ti-mia wi-mi MI-my n-nas-wi ur*¹ *Ka-a-n-nas-mia-a-D.A. Ni-mi-ti-nas* (3) *ku-wi i-us-i-ti mi-a-MIANA N-ami-kani-s-D.A.*, (1) "I am the supreme consecrator (or consecrated one), Ar(is)'atumian, the high priest, king of Yakhan, (2) in this city of Hamath: the country I have conquered. A writing¹ I being of the River-land of Kanis (3) have made in the temple, city-lord of the race of the River-land." In inscription M. 3, B, instead of the last sentence we have: (2) *ku Mi-ta-a-na-s-D.A. Ni-mi-ti-i-s* (3) *ku-wi i-us-i-ti mi-a-MIANA Tarku-di-mi-a-na-us-D.A.*, "(2) a statue I being of the River-land of Mita (*Mita-nas*) (3) have made in the temple, city-lord of the land of Tarkondemos"; while in inscription iv B the last line is: *MA-s Na-mi-a-n-nas-D.A. Ni-mi-nas ku-wi i-us-i-ti*, "Seats of the River-land I being of the River-land have made in the temple" (literally "high-place").

The phonetic value of the first character of the name of the king (which depicts a bedstead) is fixed by its occurrence in the name of Mer'ash (*Ma-ar-qua-si*), where it interchanges with *ir*, but the word it represents would be in the nominative *aris*, possibly a loan-word from the Assyrian *irsu*. Is the name of the king, then, identical with that of the Chushan

¹ The character is that which represents *ur* in (*A*)*mur-wis*, "Amorite." Since *ir* or *ar* (found in the names Gamir and Markhasi) is a picture of a seal with its string, and in M. xxxii, 2, 3, forms the first element in the compound *iry-ni-me* (sic)-*i-us*, i.e. "written stones" (*ni-meis*), to which the determinatives of an inscribed tablet and a stone are attached, I conclude that it means "to write". Cf. the Vannic *armanida-d*, "written tablets." The title *ir-wis* is frequently assumed by the writers of the inscriptions; e.g. in C. A5, a1, we have: *yi-a . . .wy Yi-mi-ian-na-is ir-wi-s akuan-na-a-wi-is-wi* D.P. *Aram-a-[mia] amistus a-na-is Khal-kuan-uan-mia*, "This have I set up, Yimiannas, the writer; I am arch-priest, chief swordsman of Aram, king of the Cilicians."

Rish'athaim of Judg. iii, 8-10? The latter also was king of the River-land (Naharaim); he is called Chushan, i.e. Kusana(s), "of the land of Kusa," the very title assumed by Ar(is)-'atumian in M. vi, 1 (see above), and he conquered the country south of the Hittite region. Ar(is)'atumian omits the nominative suffix -s in writing his name in M. vi, 1, from which we may infer that it was not pronounced, and in the Ordekburnu inscription neither the nominative nor the accusative terminations of the noun are written.

One of the errors which impeded my attempts to interpret the inscriptions was the supposition that in the inscription of the "Rabbit"-king of Mer'ash, what is really the name of his father represented the name of Mer'ash. I was led into the error by the patronymic suffix *si*, which is also the final syllable of *Markha-si*, Mer'ash. When at New York I found that the inscription from Mer'ash in the Metropolitan Museum, which had been very faultily copied, begins with the name in question, without, of course, the patronymic suffix, the correct reading of the first line being: *A-me-i-MIA ID.-kuan-s amis-s my-MIA + Y-wi*, "I am . . . -kans (? Yakhanas), the swordsman of the city." He was the son of Mamias "of Gurgumi, arch-priest of the race of Mer'ash" (*Gu-GUR-gu-mi-MI-s-mia akuan Ma-ar-KUAN-gus-ka-ni-s*), M. xxi, 2. In M. lii, 4, the name of Gurgumi is written *Gur-gú-me*.

In my paper in the *Proceedings of the Society of Biblical Archaeology*, January, 1914, p. 10, I pointed out that the name of the god whose seated image, on a pedestal with the figure of an eagle-headed man between two lions, was discovered at Carchemish, reads Agusimis, or rather Agusiwis, if my system of decipherment were correct (C. A4 d). A few months later my reading was verified by Professor Zimmern and Dr. Scheil, who recovered the larger part of a poem composed by King Khammurabi in honour of the Syrian goddess Agusaya, the rival and antagonist of the Babylonian Istar, and describing how the antagonism was finally appeased by their fusion one into the other. Agusaya is the feminine counterpart of

