









IV.—*On the Assyrio-Babylonian Phonetic Characters.* By the Rev. EDWARD HINCKS, D. D.

Read May 24, 1852.

1. MY paper of the 25th June, 1849, was chiefly occupied with the ideographic element that enters into the Assyrio-Babylonian inscriptions, and with the chronology of the period to which the later inscriptions belong. As to the former point, I consider the views which I put forward to be in the main correct. I was certainly in error as to a few matters of detail. The latter part of the eleventh section is altogether erroneous; the characters there supposed to represent combinations of words being in reality the compound syllables *shin* and *kin*. Into this mistake I was led by a false identification of an Assyrian character and a portion of another with two Second-Persepolitan characters of which the values were known. The Mal Amir inscriptions, of which I received copies from the British Museum, while the last sheets of my paper were going through the press, enabled me to see the error of these identifications, by presenting to me more ancient forms of the Second-Persepolitan characters;\* and I became aware of this mistake almost as soon as the copies of my paper were in circulation. In a lithograph dated the 29th July, 1850, and immediately circulated at the meeting of the British Association, the true values were as-

\* I supposed that  = Second-Persepolitan  = *wa*; but it corresponds to Second-Persepolitan , of which the Mal Amir form is , and the value *ki*. The Assyrian character has also, and very frequently, the ideographic value, "the earth;" but in the combinations of my § 11, it is a phonograph. Again, I supposed that , the *first part* of the character , corresponded to the Second-Persepolitan  = *in*; but the Mal Amir form of this last is , which is identical with the *whole* of the Babylonian cursive character which corresponds to the above Assyrian one.

signed to the characters in question. Into a few minor errors I was betrayed by a false identification of certain geographical names with others which closely resembled them. *Numak*, for instance, I supposed to be *Dumah*, whereas it represents *Eluma*, *Elymais*, or *Susa*; and I read the word *marrat* (the salt or bitter waters, or the sea, from the root מרר) as *farrat*, the Euphrates. These mistakes led to others, which Colonel RAWLINSON has pointed out in his Commentary on the Cuneiform Inscriptions. I must observe, however, in justice to myself, that the Colonel admits, in p. 79, that my reading of the name Babylon is correct, contrary to his previous statements in pp. 36, 37; and that, after strenuously contending against my readings of the names Sankerib and Assurkhadon, in this publication, he has within the last few months found himself compelled to embrace my views as to these two kings. As to the name of the father of Sankerib, we were both in error. It is neither *Khinilin*, as I made it, nor *Arkotsin*, as he supposed, but *Sargon*, as M. LOWENSTERN had long since asserted it to be, though not in connexion with any other correct statement. This correction, the necessity of which my lithograph shows that I had seen in July, 1850, obliges me to identify the period when this king possessed Babylon (which he certainly did not do at the commencement of his reign, nor till long after it) with the first interregnum of the Canon, instead of with the reign of Chinzirus and Porus. In other respects I adhere to the chronological views maintained in my paper.\*

2. I now propose to consider the phonetic element in the Assyrio-Babylonian inscriptions at greater length than I have hitherto done; correcting those mistakes which I made in the Appendix to my former paper, adding the homophones which I there omitted, and giving additional details and proofs. The greater part of what I have now to say was known to me at the time of the publication of my lithograph in July, 1850; and I at that time exhibited to the Ethnological Subsection of the British Association a large sheet, containing a very full syllabary. Having neither leisure nor opportunity to pursue the investigation as I could wish, I should probably have left it in the hands of those to whom public patronage has assigned it, if I did not entertain the most complete conviction, that other labourers in the field have assumed false principles

\* See Appendix.

as true, and that they are pursuing a method which can never lead to accurate knowledge. I wish, therefore, before I finally quit the field, to point out the mode of proceeding which must sooner or later be adopted.

3. It has been assumed by all other investigators, that the mode of writing used in the Assyrio-Babylonian inscriptions was contrived with a view to represent the words of the language of those inscriptions. This language is unquestionably of the family commonly called the Semitic; and it is therefore taken for granted, that the characters used in the inscriptions represent Semitic letters. I can have no doubt whatever that this is a mistake; and moreover, that it is one of so serious a nature as to render it impossible for those who labour under it to attain any accurate knowledge of the grammar of the language. I am myself fully satisfied, and I hope in the present paper to satisfy all who will take the trouble to follow my arguments, that the characters *all* represent syllables, and that they were originally intended to represent a non-Semitic language. Instead of the vowels being unrepresented, or only represented by points, as in all Semitic writing that was first applied to a Semitic language, we have in the cuneatic inscriptions every vowel definitely expressed. The Semitic language appears in the inscriptions in a disguise similar to what the Maltese does in Roman letters, or the Punic in the well-known passage of Plautus.

4. Again, it has been taken for granted, that the only method of ascertaining the value of the characters is the analysis of known proper names. It appears to me, however, that, the characters representing what I have just stated that they do, this method can only lead to approximate, as distinguished from accurate, knowledge. The way by which I have sought to obtain accurate knowledge is by analyzing verbs and nouns, especially such as have three radicals, of which none is liable to be omitted or altered. I assume two principles: first, that the characters which occur in different inflexions of the same root, if they be not the same, must contain the same consonant differently combined with a vowel; secondly, that characters which occur in the same situation, in like forms of different roots, contain the same vowel in the same position, differing only in the consonant. The former principle shows which characters express different functions of the same consonant; the latter shows which are like functions of different consonants.

5. In my last paper I laid down the position, that the characters which re-


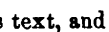
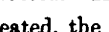
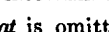


presented single syllables, exclusive of the four vowels, were of seven different forms; and I applied the mode of investigation which I have just explained, in the Appendix to that paper, to the first person singular and the third person singular and plural of the verb in the present of Kal. In my lithograph of July, 1850, I applied the same method to the Pihel and Shaphel participles, and to some inflexions of nouns. I have since applied it to other forms. The results appear to me as satisfactory as possible, fixing the syllabic values of a large number of the characters with all but mathematical certainty.

6. To illustrate the nature of my method, I will begin with producing a number of forms of the same root. I find in the inscriptions of Nebuchadnezzar eight derivatives of a root which would be in Hebrew ׀׀. This root does not occur in Hebrew,—at least in any sense which would at all suit the contexts where these derivatives are found; but ׀׀ signifies *texit*, *protexit*, and ׀׀ has the same value. I will assume this to be the meaning of the Babylonian root; and will explain the derivatives accordingly; remarking, however, that their significations are by no means so certain as the reading of the words and the forms of the greater number of them.

7. In the present paper I will express the four vowels by *a*, *e* or *o*, *i*, and *u*. The two latter have their Italian values *ee* and *oo*, as in my former paper. I use *a* in place of *ā* for the second Sanskrit vowel; it should be pronounced as in *all*, or in *father*, and represents the ך and ׀ of the Hebrews. My object in making this change is to enable me to express the lengthened sound of this vowel by *ā*, as in *zinnāti* in the following section. In place of *a* of my former paper, which represented the first Sanskrit vowel, I will use according to circumstances *e* or *o*, the Greek *ε* and *ο*, which generally represent this vowel in the Greek forms which correspond to Sanskrit ones. My seven forms of simple syllables will thus be written *Ca*, *Ce* or *Co*, *Ci*, *Cu*, *aC*, *iC*, and *uC*, *C* representing any consonant. The value of *aC* includes for the most part *eC* or *oC*; as does *iC* include *yeC* or *yoC* and even *yaC*; and in like manner *uC* includes *weC* or *woC* and even *waC*. The radical consonants in the derivatives which I am going to set down will be expressed by *Z*, *N*, *N*, distinguished by being printed in capitals. In my former paper I expressed the first of these consonants by *j*; and I still incline to think that it corresponded to the Sanskrit sonant palatal in the Indo-European language for which I believe that the cuneatic syllabary was originally formed,

but of which we have as yet no specimens.\* As, however, this consonant certainly corresponds to the Arabic *z*, which is pronounced as our *z*, and so represented by correct writers in this country, I will represent it in the same manner. For a like reason I will use *s*, in place of the *ç* of my former paper, for the consonant which corresponds to *ḍ* and *س*; and *sh*, in place of the *s* of my former paper, to express that which corresponds to *š* and *ش*. I will also use a Roman *s* among Italic letters, or an Italic among Roman, to express the consonant corresponding to *š* and *ص*, which I before expressed by *ç*, i. e. *ch*. Whatever the value of this consonant was, it is certain that it was not *ts*, because the affixes of the third person are expressed by *su*, *sa*, *sun*, and *sin*, after nouns terminating in *t*, which *t* was occasionally dropped or converted into another *s*; but the characters representing syllables containing the consonant *š* as initial, are in no instance used.† I may as well add in this place that I will express the equi-

\* The Van language is Indo-European; but the characters were borrowed by the people who used it from the Assyrians; and the inscriptions in it are of comparatively late date.

† Thus, in vi. 60. we have , *khe.ri.ù.su*. In PORTER's transcript of this text, and in vi. 30. , *is*, is used for *ù*; and in Gr. 2. 5. both are omitted, and we have simply *khe.ri.su*. In like manner, in x. 11., we have *bi.la.at.su.n'u*; in Gr. 3. 53., where this passage is repeated, the *at* is omitted. It would be strange, if  represented *tsu*, that its equivalent  should never be used in such cases as these, which are exceedingly common. Yet no instance of such a combination of the final *t* of a noun with the affix has ever been met with. Whether or not the combination *ts* was expressed by what I now write *su*, , will be discussed hereafter. I will here only observe, that these affixes are chiefly, if not exclusively, used after *t* and *s* as its substitutes; most, if not all, other consonants, and all vowels, require, as a general rule, that *sh* should be substituted for *s*. The exceptions are two; of which the first is the case which I have already noticed, where the *t* has been dropped after the vowel. Thus *khe.ri.su* means *kherit-su*; *bi.la.su.n'u*, *bilat-sun*. The other exception is where the vowel is not to be sounded, but is expressed anomalously, owing to a character being wanted in the syllabary. Thus in l. 39 we have , *mat.lu.t'u.su.un*, *matlut-sun*. There being no *ut* in the syllabary, *tu* is here substituted for it. We have here *su.un* where before we had *su.nu*. The two forms are quite equivalent; but as the *un* has an ideographic value, "a man," as well as its phonetic value, and is also a more complicated character, the latter is frequently substituted for it. Attention to this law of the affixes often enables us to determine the proper construction of a sentence. Thus, in v. 27. we have *ye.ta.at.sha*. We must not take this for a noun with an affix of the third person feminine singular, because that affix after *t* would be *sa*; but we must take *sha* for the preposition *of*;

valent of  $\mathfrak{D}$ ,  $\mathfrak{C}$ , by  $k$  in place of  $c$ ; reserving the latter to express an indeterminate consonant; while in lieu of  $k$ , which I before used to express  $\mathfrak{N}$ ,  $\mathfrak{C}$ , I will write  $kh$ . These changes of notation will, I trust, be generally approved of; and will, I hope, conciliate those who were deterred from reading my former paper by the unusual characters introduced into it.

8. Having disposed of the matter of notation, I now proceed to give the eight derivatives of the root ZNN, to which I have referred. I will substitute Assyrian forms of the characters for the corresponding Babylonian ones, which are of two kinds:—uncial, as in the ten-column inscription at the India House\* and on the bricks; and cursive, as on the cylinders or barrels, published by RICH,† KER PORTER,‡ and GROTEFEND.§

(a)  $\mathfrak{Z} \mathfrak{N} \mathfrak{N}$   $\rightarrow$   $\mathfrak{Z} \mathfrak{N} \mathfrak{N}$ . III. 66. Kal. Aorist 1. sing.  
eZ . Nu.uN. *eznun*,  $\mathfrak{Z} \mathfrak{N} \mathfrak{N}$ , *I fortify*.

(b)  $\mathfrak{Z} \mathfrak{N} \mathfrak{N}$   $\rightarrow$   $\mathfrak{Z} \mathfrak{N} \mathfrak{N}$ . Gr. 1. 6. Benoni, m. sing. in reg.  
Za.Ne . iN. *zanin*,  $\mathfrak{Z} \mathfrak{N} \mathfrak{N}$ , *the fortifier of*.

(c)  $\mathfrak{Z} \mathfrak{N} \mathfrak{N}$   $\rightarrow$   $\mathfrak{Z} \mathfrak{N} \mathfrak{N}$ . Some bricks substitute this for preceding.

Za.Ne . Nu. *zanenu*.  $\mathfrak{Z} \mathfrak{N} \mathfrak{N}$ . I take this to be the plural used out of respect, as it frequently is when gods or kings are spoken of. In i. 17 a compound character,  $\mathfrak{Z} \mathfrak{N} \mathfrak{N}$ , is used for the two last characters; its value seems to be Ne Na; compare B. M. pl. 27, l. 35, and pl. 72, l. 13. The word would then be the same which occurs with an affix, as (d); but whether it be singular or plural I cannot decide.

and accordingly the following noun is in the case which that preposition governs, which case ends with a vowel, and therefore takes an affix beginning with *sh*, *kha-ri-ti-shu*;—*yetat sha kheriti-shu*, the last word being the dative, as we may call it, corresponding to the accusative *kherit-su*, which we had at the beginning of the note. The nominative would be *kheritu-shu*.

\* Referred to by the column and line.

† Babylon and Persepolis, pl. 9., referred to as R. with column and line.

‡ Travels in Georgia, &c., vol. II. p. 394, referred to by the column and line of the India House inscription, of which it is a transcript.

§ Transactions of the Royal Scientific Society of Gottingen, vol. IV., referred to as Gr. with column and line.














gular:—1st. A syllable terminating with a vowel, and followed by that vowel, is generally pronounced as but one syllable, but with accent or increased length. Thus, in (e) *nu.u*, and in (h) *na.a*, are to be pronounced as *nú, ná*. They might be written *n'u.ú* and *n'a.á*, if we wished to combine the two systems of transcription, so as to give at the same time the full syllabic values of the characters, and their proper pronunciation when combined in words.\* 2ndly. A syllable terminating with a vowel, and followed in the same word by a syllable beginning with the same vowel, coalesces with it so as to form but one syllable. In the case where the vowel is *i* or *u*, I elide the final vowel, marking it with an apostrophe; as in the words (h) and (g), where *zi.in, zu.un*, form *zin, zun*, and would be written *z'i.in, z'u.un*; but where the vowel is *a*, I prefer apostrophizing the second vowel. Thus in (e) and (f) where *za.an, sha.az*, become *zan, shaz*, I would write *za.a'n, sha.a'z*. My reason for so doing is that *aC* may also represent *eC*, as I think it does in the first person singular of the Aorist in Kal; and that the effect of this ambiguity is thus obviated. If ¶, *a*, precede a syllable of the form *aC*, it may be well to mark it with the circumflex accent. Thus ¶ ⇒ ¶ ⇒ ¶ should be written *á.a'b ba*, or *ábbá*.

10. I now come to a case of elision which, though not quite regular, is nearly so. A syllable terminating in *e* or *o* (it is one cuneatic vowel that I represent by both these English vowels), and followed by a syllable beginning with *i* or *u*, coalesces with it into one syllable, the vowel of which is pronounced as *i* or *u*. Thus in (b) *ne.in* expresses *nin*, and might be written *n'e.in*; and in BOTTA, 2. 6. *et passim*, we have ⇒ ⇒ ⇒ ⇒ ⇒, *m'o.ush.ki* for the genitive

\* Sometimes the added vowel is designed to remove ambiguity rather than to lengthen the vowel. In such a case, I would mark off the first vowel with an apostrophe, but would not accent the second. Thus, I would transcribe ⇒ ⇒ ⇒ ⇒ ⇒ v. 59. by *su.l'e.e*. If the vowel were not added, the word might be read *Suli*, there being no *li* distinct from *le*. In some cases, the vowels should probably be sounded twice. Thus, ⇒ ⇒ ⇒ ⇒ ⇒ appears as if it should be read *yek.lu.u*, as I mentioned in Note 24 at the end of my last paper. This word signifies "they withheld," and the singular would be *yek.lu* without the final vowel. It is not, however, certain that the distinction between the two forms did not lie in the accent. The singular might be *yeklu*, with the accent on the first vowel; and the plural *yeklú*, with the last vowel accented and lengthened.



case of the name of a country at the north-west of Assyria. In my former paper, being deceived by the conjunction of the names of this country and Egypt, I supposed that it was Ethiopia; and to obtain the name Cush, it was only necessary to suppose that the last character was an ideographic determination (which it often is, but only, I believe, for places within the Assyrio-Babylonian territory);\* and to assume that as *m* and *w* were interchangeable, or at least often confounded, the reading might be *Hwush*, which might easily pass into *Kush*. The fact is, however, that in the only place in the Khorsabad inscriptions where these two countries are named together, they are mentioned as the extremes of the western boundary, which Egypt limited on the south; and Mushk, between the Euxine and the Caspian, the מִשְׁכִּי of Ezekiel, the Μόσχοι of Herodotus, on the north.† In the Samaritan text of Gen. x. 2, this

\* The distinction between  and  is precisely analogous to that of the Egyptian determinatives  and . The former in each case signifies "mountain," and thence for the most part "foreign country;" the latter "ploughed land," or "home territory." The Egyptian ideographs seem to have been pronounced *ta* "mountain," or *nakir* "foreign" and *irsût*. For    "men of foreign countries," expressed by ideographs solely in BOTTA. 153. 9, there is in 18. 79 the phonetic equivalent *ba.khu.la.te na.ki.ri*, "possessors of the foreign country," from בעל and נכר. [It is certain that the former of these characters, , is frequently used in the inscriptions to signify a mountain, hill, or mine; and the Egyptians used the same hieroglyphic for mountain and mine. When it has this meaning, it is inflected by the addition of  *u*,  *e*, and  *tu*, for the plural. The pronunciation was, I believe, *tah*. Thus we have in l. 117 of the Nimrod Obelisk an account of the people of Navri going up, *ana tahe*, "to a hill," and of the king of Assyria attacking and capturing the summit of the hill, killing the people, and bringing down their spoil; and in l. 106, 107, he goes, *ana tahtu*, "to the mines of" silver, rock-salt (*melt* = מלח), and gypsum, or perhaps marble. These were in *Ta.bal*, which must have included the south-western part of Cappadocia, where these minerals are known to exist. It adjoined *Khe.la.a'k.ku*, or Cilicia; and the name is almost certainly preserved in that given by the Greeks to the mountain chain which passed through it,—*Tauros*, or, as they pronounced it, *Tavros*.—August, 1852.]