Agusiwis. The inscription on the pedestal is: *yü[-a] uan-mi-a A-KU-gusi-mi uan-na-yi yimes Masni-s ku-wi Nana-nay-uan . . . uan-mi-MIA A-KU-gusi-mi-s KUAN-a-ti mi-a-na*, "This god's place of Agusiwis the god I the Sun-god have made; of the Nanayans . . . the god's place may Agusiwis bless for the king of the land!" In C. A11, a5, the name is written D.P. *A-KU-gusi-mi* ("a shrine in this place belonging to Agusiwis here I have erected"); but in C. A11, b3, 5, it appears as *Agu-gu(s)-is-mi* and *Ā-agu-gu-is-wis*. I believe the name originally meant "the Ancient One", but the Kaskian scribes made it a compound of a "man" (once also *ā* "speaker") and *gusi(s)* "a rock", so that it would have signified "rock-man". At Boghaz Keui three of the king's sons are called "the gold-men" (K.A.B. iv, No. 10, *Rev.* 30), and Dudkhaliyas states that a "weapon of the gold-man" was set up in a certain spot on the frontiers of Tarkhun-tassa (K.A.B. iv, No. 10, *Obv.* 27).

The *s* of *Agusiwi(s)* is elsewhere equivalent to *z*, which became *d* in the later age of the Asianic languages. *Agüsiwis* could therefore correspond with the Greek *Agdi-stis*, the father of *Attys* according to one story. *Arnobius* (*Adv. Gentes*, v, 5) tells us that *Agdistis* was born from a stone and "received his name from his mother rock". We are further told that he married *Nana*, the daughter of the *Sangarius*, King *Midas* subsequently devoting his daughter to *Attys*. *Nana*, as we have seen, was the goddess of *Carchemish*; the river *Sangura* ran a few miles to the south, and the daughters of the kings who traced their descent from *Mita* were dedicated to *Attys*. As for the suffix *-tis*, it is common in Kaskian (e.g. *Mi-mi-tis* and *Minis-tis* "of the River-land", *Karkamesiyis-tis* "of *Carchemish*") and it is also found in *Vannic* (e.g. *Argistis*).

In the Tell Ahmar text (*Annals of Archaeology*, ii, 4, pl. xxxviii, 2) the name of the god is denoted by a serpent (*agu*, cf. *ἄγυς*, *anguis*, Boghaz Keui *yankas*) followed by a picture of a stone, the passage reading: D.P. *Tarku-ku-s uan-i-is-s*

nu-wi-i-s D.P. KUANA-Khal-KUAN-kuan-D.A. D.P. . . . -*am-mi-ti-s* D.P. *Agu-gusi-wi-s Tu-uan-a-ni-i-s-mia*-D.A., "Tarkus the god, the king,¹ divine lord of the Cilicians, the god [Ka ?]mmitis, (and ?) Agusiwis of the land of Tyana."²

The goddess 'Atu, whose name is certified by its interchanging with *a-tu(a)* in that of the Wanatu or Eneti, was identified with Istar in Syria (in the compound עתר-עתה).³ On the coins of Tarsus 'Atheh, 'Atu, is represented as seated on a lion and wearing a veil with her name written beside her, while Baal-Tarzi, the chief god of the city, is depicted along with her (Head, *Historia Nummorum*, p. 616). Hence it is not surprising that at Fraktin she appears as the supreme goddess in the company of Attys (M. xxx).⁴ In front of her stands the priestess with the inscription *Am-mia-MI-mia-mi* ID., "High-priestess of Ammamnis," and at the back: *Kuana-ana-uan-D.A.-ti* D.P. [*Tarku-]wi*, "(and) of Tarkus of Hierapolis." The strange character which follows *Kuana* has the value of *ana* according to an unpublished inscription of Carchemish—the only other place in which I have met with it. The Hierapolis in question was probably the neighbouring Komana rather than the more distant Kastabala-Hierapolis.

Sir W. M. Ramsay has given reasons for believing that Fraktin is the Das-Tarkon of Strabo. If so, it may be the Tarkhuntas of an unpublished Boghaz Keui tablet of which

¹ Or perhaps "king of the gods".

² At Kara-Dagh also the inscriptions of Khattu-kuanis record the construction of "this sanctuary of the gods Tarkus, Attys, and the Serpent" (AGU-ku); Ramsay and Bell, *The Thousand and One Churches*, p. 515.

³ See my paper on "The Monuments of the Hittites" in the *Transactions of the Society of Biblical Archaeology*, vii, 2, p. 12. In M. lii, 1, 2, 4, the character 'Atu also interchanges with *a-ti* in the name of the country 'ATN', written Yaeti in Assyrian (*Black Obelisk*, 90). In line 1 we have *Ya-'atu-yu-a-si-ian-D.A.*, in line 2 *Ya-ti-a-si-ian-D.A.*, in line 4 *Ya-ti-[asian]*.

⁴ Ἀδαγυός was the name of "a Hermaphrodite" deity among the Phrygians, with which Thomopoulos (*Pelasgika*, p. 447) compares δαγός, "an image of Aphroditê." Ada-gyus would be the Kaskian 'Atu-gus, "the oxhorn-pole of 'Atu," which might be described as Hermaphrodite, since the *gusi-yas* or pole was properly the symbol of the bull-god Hadad-Tarkus.