[N. B. This and other passages between brackets were added to the paper after it was read.]

† [Many copies have *muzki*, in the place of *mushki*, which I take to be more correct. This is the genitive case; the theme might be *muzak*, a name which is perhaps preserved in *Mázaka*, afterwards Cæsarea, the capital of Cappadocia. At any rate this country must lie further south than I have supposed in the text, being included within the limits of Cappadocia. It adjoined *Tabal*, mentioned in the preceding note; lying between it and *Wararad* (whence *War.ar.da.a'y*), that is, Ararat, Armenia; and its king had political relations with *Qar.ga.mish*.—August, 1852.]

name is written  $\text{𐎧𐎺𐎠}$ , with which, and with the Cuneatic spelling, but in opposition to the Masoretic pointing, the Septuagint has  $\text{Μοσός}$ . The elisions of this section may be considered to indicate either that the syllable which would most naturally be used, as *ni* in the first instance, had nothing to represent it; or that the use of its proper representative was, from its having other ideographic values, or from its peculiarity of form, more likely to lead astray than the use of a character with an approximate value.

11. I proceed to notice some elisions that were still more irregular than these, but for which the same plea of necessity might be urged. In the name of Nebo, I. 6, we have, after the determinative of divine names, three characters,  $\text{𐎠𐎢𐎵𐎠𐎢𐎵}$ , which have the values *na.bi.uv*. The last was probably here sounded as a *û*, or in some dialects as *ug*; but the irregularity to which I would call attention is the elision of *i* before a *u*. This could only have arisen from the circumstance that the syllabary contained neither a *bu* nor a *bo*. It had in fact *ba* and *bi*, *pa*, *pe* or *po*, and *pu*;—five of the eight syllables with representatives, and three without. The consequence was, that *pi* had to be represented by either *pe* or *bi*; *bu* by *pu* or *bi*, and *be* or *bo* by *pe*, *pu*, or *bi*. The writer had to choose between representing the true vowel of the word with an approximate value of the consonant, and representing the true consonant with an approximate vowel, to which the true vowel would perhaps be joined in a manner that is evidently anomalous. The above word is certainly to be transcribed *na.bi.uv*, the *i* of the second syllable being elided before the *u* of the third. Similar to this is the irregular elision which occurs in the verb *ekhro* in VI. 30. This is the first person of the aorist in Kal of that verb, of which *kherit*, mentioned in the note to section 7, is a derivative. It is written  $\text{𐎠𐎢𐎵𐎠𐎢𐎵𐎠𐎢𐎵}$ , *ekh.r'i.o*; *i* being elided before *o*. The cause of this is the want of a character to represent *re* or *ro*.\*

12. Other irregular elisions are these.  $\text{𐎠𐎢𐎵}$  is used before a syllable of the form *iC* to express *eC*; either because it was thought necessary to distinguish *eC* from *aC*, or because the nearest character of the form *aC* represented an ap-

\* If such a character had existed, it would have been used to express the third vowel in *Ahuramazda*, which is what I call *e* or *o*. Some of the Achæmenian inscriptions write the first part of this name  $\text{𐎠𐎢𐎵𐎠𐎢𐎵𐎠𐎢𐎵}$ , *a.khu.ru*, and others  $\text{𐎠𐎢𐎵𐎠𐎢𐎵𐎠𐎢𐎵}$ , *a.kh'u.ur*, which are both approximations.

proximate sound, and not the true one. Thus in v. 31, *es* is expressed by  $\text{𐎶𐎶𐎶}$ , *e.i's*, rather than by  $\text{𐎶𐎶𐎶}$ , which was *az*, though by license used also for *as* and *as*.  $\text{𐎶𐎶}$  is distinctively *is*, signifying "a tree or beam,"  $\text{𐎶𐎶}$ , and being prefixed as a determinative to objects made of wood, and to names of different kinds of wood; but it is used by license for *iz* and *is*, so as in general to commence the third person masculine of verbs, when the first commences with  $\text{𐎶𐎶}$ . By a process, almost the reverse of what I have mentioned, *yeC* and *weC*, when not occurring in the syllabary, have their places supplied by *ye.aC*, *we.aC*. Thus in v. 1, we have  $\text{𐎶𐎶𐎶𐎶𐎶𐎶𐎶𐎶}$ , *y'e.ekh.ru* for the third person plural masculine of the aorist, the first person singular of which is *ekhra*, as at the end of the last section.\* A word which represents some form of the verb "to bring" is generally written with an initial  $\text{𐎶𐎶}$ , which is properly *up* or *wep*, though here by license used for *web*. So in III. 23; but in a parallel passage, Gr. 3. 37,  $\text{𐎶𐎶𐎶𐎶𐎶𐎶𐎶𐎶}$ , *w'e.ab* seems to be substituted for it. The root is  $\text{𐎶𐎶}$ , in Hebrew  $\text{בבל}$ .

13. I will mention one more irregular dropping of a vowel, which is of a different character from any of the foregoing. Sometimes when a word terminates in a consonant, and when there is no character which represents that consonant preceded by its vowel (or at least no character which it is desirable to use), a character is used which represents that consonant followed by the same vowel, which should then be marked with an apostrophe as elided. In some instances a doubt may be entertained, whether the vowel should be sounded or not; but in others it is certain that it should not. I have mentioned two such instances in the note to section 7; *mat.lu.t'u-s'u.un*, where the absence of a final vowel is proved from the form of the affix, there being no *ut* in the syllabary; and the affix of the third person masculine plural, which is *sun* or *shun*, though often written with a final *nu* in place of *un*, which latter character might be

\* From this it may be inferred that there is no *ikh* in the syllabary, which I believe to be the fact. Its place is sometimes supplied by *akh* and sometimes by *ik*. This argument is, however, not conclusive, because *akh* and *uk* are both used to supply the place of *ikh*; and yet this syllable had a representative of its own, though a very difficult one to form; namely,  $\text{𐎶𐎶𐎶𐎶}$ , used in Botta, 11. 58, where we have *ukh.a* in place of the *u.kha* of 19. 64. Other inscriptions have *u.a*, the  $\text{𐎶𐎶}$  being frequently left unrepresented.



almost sure to lead him astray.  $\text{𐎶}$  and  $\text{𐎶𐎠}$ , for instance, are found to be interchanged. They are so at the beginning of the name of Hamath, and at the end of a proper name, of which the different terminations are given in the note to section 12. Are these characters then equivalent? The first answer that would naturally be given would be, that they were. Further examination would, however, show that, though interchanged in a few words, they were generally used quite differently. The name of Achæmenes, which begins with these two characters, would lead to the inference that the former was *ha*, and the latter *khá*; for the Persian word which corresponds begins with the letters *h.kh.a*. The former character is, however, proved by grammatical forms to be a simple vowel. See the word marked (h) in section 8; and observe that it begins the first person singular of the aorist in certain verbs, which *h* could not do according to any Semitic analogy. The value of this character is therefore properly *a*; and it is *ha* by license, there being no proper *ha* in the syllabary. But is there, therefore, no *h* in the Assyrio-Babylonian system? Such would be the natural inference; but this again would be incorrect; for though there is no representative of *ha*, there is at least one character of another form, which contains *h*, as distinguished from every other consonant. It is the same thing in other cases. The analysis of proper names, plausible as it may appear to be as a groundwork for deciphering, is for such a system as the Assyrian quite illusory, and can only lead at the best to approximate results. In order to grapple successfully with the difficulties of the decipherment, recourse must be had to the discussion of grammatical forms; different forms of the same root, and like forms of different roots; and these as they appear in correct inscriptions, which those of the Achæmenian monarchs do not appear to be.

15. I now proceed to consider the different series of characters which agree in their consonantal part; and I naturally begin with what may be called the Aleph series, that is, the pure vowels. In my paper on the Van inscriptions, I stated that there were four,  $\text{𐎶}$ ,  $\text{𐎶𐎠}$ ,  $\text{𐎶𐎠𐎶}$ , and  $\text{𐎶𐎠𐎶𐎠}$ . I repeated this statement in my paper of June, 1849;\* and I should not have thought it necessary to add much to what I there said, were it not for a new aspect of the controversy between Colonel RAWLINSON and myself, which has presented itself since the preceding sections were written, and which obliges me to remodel much

\* Trans. Royal Irish Academy, vol. xxii. Pol. Lit., pp. 8-10.

of what follows, with a view to meet his altered statements. I must, in the first instance, describe the change I refer to. In Colonel RAWLINSON'S "Commentary on the Cuneiform Inscriptions of Babylonia and Assyria," which was published in the early part of 1850, he maintained the Alphabetic values of the elementary characters, in opposition to the Syllabic, which at that time I exclusively held.\* He has lately published the first part of a "Memoir on the Babylonian and Assyrian Inscriptions;" in which he has abandoned the alpha-

\* As Colonel RAWLINSON'S Commentary may not be generally known, I think it fair to give a few extracts from it, with a view to show what opinions its author held when he wrote it. He says, pp. 4, 5—"The Phonetic signs are in some cases syllabic, and in others literal. Where a sign represents a syllable, I conjecture that the syllable in question may have been the specific name of the object which the sign was supposed to depict; whilst in cases where a single alphabetical power appertains to the sign, it would seem as if that power had been the dominant sound in the name of the object. . . . . There is, it may be admitted, an extensive syllabarium; but at the same time many of the characters can only be explained as single consonants." He says, p. 13, speaking of the conjugations: "I recognise, I think, independently of those which may be formed by a permutation of the interior vowels, and which, owing to the want of points, it is impossible to discriminate, the Niphal, Hiphil, or Hophel and Hithpael of the Hebrews, together with the Chaldee Ithpael, Aphel, Ittaphal, Shaphel, and Ishtaphel." He here evidently ignored Pihel. In p. 72 of my paper, I gave a Pihel participle; and in my British Association lithograph I gave a series of such. In Colonel RAWLINSON'S recent work, the interior vowels are discriminated. The characters being read as syllables in place of letters, the want of points is no longer complained of. The characteristic of the "Hiphil or Hophel" of the Commentary is clearly the  $\Xi\text{M}\Xi$ , which I equated to  $\text{H}$ ; and considered to be the formative of the participle. Here again my views have been adopted. In p. xxxiv. of the Memoir, this statement of mine is repeated without the slightest hint that it was different from what the author had formerly made, or that it had previously been made by any one else. In p. 13 of the Commentary it is said, that the suffix of the third person plural is a simple  $n$ , which was thought to be characteristic of number, rather than of person. In p. 60 of my paper I said: "The first and third persons of regular verbs generally terminate with characters of the form  $uC$ ; while the third person plural has the same consonant followed by  $u$ ." Examples of this are given in my British Association lithograph. In p. xi. of the Memoir, Colonel RAWLINSON adopts this view; but gives it as what he had always supposed. Speaking of *Yatipou*, he calls it "the regular third person masculine plural." And in a note he observes; "the termination in  $u$  marks, of course, the plural number, like the Hebrew  $\text{ל}$ ." When the Commentary was published, no  $u$  could be discovered. The final  $\text{I}$ , which he now reads  $su$ , was a simple  $s$  (p. 6); and in p. 13 he says: "I have neither adopted, nor do I conceive it possible to adopt, any system with regard to the employment of the vowels in Assyrian and Babylonian." The system proposed by me in my last paper has since been adopted by him, with very slight alterations; and these, as shall show, not improvements.

betie values that he formerly asserted, and has given syllabic values to all the characters. For this substitution of truth for error, I of course cannot blame him; but I think I have a right to complain that he has omitted all mention of my priority in asserting that truth which he has so recently embraced. The slight change which he has made in my classification of the vowels and simple syllables, even if correct, is not of such moment as to entitle him to claim more than the credit of improving another's work. This change is the rejection of  $\text{𐎶}$ , *e* or *o*, as a distinct vowel, and the placing the syllables which I supposed to terminate in it, some of them among those that terminate in *i*, and others among those that terminate in *u*. But the fact is, as I expect to be able to prove in this paper, that the alteration is no improvement. The system which Colonel RAWLINSON has now proposed is inconsistent with itself; and he will have to abandon it so far as it differs from mine before he completes his present memoir. This change in the aspect of the controversy has compelled me, as I said, to remodel much of what I had written. I had sought to establish the syllabic values of the elementary characters, supposing this to be the point in dispute; and I had accordingly directed attention to the facts that proved it. I may now pass lightly over these proofs, while I have to put prominently forward the facts which show the distinctness of the vowel  $\text{𐎶}$ , *e* or *o*, and of the syllables which terminate in it, from other vowels and other forms of syllables. I think it proper to add in this place, that Colonel RAWLINSON has not only adopted my system of classifying the characters, but my method of investigating their values by comparing different derivatives of the same root. In describing this method in sections 4 and 5 of this paper, I have referred to the places where I previously employed it. If, then, it be alleged that Colonel RAWLINSON was led to alter his views as to the *literal* nature of the cuneatic phonographs by his having adopted a better method of investigation than he had previously used, and not by the statements which I had made, I must reply, that this better method is itself to be found in my previous publications.

16. Returning from this digression to the four vowels, and their cuneatic representatives, I say that  $\text{𐎶}$  denotes the long vowel *a*, corresponding when initial to  $\text{𐎶}$  or  $\text{𐎶}$ , as in  $\text{𐎶} \text{𐎠} \text{𐎶}$ , *a.na.ku*, "I," Heb.  $\text{אנכי}$ , and where it forms the first person singular of the aorist; as it does in quiescents in  $\text{𐎶}$ , and some few other cases. Sometimes it represents this long vowel preceded by

ע, ה, and even ח, instead of by א; as in אָ <אָֿ, *a.di*, corresponding to אָֿ, whence אָֿֿ; and in אָֿֿֿ, *a.lik*, “going,” which I suppose to be the Benoni, corresponding to אָֿֿֿ, and probably also in אָֿֿֿֿֿ, *a.sh'i.ib*, “dwelling,” which I take to correspond with אָֿֿֿֿֿ, from a root not used in Hebrew, but bearing the same relation to אָֿֿֿֿֿ as אָֿֿֿֿֿ does to אָֿֿֿֿֿ. אָֿֿֿֿֿ represents ח, in the name of Hamath referred to in section 14. In the middle or at the end of a word this vowel is only expressed when the preceding character represents a syllable terminating in a consonant, or when it is intended to denote a lengthened vowel, such as in Hebrew would be expressed by a so-called quiescent letter א, ח, or ל.

After each of the characters of which I treat, I propose to give the number in FISHER'S list, published by the East India Company, and the first determination of its true value. H. 49 will imply that this was first assigned by me in my paper of June, 1849, or previously thereto; H. 50, that it was assigned in my lithograph of July, 1850; and H. 52, that it is so in my present paper. I annex R. to the characters for whose values I am indebted to Colonel RAWLINSON. I begin, then, with—

No. 1. אָֿֿֿֿֿ. F. 4. *a*. H. 49.

17. As to the secondary or ideographic values of אָֿֿֿֿֿ, I cannot undertake to give complete satisfaction. It is well known that it signifies “a son;” GROTEFEND recognised it as doing so in the Achæmenian inscriptions, and it has since been found with the same meaning in those of Assyria. Occurring in the name of the father of Nebuchadnezzar, it has been read *pal*, *Ναβοπαλασσάρως* being the Greek form of this name which appears most authentic; but the true Babylonian value appears to be *bal*, as we have it in Merodoch-Baladan. Colonel RAWLINSON identifies the Chaldean king mentioned in the Khorsabad inscriptions, and on BELLINO'S cylinder, with the Merodach-Baladan of Isaiah, 39. 1. I cannot agree to this, though I think he had the same name.\* I identify him with the *Μαρδοκεμπάδος* of the Canon; supposing, with Chevalier BUNSEN, that the δ is a corruption for λ, and that the μπ represents the Babylonian *b*; the Greek β being *v*. The father of this king is called Yagin, which may very well be the

\* [I am now satisfied that this identification of Colonel RAWLINSON was a correct one, as well as that of my own which follows. See Appendix.—September, 1852.]



*Iovyalos* of the Canon. Another ideographic value of this character I take to be "water," which may be connected with the preceding. (See GESENIUS'S Hebrew Lexicon, p. 774, B.) In this sense it appears to be used in BOTTA, 151, 22, where  $\text{𐎶 𐎶} \rightarrow \text{𐎶} \text{𐎶} \rightarrow$ , seems to mean "the waters of the rivers." In the second word it is a determinative prefix, as in  $\text{𐎶} \text{𐎶} \rightarrow \text{𐎶}$  which replaces it in v. 8. This is the genitive case *bar.ti*. The theme would be *bar.it*,  $\text{𐎶}$ . The name  $\text{𐎶} \text{𐎶}$ , used for "the Euphrates" on the obelisk and elsewhere, may mean "the great water." I am not, therefore, prepared to adopt Colonel RAWLINSON'S opinion, that  $\text{𐎶}$  is ever to be read *pu*.\* I suspect, however, that it had other values besides *bal*. I am by no means satisfied that the names of the great Nebuchadnezzar and of his father were distinct, independent of dialectic variations. If I be right in this,  $\text{𐎶}$  would have the value *kudur*, connected with  $\text{𐎶}$ . On this point I would not speak positively; but content myself with giving as certain—

No. 1, a. *bal*. R.

18. I now come to the second vowel, as to the nature of which my present controversy with Colonel RAWLINSON chiefly turns. I transcribe it by *e*, *o* (see section 7); and consider it a distinct vowel from both *i* and *u*, though approximating sometimes to one and sometimes to the other. Colonel RAWLINSON represents it by *e*, but denies that it is a distinct vowel. He considers it to represent  $\text{𐎶}$  (Memoir, p. 12); to form "the oblique case" of nouns (p. 13, note); and to denote ideographically the dual number, which he says "must end in a consonant;" and he is inclined to read it *im*, p. 16. That it is a distinct vowel I inferred long ago, from its use in the Van inscriptions, where it is the custom to insert after each character that represents a syllable terminating in a vowel the character that represents the vowel, when there is a sufficiency of room in the line. Thus we have, written indifferently, according as the sculptor

\* On this point I will not be positive, owing to my want of data. What seems to me to bear strongest on the question is this:—In the 16th line of the Standard Inscription, B. M. pl. 1, we have  $\text{𐎶} \text{𐎶}$  in the genitive; and where other inscriptions containing the same text, as those on the great slab or altar, have  $\text{𐎶} \text{𐎶} \text{𐎶}$ . In Mr. LAYARD'S valuable collection of variants, it is stated that  $\text{𐎶}$  is substituted for  $\text{𐎶}$ , and  $\text{𐎶}$  or  $\text{𐎶}$  added to the word; but it is not clear whether one of these variations occurs without the other.

had or had not spare room,  $\text{𐤅}$  and  $\text{𐤅}$   $\text{𐤍}$ , *na*,  $\text{𐤅}$  and  $\text{𐤅}$   $\text{𐤍}$ , *ta*; and in like manner  $\text{𐤅}$  and  $\text{𐤅}$   $\text{𐤍}$ , *ne*,  $\text{𐤅}$  and  $\text{𐤅}$   $\text{𐤍}$ , *te*. Everything that I have ever observed in the Assyrio-Babylonian inscriptions confirms me in this view of the matter. I will briefly notice the cases in which this character occurs initially, medially, and finally.

19. First, as to the beginning of a word: I remarked in my last paper (p. 69), that this character, "where it precedes *two radicals* at the commencement of the first person, represents  $\text{𐤅}$ ." Such a verb as  $\text{𐤅}$  is thus distinguished from such a verb as  $\text{𐤅}$ , the former giving *e.sur*, and the latter *a.sur*. It also forms the first syllable of the infinitives of such verbs, or their nouns of action: as in BOTTA, 145. 13,  $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$ , *ana e.bish qabli*, "making opposition." But it is not always used to express initial  $\text{𐤅}$ . We have seen (section 16) that  $\text{𐤅}$  begins with  $\text{𐤅}$ . The proper names  $\text{𐤅}$ , Gaza, and  $\text{𐤅}$ , Omri, begin with the sound *kh*, being in the genitive  $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$ , *kha.zi.ti*, and  $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$ , *kh'u.um.ri.a*; while  $\text{𐤅}$ , Ekron (Sept. *Ακκαρών*) begins with a syllable of the form *aC*,  $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$ , *av.qar.ru.na*. On the other hand,  $\text{𐤅}$  is often initial when there is no  $\text{𐤅}$ , as in  $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$ , *e.i's.n'e.ik.ma*, v. 31, and  $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$ , *e.ĭp.t'i.ik*, iv. 24, which I have explained in section 12. Here the character precedes those radicals, and represents simply  $\text{𐤅}$ . The latter verb is followed by the cognate noun  $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$ , *pe.t'i.ik*; and in III. 5, we have the third person plural,  $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$ , *yep.ti.ku*; so that there can be no pretence for supposing the presence of a  $\text{𐤅}$ .

To come now to the middle of words. It is very true that in Gr. 2. 41,  $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$ , is used for "my lords;" and the former  $\text{𐤅}$  may be considered to represent the  $\text{𐤅}$  of the Hebrew  $\text{𐤅}$ . We have, however, in BOTTA, 77. 5,  $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$ , *so.o.ne*, for  $\text{𐤅}$ ; and in R. 1. 14,  $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$ , *r'i.o.ku.tu*, from  $\text{𐤅}$  (see section 11). The fact is, that in these three instances the  $\text{𐤅}$ ,  $\text{𐤅}$ , and  $\text{𐤅}$ , are not represented at all. It is the vowels connected with them, which would be represented by points in Hebrew, Syriac, or Arabic, that the cuneatic  $\text{𐤅}$  represents.

20. Lastly, at the termination of words I deny that  $\text{𐤅}$  indicates  $\text{𐤅}$ . Colonel RAWLINSON supposes that the word  $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$   $\text{𐤅}$ , which he reads *akri* or *akre* (followed of course by the affix *ma*) means, "to them I made adoration,"

from כרע. In the first place I deny that this is the root or the meaning. I translate it, "I call upon them," deducing it from קרס.\* The ער is often omitted, and I suppose it to be merely used to indicate that the preceding character, which is properly *ri*, has here the value *ro*, for which it is used by license, there being no character properly denoting that syllable (see section 11.) But in the second place I contend, that if the root were כרע, it would not follow that the ער expressed the final radical, as distinguished from its vowel. Of this verb I do not recollect to have met any other form; but we may take three forms of חרע or חרס (verbs given in sections 11 and 12, and a noun in the note to section 7), and compare them with corresponding forms of the root נצר.

We have—1st singular, *ekh.r'i.o*, as *es.s'u.ur*, for *en.s'u.ur*.

3rd plural, *y'e.ekh.ru*, as *yes.su.ru*, for *yen.su.ru*.

Noun in dative, *khe.ri.ti*, as *ne.sir.ti*.

It is quite plain that the *u* or *s*, whichever it may be, is no more represented by the final character in the first form than by the vowel inherent in the second character of the third form. Were we to complete them, we should have *ekhro'u*, *yekhro'yu*, contracted into *yekhru*, and *kheri'uti*. The *u*, in fact, is not represented; the vowel connected with it is.

There are, however, numerous instances in which ער terminates a word, where no *u* can be imagined to be present. Let us consider the other ways by which Colonel RAWLINSON explains its presence. In the word above quoted, "my lords," in which it occurs twice, he reads *belim-a*, supposing the second ער to be an ideograph for the dual. I read *bele-a* (*b'i.e.l'e.e.a*), and suppose it to be a plural case governed by the preposition *ana*. It is in the same case as 𐎶𐎵𐎶𐎵 𐎶𐎵 𐎶𐎵𐎶𐎵 𐎶𐎵𐎶𐎵 (Stones), *p'e.i.le pe.s'e.e*, which I contrasted in my lithograph of July, 1850, with (Stones), *p'e.i.lu pe.s'u.u* in the nominative; and every one must see that these two forms are identical as to their vocalization. Whatever kinds of stones be spoken of, it is clear that the adjective

\* [The true translation is, "I invoke or call upon." *Ma* is not a pronominal affix, but seems to mark the tense of the verb. It is equivalent to the prefixed particle *lu*, which in the note in p. 63 of my last paper, I erroneously supposed to be a variant of *ana.ku*. The power of these particles may not be the same as that of the Hebrew *Vaw* conversive; but it has some analogy to it.—September, 1852.]

*pese* means "broken small;"\* it being repeatedly contrasted with *rabe*, "in masses, large;" so that the dual number is here out of the question. I see, indeed, no reason to suppose that there is any dual in the language of the inscriptions. Colonel RAWLINSON'S argument for the consonantal termination of the value of  $\text{𐤀}$  is one of which I cannot discover the force. "At any rate," he says (p. 16 of his Memoir), "the dual characteristic must end in a consonant, or otherwise the suffix of the first person, which is attached to the noun, would be represented by  $\langle \text{𐤀}$ , or  $\text{𐤀𐤀}$ ." Why? The affix of the first person singular is  $\text{𐤀}$ , *a*, for which  $\text{𐤀𐤀}$ , *ya*, is generally used after a syllable terminating in *i*. This *ya* is in fact *i.a*; and what is here done is simply to write down the vowel of the last syllable before the affix. The very same thing is done in the case of a syllable terminating in *u* or in *e*. In the instance of *abua*, which Colonel RAWLINSON gives, the affix is not *ua*, as he supposes, but simply *a*. The  $\langle$  which precedes  $\text{𐤀}$  is the vowel inherent in the ideograph for "father," which is written phonetically when no affix follows  $\text{𐤀} \langle \rangle$ , *a.bu* (Br. Mus. 42. 52, and 87. 4). In other instances, where *u* precedes *a*, the connexion of the *u* with the noun is obvious, as in  $\text{𐤀𐤀𐤀} \langle \rangle \text{𐤀} \text{𐤀}$ , *qa.t'u.u.a*, I. 46;  $\text{𐤀𐤀} \langle \rangle \text{𐤀𐤀} \text{𐤀}$ , *su.p'u.u.a*, II. 6. This last word is in the nominative plural; and the corresponding genitive occurs, I. 52, with the affix of the third person masculine in place of that of the first. It is  $\text{𐤀𐤀} \text{𐤀} \langle \rangle \text{𐤀} \text{𐤀}$ , *su.p'e.e.shu*. It appears to me, that if the affix of the first person had to be expressed with this genitive, nothing could be more natural than to substitute *a* for *shu*. Colonel RAWLINSON'S objection to this is evidently founded on his assumption that  $\text{𐤀}$ , when a vowel, is not distinct from  $\text{𐤀}$ . It consequently depends on a *petitio principii*.

21. He says in p. 13, that *e* is often used for the *oblique case* of nouns. It would seem from this, that he admits only *one* oblique case. It appears to me that nouns have four cases,—the nominative, the genitive, the dative, and the accusative; which last is in singular nouns which terminate in a consonant *the theme*, and is used for the three other cases when in construction.

\* [This is a mistake of mine; but it does not vitiate my argument. The meaning of *pese* is certainly *smoothed*, *dressed*, or *cut*; *rabe* being *in the rough*, as the stones were taken from the quarry. Objects are said to have been made of *pile pese*, which Mr. LAYARD states to be of fossiliferous limestone.—September, 1852.]

It is true, that these four cases are not all distinguished from one another in both numbers and in every declension. The same thing, however, occurs in all languages; but it is the grammarian's business to distinguish the cases, and note their several uses. Now I maintain, that *e* and *i* are the terminations of different cases. I will not now attempt to give complete declensions of Assyrian nouns with the modifications that they may undergo in construction and before affixes, and perhaps in different dialects. I only feel myself called on at present to show the distinctions of these terminations; and it may be sufficient to refer to two clear instances, in which a difference of the vowel is connected with a different use. In a very great number of the Khorsabad inscriptions, we have mention made of a people bordering on the sea. In some inscriptions this is written *mar.ra.te*, with a final 𐎠𐎵, and in others *mar.ra.ti*, with a final 𐎠𐎶. Now the former is preceded, without a single exception, by 𐎠𐎶𐎵, *tik* (as BOTTA, 1. 25), and the latter, without a single exception, by *kishad* or *kishade* (as BOTTA, 3. 24, 9. 18, 19). 𐎠𐎶𐎵𐎠𐎶𐎵, *na.g'e.i*, and 𐎠𐎶𐎵𐎠𐎶𐎵𐎶, *na.g'e.e*, are used for different cases; the former represents the nominative or accusative plural, "towns" (as Botta, 147. 8, 11); the latter the genitive plural; as in Bel. 33,\* *dan.na.a't na.g'e.e*, "the chief of the towns." This distinction appears to me sufficiently well marked. I grant that instances may be produced in which an apparent interchange of *e* and *i* final, and of characters which I suppose to terminate in these vowels, occurs in equivalent inscriptions. Instances of false spelling are, however, pretty abundant in Greek manuscripts and inscriptions; yet no one supposes that such instances prove the equivalence of the characters interchanged. Nor are these the only characters which are occasionally confounded in Assyrio-Babylonian inscriptions. In a word quoted in section 19, from R. 1. 14, the last character is erroneous. In a duplicate of the inscription published by GROTEFEND, 𐎠𐎶𐎵 is substituted for it, which contains the same consonant, but certainly followed by a different vowel.

\* BELLINO's cylinder, of which a beautiful lithograph has been published by GROTEFEND. It is also in the British Museum series, plates 63 and 64. I do not insist on passages where this word is preceded by a numeral. "Six towns," "six of the towns," and "a six of towns," may all be used with propriety; after a numeral, therefore, *e* and *i* may be used almost indifferently.

I have dwelt longer on this character on account of the importance of the questions connected with it. I conclude—

No. 2.  $\text{𐎶}$ . F. 135. *e* or *o*. H. 49.

Its ideographic value would seem to be “a place.” In that sense it is used, but rarely, as a determinative prefix; see III. 13, and compare III. 65.  $\text{𐎶}$   $\text{𐎶}$ , “heaven,” I take to be a compound ideograph, “the place of gods or stars,” or “the high place.” In the Behistun inscription, 87 and 89,  $\text{𐎶}$   $\langle \text{𐎶} \rangle$  is used for “Babylon.” Like many other expressions for the proper names in most general use, this defies explanation.

22. No. 3.  $\text{𐎶}$ . F. 12. *i*. H. 49.

No. 3, a. *ye, yo*. H. 49. It represents the preformative of the third person singular and plural, when it constitutes a distinct syllable. It thus corresponds to  $\text{י}$  and  $\text{י}$ , as in  $\text{𐎶}$   $\langle \text{𐎶} \rangle$   $\text{𐎶}$ , *ye.b'u.ush*, D. 14, compared with  $\text{𐎶}$   $\langle \text{𐎶} \rangle$   $\text{𐎶}$ , *e.b'u.ush*, in same line; the former would be  $\text{יבוע}$ , the latter  $\text{יבוע}$ ; and again in  $\text{𐎶}$   $\text{𐎶}$   $\text{𐎶}$   $\text{𐎶}$ , *ye.ga.a'b.bi*,  $\text{יגאבי}$ , “he said,” in Pihel.

No. 3, b. *nit*. R. In the name *Nabunita*, Beh. detached inscription, Nos. 3 and 8.

No. 4.  $\text{𐎶}$ . F. 46. *u*. H. 49.

No. 4, a. *we, wo*. H. 49. Used as the preformative of the participle when it constitutes a distinct syllable as in Pihel and Shaphel.  $\text{𐎶}$   $\text{𐎶}$   $\text{𐎶}$   $\text{𐎶}$ , *we.kha.a'l.le.ip*,  $\text{יחלל}$ ;  $\text{𐎶}$   $\text{𐎶}$   $\text{𐎶}$   $\text{𐎶}$ , *we.sha.a'l.b'i.ish*,  $\text{יבש}$ ; in Hebrew  $\text{יבש}$  for  $\text{יבש}$ . *w* and *m* were scarcely distinguished in the language of the inscriptions; yet it seems to me that  $\text{𐎶}$ , *me*, is not exactly equivalent to No. 4. It forms the verbal noun, while No. 4 forms a participle; the one would be “the defender of,” the other “defending,” or “having defended.” The distinction between these in Assyrian, while they are confounded in Hebrew, is analogous to the distinction between the first person of the dual and plural in Sanskrit, Lithuanian, and Slavonic verbs active, and their confusion in Greek, which converted  $\text{τύπτοτες}$  and  $\text{τύπτομες}$  alike into  $\text{τύπτομεν}$ .

No. 4, b. *sham*, H. 52. I take this to be the value in  $\text{𐎶}$   $\langle \text{𐎶} \rangle$ , “of the sun,” *sham.shi*; and in Botta, 40. 98, where Astarte is called, as I read the word, *me.sham.mi.kha.a't*, from  $\text{ימש}$ , “the causer to rejoice.”

Ideographically this character signified a measure of length, of the value of

which I am ignorant. Compare vi. 25 and viii. 45; where we have in like contexts 480 *am.ma.a't*, "cubits," and 4000  $\text{𐎠𐎢𐎽}$ .

No. 5.  $\text{𐎠}$ . F. 21. *u*. H. 49.

No. 6.  $\text{𐎠𐎢𐎽}$ . F. (32 + 122). *u*. H. 49.

These are interchanged with No. 4, when medial or final; but when initial they always denote the conjunction "and,"  $\text{𐎠}$  or  $\text{𐎢}$ .

23. Intending to treat of the simple syllables in the order in which their consonant occurs in the Hebrew alphabet, I begin with those that contain *Beth*. I have stated in section 11, that of the four forms ending in a vowel, two only, representing *ba* and *bi*, were used by the Assyrians; and I have pointed out the substitutions made for *be* and *bu*. These may be taken as a specimen of what was practised in other similar instances.

The characters referred to as containing *b* before a vowel are—

No. 7.  $\text{𐎠𐎢}$  or  $\text{𐎢𐎠}$ . F. 111. *ba*. H. 49.

No. 8.  $\text{𐎠𐎢}$ . F. 225. *bi*. H. 49.

I cannot think that the Babylonians had any character which properly denoted *bu*; for if they had, they would not have used *b'i.ú* to express the final syllable in the name of their god Nebo. The characters by which this syllable was commonly denoted will be found under  $\text{𐎠}$ .

24. In general, characters whose values terminate with a consonant express both the surd and the corresponding sonant. Before a character representing a syllable beginning with either the surd or the sonant, such a character must be made to terminate with the sound which begins the following syllable. In other cases there is an ambiguity which can only be removed by observing how other derivatives of the same root are written, or by observing how the same root is spelled in some cognate language which employed alphabetical characters. This being premised, I will here produce such characters as represent single syllables terminating in either *b* or *p*.

No. 9.  $\text{𐎠𐎢}$ . F. 79. *ab* or *ap*. H. 49.

No. 10.  $\text{𐎠𐎢𐎽}$ . F. 150, *ab* or *ap*. H. 52. This is perhaps distinctively *ab*, when it is not followed by a syllable beginning with *p*. It is chiefly used with this value in Babylonian inscriptions. Compare Gr. 1. 8 with i. 40, and R. 2. 13 with v. 19.  $\text{𐎠𐎢𐎽 𐎠𐎢𐎽 𐎠𐎢𐎽}$ , *ra.a'b.u*, seems used for *rabu*, as more distinctive than  $\text{𐎠𐎢𐎽 𐎠𐎢𐎽}$ . I have never recognised the character with

this value in an Assyrian inscription, except when it occurred as the name of a month.

No. 10, a. *kuv* or *kum*. R. It is interchanged with *ku.uv* or *um*; compare BOTTA, 40. 21 and 36. 15. It signifies "fire," from the root כּוּר; and is used as a determinative prefix interchangeably (in some words at least) with 𐎧𐎢𐎠.

No. 10, b. *tha*. H. 52. It is used in the Van inscriptions to denote a syllable ending in *a*, corresponding as to consonantal value with that which I will give hereafter as 𐎠𐎠. I have never recognised it as having this value in any Assyrian inscription, but it is possible that it may have it.