Kuruntas was king. In K.A.B. iv, No. 10, instead of Tarkhuntas we have Tessubtassa, Tessub and Tarku being merely the varying national names of the same deity. In an inscription of the Vannic king Sarduris II (Sayce, l, 30, 31), two Melidian towns are mentioned called Tâsê or Tas and (AN) Querai-tâsê, the *tasê* (or "township"?) of the god Queras.¹

I can now explain another rock-sculpture of Asia Minor with more exactitude than was possible when I first attempted a translation of it. This is the sculpture at Ivriz (M. xxxiv). The inscription attached to the figure of the god is: (1) *yi-a* D.P. *Tarku*² *kui-s Ti-ya-s ku-wi* (2) *U-wi-ni-a-si-s a-tu Ky-ti-is-(3)s-mia Uana-tu-ti attas*, (1) "This for Tarkus making I Theias have made, (2) the son of Uwi-nias, prince of Ketis, father of the Eneti" (*Wanatudî*). That attached to the figure of the king is: (1) *yi-a ku-wis U-wi-(2)ni-a-s ami* (?) *ku-(3)-yu is-wi*, (1) "This making, of the High-priest Uwinias the image I have erected." In the mutilated inscription below all that can be read with certainty is: . . . *ku-wis ti-mi-a-an* . . . *U-wi-ni-a-s-my a-is-mi-[yas]* . . . " . . . making the consecrated place . . . the water-basin(s) of the place of Uwinias . . ." Uwi-nias signifies "dedicated to the priest", as Uanna-nias (C. A6, 9) signifies "dedicated to the god".



Sufficient has now been said to show that as fresh materials have come to light the application to them of my system of decipherment has resulted in translations which are congruous in sense and yield the geographical, personal, and divine names which we should expect. I will now conclude this series of verifications with an example of another sort.

In the *Journal* of this Society, October, 1912, p. 1036, I published the fragment of a tablet from Boghaz Keui containing an inventory of the royal treasures and finishing with

¹ Kuaruwan above (p. 538) is a derivative from Queras. Similar formations in *-uan*, *-ian* from divine names are common on the Kaskian seals.

² Or Sanda, since we are here in Cilician territory.






the colophon: *dub* II-KAM *u-ul qa-ti sa* D.P. *Ar-nu-wa-an-da-[as]* *Khu-o-ti-wi-is u-nu-ut bit* TAK-DUB, "Second tablet, not finished; by Arnuandas the *Khutiwis*; (giving) the contents of the house of stone monuments"¹ (i.e. the royal museum). Then comes a counter-signature consisting of three hieroglyphic characters, which I rendered: "before the minister." The newly published cuneiform texts show that the translation is exact. The character I have rendered "minister" is the head of a large hound, and in accordance with this in the colophon of the legend of the slaying of the wicked serpent we read: D.P. *Kas-kha* AMEL . . . *pa-ni* D.P. UR-MAKH *rab* DUB-[SAR-]MES *is-dhur*, "Kaskha the . . . before the Big-dog, the chief scribe, has written (this)." In M. x, 4, the head of the hound is followed by the picture of the quiver (*ka*), which is probably its phonetic complement.

How the characters were pronounced in Hittite we do not know. In Kaskian *miami* was "before", in Assyrian *pani*; but in Boghaz Keui Hittite the word was probably *ziyantaz*.² As in the case of the cuneiform characters, the Hittite hieroglyphic characters had different pronunciations according to the languages in which they were employed. Thus, in Cilician *is* "a goat" was *tarkus*, Greek *τράγος*, *guan* "temple" (the "consecrated" place) was *dimes* (*times*), Greek *dómos*. In Kaskian itself an ideograph could have more than one pronunciation, though the one to be adopted is usually denoted by phonetic complements or a reproduction of the whole word; e.g.  *ana* generally represented *amis* when written perpendicularly, and  (*úmis* and *kuanas*) has *kuan-n-a-is* attached to it in M. xxi, 5.

The arm and hand in various positions occupied a prominent place in the Hittite script and represented a number of different words and phonetic values. I have had great difficulty in

¹ This is how we now know the lines should be read and translated.

² The Boghaz Keui reading of MI-*i-a*-MI-*i* would, therefore, have been ZI-*i-a*-NZI-*i*.