No. 10, c. *gil?* H. 52, interchanged with 𐎧𐎢𐎠𐎠; compare BOTTA, 21. 17, and 9. 20. I am not quite sure that the initial consonant is *g*; Colonel RAWLINSON makes it *b*; but I distrust the proofs on which he seems to rely. See No. 17.

No. 11. 𐎧𐎢𐎠. F. 253. *ib*, *ip*, *yeb* or *yep*. H. 49.

No. 12. 𐎧𐎢𐎠. F. 209. *ub*, *up*, *web* or *wep*. H. 49.

25. No. 13. 𐎧𐎢𐎠. F. 229. *ga*, R. In the Babylonian uncial inscriptions it is always used for *ga* as well as *ga*; it has this value frequently in the Babylonian cursive inscriptions, and occasionally in the Assyrian; but in these another character was in use to express *ga*. See below. Colonel RAWLINSON has not recognised any distinct representation of syllables containing 𐎧.

No. 14. 𐎧𐎢𐎠. F. 52. *ge* or *go*. H. 52. This is used to express both *ge* and *go*, and *gi*, and it may be doubted which is its proper value. I choose the former, partly because, 𐎧𐎢𐎠 being interchanged with this character in certain words, we must suppose them to have different vowels, on the principle laid down in section 11; and it seems to me preferable to value them as *ki*, *ge*, than as *ke*, *gi*; partly because I believe No. 17 to be *gi*, though only used as such at the commencement of a word. This character, whatever its phonetic value was, seems to signify "fire or flame;" and hence we have the compound ideograph 𐎧𐎢𐎠𐎠 to express "gold," *khuras*.

No. 15. 𐎧𐎢𐎠. F. 62. *gu*. H. 49.

I think the preceding three characters are the only ones which express syllables commencing with *g* in the inflexions of nouns and verbs. The two following, however, appear to me to express such syllables when initial.

No. 16. 𐎧𐎢𐎠. F. 221. *ga*. H. 49. This is used by abbreviation to de-



note "an ox." Sometimes it is completed by the addition of  $\text{𐎠𐎡}$ , *av*, or  $\text{𐎠𐎢}$ , *ap*, in the Assyrian inscriptions; while in the Van inscriptions *pa* is added. I inferred long ago, and I see no reason to alter my opinion, that we had here an Indo-European word, the initial character being *ga*. I observed also, that, if WESTERGAARD's copy of the Babylonian inscription at Nakshi-Rustam is *in this instance* to be depended on, the name of Zaranga, at the beginning of l. 13, terminates with this character.

No. 17.  $\text{𐎠𐎢}$ . F. 28. *gi?* H. 52.

This character has different values, but one is certainly of the form *Ci*. In a verb which occurs in the pavement inscriptions at Khorsabad, we have in the first person singular of the aorist  $\text{𐎠𐎢𐎠𐎡}$ , in BOTTA, 21. 17, and  $\text{𐎠𐎢𐎠𐎡𐎢𐎠𐎡}$  in 9. 20. The first and last characters in this word being *a* and *il*, the second must be of the form *Ci* or *Ce*. In the third person plural we have, in 1. 27, *ye. Cil.lu*, and in 13. 20, *ye. Ci.lu*. The former of these seems to be in Pihel, the latter in Kal. The root may be  $\text{גלה}$  or  $\text{בלה}$ ; I cannot say that the one is more probable than the other, but I object to *bi*, which is Colonel RAWLINSON's value, for two reasons:—First, because the character has for a secondary value *bit* or *bid*, and I know no other instance in which a character has a phonetic value a part of its other value; and secondly, because there is a character which can be proved to consist of this syllable with the addition of *r*; and there is another character, the value of which is certainly *bir*, and which is never interchanged with it. I suspect, too, though I have no positive proof, that this represents  $\text{גג}$ , "a stranger," or "enemy." I hope to give more satisfaction on the subject when I come to that character.

No. 17. a. *bid* or *bit*. H. 52.

This is interchanged with  $\text{𐎠𐎢𐎠𐎡}$ , which is the ideograph for "house," and is known to have this value in *we.sha.a'z.bid*. See Variants in B. M. Standard, 44. This is the Shaphel participle; we have also the Pihel *we.zab.bid*, produced in my lithograph of 1850; and the first person of the aorist in Kal,  $\text{𐎠𐎢𐎠𐎡}$   $\text{𐎠𐎢}$ , *I gave or put*.

No. 17, b. *mad* or *mat*. H. 52.

With respect to this value, I differ entirely from Colonel RAWLINSON. I think it occurs in the derivatives of  $\text{מתל}$ , "to rule," corresponding to the Hebrew  $\text{משל}$ , all of which he refers to  $\text{בעל}$ . Thus the word which occurs so

commonly in the inscriptions signifying "dominion," is, according to me, *mat.lu.tu* or *ti*, formed like *shar.ru.tu*, "reign," or "kingdom," or like the Hebrew *malkut*. Colonel RAWLINSON reads it *bi.lu.tu*. So *mat.il.ti.ya*, "of my mistress," Gr. 1. 32, is, according to him, *bi.il.ti.ya*. Again, I give it this value in the derivatives of  $\text{𐎠𐎢𐎣}$ , "to continue," which he derives from  $\text{𐎠𐎢𐎣}$ , in the sense of "imposing" (the tribute payable by cities). We have also  $\text{𐎠𐎢𐎣}$ , which seems to me to signify "names," or "titles," and which I read *shu.mat*, the plural of *shum*, No. 63, a. In B. M. 38. 8, compared with Bel. 46, we have  $\text{𐎠𐎢𐎣}$  transcribed by  $\text{𐎠𐎢𐎣}$ , that is, *mi.ti*. According to my view of the case, it was wished to express *mit*, for which there was no character; and one copy used *mat*, another *mi.ti* (see section 13). The final *i* must be here dropped, as it occurs in an infinitive in construction. I read the passage thus:

*Sha* (ideog.) *alekut makhri* (ideog.) *ya ana rimit matluti-shun weshopeshu-ma.*  
 which the kings who went before my fathers during their dominion made.

Observe here how the gerund is formed by prefixing *ana* (=  $\text{𐎠𐎢𐎣}$ ) to the construct infinitive *rimit*  $\text{𐎠𐎢𐎣}$ , from  $\text{𐎠𐎢𐎣}$ , "to be high," and so "to prevail." The last word is the Shaphel participle (see under No. 100) in the plural, with the affix of the third person plural, proper to verbs.\*

[This character preceded by  $\text{𐎠𐎢𐎣}$  forms the name of a god.—Oct. 1852.]

No. 18.  $\text{𐎠𐎢𐎣}$ . F. 40. *ag* or *ak*. H. 49. Preceded by  $\text{𐎠𐎢𐎣}$ , this represents *Nabú*.

No. 19.  $\text{𐎠𐎢𐎣}$ . F. 283. *ig*, *ik*, *yeg*, or *yek*. H. 49.

No. 20.  $\text{𐎠𐎢𐎣}$ . *ug*, *uk*, *weg*, or *wek*. R. = F. (105 + 64). H. 52.

No. 21.  $\text{𐎠𐎢𐎣}$ ,  $\text{𐎠𐎢𐎣}$ . F. 173. *ug*, *uk*, *weg*, or *wek*. H. 52.

This is used in a proper name, *Ruhukha*, followed by *a* (BOTTA, 16. 74), where we have *u.kha* in 19. 64. This determines the vowel to be *u*, and shows that the following consonant is *kh*, or what may be used for it. It is, however, also used in a common word (BOTTA, 164. 8, and IX. 9), all the other characters of which have their values known. They are *mesh (uC) kan.na*. This is evidently a derivative of the *Puhal* conjugation, and the same consonant must terminate the second syllable and begin the third. It appears to me, therefore that this character must be phonetically equivalent to the preceding.

\* [See note in p. 311.—September, 1852.]

26. No. 22.  $\text{𐎶𐎵𐎶}$ . F. 268. *da*. H. 49.

No. 23.  $\text{𐎶𐎵}$ . F. 162. *de* or *do*. H. 52. Like No. 14, this is used to express the syllable terminating in *i*, as well as that which terminates in *e* or *o*; it is, however, in my judgment, satisfactorily proved to have the value here assigned to it. I argue from the Van inscriptions. It terminates a case which I formerly supposed to be the dative, but which I am now satisfied was the ablative, of which the ancient forms terminated in *d*; this points to a primitive *de*, not *di*. But, more than this, we have this ablative both in the singular and plural. The plural termination is  $\text{𐎶𐎵𐎶}$ , *ashte*. Now it appears to me obvious that the case is formed in both numbers by adding the same post-position, which is curiously enough the Latin *de*, "from." The sonant of the singular is changed into the corresponding surd in the plural, through the influence of the *sh*. From this it seems to follow, that the vowel which inheres in  $\text{𐎶𐎵}$  is the same as that in  $\text{𐎶𐎵}$ , which is most certainly  $\text{𐎶𐎵}$ , *e* or *o*.

No. 24.  $\text{𐎶}$ . *di*. R. In *Naditabira*, and in some inflexions in the Achæmenian inscriptions; not, I think, in the more ancient ones.

No. 25.  $\text{𐎶𐎵}$ . F. 260. *du*. H. 49.

No. 25, a. *gin*. H. 52. It is interchanged with  $\text{𐎶𐎵𐎶}$   $\text{𐎶𐎵}$ , *ge.na*, and  $\text{𐎶𐎵𐎶}$   $\text{𐎶𐎵}$ , *ki.na*, the one form preserving the consonant, and the other the vowel. It occurs in the two proper names, *Shar.gin* (𐎶𐎵𐎶𐎵 of Is. xx. 1), and *Yagin*, king of the Chaldeans, probably the *Iovyalos* of the Canon. The final *a* is probably emphatic, and I do not think it should be included in the value of the present character.

No. 26.  $\text{𐎶𐎵𐎶}$ . F. 204. *ad* or *at*. H. 49.

No. 26, a. *abu*. H. 52. In my paper of 1849, I valued it as "father."

No. 27.  $\text{𐎶𐎵𐎶}$ . F. 269. *id*, *it*, *yed*, or *yet*. H. 49.

There is no character in the syllabary representing *ud* or *ut*.\*

27. The character which represents *h* will be found with those which con-

\* [Since this was written, I have satisfied myself that No. 112, in addition to its value *tu*, in which it is equivalent to No. 111, had the special value *ud* or *ut*. I have found it used in several words where it requires to be read *ud*; and for this a character representing *tu* could not be used on the principle of section 13. Thus, e.g.  $\text{𐎶𐎵𐎶}$   $\text{𐎶𐎵}$   $\text{𐎶𐎵}$ , Ob. 76, must be read *ek.shu.ud*, because *yek.shu.da* occurs in Bel. 8, and *yek.shu.du* in Beh. 66; both being from the same verb.—September, 1852.]

tain *kh*. I doubt if there be any character which properly stands for *wa*, unless indeed the combination of Nos. 4 and 1 be regarded as such. *Wa* is sometimes represented by these two characters, but more frequently by  $\Xi\Upsilon$ , which is properly *ma*, and will be found between the *l* and *n* series.\*

No. 4, a, has been already stated to represent *we* or *wo*.

No. 28.  $\langle \Xi \Xi \rangle$ . F. 17. *wi*. H. 50.

If *wu* were a combination admitted into the language, it was probably expressed by *uv* or *mu*.

No. 29.  $\Xi \Delta$ . F. 227. *av*, *am*. H. 49. It seems also to represent *aq*, being the first syllable of *aq.qar.ru.na*,  $\text{Ακκαρών, } \text{𐤀𐤒𐤓𐤁}$ ; where the Masoretic pointing is not to be relied on. Whether the *v* is here used for *q* (compare *vivus*, M. Go. *qvivs*, &c.), or whether the *dagesh* (which the Hebrew  $\text{פ}$  ought to have marked in it) be a compensation for a radical *m* or *n*, I will not undertake to say.

No. 30.  $\Delta \Upsilon \Upsilon$ . F. 57. *iv*, *im*, *yev*, or *yem*. H. 49. With  $\rightarrow \Upsilon$  prefixed, it is the name of a god. As a determinative prefix, Colonel RAWLINSON has justly remarked that it distinguishes points of the compass. †

No. 31.  $\Xi \rightarrow \Upsilon \Upsilon$ . F. 143. *uv*, *um*, *wew*, or *wem*. R. I think, however, that Colonel RAWLINSON is in error when he gives this value to both the characters which he places as equivalent. The second is, I think, the Achæmenian form of *mu*. The syllables *um* and *mu* were confounded in the Babylonian uncial inscriptions, but distinguished everywhere else. ‡ In the name of Nebo, and in some other words, this character seems to represent *ú*, as if *uw*.

28. No. 32.  $\Upsilon \Upsilon$ . F. 5. *za*. H. 49; used also for *sa*, H. 52. By a strange

\* [*Wa* was represented by  $\Xi \Xi \Upsilon$   $\rightarrow \Upsilon \Upsilon$ ; compare BOTTA, 149. 11, and 155. 8, where the same syllable is expressed by this compound character and by  $\Xi \Upsilon$ . This is also the value in *Ya.wa.nu sha qabal tu.ti*, "Ionia of the middle of the sea," BOTTA, 13. 7, *et passim*.—September, 1852.]

† [As a distinct word (*im* or *iv*,  $\Upsilon$ ), it signifies "a command or decree." In this sense it is used alone in an Assyrian inscription, copied by Mr. LAYARD at Van; but it more frequently takes the determinative prefix  $\Xi \Delta \Xi \Upsilon$  before it. The genitive is  $\Xi \Upsilon \Upsilon \rightarrow$ , *e.mi*. The root I take to be עוה = Hebrew צוה.—September, 1852.]

‡ [They were also confounded in the peculiar character used in the inscription on Lord ABERDEEN's stone.—September, 1852.]

inadvertence, I made this *sa* in my lithograph of 1850; that is  $\text{𐎶}$ , a value which it never has; it is the more necessary to note this, because Colonel RAWLINSON has given this as its only value.

No. 33.  $\text{𐎶𐎵}$ . F. 53. *zi*. R.

No. 34.  $\text{𐎶𐎶}$ . F. 124. *zu*. R.

No. 35.  $\text{𐎶𐎶𐎵}$ . F. 214. *az*, or *as*. H. 49.

No. 36.  $\text{𐎶𐎶}$ . F. 11. *az*, *as*, or *as*. H. 50.

No. 36, a. *asshur*. H. 49.

No. 36, b. *adan*. H. 52. I recognised the name  $\text{𐎶𐎶𐎶}$  as that of Esarhaddon in my paper of 1849; but I sought to reduce the first and last elements to phonetic equivalence. I now suppose No. 36 to stand for two distinct elements in this name.

No. 37.  $\text{𐎶𐎶}$ . F. 77. *iz*, *is*, *is*, *yez*, *yes*, or *yes*. H. 49. This is the determinative of kinds of wood, and of things made of wood. It is properly  $\text{𐎶𐎶}$ , "a tree."

[No. 37, a. *gish*. H. 52. Only, I believe, in the Van inscriptions. Compare No. III. 8 and 11.—September, 1852.]

No. 38.  $\text{𐎶𐎶𐎶}$ . F. (26 + 71). *uz*, *us*, *us*, *wes*, *wes*, or *wes*. H. 49.

No. 39.  $\text{𐎶𐎶}$ . F. 165. *kha*. H. 50. Used for  $\text{𐎶}$  and  $\text{𐎶}$  as well as for  $\text{𐎶}$ .

No. 40.  $\text{𐎶}$ . F. 151. *khe* or *kho*. H. 50. In the Van inscriptions it takes an  $\text{𐎶}$  after it; it also begins the second part of the patronymics, as *mi.nu.a.kho.no.sh'e*, "the son of Minyas." This is a position in which the analogy of Indo-European languages requires the equivalent of the first Sanskrit vowel. This character is, however, used for *khi*, which was wanting in the syllabary. [Preceded by  $\text{𐎶}$  it denotes *Asshur*.—September, 1852.]

No. 41.  $\text{𐎶𐎶}$ . F. 71. *khu*. R.

No. 42.  $\text{𐎶𐎶𐎶}$ . F. 154, *hu*. H. 52. This occurs as the termination of several proper names in the nominative; as in BOTTA, 86.1, 16.71, 75.6, 145.15. In the last case a final *u* is added. In my former paper I supposed the value of this character to be *ru*, which was not unnatural, considering that the proper names of a country, *Ye.tu.Cu* (BOTTA, 145.6); of a city, *Sa.a'm.C'u.u.na* (145.8); and of the king of Egypt, *P'e.ir.C'u.u* (145.15), might be naturally read *Yeturu* (Iturea), *Samruna* for Samaria (which is in fact *Sa.mi.ri.na*); and *Boharru*, Bocchoris. The latter reading is indeed objectionable, because

the *ir* does not admit the value *har* or *khar*; as I believed it to do, owing to an erroneous reading in WESTERGAARD'S copy of the Nakshi-Rustam inscription. I am now satisfied that Colonel RAWLINSON is right in identifying this name with Pharaoh, the common title of the kings of Egypt, פֶּרַעִי. But this being admitted, the value *ru* might suit this word. I am, however, now convinced that the city and country above mentioned are much more to the East than I supposed; and as  $\text{𐤓𐤕}$ , which certainly represents *ru*, seems clearly distinguished from  $\text{𐤓𐤕𐤔}$ , the latter must contain some other consonant, and this can be no other than *h*, if we would bring פֶּרַעִי out of the above name. The reading would then be *Pirhu*; and we have no proof that this was not the proper pronunciation of what we pronounce "Pharaoh." The omission of the final *u* in this name implies, that the value of the present character terminates with that vowel; otherwise I should be disposed to read it as below, *ah*, giving *Pirahu*.

No. 42, a. *ah*. R.