distinguishing them, and in one or two instances have not yet been able to reach a certain conclusion. Many of the inscriptions are as carelessly written as similar Egyptian hieroglyphic ones, the result being that characters of similar form are confounded by the engravers, some of the texts are in an exceedingly cursive script rendering identifications with the original pictures a matter of difficulty, the inscriptions belong to different localities and periods, and a considerable number are mutilated or only semi-legible. It is but recently that the Tell Ahmar inscription (*Annals of Archaeology*, ii, 4, pl. xxxviii, 1) has given me the pronunciation of the frequent title  *a-gu(ku)-uan-na*, i.e. *kuanis* or *kuanas*, with the prefix *a* "man", which explains the Phrygian title *akenanolavos*. The arm  is merely a variant of the hand, which in its most cursive forms appears as  and  *mis* or *wis* and *nas*, *as*, and denotes the "seizer" or "conqueror" (see C. A3, 2). It is clearly related to *nas-wi*, "I conquered." A variant is , with the thumb expelling a word (*na*), which ought to have the value of *nas* or *as*, though it seems to have been employed for *mis* and *wis*. With the sword or dirk (*mis*) attached to it, the outstretched arm denotes *ana* "king" (perhaps a compound of *a* and *nas*), but when standing upright it represents "swordsman" (*a+mis*), as it also does when surmounted by the ideograph of "city" (e.g. M. iii, B3). The upright arm is *atta*, "father," also *atus*, "lord," which may originally have had the same signification; *Papas*, "father," we are told, was a title of Attys in Phrygian.¹ With the palm turned away from the reader it was *ku*, probably from *akuan* or *kuan*. With the nail of the thumb turned outward it was *isi*, "high," the cursive form of which I formerly mistook for a

¹ So in C. A6, 5: *ki-i-is ky-i atta-na-a Khattu*, "I have given gifts to our father Khattu." Cf. line 7: *ki-i-is ky-i ID. IX Mas-n-a-i*, "I have given gifts to the Sun-god of the 9 heavens."

ladder.¹ The depressed hand, denoting consecration, had the value of *ti*, *dî*; with the palm towards the reader it was *ki*, "to give." In the reverse position it was *akuan*. For other uses of the arm or hand the syllabary must be consulted.

SCRIPT AND PHONOLOGY

The Kasko-Hittite hieroglyphs originated in the highlands of Asia Minor. All were primarily pictographs, and were accordingly used to express the words of more than one language. Hence we must expect to find them polyphonous.

In course of time a few of them came to be employed phonetically. Unfortunately the number of these was limited, and a very small number had to serve for the more common sounds of the language. As in Mitannian and Vannic cuneiform, the syllabic value of a character tended to pass into an alphabetic one.

The oblique or perpendicular stroke so frequently attached to a character had a double signification. Properly the perpendicular stroke denoted the vowel *u*, from *ua*, "one," while the oblique stroke indicated that the character to which it was attached was modified in pronunciation. But as this frequently meant the addition or insertion of *u*, *ü*, the two came to be confounded together in the later texts. On the seal of Tarkondemos the oblique stroke attached to *mi*, "four," is represented in the cuneiform transcript by *e*.²

One of the peculiarities of the script is that an object is

¹ With the forefinger crooked inward it denoted "conqueror", "possessor." The two forms are clearly distinguished in C. A6, 2. The name of the Karaburna king (M. xlvi, 1) is Sianas, and he calls himself "king of the land of Siana", *Si-ana-s-mi-a nais*. Sir W. Ramsay places Sanisênê to the north of it, and the fortress itself is either the Byzantine fortress Sania-na or its earlier representative. Sianas calls it Kamissa, "the fort," which must be the *Kάμησος* of Polybius (xxv, 4). The use of the hieroglyph of hand or arm by the Hittites influenced their use of the Sumerian *Á*, "hand," "arm." Thus, *Á-DU* (*áttú*) is used for *attas*, *áttús*, "lord," *Á-AS* (*addu*) for *SI+DU-is*, "general," *Á-SAL*, Assyrian *Sarkhattu*, for *Kharáú*, "an Amazon" (*Keilschrifttexte aus Boghazköi*, i, 42; ii, 7-9).

² It is noteworthy that the same oblique stroke is found on the famous Disk of Phæstos.

generally represented only by a part of itself, a man or animal, for example, by the head alone. Hence more than one part of an object can be used indifferently for this purpose and so possess the same pronunciation; thus, a chariot is represented by its wheel and front as well as by its body, a ram by its head as well as by its horn. In different localities the same object may assume different forms; the Syrian chair, for instance, as depicted at Hamath is somewhat different in shape from that of Asia Minor. In the later cursive writing, again, many of the characters acquired forms which are sometimes difficult to identify with their originals.

The vowels seem to have been obscure and uncertain as in English. As in English, also, *r* was untrilled, and was a vowel rather than a consonant. But it must be remembered that the pronunciation, especially of the vowels, would have varied in the different localities and periods to which the inscriptions belong. By the side of *u* was *ü*, which often passed into *i* or *y*. The sonant nasal of the accusative is occasionally omitted in writing, and was probably but little heard.

W passed into *y*, as *u* or *ü* into *i*. This characteristic of the Hittite languages influenced the language of Canaan, the passage of *w* into *y* being a well-known characteristic of Hebrew. Perhaps the Greek *Βάκχος* and *Ίακχος* came from the two-fold pronunciation of some Hittite word for "wine".

As in Assyrian and Sumerian, no distinction was made between *m* and *w*, *w* being ordinarily represented by *β* in Greek and by *p* and *b* in Egyptian and cuneiform. It is probable that in Assyrian this very non-Semitic characteristic was also due to northern influence.