Colonel RAWLINSON represents this character by ' , which I presume is intended for *ah*. It seems to me quite evident, that this is *one* value of the present character, and that it should generally be read thus when it follows a syllable terminating in *a*. It occurs thus in (the land) *Na.a'h.i.ri*, BOTTA, 146. 18; evidently נַהֲרִים, Mesopotamia;\* and in *Kha.za.a'h.il*, Ob. 123; חַזְרַאִל, as the name is written, 2 Kings, viii. 8; and again in *we.ma.a'h.ir*, Ob. 150, "hastening," the Pihel participle of מָהַר. In other words, the consonant is expressed in Hebrew by an א, as in *Sa.ba.a'h.ay*, BOTTA, 145. 15; Sabæan, the Gentile adjective of סַבְא, Meroe, or, at any rate, a country south of Egypt; see GESENIUS. Or it is superfluous. Thus *ma.a'h.li*, Brit. Mus. Standard, l. 55,  $\text{𐤌𐤓𐤕𐤔}$  אַל, as it should have been printed, is from the root מָלַא, and is, in fact, no more than *mali*. In like manner, in the Achæmenian inscriptions,  $\text{𐎠𐎡𐎢}$ , the form of this character there used, is repeatedly interchanged with  $\text{𐎠𐎡}$ , *a*.

No. 43.  $\text{𐎠𐎡𐎢}$ . F. 154. *akh*. H. 50.

\* [This was the country through which the Upper Euphrates ran, and which contained the two lakes of Urumiah and Van, which are called the Upper and Lower Waters of *Nahiri*. B. M. 12. 14, 15. The name is here written without the *ah*; as it is also in a Van inscription in the Assyrian character, where the king, assuming the rest of the titles usually borne by the kings of Assyria, substitutes *Nahiri* for *Ashur*.—September, 1852.]

This is clearly distinguished from the preceding in both the Babylonian cursive and the Assyrian inscriptions; yet the Babylonian uncial expresses both by F. 154. Compare Gr. 2. 7, with VI. 30, where the word is *akh.re*, connected with *kherit*, which occurs in the same line; and again compare Gr. 1. 33, with III. 53. This participle must be read *we.za.a'h.in*, or *we.sa.a'h.in*. The first radical is uncertain (see No. 32), as I have never met the word in any other form. Neither  $\text{כָּרַח}$  nor  $\text{כָּרַח}$  occurs as a root in Hebrew; but this may perhaps be from a root equivalent to  $\text{כָּרַח}$ , and meaning "to shine," "making its — to shine with silver."

No. 44.  $\text{𐎠𐎡𐎢𐎣}$ . *akh*. H. 52.

This is used for "brother,"  $\text{אָח}$ , in BOTTA, 73. 5, and elsewhere; it occurs as an element in the name of Esarchaddon, *Asshur-akh-adan*, and with the plural sign *akhi* in that of Sennacherib, *Shan.akhi.rib* or *ir.ba*.




No. 45.  $\text{𐎠𐎡}$ . *akh*. H. 52. Interchanged with the preceding. These are phonetically equivalent to No. 43; but are not used except in proper names, or to express the idea "brother."


No. 46.  $\text{𐎠𐎡𐎢}$ . *ukh* or *wekh*. H. 52. This character, followed by *a*, is used in BOTTA, 11. 58, where 19. 64 has *u.kha*. It occurs in the name of a people, the *Ru.h'u.ukh.a*.


29 There are only two sets of words in which I have recognised the Hebrew *Teth*. One is the name of Armenia,  $\text{אַרְמֵינָא}$ , the other the derivatives of  $\text{כָּתַב}$  "to write." Targ. Jer. xxxiii. 12.  $\text{كُتِب}$  in Arabic. These words both give No. 22 for  $\text{כָּ}$ ; No. 23 for  $\text{כָּ}$  or  $\text{כָּ}$ , there being with these vowels no distinction between  $\text{כָּ}$  and  $\text{כָּ}$ ; but the following character for  $\text{כָּ}$ , for which No. 25 is very rarely substituted. The Gentile adjective *War.ar.da.ay*, and the genitive *War.ar.de*, are common in the Khorsabad inscriptions. The nominative occurs at Behistun, 49: *We.ra.ash.thu*,  $\text{𐎠𐎡𐎢𐎣}$ ; not *as.sad*, as Colonel RAWLINSON has read it.\* The *ash* before a consonant is generally to be read *ar*, as I have stated in my former paper. In the Van inscription of Xerxes (No. XI. in SCHULTZ's Plate II.), l. 22, we have *yesh.th'u.ur*, for "he wrote." In the following line we have *a.na sha.da.ri.shu*. The two last characters are defective




\* In his "Indiscriminate List" Colonel RAWLINSON places a variant of *lu*, to which he gives the secondary value *du*. This character and *lu*, No. 56, appear to me quite distinct.



in the copy, but the *da*, No. 22, is distinct. The meaning is "to inscribe it," as is evident from the Persian text.\* We have then—


No. 47.  or . F. 247. *thu*. H. 52. It occurs in BOTTA, 166. 6, and 167. 10, from which the forms given are copied; the Achæmenian form has been already given. The equivalent of F. 247, in Gr. 1. 6, is so like this, that I cannot doubt the identity of the characters. Accordingly, I read the name which occurs in that line *Bit.shag.ga.thu*. No. 10, b, is used in the Van inscriptions for *tha*; but I question if it be so in the Assyrian. From the use of *da*, *de* for *tha*, *the*, there can, I think, be no doubt that  was pronounced as *th* in "that;" which is certainly very different from the received opinion.


No. 48. . F. 249. *ya*. H. 49.

No. 49. . *ya*. R. Interchanged with the preceding. Compare BOTTA, 8. 32, and 10. 13. *Ye* or *yo* was expressed by No. 3; *yi*, *iy*, and *uy* had no representatives; No. 30 was, I presume, used for *yu*, though more properly *yev*. We have one more character in which this semi-vowel predominates, viz.:










No. 50.  . *ay*. R. It is, I think, sometimes used for the plural "waters," and may then have an *i*, , added. Compare VII. 46, and v. 38. This led me to think that the present character terminated in *i*.

No. 51.  . F. 243. *ka*. H. 49. It is also used for a noun, the meaning of which is as yet unknown to me; it was an article of tribute.

No. 52. . F. 163. *ki*. H. 50; see No. 14. This is also used for "earth, land," and as a determinative; see note to section 10.

No. 53. . F. 113. *ku*. H. 49.

In the Babylonian uncial inscriptions, and occasionally in others, these two

\* [Since the above was written, I have recognised the *Tath* in   , *ship. di*, "of judgment," from . This word is written thus, and with No. 10 in place of the determinative at the beginning, in two unpublished inscriptions, shown to me by Mr. LAYARD. I have also recognised several derivatives of , as   , *pal.ad*, "passing by," Ob. 111,—*at.ta.pal.tha*, "I passed by."—Ob. 132. Here the last syllable is represented by , which is the Assyrian equivalent of No. 10, b, used at Van. Another derivative of this root occurs repeatedly at Behistun, if I be right in my reading and interpretation: namely, *pal.thu*, "the survivors," Beh. 63. Colonel RAWLINSON, however, reads the word *mallu*, and translates "one and all."—Memoir, p. xciv., note.—September, 1852.]



characters are used to represent *qi* and *qu*, which, however, had other representatives, as will be seen below.

[No. 53, a. *dur*. H. 52. It occurs with this value on many of the Babylonian bricks, where  $\square \square$  is substituted for the *ku.du.ur* of Gr. 1. 1; also in  $\square \square \square$ , *e.dur.ma*, "he gave the slip to," BOTTA, 145. 14. Compare  $\square$ . This is written in an unpublished inscription of Mr. LAYARD's, with two characters for the  $\square$ .—September, 1852.]

31. No. 54.  $\square$ . F. 188. *la*. H. 49.

No. 55.  $\square$ . F. (26 + 273). *le* or *lo*. H. 49. In the Van inscriptions it is used both alone and with an  $\square$  after it, for the termination of the third person singular, *a.le* = Sanskrit *áha*. As to the consonantal part of the value there can be no question.

No. 56.  $\square$ ,  $\square$ . F. 119. *lu*. H. 49. Not to be confounded with No. 47. I must here retract what I stated in my former paper,—that the first form of this character is ever used for  $\square$ , "I." It is an expletive adverb, prefixed to verbs in every person, and must be read *lu*.\* This character is frequently used as an ideograph for "sheep," and seems a determinative prefix to words signifying sorts of sacrifices.—Brit. Mus. 43. 9.

No. 57.  $\square$ . F. 13. *le* or *lo*. H. 52. This is interchanged with No. 56 in two separate words, BOTTA, 145. 7, and 12. 49, 51. On the other hand it is used in Beh. 51, as the termination of a noun after the preposition *az*, and followed by the adjective *rabti*. Here it would seem to represent *li*. For these or similar reasons, Colonel RAWLINSON has valued it as *li* or *lu*. If he means, however, that it had both these values, I must object to this view of the matter, that no other character is so used. I accordingly propose a different theory. I do not find that, except in proper names, this was interchanged with No. 56. It seems to me then probable, that it represented the combination of a peculiar *l*, which I would distinguish as above, with the vowel *e* or *o*. It may have been the surd *ll* of the Welsh, or the barred *l* of the Poles, or the *ll mouillé* of the French. On that I do not pronounce an opinion, but I think it plain that this character was distinct as to its use from No. 55, though agreeing with it as to its vowel, and as to its being represented by *Lamed*.

[\* Not exactly an expletive. See Note in page 311.—September, 1852.]

No. 58.  $\text{𐎶𐎠𐎶}$ . F. 278. *al.* H. 49.

No. 59.  $\text{𐎶𐎠𐎶𐎶}$ . F. 277. *il, yel.* H. 49, as to the Babylonian uncial character, though I had not then recognised the Assyrian equivalent.

No. 60.  $\text{𐎶𐎠𐎶𐎶}$ ,  $\text{𐎶𐎠𐎶𐎶}$ . Ass. *il, yel.* H. 50.

No. 61.  $\text{𐎶𐎠𐎶}$ . F. 222. *ul, wel.* H. 49.

32. No. 62.  $\text{𐎶}$ . F. 238. *ma* (often used also for *wa*). H. 49. I am by no means confident that this had not other values, but I cannot assign any.

No. 63.  $\text{𐎶}$ ,  $\text{𐎶𐎶𐎶𐎶}$ . F. 15. *me* or *mo*. H. 50. It is interchanged with No. 4, as a prefix to the Pihel and Shaphel participles; compare BOTTA, 6. 5, and 144. 8, *et passim*. See, however, what I have said on this subject in section 22. The use of this character for *mu*, which Colonel RAWLINSON supposes to be its proper value, is explained in section 10. No. 65 was objectionable, as being frequently used for *mesh*, which might puzzle the reader, especially in a proper name.

No. 63, a. *shum.* R. Compare BOTTA, 44. 4, and 40. 5. It is chiefly, if not exclusively, used with this value in the word signifying "a name."

This is also used as an ideograph for "a year;" and as a determinative prefix before *annat*, "years,"  $\text{𐎶}$   $\text{𐎶𐎶}$   $\text{𐎶𐎶}$   $\text{𐎶𐎶}$ . Compare BOTTA, 151. 16, and 114. 6. Without this prefix, this word denotes an article of tribute, which I take to be "rings." The connexion of the word with *annus*, *annulus*, is not a little remarkable.

No. 64.  $\text{𐎶}$ . F. 31. *mi.* R. Often confounded with No. 28; but the distinction is for the most part observed. This is used for "a hundred,"  $\text{𐎶𐎶𐎶}$ , which without the termination of the feminine would be *mi*. On the other hand, in some varieties of cuneatic writing, No. 28 is clearly composed of Nos. 5 and 3, *u.i.* The derivatives of  $\text{𐎶𐎶}$  and  $\text{𐎶𐎶} = \text{𐎶𐎶}$ , "to fear," which occur in the great inscription at the India House, are always written with No. 28, when the *w* should be followed by an *i*.

No. 64, a. *shib* or *ship.* H. 49. Compare BOTTA, 8. 21, and 9. 13.

No. 65.  $\text{𐎶𐎶}$ . F. 143. *mu.* H. 52. As in the instance of the uncial character, 154, which corresponds to both Nos. 42 and 43, we have here a second equivalent of F. 143, the first being No. 31. See what I have said of that character. The value is ascertained by the word  $\text{𐎶𐎶}$   $\text{𐎶𐎶}$   $\text{𐎶𐎶}$ , *ki.mu.ti*,

constantly used after a masculine noun, while the feminine, used according to custom when no noun was expressed, is as constantly expressed by  $\langle \text{𐎶} \rangle$   $\text{𐎶}$ , *kima.ti*. Compare BOTTA, 147. 2 and 146. 13. The word *bi.mu*, "between," is written with this character in BOTTA, 151. 21; and at Behistun with the second form of Colonel RAWLINSON'S *um*, which he erroneously supposes to be equivalent to the first.

No. 65, a. *mesh*. R. This terminates the name of Carchemish, recognised as a town of the Hittites (BOTTA, 44. 17), situated on the Euphrates, B. M. 34. 22. It occurs also in a common word which we find in IX. 9, and BOTTA, 164. 18, *mesh.uk.kan.na*; see No. 21. This is also written *me.shuk.kan.na*, BOTTA, 177. 15; and sometimes we have *mesh.kan.na*, without the duplication of the second radical. The root seems to be  $\text{𐎶}$ .

No. 65, b. F. 98. *lak*. R.? This, or a character which Colonel RAWLINSON has confounded with it, occurs in the Behistun inscription in the verb *et.ta.lak*, "I went;" Beh. 36; like *et.ta.rad*, "I went down." Colonel RAWLINSON, though he gives the character the value *lik*, identifies it with the uncial character, F. 98, of which one value is certainly *lak*, another being *shid*. Compare v. 20 and v. 53. I have never met this character with the value *lak* in an Assyrian inscription, and I much doubt its admitting it.\* The uncial character, F. 143, to which it corresponds in Assyrian, is very different in appearance from F. 98. If the Achæmenian and Assyrian characters be really of

\* [I have now no doubt of its having the values *lak* and *shid*, and so being an exact equivalent of F. 98. It occurs with the value *lak* in the name of Cilicia,  $\text{𐎶}$   $\text{𐎶}$   $\text{𐎶}$   $\text{𐎶}$ , *khe.lak.ki*, identified by Colonel RAWLINSON. It is thus written in BOTTA, 145. 18; and in 117. 9 we have  $\text{𐎶}$   $\text{𐎶}$  in place of  $\text{𐎶}$ . Again, the value *shid* (compare VIII. 60, and VII. 61) belongs to this character in the word  $\text{𐎶}$   $\text{𐎶}$   $\text{𐎶}$   $\text{𐎶}$ , *yep.tu.shid.ma*, "he escaped," Bel. 7, from which we have the pluperfect  $\text{𐎶}$   $\text{𐎶}$   $\text{𐎶}$   $\text{𐎶}$ , *yep.tu.shi.du*, "he had escaped," in Bel. 26. It would thus appear, that at Behistun there were three characters to represent *um*, *mu* and *mesh*, and *lak* and *shid*; that in the Babylonian inscriptions the first and second were confounded; and that in the Assyrian the second and third were confounded, or at any rate they have been confounded by the copyists of the inscriptions. I cannot help thinking it possible that some difference, which has been overlooked by the copyists, exists in the normal forms of these characters. *Mu* and *mesh*, for example, might be  $\text{𐎶}$ ; *lak* and *shid*  $\text{𐎶}$ . I throw this out for the consideration of those who have access to the original inscriptions.—September, 1852.]

like form, I should consider the case to be like that of  $\Xi\Upsilon\langle\Upsilon$ , which in Assyrian represents F. 273, *sha*, but in Achæmenian, F. 268, *da*; the Achæmenian *sha* and the Assyrian *da* having additional wedges.

[No. 65, c. *shid*. H. 52. See the preceding note.]

[No. 65, d. *rat*. H. 52. Compare v. 17, vi. 1, with BOTTA, 40. 80; Brit. Mus. 39. 22, and many inscriptions which contain the same matter.—October, 1852.]

[In addition to all its other values, this character when preceded by  $\rightarrow\Upsilon$  represents  $\rightarrow\Upsilon \Xi\Upsilon\rightarrow \Xi\Upsilon\Upsilon^{\wedge}$ , *Mar.duk*, the  $\Upsilon\Upsilon\Upsilon$  of Scripture.—September, 1852.]

33. No. 66.  $\rightarrow\Upsilon$ . F. 140. *na*. H. 49.

No. 67.  $\rightarrow\Upsilon$ . F. 192. *ne* or *no*. H. 49. This is used for  $\Upsilon$  in the verb *ne.te.b'u.ush*, "we made;" WEST. D. 10; but inasmuch as it was also used for *ni* in the name of Nineveh ( $\rightarrow\Upsilon \rightarrow\Upsilon \rightarrow\Upsilon \Upsilon$ , *Ni.nu.a*, or  $\rightarrow\Upsilon \rightarrow\Upsilon \rightarrow\Upsilon \Upsilon$ , *Ni.n'a.â*), and in some inflexions of nouns, a doubt may be entertained as to which was the proper value. I think that this question is best settled by the Van inscriptions. This is the termination of the accusative singular and of the genitive plural, and is also the penultimate character in the latter. In these positions the short vowel can alone be tolerated; *ni* for the accusative singular, *nini* for that of the genitive plural, would be contrary to all analogy of cognate languages.

No. 67, a. *sal*. H. 52. Compare Gr. 3. 59, and x. 19. Also a determinative prefix. See No. 10, b.

No. 68.  $\Upsilon$ . F. 211. *nu*. H. 49.

No. 69.  $\langle\rightarrow\Upsilon$ . F. 274. *nu*. H. 49.\*

No. 70.  $\rightarrow\Upsilon$ . F. 287. *an*. H. 49.

No. 70, a. *û*. H. 49. In proper names, and to express the idea of "God;" it is the Hebrew  $\Upsilon$ .