As in other Asiatic languages the vowels could be nasalized, so in the proper name Garpa-rundas by the side of *Khite-ruadas*.

L is rare, in this affording a great contrast with Vannic. Its place in grammar appears to be taken by *n*, and I would accordingly divide the Asiatic languages into the two groups of *l* and *n* languages. This would explain such double forms

as Khali-galbat and Khani-galbat,¹ or the equivalent pronominal forms *li* and *ni* quoted in Assyrian lexical tablets from what are presumably Asianic dialects (cf. V.R. 27, 4, 57; 27, 34, 43). On the other hand, the Greek *l* often replaces *r* before a semi-vowel; e.g. Olba for Urwa, while conversely Tabal, Tubal, appears as Tibareni. The interchange of *l* and *n* is common enough in all languages; final *l* becomes *n* in colloquial Egyptian Arabic, and even in English *chimbley* is the vulgar pronunciation of *chimney*.²

Final *s* tended to pass into *h* and then disappear altogether. In the nominative singular its occurrence in the script seems to be etymological only; at all events it is more often dropped than written in the case of proper names in *-uan*, *-ian*.

There were at least two sibilants, *s* and *z*, but at present it is not possible to distinguish between them in transcription. The patronymic suffix *-si* is represented in Assyrian by *-zi*, as in Tarkhu-na-zi, "son of the land of Tarkus," Tarma-na-zi, the modern Turmannin; the Biblical Ashkenaz is similarly Aska-na-zi, "son of the land of Aska" (whence the names of Askanios and Aska-ênos).³ On the other hand, we find in Greek Suennesis, from Zuin, the Moon-god, while Tarsus, Tarshish, is written Tarzi in Assyrian and Aramaic. In the Ordek-burnu inscription the demonstrative *yisi* is written יִסִי.

The interchange of surds, sonants, and even aspirates in the Hittite region has long been known both from the Tel el-Amarna tablets and from the Assyrian inscriptions, and is reproduced in the Cypriote syllabary, where the same character represents surd, sonant, and aspirate. The Asianic *q*, *kh*, is made the equivalent of the Semitic *ghain* in a name like that of Mer'ash, and could be lost altogether like *qôf* in Cairene Arabic. Hence *Mápaovs*, *Tápaovs* for Mer'ash, Tarkus.

¹ Or *galbe*, *kalbe*, as it should more probably be read. Does this represent the Khalbi(s) of the Kaskian texts?

² Similarly, Parnassos on the Halys is the modern Parllasson.

³ In the Cappadocian tablets the name appears as Washkhania (e.g. Contenau, *Tablettes cappadociennes du Louvre*, 4, 8).

The dentals, as in Boghaz Keui Hittite, were confounded together, and were especially addicted to the development of a preceding sonant nasal (as in *rundas*), which, however, was seldom written.

R, as I have said, was pronounced as in English, and before a consonant or at the end of a word could be treated as a vowel. Hence the name of Karkamis is now and then written *Kě-ka-mis*. On a seal the name Garpa-runda appears in Aramaic letters as **גבבד**.

Grammar.—The leading characteristics of Kaskian grammar are those of the other Asianic languages. Adjectives are formed by the suffix *-wa*, *-wi*, which later passes into *-ya*, *-yi*. The ethnic suffix is *-na*, by the side of which we also find *-ni*. A territorial suffix is *-mias*, “of the land of,” to be distinguished from the purely adjectival *-wis* and *-mis*, the latter of which corresponds with the Greek *-μο*, as in *Tarkamos*. *-Kanis*, from an earlier *-qanis*, *quanis*, a compound of *-ka* and *-ni*, denotes “of the race” or “family”.¹ The name of the agent is denoted by *-tis*, as in *Nana-tis*, “the Nanayan,” *tua-tes*, “charioteer,” *Karkamisiyas-na-tis*, “he of the land of Carchemish.” The gentile suffix is *-sis*, as in *Uwinia-si-s*, “son of Uwinias”; it also denotes “the child of” a city or country. In *amis-tus*, “chief swordsman,” *-tus* has the signification of “chief”; *-kus*, as in *amis-kus*, must have much the same meaning.² Many proper names are formed from those of deities by means of the suffix *-wan*, *-yan*, which apparently corresponds with the Greek *-ων*. Another suffix is *-(n)da*, as in *Amikandas*, “the lowlanders.”

The case-terminations of the noun are Asianic, and agree with those of Vannic, Mitannian, Boghaz Keui Hittite, Hittite, and Lycian: nom. sing. *-s*, acc. sing. *-n*, oblique case a vowel according to the stem, the genitive, however,

¹ Or rather, perhaps, “people,” since we find *Markhas-kanis*, “of the people of Mer’ash,” and similar formations, as well as the form *-kan-mi*, “in the land of the people of” such and such a locality.

² M. liii; xxxv, 3; xxxvi, 2.

being often denoted by *-wi*, *-yi*; nom. and acc. plur. *-s*, gen. plur. *-an*, *-wan*, *-yan*. Postpositions are the locative *-ta*, *-ti*, *-da*, *-di*, and the elative *-mi* (?). The vocative had the same termination as the nominative. A peculiar form of the accusative singular is that in *-mia*, *-mi*, which is used with words denoting "a place", like *gú(s)-mia*, "the place of the sacred ox-horn," *di-mia* or *ti-mia*, "a temple" (perhaps from *ti*, "to consecrate"). In the Ordek-burnu inscription it is represented by **ND** in the word **ND**𐎠𐎢𐎣, "sanctuary," the Kaskian *aku-mia*, which must have been pronounced *akuwia*. In place of the ordinary genitive we sometimes find the adjectival *-syi* (Lycian *-hi* for *-si*); e.g. *Uan-kua(n)-nas-yi* and *Uan-UAN-kua(n)-ni-(n)as-yi*, "of the Unqians" (M. vi, 4, 5), *mia-a Tarku-ku-uan-YIWIS-yi-s-yi-D.A. UAN-uan-yi*, "city of the god of the Tarkians" (or, perhaps, Sandians, i.e. Herakleia, M. xxxii, 4), *kuan-a-(n)as-yi-mia a-na-is*, "king of Hierapolis." In certain proper names, moreover, *-s* seems to be a suffix of the genitive singular.

The prefix *a-* denoted a person; thus from *kuanis*, "consecrated," was formed *a-kuanis*, "a priest," from *mis*, "a knife" or "dirk", was formed *a-mis*, "a swordsman." The Kaskian scribes regarded this prefix sometimes as the word for "man", sometimes as the word for "speaker".

The adjective usually preceded the substantive with which it agreed in number and case. There were no genders. The genitive usually preceded the governing noun, the verb coming at the end of the sentence.

The 1st pers. pron. sing. was *yimis*, or, rather, *yiwis* in the nominative,¹ the dative being *ami*, *amia* (or *imi*, *imia*), M. xxxi and v, 4. In the abbreviated form *-mei* (cuneiform *-me-e*) it could be attached to a noun, as in *ana-mei*, "I am king" (M. xxxii, 1; so, too, x, 8). The 2nd pers. pron. was *tu* in the genitive: *me-s i-us-is-tu*, "builder of thy high-places" (C. A3, 4). Of the 3rd pers. pron. I know only the

¹ Cf. Vannic *ies*.

acc. plur. *senā* (M. xi, 5), which is affixed to the verb, as in Mitannian.

The poss. pron. of the 1st pers. sing. was *mis*, in the plur. *na(s)*; e.g. TE-*a-na*, "our sanctuary" (C. A1, a6), *atta-na-a*, "to our father" (C. A6, 5).

The numerals, so far as I have been able to ascertain them, are *ua*, "one," *tuāus*, "two" or "two-fold" (M. lii, 2), *kes*, "three," *mi*, "four," *nitini* and *nitinna*, "six" (C. A1, a3), *qaṇmi* and *qaṇmis*, "nine," "nine-fold," *kar*, "ten," and *gu*, "one hundred."

The demonstrative is *yi(s)* or *wi(s)*, *ya*, *ya* in the accusative. A fuller form is *yisis*, which becomes *yis-i*, *yis-a* in the accusative, and is written 𐎶 in the Ordek-burnu inscription. *Yis'i* seems the older form. From *yis* was derived the adverbs *yismia*, *yismi* and *yimia*, *yimi*, "here" (literally "in this place"), as well as the adjective *yismianas*, *yimianas*, "of this country." The plural is *yis*, *wis*. Another demonstrative was *tua*, which we find in *my-tua*, "of this land" (M. xxi, 3; in M. i, 3, *mī-a-tu(a)* may be "of thy country").¹ Whether a word *ai*, which follows a noun in some passages, is a demonstrative I do not know.²

¹ Possibly *ti* in M. vii, I, 2, is the demonstrative rather than the locative suffix ((*gu*)-*ka-s-mi i-us-i-ti*, "for this high-place").

² The inscriptions attached to the series of figures in C. A7 will illustrate the use of the demonstrative and at the same time serve as a practical verification of my system of decipherment:—

a. (1) *yi-s-mia-a KA-kuan-n-i-s Yi-is-mi-a-na-i ID.yis akuan-ni-i-(y)is a-mi-mi-a-ian yi-mī ki-i-is* (2) *ky-ian ti-mi-a-ian UAN-KA-ti sy(?)-mi AGU-a-ku-s-mi-MI akuan-na-s a-s* (3) *ku-wi a-mis-s*, (1) "Here (is) the priest of this land, the supporter of the king, the arch-priest of the people: here (2) giving the gift, an altar in the temple-court I have erected as arch-priest of Agusimis. Now (3) I have done (it), being swordsman."