No. 70, b. *Asshur*. H. 49. It is interchanged with  $\rightarrow\Upsilon$ , of which this is certainly the value, too often for the interchange to be attributed to mistake. See BOTTA, 21. 30, where "the Gods" is expressed by this last character with

\* [This may be written for distinction *nû*. It is interchanged with  $\Upsilon \Xi\Upsilon$  and  $\Upsilon \Xi\Upsilon$ ; the latter in the name of the God  $\rightarrow\Upsilon \Upsilon \langle\rightarrow\Upsilon$ , *A.nû*.—September, 1852.]

the plural sign; 9. 34 being No. 70. I still consider this word to be the Persian *ahura*; and would read the name of the country  $\text{𐎠} \text{𐎢} \text{𐎠}$   $\langle \text{𐎠} \text{𐎢} \text{𐎠} \rangle$ , *Asshur. di*, not *An. di* or *Il. di*.

This character, No. 70, is used as a determinative prefix before names of gods, and it forms with other characters many monograms, the value of which cannot possibly be known from their component parts. Thus, with  $\text{𐎠}$ , *pa*, or  $\text{𐎠} \text{𐎢}$ , *ak*, it is to be read  $\text{𐎠} \text{𐎢} \text{𐎠} \text{𐎢} \text{𐎠}$ , *Na. b' i. ú*, "Nebo;" with  $\text{𐎠} \text{𐎢}$ , *mu* or *mesh*, or  $\langle \text{𐎠} \text{𐎢} \text{𐎠} \text{𐎢} \rangle$ , *sur. tu*, it is to be read  $\text{𐎠} \text{𐎢} \text{𐎠} \text{𐎢} \text{𐎠}$ , *Mar. duk*; and so in other instances.

No. 71.  $\text{𐎠} \text{𐎢} \text{𐎠} \text{𐎢} \text{𐎠}$ . *in* or *yen*. H. 50. See note in section 1.

No. 72.  $\text{𐎠} \text{𐎢}$ . F. 256. *un* or *wen*. H. 49.

As an ideograph it is used for "man," *homo*, including men, women, and children.

34. No. 73.  $\text{𐎠} \text{𐎢}$ . F. 181. *sa*. H. 49.

No. 74.  $\text{𐎠} \text{𐎢}$ . F. 107. *si*. H. 50.

No. 75.  $\text{𐎠} \text{𐎢}$ . F. 126. *su*. H. 50.

These characters correspond to  $\text{𐎠} \text{𐎢}$ ,  $\langle \text{𐎠} \text{𐎢} \rangle$ , and  $\text{𐎠} \text{𐎢}$  respectively, in the affixes of the third person; the vowels in these last are determined with the greatest certainty, and those of the former must be the same. We have after a *t* (an *s* substituted for a *t*, or a vowel the *t* after which has been omitted) for the affix "his," *su*; in other situations, *shu*; for the affix "her," *sa*; in other situations, *sha*; for the affix "their," when masculine, *sun*, and when feminine, *sin*; in other situations, *shun* and *shin*.

From this it is natural to infer that the consonant in Nos. 73–75 is equivalent to that in the more usual affixes with a prefixed *t*.<sup>\*</sup> Nevertheless, the

\* Another instance of the connexion between the characters of the *s* and *sh* series is deserving of being noticed. A common sentence after the mention of cities is *appal, aq. qur, az kuvi ash. r'u. up*. In p. 70 of my last paper, I interpreted the two first words, "I shot arrows against, I made a bank against;" but the Behistun inscription, l. 25, proves, as Colonel RAWLINSON has remarked, that the first verb must mean some mode of destruction; he refers it to בללח, but I think it rather comes from גבלח, "I overthrew;" the second verb is probably "I dug up," from נקח; the third clause is most certainly, "I burned with fire," from כודח and שרף. Now in the penultimate line of the inscription on the Nimrod obelisk we have a similar passage in the Pathal conjugation, instead of the Kal. It is (see the original) *at. ta. pal, at. ta. qar, az kuvi a. sa. rap*. In this conjuga-

former consonant is the Hebrew  $\text{D}$ ; as appears from its use in *Par.su*, "Persia,"  $\text{DPR}$ , and *Par.sa.a'y*, "a Persian;" also in *na.si.akh*,  $\text{𐤎𐤓𐤏𐤍}$ , "carrying away;" BORTA, 41. 33; and *es.su.kha*,  $\text{𐤅𐤔𐤕𐤁}$ , "I carried away," BORTA, 70. 9. The root is  $\text{𐤎𐤓𐤏}$ ; which has this meaning in Hebrew. From this I infer, that the Hebrew consonant corresponding to that which these letters contain is  $\text{D}$ ; not  $\text{S}$ , as Colonel RAWLINSON makes it; but that the Hebrew  $\text{D}$  was sounded as *ts*; the  $\text{W}$  of the affix, when unaffected by the proximity of *t*, being sharp *s*, which, as all etymologists know, is easily convertible into an *h*, which characterizes all the above affixes in the Syro-Arabian languages. I may as well here remark, though it is an anticipation, that I by no means consider the consonant of the *sh*, or  $\text{W}$  series, to have always had this sharp sound. I confine my observation to its value in the affixes of the third person, and to the prefix of the Shaphel conjugation, which become  $\text{𐤍}$  in the Syro-Arabian languages.

No. 75, a. *rib*. H. 49.

This is its value in the name of Sennacherib, which it most generally terminates, though *ir.ba* is substituted in many texts; in like manner we have *gin* and *ge.na* at the end of the name Sargon; and, as I infer by analogy, *Bal.adan* and *Bal.ad.na*. The *a* was added, either for emphasis, or to form the genitive; and this led to the shortening of the preceding vowel.

No. 76.  $\text{𐤎𐤓𐤏}$ . F. 10. *si*. H. 52. This is clearly interchanged with No. 74. Compare III. 40, and PORTER'S transcript, 1. 9, with III. 31.

No. 76, a. *ad*. H. 52. It occurs between *Mar.duk.bal* and *na* in the name of the Chaldean king. I think *ad* a more likely value for it to have than *adan*, which Colonel RAWLINSON gives it. The same termination occurs in the name of the king on the hexagonal prism in the British Museum, who was probably *Asshur.akh.adan*, and in that on Lord ABERDEEN'S stone, which I strongly suspect to contain an equivalent name. The monogram  $\text{𐤎𐤓𐤏}$ ,

tion, the second syllable is regularly *ta*; the first terminates with the first radical, or its substitute, *n* being here changed to *t*, as it was in *Kal*, to *p* and *q*, we should then expect *ash.ta*; and for this we have *a.sa*. Give the consonants  $\text{W}$  and  $\text{D}$  the values I suppose them to have, and this is in effect a substitution of *atsa* for *asta*. It is rather curious, that this irregularity is precisely the reverse of what occurs in Hebrew in the case of verbs which begin with a sibilant. In Hebrew we should have *estariḫ* for *etsariḫ*, which would be according to the analogy of other verbs.

with which the latter commences, may have been pronounced *Asshur*, when designating a divine name; though I believe it to have been *Shamash* or *Shamshi*, according to the case, when the material sun was intended.\*

Colonel RAWLINSON says, that this character is used as a monogram for Babylon. Not having been made acquainted with his data, I will not speak positively; but I entertain a very strong conviction that he labours under a mistake. The monogram to which he seems to refer occurs in PORTER'S transcript, 2. 12; and a comparison of it with the present character in 1. 9, leads me to consider them different, though resembling one another. The uncial characters occurring in VII. 11, and III. 40, which correspond to them, are as unlike as could well be imagined.

35. After the full explanation that I have given of the mode of representing  $\mathcal{V}$  in sections 18–20, it will be unnecessary for me to say much on that subject now. Let it suffice to say, that it is often unrepresented, the vowel connected with it being alone expressed; and that a strong tendency existed to shorten this vowel to *o*, contrary to analogy, so as to render verbs containing  $\mathcal{V}$ , as a radical, specially irregular. Thus, not only was  $\mathcal{V}\mathcal{S}$  at the commencement of the first person of the aorist represented by *e* or *o*, but  $\mathcal{V}$  and even  $\mathcal{W}$  was expressed in the same manner. When a consonant was used to express  $\mathcal{V}$ , characters of the *kh* series were most frequently employed; but occasionally, it would seem, those of the *w* series were employed. If *wibish*, which occurs after the royal name and before “the great gods,” in the Khorsabad inscriptions, is not “servant of,” =  $\mathcal{W}\mathcal{V}$ , I must confess myself unable to explain it.† On the other hand, as I pointed out in my former paper, we have *ab.d'e.ish.tar.ti* and *ab.de.w'i.ish.tar.ti*, used indifferently to express the name of the king of Sidon, contemporary with Esarhaddon; and though I do not identify this king with the Abdistartus of the Tyrian Annals cited by Josephus, as Colonel RAWLIN-

\* [I now think that the royal name on Lord ABERDEEN'S stone should be read *Shamash.akh.ad.na*.—October, 1852.]

† [The word is *wi.gir*, and I believe it to refer to the country of Mesopotamia, not to the king. I would now translate it, “the care, or object of regard, of (the great gods)”.  $\mathcal{W}\mathcal{V}$  has a double value, *bish* or *pish*, and *gir* or *kir*. This weakens, but does not annihilate, the evidence for *w* being a representative of  $\mathcal{V}$ .—September, 1852.]

son represents me to have done, I think it quite evident that we have in all cases the one name, עברעשתרת.

I proceed with the *Pi* series :

No. 77.  $\text{𐤀}$ . F. 44. *pa*. H. 49.

No. 77, a. *shiru*? H. 49. As No. 78 has certainly the value of *pa*, it is not impossible that No. 77 has the value of the two component elements of this compound character. This is the more likely, as we have No. 77 before *tinay* in the Gentile adjective derived from the name of a country; and *Shirutana* is a known Egyptian name for an Asiatic people.\* Again,  $\text{𐤀} \text{𐤀} \text{𐤀}$ , is "Syria," or a portion thereof; and may it not be *Shiruti*? Colonel RAWLINSON has offered another explanation of this name; he reads it *khatti*;† and *khatti* is unquestionably interchanged with it in the Khorsabad and other inscriptions; but on the other hand, may these not be different names, the one including the other, as Bavaria, for example, and Germany? I give both values, and I should not be surprised if it should turn out that the character had both of them, as well as *pa*.

No. 77, b. *khat*. R. See what has just been said.

No. 78.  $\text{𐤀} \text{𐤀} \text{𐤀}$ . *pa*. H. 49. This is distinctly interchanged with No. 77; compare VI. 58, and VII. 32. Colonel RAWLINSON identified the name in which this occurs with Borsippa; but he read it *Bartsira*, supposing that we had here another example of "the interchange of the *l* and *r* with the *v* or *b*."—(Comm. p. 37). This is an interchange of which I deny that there is any example whatever.


No. 79.  $\text{𐤀} \text{𐤀}$ . F. 37. *pe* or *po*. H. 49. See section 11. It takes a  $\text{𐤀} \text{𐤀}$  after it in the Van inscriptions.

No. 80.  $\text{𐤀} \text{𐤀}$ . F. 59. *pu*. H. 52.


\* [The *Shirutinay* certainly inhabited the northern part of Syria. *Kinalua*, their capital city, must have been near the site of Antioch. The *A. ra. a'n. tu*, evidently the Orontes, flowed by it; and the name of the *Ap. re*, which appears from the inscriptions to have been on the other side of it, is still preserved in *Afrin*, a small river to the north of Antioch. This is, I believe, as probable a site for the *Shirutana* of the Hieroglyphic inscriptions as any other; and I therefore adhere to this reading of the name before us.—October, 1852.]

† [ $\text{𐤀}$  is repeatedly interchanged with  $\text{𐤀} \text{𐤀}$ , *Kha. a'd* or *a't*, not only in the name of *Khatti*, Syria, which is certainly to be thus read, but in other words.—September, 1852.]





No. 81. . F. 115. *pu*. R. These two characters are interchanged, and both certainly terminate in *u*. I have given my reasons for supposing them both *pu*, and that *bu* was wanting in section 11, and under No. 8.















36. I have already stated, that No. 32 expressed both *za* and *sa*. The other characters beginning with these consonants differ. I make—

No. 82. . F. 80. *se* or *so*. H. 50.

No. 83. . F. 205. *su*. H. 49.

The connexion between these characters and the vowels which belong to them will be evident from comparing the two forms which I gave in my lithograph of 1850. Compare B. M. 40. 50, 51, and 11.


					
					


That the consonant belonging to these characters is *š*, *s*, not *š*, *s*, as Colonel RAWLINSON makes it, will, I think, appear evident from the following considerations. No. 82 begins the name of Sidon,                 


sonant corresponding to both of these, having the double value *dz* and *dzh* or *j*. The only simple sibilant appears to have been *ʃ*; which must have represented all the sounds *s*, *sh*, *z*, and *zh*, so far as they were used in the language.

Such are the conclusions at which I have arrived respecting the true powers of the consonants contained in these characters. I transcribe them, however, according to the received values of the Hebrew or Arabic letters to which they correspond.

37. I now pass to the *Qoph* series. In the Babylonian uncial writing this was not used; and, curiously enough, characters which did not correspond in their proper use were employed as corresponding, when *q* was to be expressed. Thus *qa* was expressed by *ga*; but *qi* and *qu* were expressed by *ki* and *ku*. In the other varieties of Assyrio-Babylonian writing the following characters of the *q* series are used; but they were occasionally replaced by the above-mentioned substitutes. The common word *קרק*, for instance, denoting “near”—with the preposition “in” before it, “within,”—and after other prepositions being a sort of expletive—is constantly written with an initial *ki*.

No. 84. . *qa*. H. 52. It occurs in *el.qa*, “I took;” and *qa.ti* the dative of *qat*. These would be in Hebrew אלקה and קחת. The *Heth* is dropped, as it often is in Assyrian. The last word signifies “hold, prison,” in the phrase “I put in hold;” and is often a mere expletive, like the *pair of uplifted arms* in Hieroglyphics. *Kimuti qatiya*, which occurs so often in the inscriptions, signifies, as I am persuaded, “belonging to me (lit., to my holding).” This character occurs also in the word “she camels,” *anaqati*, in B. M. 68. 2. In the Targum of Est. 1. 2, a she camel is אנקא. It also occurs in *qa.bal*, “over against,” *קבל*, BOTTA, 8. 9. [See No. 168, a.—October, 1852.]

No. 85. . *qe* or *qo*. H. 52.

This occurs in the plural Pihel participle *we.da.qe.qu*, B. M. 76. 6; which is also written with No. 86 in BOTTA, 175. 7. The more correct spelling is with *daq* in place of *da*, as we find the word in 166. 8, and most of the similar inscriptions. In B. M. Stand. 22, we have the name of a country written *La.q'e.e*, this character being followed by . I have met the derived adjective written *La.qa.a'y* with No. 84. This seems conclusive as to the value.

No. 86. . *qi*. H. 52.

See what has just been said. This occurs in the name of Hezekiah,

𐎧𐎠𐎧𐎠; which, in B. M. 61. 11, is written *Kha.za.qi.ay.u*. The name of a city, which I take to be Damascus, is written with this character, when in the dative, in BOTTA, 146. 21.\* The same name is written in 145. 21 with No. 84 and in 95. 1 with No. 87.

No. 86, a. *kin*. R. Compare BOTTA, 36. 5 and 40. 6.

No. 87. 𐎧𐎠𐎧𐎠. *qu*. H. 52. This occurs repeatedly in the word signifying "distant," from 𐎧𐎠𐎧𐎠. In BOTTA, 17. 59, we have *ma.da.a'y ru.q'u.u.ti*, "Media the distant." [Rather, "distant Medians."—October, 1852.] The *Kheth* is here omitted, as in the derivatives of 𐎧𐎠𐎧𐎠. See what is said on Nos. 85 and 86.

38. No. 88. 𐎧𐎠𐎧𐎠. F. 85. *ra*. H. 49.

No. 89. 𐎧𐎠𐎧𐎠. F. 73. *ri*. H. 50.

[No. 89, a. *dal*. H. 52. Compare BOTTA, 147. 10 and 74. 6.—October, 1852.]

No. 90. 𐎧𐎠𐎧𐎠. *ri*. H. 52. Repeatedly interchanged with the preceding, of which it cannot be considered a calligraphic variant. Colonel RAWLINSON has not noticed it.

No. 91. 𐎧𐎠𐎧𐎠, 𐎧𐎠𐎧𐎠. F. 51. *ru*. H. 49.

No. 92. 𐎧𐎠𐎧𐎠. F. (32 + 73). *ar*. H. 49.

No. 93. 𐎧𐎠𐎧𐎠. F. 194. *ir* or *yer*. H. 49.

No. 94. 𐎧𐎠𐎧𐎠. F. 91. *ir*. H. 49. In the Babylonian inscriptions it is used as the preceding; but in the Assyrian it only occurs phonetically in proper names, and to represent "a city," 𐎧𐎠𐎧𐎠. It is used as a determinative before names of cities.

No. 95. 𐎧𐎠𐎧𐎠. F. 239. *ur* or *wer*. H. 49. This is chiefly used in Babylonian inscriptions.

\* [The name of this city is 𐎧𐎠𐎧𐎠 𐎧𐎠𐎧𐎠 𐎧𐎠𐎧𐎠, *De.mash.qi*. I inferred that 𐎧𐎠 had the value *mash* (as well as that of *bar*) from its use in this name and in 𐎧𐎠𐎧𐎠, *sha.mash*, "the sun." Of this value I have just met with a most unexpected verification. In an *Assyrian* syllabarium, or unfortunately, I should rather say, a fragment of one, found by Mr. LAYARD at Kouyunjik, and now in the British Museum, the two values *bar* and *mash* are given to this character. I may add, that the three values *lib*, *dan*, and *kal* are given to 𐎧𐎠𐎧𐎠; and the readings *Kal.di*, Chaldea, for the country about the Lower Euphrates, and *Kal.khu*, Galah, 𐎧𐎠𐎧𐎠, for the city at Nimrud, are thus rendered certain.—October, 1852.]

No. 96.  $\text{ur}$ . F. 252. *ur* or *wer*. H. 49.

No. 96, a. *lik*. R. Compare B. M. 27, v. 34, and Bel. 46.  $\text{ur}$ , *a.lik*, is here interchanged with *a.li.kut*, precisely as  $\text{ur}$ , *a.shib* (see p. 23 of my former paper) is interchanged with *a.shi.bu.tu*. Compare BOTTA, 168. 26, and 165. 9. *Lik* is a secondary value of No. 96, only used in derivatives of the verb  $\text{ur}$  or  $\text{ur}$ ; just as *shib* is a secondary value of No. 64, only used in derivatives of  $\text{ur}$ , or, as it would appear,  $\text{ur}$ .\* As the plurals correspond in vowels, the singular should do so too. Colonel RAWLINSON gives *lak*, *lik*, and *liku*; the latter because he supposes a character to be *ku* which I read *kut*.