b. *yi-mi-MIA-a I-my-yu-s Amis-tu-s*, "Here is Imois the chief swordsman."

c, d. *yi-[is]-ja Kuan-i-Tarku-mi-MI-s yi-s-mi-a-MIA*, "This (is) Kani-Tarkamos." "Here (is)"

e, f. *AMIS-s mī Tarku-ku-wi-s yis-mi-a Ku-ni-wi-s-mi-s*, "the swordsman of the country Tarkois. Here (is) the attendant of Kuniwis."

g. *yi-s-mia-a I-si-ku-wi-s-mi-s*, "Here (is) the attendant of Isikois."

h. *yi-s-a Isi-ka-wy-s*, "This (is) Isikois."

i. *yi-s-a Tarku-di-mi-ū-s yi-is-s-a Is(i)-ka-wi-s-mi-s*, "This (is) Tarkondemos; this is the attendant of Isikois."

There were at least two conjugations (or tenses?) of the verb, in one of which the 1st person of the past tense was expressed by *-mi*, and in the other by *-wi*, which passing through *-yi* became *-i*. *-Wi* is the *-bi* of Vannic.

The 3rd pers. sing. (and also plur.) terminates in *-tu*, *-ti*, and *-t* (as in Lycian, Lydian, and the Vannic plural); e.g. *es-tu anas*, "the king has erected" (M. liii), *KUANA-ti*, "may she bless" (M. xi, 5), *Agusimis ID.-a-ti mia-na*, "may Agusimis bless our land" (C. A4, d). We may conclude from the last two examples that the precativè was denoted by *-ti*.

Much use is made of the present participle in the nom. sing., which can also take the place of a 3rd pers. sing.; thus we have *k'is kyn timian UAN-KA-ti sy-mi*, "giving a gift, I have erected an altar in the temple-court" (C. A7, a2).

A derivative conjugation was formed by the suffix *-mi*, and we have what is probably a causative in *nas-kuan-yi*, "I have set up" (M. xxxi, 1; xlvi, 1), by the side of *nas-me-w-i* (M. xxxiii, 4).¹

The only conjunction I know is *aš*, which occurs at the beginning of a sentence in the sense of "now", "behold" (C. C6, 4, 7, etc.; cf. M. xi, 3).

Adverbial prepositions are *miami*, "in front of," also used as a postposition, and *agu*, "behind." *Kasmi*, *kesmi*, probably signifies "for", "on account of" (M. i, 3; vii, 1, 2).

Linguistic Position.—The language of the Hittite hieroglyphic inscriptions is that of the Kaskian and Moschian tribes, who in the thirteenth century B.C. overran Cilicia, Cappadocia, and Lesser Armenia, established themselves at Carchemish and Melid, made Tyana their capital and founded the second Hittite empire, called "Cilician" by Solinus,

j. (1) *yi-s-mi-a-MIA Na-š-is-i-š kuan-ni-i-s Nanay-wy* (2) *yi-me-s DET.-isi-mi a-kuanis yi-me-i-š ISI-MI-s*, (1) "Here (is) Nawisis the priest of Nana: I (am) supreme arch-priest of the land, I (am) supreme over the land." *Isi-kuwis* is really a title signifying "lifter-up of the standard".

¹ I should now render this last passage, which reads: *a-(a)nin agu-ti-is a-kuana-s nasmewi*, "the (sacred) stone I the priest of the inner shrine have set up."

which extended from Syria to Lydia. Along with the Tabal, Tubal, or Tibareni, and other tribes, among whom Yavan, the Ionians, would have been included, they overthrew the older Hittite empire which had its centre at Boghaz Keui, made themselves masters of Northern Syria and threatened Egypt, which was saved only by the victories of Ramses III. Tiglath-pileser I tells us that under their "five kings" the Moschians had occupied the Assyrian dependencies of Alzi and Burukuzzi, on the Arsanias, and that "4,000 men of the Kaskians and Urumians, soldiers of the Hittites", had conquered the Assyrian province of Subarti. The old song quoted in Gen. ix, 27: "God shall enlarge Japhet (a Cilician deity according to Stephanus Byzantinus) and he shall dwell in the tents of Shem, and Canaan shall be his servant," must belong to the time when the Cilician empire was established.

We may assign the Kaskian occupation of Carchemish to about 1200 B.C.¹ The conquerors carried with them the new form of culture, which has been brought to light by the British Museum excavations on the spot—the practice of cremation and the use of "Hittite" seals, special types of pottery, hieroglyphic writing, and the general substitution of iron for bronze. The kings traced their descent from Mita or Midas.

Kaskian Hittite was an Asianic language, displaying the same combination of Asianic and Hellenic elements as are found in other languages of Asia Minor. It is becoming clear that in the prehistoric age Asianic and Indo-European languages were in close geographical contact in that region; indeed, Dr. Forrer believes that Hittite, "Luvian," and the parent Indo-European were sister forms of speech. That the Greek language contains many words of Asianic origin has long been suspected, and where there is extensive lexical borrowing there is also grammatical borrowing.

It is also becoming evident that the Asianic languages

¹ The Hittites were already established there in the time of the Assyrian king Tiglath-pileser I (1110 B.C.); cf. his Annals, v, 49.

exercised some influence upon Northern Semitic, that is to say, Canaanite or Hebrew, Aramaic and Assyrian. The use in Assyrian of the prepositions *ana* and *in* (later *ina* through assimilation) is an example of this.

The manufacture and use of bronze seem to have originated in Asia Minor. At all events it was from that country that a knowledge of the metal was carried to Babylonia, Canaan, and Egypt, and with the bronze would have come some knowledge of the language of the bronze-makers. At an early date, also, Asia Minor became a main source of supply of silver and lead to the ancient Oriental world, and iron followed at a later date.

It is not surprising that words of Asianic origin occur in Sumerian like *guskin*, "gold," the non-Indo-European *oski* of Armenian, or *annak*, "lead," the Armenian *anag*. It was from the highlands of Armenia that the brachycephalic peoples of Western Asia made their way to the south.

By way of appendix I add a note upon the two rock-inscriptions of Lydia, which had much to do with the discovery of the Hittite empire, and about which more can be said to-day than was possible a few years ago.

There is a good cast of the inscription attached to the figure of the Pseudo-Sesostris at Karabel in the Museum of the Fine Arts at Chicago. Here the second character looks like the ox-horn on a pole (*gusias*), but I confess that when I visited the monument in 1879 it seemed to me rather to resemble what we now know to be *kuanis*, "a priest." The characters in the third line are now visible in the cast, and are *amis-ku* (as in M. liii). Consequently the whole inscription reads: (1) *ku . . . navy* (2) *Khalwi-nay* (3) *amis-ku*, (1) "the image of . . . the king, (2) of the land of Khalwis (3), the chief swordsman." Is Khalwis the Halybê of Homer (Il. ii, 857)? At any rate, "the land of Khalwis" seems to be the nameless "City of Midas" near Kumbet, since a hieroglyphic inscription engraved on a rock at its entrance reads: "The rock of Khalwis" (M. xxxvi B). Khalwis corresponded to Kybelê,

and since it could also be read Khubis, the name of the country ought perhaps to be Khuba or Komba.

The copy of the "Nisbe" inscription on Mount Sipylos (M. xxxviii, 5) requires correction, the boot under the bull's head being part of the head itself, which should face the reverse way. The first character is the outstretched arm found on Mount Argæus (*Annals of Archæology*, i, pl. viii) (where it is followed by *Amma* as on Mount Sipylos), at Kara-Dagh (2b) and elsewhere; it signifies *προσκύνημα*, "adoration." Consequently the translation of the inscription is: "adoration to Ammi (*Amma-mi*), queen of the rocks." The same title is applied to the goddess Amma or Ammi at Emir Ghazi (M. I, 2).¹

NOTE.—C. denotes *Carchemish*, part i (1914), by D. G. Hogarth; M. Messerschmidt's *Corpus inscriptionum Hettiticarum*, ii sqq. (1900-6); ID. "ideograph".

¹ The list of Carchemish kings hitherto recoverable from the inscriptions is as follows: Yakhans (C. A1 a), Khalbi-iyaki(?)me (M. x), Kanas (C. A2, 3, 11; M. ix, xi), Yimiannas (C. A5, a1), Imois (C. A6, 7), and Agu-sis, the father of Kanas, who was Swordsman of Nukhassi and lord of Melid (C. A11, b1, A4, b7). Yimiannas could also be read Yiwiannas, and be compared with the Assyrian Yamanu, Yavanu, "Ionian." It must be remembered that the hieroglyphs were employed for more languages than one, and that consequently where the characters are used ideographically (and to a certain extent, at all events, phonetically) they would have different values in the different forms of speech. At Boghaz Keui, for example, they would not have the same pronunciation as at Mer'ash or Carchemish. That was certainly the case in Cilicia, where an Indo-European language, which we may call proto-Ionian or Yavanian, was spoken. On the seal (misnamed "boss") of Tarkondemos the goat's head (*is* in Kaskian) is *tarku*, Greek *τράγος*, and the temple (*guana* in Kaskian) is *dimme*, Greek *δῆμος*. So on the bilingual seal of Indi-limma in the Ashmolean Museum the hieroglyphic legend reads "Life-stone (NA-ZI at Boghaz Keui) of Indi-limma", the name of the deity being represented by a character not found elsewhere, while *limma* or *livva* is expressed by the stone which had the value of *ani*, *ana*, syllabically *na*, in Kaskian. As Tarkondemos is "the temple of Tarkus", so Indi-livva is "the stone of Inda", *livva* being the Greek *λίθω*, "to stone," Doric *λίθω*, "stone," usually identified with *lâas*, which is, however, more probably a loan-word from Asia Minor.