39. No. 97.  $\text{ur}$ . F. 273. *sha*.

No. 98.  $\text{ur}$ . F. 175. *sha*.

In the Babylonian inscriptions of Nebuchadnezzar No. 98 is very rarely used, and perhaps in its secondary meaning, except in one place, where it is certainly the relative particle,—see VII. 35. On the contrary, in the Achæmenian inscriptions, the use of No. 98 is universal. The Assyrian inscriptions use them both indiscriminately. I should have liked to establish a phonetic distinction between them, causing one to be used in one dialect and the other in another; but I can trace no satisfactory distinction as to their use. Each represents the sharp *s*, passing into *h*, of the causative conjugation and the affixes of the third person; and each represents also the soft sound which we may naturally attribute to the relative and the preposition denoting the genitive, passing into the Chaldee *d*. If a distinction be made, the similarity of No. 97 to *da* would lead us to consider it as the sonant *za*, and No. 98 as the surd *sa*; but, I repeat, I can see no ground in the inscriptions for making such a distinction.

No. 98, a. *gar, qar*. H. 52.

This is used as the first syllable in the name of Carchemish; and though this be written in Hebrew with two *Kaphs*, I inferred from the *quadrants*, which represented them both in the Hieroglyphics, that the proper spelling would be with *Qophs*, as it is in Arabic. The point seems settled by the transcription of the name of the king of Carchemish, who was contemporary with the obelisk

\* [It is incorrect to state that  $\text{ur}$  has the value *shib* in this word *only*. It represents *shib* or *ship* in other words.—October, 1852.]

king, and of course with Jehu. It is written, Ob. 85,  $\overline{\text{𐎶𐎵𐎶}} \rightarrow \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶} \text{𐎶}$ , for which we have B. M. 15. 30,  $\overline{\text{𐎶𐎵𐎶}} \rightarrow \text{𐎶} \text{𐎶}$ . Colonel RAWLINSON supposes that we have here equivalent monograms for the name of a god, which he makes "the sun," or "fire;" but I cannot suppose  $\rightarrow \text{𐎶}$ , after *sa*, to have any other value than *an*. I read the name in both cases *Sangara*, and without the final *a*, *Sangar*. The use of *g* for *q*, of which I have given instances, leads me to read *Qar* in the name of the city, as well as to give the value *qa* to the following  $\text{𐎶𐎶𐎶}$ . The name is thus *Qar.qa.mesh*, rather than *Gar.ga.mesh*.

No. 99.  $\text{𐎶𐎶𐎶}$ . *sha*. H. 52.

A character which is omitted in FISHER'S list, but which seems to me clearly to correspond to this, occurs several times in the great inscription of the India House, in place of F. 273, No. 97. See in particular v. 27 and 34, where it represents the preposition "of," or the relative particle.

No. 99, a. *gar, qar*. H. 52.


This is interchanged with No. 98, a, in the name of Carchemish.

No. 100.  $\text{𐎶𐎶𐎶}$ . F. 26. *she* or *sho*. H. 49.

Colonel RAWLINSON in his table makes this *-z*; that is, as I understand him, *z* terminating a syllable, but preceded by any vowel. In p. xxiv. he transcribes it by *ts*, without completing the syllable, and then gives  $\text{𐎶}$  for the corresponding Hebrew letter. It is plain, however, to me that  $\text{𐎶𐎶𐎶}$   $\text{𐎶𐎶}$   $\text{𐎶𐎶}$ , in III. 66, is the *Shaphel* participle of the same verb, from which we have in IV. 48 the first person singular of the aorist in *Kal*,  $\text{𐎶𐎶}$   $\text{𐎶𐎶}$   $\text{𐎶𐎶}$ . The former is "making," or "causing to be made;" the latter "I make." In this latter Colonel RAWLINSON himself admits that  $\text{𐎶𐎶}$  =  $\text{𐎶𐎶}$ ; and surely in the former, on the same principle,  $\text{𐎶𐎶}$  should be  $\text{𐎶𐎶}$ . If  $\text{𐎶𐎶}$  be, as I think I have proved it to be, a short vowel distinct from *a*, *i*, and *u*, it seems plain that  $\text{𐎶𐎶}$  must terminate with the same short vowel. This completes the series of seven simple syllables containing *sh*, which, with their homophones, are given from No. 97 to No. 106. The verb which Colonel RAWLINSON reads *yatsimma'*, and refers to  $\text{𐎶𐎶}$ , is, according to me, *ye.sh'e.im.ma.'ah*, from  $\text{𐎶𐎶𐎶}$ ; whence in BOTTA, 65. 13, we have in *Kal*, *yesh.mi.ma*, "he heard."

This value is confirmed by the Van inscriptions, in which the present character is added to the theme for the termination of the nominative. Now, that



*she* or *sho* (with the first Sanskrit vowel) should be added to the theme to express the nominative in this very early specimen of an Indo-European language, is just what we should expect. This is the way in which etymologists account for the actual *s* of the Greek and Latin; but it would be contrary to all analogy for *i*, or any other vowel than the first Sanskrit, to follow *sh* in the nominative singular. Colonel RAWLINSON'S value 'z is clearly erroneous. Would he read the above participle *wazbish*, in place of my *we.sho. b'i. ish?*


No. 101. . F. 32. *shi*. H. 49.

No. 101, a. *pan*. R. Compare B. M. 45. 31, and Ob. 36.


No. 101, b. *liv* or *lim*. H. 52. Compare BOTTA, 43. 115, and 51. 101.


This character also stands for "a thousand."


No. 102. , . F. 48. *shu*. H. 49. (p. 70.)


No. 102, a. *gat*. H. 52. Only in the word treated of under No. 84; which is frequently expressed by this character; see B. M. Stand. 41. 55, *et passim*. More correctly, however, it seems as if it should be written , with two additional wedges.\*

No. 103. . *shu*. H. 49. (p. 70.)






This is perpetually interchanged with the preceding; but it is also used with other values which I cannot explain; as in , B. M. Stand. 3, &c., a common title of Assyrian kings.†

No. 104. . F. 45. *ash*. H. 49.

No. 105. . F. 90. *ish* or *yesh*. H. 49.

No. 106. . F. 262. *ush* or *wesh*. H. 49.

\* [It has this value (or *gad*) in proper names also. It is used without the additional wedges in the most ancient inscriptions; and they were probably added to distinguish it from the affix "his," with which in these inscriptions it is apt to be confounded. It represents "hands;" and I suspect that it was also read *yade*. It is not improbable that the two small wedges were added ideographically to represent the two hands.—October, 1852.]

† [It is used interchangeably with , or its plural   ; the last characters of which prove that the first, as yet unknown, is of the form *Cash*, *Cish*, or *Cush*, the root having a double  preceded by an unknown consonant. It probably signifies "nations," "races," or the like.—October, 1852.]

Ideographically this denoted "male," Bel. 31; which is transcribed in Bel. 17, by  $\text{𐎶𐎵𐎶}$  *ru*; the power of the former syllable being as yet unknown to me. It is natural to think of the Hebrew  $\text{רז}$ , reading, *zik.ru*.\*

No. 107.  $\text{𐎶}$ ,  $\text{𐎶}$ . *yesh*. H. 52. Compare Variants, B. M. Stand. 6, 8.†

[No. 107, a. *duk, duq, tuk, tuq*. H. 52. Compare the Variants in B. M. Standard, just referred to; and see B. M. 84. 4, and WEST. N. R. 16. In the former place, it occurs in *a.duk*, "I smote;" which is written with *du.ku* (for the pluperfect) in Beh. 29. The latter reference is to the name of Cappadocia, where the Greek form has *d*, the Persian *t*. In an unpublished inscription it is represented by  $\text{𐎶𐎶𐎶}$ , *tu.ku*.—October, 1852.]

40. No. 108.  $\text{𐎶𐎶}$ . F. 272. *ta*. H. 49.

In the older Ninevite inscriptions, this is used to express the preposition "from." In the Khorsabad inscriptions, and in those which follow to the time of Nebuchadnezzar, *sha* is used for this preposition; and in the Achæmenian inscriptions we have *la*. I offer this as the first contribution towards the classification of the inscriptions in respect to dialects. It is not the only one that I have observed, but it seems the best marked. Of course I read this preposition phonetically, *ta*.

No. 109.  $\text{𐎶𐎶}$ . F. 275. *te* or *to*. H. 49.

There can be no doubt as to the consonantal part of this value, nor that it is distinct from *ta* and *tu*. Colonel RAWLINSON makes it *ti*, a homophone of No. 110; but I have shown in section 21, that these characters are not equivalent. I may add, that in the Van inscriptions, the present character always takes  $\text{𐎶}$  for the vowel to be supplied after it, while No. 110 takes  $\text{𐎶}$ . It is plain, too, that in the verb at the beginning of WESTERGAARD'S D. 12, which

\* [I have since ascertained, that I was right in this conjecture. Compare BOTTA, 43. 105, and 35. 87; where *zik . ri* in the plural, written with this character, is interchanged with *zi . kir*, the singular theme. The character occurs also in the name of a Babylonian or Chaldean city, which it forms with the usual addition of  $\text{𐎶}$ . This might be read *Zik*, but I know no such name.—October, 1852].

† [We have  $\text{𐎶}$   $\text{𐎶𐎶}$  and  $\text{𐎶𐎶}$ , *yesh . u* and *ye . shu*; representing *they did* or *they made*,  $\text{ישעו}$ . It occurs in such expressions as *sha makhiru la yeshu*, "what former (kings) did not do," and *sha niba la yeshu*, "of which count they did not make," i. e. "which were not to be counted."—October, 1852.]

begins with  $\aleph \aleph$ , the analogical Hebrew form would be  $\aleph \aleph \aleph$ . Now the vowel *e* or *o* is the special representative of the *Sheva mobile*.

No. 110.  $\aleph \aleph$ . F. 34. *ti*. H. 49.

No. 111.  $\aleph \aleph \aleph$ . F. (26 + 202.) *tu*. H. 49.

I have not met either of these characters used ideographically; but each of them represents a noun, which I believe to signify "water;" the former in the dative and the latter in the accusative case. The plural, too, seems to be represented by *tuti*, written (perhaps to prevent confusion) with Nos. 112 and 114,  $\aleph \aleph \aleph$ .

No. 112.  $\aleph$ . F. 105. *tu*. H. 49.

This is interchanged with the preceding; compare BOTTA, 165. 9 and 166. 9; 40. 4 and 44. 4; 40. 16 and 54. 13, &c.\* Colonel RAWLINSON'S value *ta* is evidently grounded on the Behistun transcription of *Naditabira*, which is elsewhere written with No. 115. The same interchange occurs in the name of *Gomata*, and in *saltu*, "a battle;" but this only proves that these two characters have the same value; not that their value is *ta*. No stress should be laid on the transcription of a short medial or of a terminal vowel.

No. 112, a. *par*. H. 49.

It has this value in the Achæmenian names of Persia, Parthia, and Saparda, and in *par.ri.sha*, Bel. 8, which has the determinative prefix of great beasts, and must, I think, signify "horses for riding," from  $\aleph \aleph$ .

No. 112, b. *sham*. H. 52.

See 4, b, with which it is interchanged.

This is also used for "day;" but is rather phonetic than ideographic. *Tu* would thus signify in the nominative both "a day" and "water;" No. 112 being always used in the former sense, and No. 111 in the latter. The former has for its dative  $\aleph \aleph$ , *tu.wi*, the latter *ti*, No. 110. The connexion between  $\aleph$  and  $\aleph$  cannot fail to suggest itself; but it is difficult to think that the Hebrew  $\aleph$  can be a corruption of  $\aleph$ . If it be, *yam* is probably a plural form, as in Phœnician, corresponding to *tuti* (see No. 111), rather than to *tu*. In some cases, however, the present character is clearly ideographic. The group

\* [We have, however, in B. M. 20. 10,  $\aleph \aleph \aleph$  used, while in 22. 35, the same word is written with  $\aleph \aleph \aleph$ . This renders it probable that, though these characters were often confounded, No. 111 was distinctively *ti*. See notes in p. 328 and p. 342.—October, 1852.]



𐎧𐎶 𐎵, for *kaspa*, "silver," is one instance; and here it has perhaps the meaning "water," as 𐎶𐎵𐎶, which replaces it in the word for *khurasu*, "gold," seems to signify "flame," or "fire." To other words it is prefixed as a determinative prefix.

[No. 112, c. *ud, ut*. H. 52. See note, p. 319.—October, 1852.]

[No. 112, d. *likh*. H. 52. Compare the conclusion of Bel. 2, with RICH, 1. 4.—October, 1852.]

No. 113. 𐎶𐎶. F. 24. *ta*. R. See p. lxxv. of his Memoir.

No. 113, a. *kur*. R.

Chiefly, if not exclusively, in derivatives from the root 𐎶𐎶, *to remember*.

No. 113, b. *mat*. H. 49.

It occurs with this value in the name of *Hamath*. Compare Ob. 88, and B. M. 15. 36. In WESTERGAARD'S N. R. 33, *ma.ti.ya* is used for "my country;" and in the fragment, BOTTA, 53. 13, compared with 43. 104, we have 𐎶𐎶 for *m'a.â.ti*; though it might at first appear that in this passage, as well as in WESTERGAARD'S H. 8. 16, the *mâtu* were distinct from the 𐎶𐎶 𐎶𐎶.

No. 113, c. *shat, shad*. R.

Colonel RAWLINSON marks this with a (?), yet it appears to me that it is far the most usual value, when not ideographic; and it is certainly as well ascertained as any of the others. Compare IX. 8, and BOTTA, 42. 77; BOTTA, 21. 16, and 9. 18; B. M. 12. 2, and BOTTA, 1. 1.


[No. 113, d. *lat*. H. 52. In Ob. 13. An unpublished inscription, containing the same title, has *la.a't*. This is a very common value in the more ancient inscriptions; it occurs also in *D'e.ig.lat*, "the Tigris," Beh. 35.—October, 1852.]

[No. 113, e. *nat*. H. 52. Compare B. M. 15. 24, and Ob. 76.—October, 1852.]


[No. 113, f. *kimu*. H. 52. Compare B. M. Stand. and Variants.—October, 1852.]


[No. 113, g. *ekshu*. H. 52. 𐎶𐎶 𐎵 is repeatedly used for *ekshut*, "I subdued;" see note in p. 319.\*—October, 1852.]

\* [I rather think now that *ekshud*, "I reached," and *ekshut*, "I subdued," are distinct words.—October, 1852.]

No. 114. . F. 196. *ti*. H. 49.





This is repeatedly interchanged with No. 110; the Great Inscription at the India House has No. 110 very frequently, where GROTEFEND's barrel has No. 114.

[No. 114, a. *dim*. H. 52. The group  occurs in the epigraphs over the bas reliefs representing the transport to Nineveh of colossal figures of animals. It seems to correspond to the Hebrew דמוה, "a likeness or effigy." I read the word *dim.mi*.\*—October, 1852.]


No. 115. . F. 210. *tu*. H. 52.

See what is said on No. 112, with which it is interchanged. This is used as a determinative prefix to names of beasts of burden, and expressed some one distinctively, probably "an ass."

17th May, 1852.

\* [Among some inscriptions from pieces of *terra cotta* in the British Museum, which Mr. LAYARD recently showed me, was one which I recognised as an Assyrian syllabarium. Unfortunately, it is but a fragment; but enough remains to show its nature. It contains parts of four columns, each of which is divided by ruled lines into three series. That in the middle contains the characters to be valued; that on the left contains the values; and that on the right contains the plural form, or the value which the character would have if the plural sign were added. This syllabary, which will probably be speedily published by the authorities at the Museum, establishes a number of points on which doubts may yet linger in some minds. First, it proves that the characters are syllabic; secondly, that many values belong to the same character; and thirdly, that  and , and probably  and , are distinct. I observed in a note to No. 69, that its value was probably *nú*. The Assyrian syllabary represents Nos. 83 and 87 as terminating with a similar long vowel; they would be *sú* and *qú*. I have reason to believe also that, if this distinction be admitted, Nos. 111 and 120 would be *tú* and *lú*. The syllabary appears, from the forms of the characters, to be of late date. It is probably to be referred to about 650 B. C. Many values which it assigns to characters have not yet been found in inscriptions; but others had been previously recognised either by Colonel RAWLINSON or by myself, as having the very values assigned to them. I can only give as a specimen of the arrangement one entry, to which I have already referred in a note to No. 86.




The value of the middle character is *mash*, *ma. a'sh*; which would be in the plural *m'a. á. shu*. In this syllabary No. 114 is valued as , *d'i. im*.—October, 1852.]

## POSTSCRIPT.\*






41. The following characters, having simple syllabic values, ascertained since this paper was read, may be added to the list:




No. 116. . *va*. H. 52. See note on No. 27; but rather *ava*.

No. 117. . *tha*. H. 52. See note in page 324.


No. 118. . *sha*. H. 52. Interchanged with No. 98 in *Shushan*.†

No. 118, a. *tur, thur*. H. 52. Compare BOTTA, 151. 10, and Ob. 75. I would read *esh.thur*, from 𐎶𐎵𐎶, in Ob. 72; the meaning being, "I wrote."

No. 119. . *li*. H. 52. In BOTTA, 5. 12, "upper and lower" is expressed by   <  , *e.li u shap.li*. This determines the initial consonant in the value of the character. The vowel may be inferred from the form *ana.ma.a'h.li*, near the end of the Nimrud Standard inscription, signifying, "abundantly, to the full." This character is the final one in this word in the original, though the small oblique wedge is omitted in the printed copy; and the final vowel of the infinitive is regularly *i*.

No. 120. . *lu*. H. 52. Compare BOTTA, 149. 11, with 84. 6. A comparison of the inscription of Xerxes at Mount Elwand, l. 6, with WEST. D. 3, where the Persepolitan form of this character, , is interchanged with , tends to show that the value was *li*. See notes in p. 328 and p. 342.

No. 120, a. *duk, duq*. R.? Colonel RAWLINSON gives this value to the Persepolitan form of the character which occurs in Beh. 65; but gives the Assyrian form among the unknown characters. This character and No. 107, a, are both used in *a.duk*, "I smote," in B. M. 84. 4 and 17.

No. 121. . *shu*. H. 52. In the word for "mares," *shushu*, Bel. 7.

\* The paper as originally sent concluded with an apology for not adding the characters which had no single syllabic values. These are now added, together with some characters having simple syllabic values which have been since discovered.

† This, and some interchanges subsequently noticed, occur in unpublished inscriptions shown to me by Mr. LAYARD.

Ideographically, it represented "a star;"\* and it is remarkable, that the Egyptian word for star was *su*.

No. 122.  $\overline{\text{W}}$ . *ash*. H. 52. Interchanged with No. 104.

No. 123.  $\lll$ . *ish, yesh*. R. Interchanged repeatedly with No. 105. See also the passage quoted under No. 171.

Preceded by  $\rightarrow\text{Y}$ , it forms the name of the god San, as I stated in my former paper.

No. 124.  $\lll\rightarrow\overline{\text{W}}$ . F. 69. *ush, wesh*. R. In the name of Darius; and also, as I lately observed, interchanged with No. 106 in *at.t'u.ush*, "I departed," in which it is cognate to *at.tu.shu*, "I had departed," and *at.tu.sha*; these last words being written with Nos. 103 and 98 respectively.

No. 124, a. *sir*. H. 49. See my former paper, p. 63.

42. I now proceed to the characters with compound syllabic values.

No. 125.  $\overline{\text{W}}\rightarrow\text{Y}$ . F. (192 + 105). *abin*. H. 52. I presume that this is its value, when sounded at all, in the singular number and in regimen; but it is often a determinative of kinds of stones and of objects made of stone. In the plural it would be read *abnu* or *abne*; and in the gentile noun belonging to the city *Til Abne* it is interchanged with  $\rightarrow\text{Y} \rightarrow\text{Y}$ , *ab.na*, giving *Til.abna.a'y*. This interchange shows the identity of this noun with the Hebrew  $\text{אבן}$ .

No. 125, a. *tak*. H. 52. On the Nimrud Obelisk, l. 62, we have *yet.tak.lu.ma*, with this character in the second place. It is elsewhere written with  $\overline{\text{W}}\rightarrow\text{Y}$ , which represents the second syllable in Artaxerxes; and is plainly from  $\text{תכל}$ , "to confide in."

No. 126.  $\rightarrow\text{Y}$ . F. 285. *adi*. H. 49; interchanged repeatedly with  $\overline{\text{W}} \leftarrow\text{Y}$ . Compare B. M. Stand. 21, 23, and Variants.

No. 126, a. *bil*. R. In various proper names; but  $\rightarrow\overline{\text{W}}$ , F. 184, is more frequently added.

No. 127.  $\text{Y}$ . F. 1. *ana*. H. 49. Compare B. M. Stand. 22, 23, and Variants.

No. 127, a. *tish, dish*. H. 52. In *shal.la.tish*, "for a spoil," equivalent to

\* As in the following passage from the as yet unpublished Annals of Assurakhbal:—*Shallasu kabitta, sha, kima*  $\rightarrow\overline{\text{W}}\rightarrow\text{Y} \rightarrow\text{Y} \rightarrow\overline{\text{W}}$ , *shitta la yeshu, ashlula*. "His immense spoil, which, like the stars of heaven, they made no reckoning of, I carried away."

*ana shallati*; compare Bel. 10, and BOTTA, 148. 4. In Bel. 7, it is, I believe, *dish*; 𐎠𐎶 𐎶, *e.dish(ana edi)*, being probably connected with 𐎠𐎶 𐎠𐎶, *e.du*.

No. 128. 𐎠𐎶𐎶. *bab*. H. 49. It is the first syllable in Babylon, and ideographically denotes a gate, as Colonel RAWLINSON has pointed out.

No. 129. 𐎠𐎶𐎶. *bid, bit*. H. 49. Signifying a house, 𐎠𐎶, it is more properly the latter. No. 17, a, is interchanged with this, being occasionally used for a house. It seems, however, to admit also the values *bad, bat*, and perhaps also *mid, mit*. As for the value of No. 17 as a simple syllable, I am now satisfied that it was *bi*, having found it interchanged with No. 8 in Mr. LAYARD'S unpublished inscriptions; and likewise No. 10, c, which contains it, with 𐎠𐎶 𐎠𐎶. The following should, therefore, be substituted for what stands in the former part of this paper:

No. 10, c. *bil*. R.

No. 17. *be*. R. (Except as to the vowel.)

No. 17, a. *bad, bat, bid, bit*. R.

No. 130. 𐎠. *bar*. F. 41. R. Compare BOTTA, 42. 103, and R. 2. 19.

No. 130, a. *mash*. H. 52. See note on No. 86.

No. 131. 𐎠𐎶. *bir*. R. Compare B. M. 44. 25, and Beh. 35.

No. 132. 𐎠𐎶. *bira*. H. 52. Compare Bel. 61, and B. M. 42. 43; where 𐎠𐎶 𐎶 𐎠𐎶, *bir'a.â.ti*, and 𐎠𐎶 𐎶 𐎠𐎶, *bi.r'a.a.ti*, are interchanged.

No. 133. 𐎠𐎶. F. 177. *bur, pur*. H. 49. Compare v. 15 and 45.

No. 134. 𐎠𐎶. *bard, bart*. R. Begins the name of Borsippa, interchangeably with *bar* (No. 130) and *ba.a'r*, before 𐎠𐎶𐎶, *zi*, properly *dzi* or *ji*. This is consistent with its containing a final dental, but does not require it to do so. I have no doubt, however, that this is its value.


No. 135. 𐎠𐎶. F. 133. *barit*. H. 52. It follows the analogy of No. 125' and would be read, according to circumstances, *bartu* or *barti*. With the latter value it is transcribed in v. 8, by 𐎠𐎶 𐎠𐎶, *bar.ti*. It takes the determinative of water, 𐎶, before it; and with this it is used as a special determinative for names of rivers. By itself it signifies "a river."


No. 136. 𐎠𐎶𐎶. F. 166. *bish, pish*. H. 49. Compare III. 29 and 45.


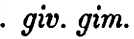
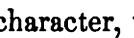
No. 136, a. *gir, kir, qir*. H. 52. It occurs in several common words, *gir.ri.ya*, "my campaign;" *zi.kir*, "mention;" *qir.bi*, "the middle," &c. The first


of these words is written *g'e.ir.ri.ya*, in an unpublished inscription from one of the Kouyunjik bulls.

44. No. 137. . *gab, qab*. R. Compare WEST. D. 10, and C. 15.

No. 138. . *gab, qab*. H. 52. Colonel RAWLINSON makes this an equivalent of No. 13; but compare BOTTA, 15. 11, and 21. 10, where it is interchanged with the preceding character.

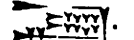


No. 139. . *gav, gam*. H. 52. Compare BOTTA, 145. 7, and 65 bis 1. It begins a word which signifies "camels," which I read *gam.mala*. See BOTTA, 145. 15.

No. 140. , . *giv, gim*. H. 52. It occurs in a title of the Sun, *memahir gim.ri*, which occurs in Ob. 8, written with this character, while , *g'e.im* replaces it in an inscription in the British Museum, of a somewhat earlier period, in which the same thirteen deities mentioned on the Obelisk are mentioned, though differently arranged. I would translate this title, "the hastener to go round." The character occurs in the first line in the title of Asshur, who is called in both "the great lord, king of the circle (*gim.rat*) of the great gods." The Circle of the Gods is a well-known Egyptian expression; and, like the Assyrian Circle, it consisted of twelve, evidently connected with the twelve months. The Egyptian Circle, however, does not appear to have admitted a king, distinct from the twelve, as it appears from these two inscriptions, that the Assyrian Circle did. See LEPSIUS, *über den ersten Ägyptischen Götterkreis*, in the Transactions of the Prussian Königl. Acad. der Wissenschaften, for 1851.

No. 140, a. *kima*. R. Repeatedly interchanged with *ki.ma*, both in the feminine plural, *kimāti*, "belonging to," and as the particle of similitude "like," Hebrew .

No. 141. . F. 160. *gar*. R. Compare VII. 30 and IX. 52.

No. 142. . F. 78. *gur*. H. 49. Compare IV. 66 and V. 23.

No. 143. . *gushur*. H. 52. It is interchanged with , *gu.shur*; compare B. M. 15. 41, and Ob. 96. It denotes something made of wood, which the Assyrian kings brought from Mount Amana; the determinative No. 37 is prefixed to it. This root signifies in the cognate languages (see GESENIUS under ) *trabs, pons*. I believe it means "the beams of the roof." I formerly thought that the second character in III. 27 (F. 259), was a form of this; but I now consider it to represent the *erinu*, which are joined to the *gushuru*

on the Obelisk. The latter were, I believe, beams which lay horizontally. The former were upright poles. They were brought by Nebuchadnezzar from Lebanon, and were in the instance here mentioned gilt. The *zuluh* which they supported was an awning.

No. 144.  $\overline{\text{𐎶𐎶𐎶}}$ ,  $\text{𐎶𐎶𐎶}$ . *dag, dak, daq.* R. It occurs in *we.daq.qi.qu.* BOTTA, 166. 8.

No. 144, a. *dir, thir.* H. 52. In *weshashthir*, "causing to be written." Bel. 27.

No. 145.  $\text{𐎶𐎶𐎶}$ . F. 248. *dav, dam.* R. Compare the different forms of *davgâti* in Bel. 3, VII. 1, and I. 15.








No. 146.  $\text{𐎶𐎶𐎶}$ . *dan.* H. 52. See note in p. 335. Before I had seen the syllabary referred to, I had given the character this value. I inferred from the equivalence of  $\text{𐎶𐎶𐎶}$   $\text{𐎶𐎶𐎶}$  to  $\text{𐎶𐎶𐎶}$   $\text{𐎶𐎶𐎶}$  (compare BOTTA, 146. 11 and 16), and from the common forms  $\text{𐎶𐎶𐎶}$   $\text{𐎶𐎶𐎶}$  and  $\text{𐎶𐎶𐎶}$   $\text{𐎶𐎶𐎶}$ , that the termination of this word must be *n*, the root being of the form  $\text{𐎶𐎶}$ . The only adjective of this form in the Great Inscription at the India House (in which it was unlikely that so common a word should never occur), was *da.a'n.nu*, IX. 19. This view of the value of the character was confirmed by its use in the verb for "he gave," in the Behistun text. I agree with all that Colonel RAWLINSON has said on this subject in his Notes in pages xiii. and xiv. of his Analysis of the Text; save that I dissent from his final inference. He makes the value of the character *da*, while I made it *dan*. The Assyrian syllabary proves that I was right.




No. 146, a. *kal.* R. It has this value in the names *Kal.di* and *Kal.khu*, "Calah,"  $\text{𐎶𐎶𐎶}$ , the city at Nimrud.

No. 146, b. *lib, rib, lip, rip.* H. 49. It has this value in the name *Lib.na.na*, "Lebanon,"  $\text{𐎶𐎶𐎶}$ ; also in *o.rib*, "setting" (of the sun), B. M. 33. 5, *et passim*, and in  $\text{𐎶𐎶𐎶}$   $\text{𐎶𐎶𐎶}$ , *il.lip*, applied in the inscription on the Kouyunjik bulls to those objects; compare  $\text{𐎶𐎶𐎶}$ .



No. 147.  $\text{𐎶𐎶𐎶}$ . *dun.* R. Occurs in the common name of *Qar-Duniyash*, Bel. 8. In some of BOTTA's plates, as 3. 21,  $\text{𐎶𐎶𐎶}$   $\text{𐎶𐎶𐎶}$ , *du.ni*, is substituted for *dun.ya*, before the final *ash*. The latter part of the name has the determinative  $\text{𐎶𐎶𐎶}$  prefixed, whence we may safely infer, that *Duniash* was the proper name of a deity, and probably in the genitive case.

No. 147, a. *khar*. H. 52. Occurs in the Pihel participle *we.khar.ru*, "digging," in some unpublished inscriptions, where it is interchanged with *ekh.r'u.u*, "I had dug." The meaning is obvious from the context. This, it may be observed, is the verb of which other derivatives have been given in section 20.




46. No. 148.  . *umman*. H. 52. This is a compound ideograph, like  , "a palace," or "great house." It denotes "an army." The first part signifies, "a man, a soldier," and the latter, "many." It is interchanged with   , *um.ma.a'n*, BOTTA, 151. 12; compare Ob. 142 and 149.

No. 149. . *zab, sab*. H. 50. Alone it signifies "a man," or "a soldier;" and appears to correspond to  , or at any rate to be from that root. Compare BOTTA, 48. 10, and 6. 10.






No. 149, a. *bir*. H. 52. It is used for No. 131 in *e.te.bir*, "I crossed."

No. 150.  . F. 131. *zar, sar*. H. 52. Compare VI. 53, and PORTER, 2. 4.

No. 150, a. *kas*. H. 52. Compare BOTTA, 18. 116, and 152. 11.

No. 151.  . *zir*. H. 52. Compare BOTTA, 146. 5, and 73. 9. When it stands alone this character signifies "seed, race," .

No. 151, a. *kul*. H. 52. The word *tu.kul.ti* is written with this character in BOTTA, 1. 4, and the other pavement inscriptions; elsewhere with *k'u.ul*. Compare also WESTERGAARD, N. R. 11, and Beh. 34, where *kulluah*, "they held," is written in both ways.

47. No. 152.   . *khaz, khas, khas*. R. Compare BOTTA, 71. 2, and 145. 14. The word is *ev.khaz*, "I fought," equivalent to *ev.takh.iz*, which is used in other inscriptions, and is in a different conjugation. I suppose the first radical to be , rather than , because it disappears in the derived noun *takhazu*, "a battle," "fighting."

No. 152, a. *kud, kut, qud*. R. Compare BOTTA, 144. 10, and 159. 2. 5.

No. 152, b. *tar*. H. 49. In *ishtar*, "a goddess," and *tar.ta.nu*, "a general." Compare BOTTA, 138. 3, and 145. 13; in the latter of which the middle character has the last of the three forms that I have given, which Colonel RAWLINSON considers to represent exclusively *kut*.\*

\* No. 152 must, I think, have at least one other value, and that would seem to be a simple



No. 153.  $\rightarrow$ . *khal*. R., to whom I refer for proofs. The value is certain. This character doubled forms the name of a river which I would read *khale*, as a genitive plural expressed ideographically. It is certain, however, from B. M. 44. 25, that the Assyrians denoted the Tigris by this name, and not what the Greeks call the Halys; though, as Colonel RAWLINSON has suggested, these names had probably a common origin.

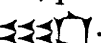
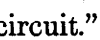
No. 153, a. *maz, mas?* H. 52. The group  $\rightarrow$  $\rightarrow$  signifies "a fenced city." In the plural it takes  $\rightarrow$  $\rightarrow$ ; compare B. M. 84. 9, and BOTTA, 146. 11. This proves that the value of the character ends with s. I cannot help referring this word to the Hebrew  $\text{מָצָה}$ , though the final consonant of this is different; and I am confirmed in this view by the name of the principal deity at Van, the *Mesasir* of the Khorsabad inscriptions, which would thus be *Mazdis* in place of *Khaldis*. *Ahura-Mazda* is stated by Colonel RAWLINSON, on the authority of an unpublished inscription at Behistun, to be the special god of the Arian nations; and among these the people at Van must be reckoned, as their language fully proves.\*

No. 154.  $\rightarrow$ . *khar*. F. 156. H. 49. The name of the city *Khar-*


syllable of the *kheth* series. It occurs, or at least a character very like it, on Lord ABERDEEN'S stone, 4. 20; where, after mentioning Babylon, the same object is called *shal* $\rightarrow$ *-shu*, which in VIII. 47, is called *sha. a'l. kh'e. e* (of Babylon). Neither *chas* nor *khut* could be the value here, as the latter would be followed by *su*, in place of *shu*, and a radical s could not be dropped. It is possible, that what I take for No. 152 may be intended for No. 41, *khū*, which I do not see on the stone; but I do not think this likely. Or this word might be the singular of *shalkhe*, giving *akh*, *ikh*, or even *ukh*, for the value. In connexion with this I may mention, that No. 152 precedes *latu* in a word which from its situation must mean "blasphemy." What can this word be? The construction of the sentence, which is over a bas relief copied by Mr. LAYARD, is very plain: "Against Assbur *yegbū*  $\rightarrow$ *latu rabitu*, they spoke great blasphemy; *lishane-shunu eshlup*, their tongues I pulled out." I can scarcely think that any of the recognised values of the present character will suit it in this place; yet any single syllable containing *kh* would be equally unsatisfactory. I must leave this as a problem for others.


\* I have repeatedly stated my conviction, that the language of the Van inscriptions is Indo-European. The declension of this one noun fully proves it. Besides being the special name of the chief god, it signifies a god generally. We have in the inscriptions—Nom. Sing. *Maz. di. sho*; Acc. *Maz. di. no*; Abl. *Maz. di. do*; Nom. Pl. *Mazdia. sho*; Gen. *Maz. di. no. no*; Acc. *Maz. di. a*; Abl. *Mazdia. a'sh. to*. *Mazdia* in the Nom. and Abl. is expressed ideographically by  $\rightarrow$  $\rightarrow$ ; the other cases are written purely phonetically.



*khār* is written with this character and with *kha.ar*; compare BOTTA, 16. 17, and 6. 14. This city must have lain somewhere near Holwan; it commanded the entrance to Media and to *Yellapi*, which I take to be the modern Luristan. It adjoined Susiana; because when Dalta, the king of Yellapi, died in the eleventh year of Sargon, and his two sons contended for the crown, the kings of Assyria and Susiana supported them. The great victory which Sargon gained on this occasion led to the conquest of Babylon in the following year. Colonel RAWLINSON must have overlooked this part of the Khorsabad annals, when he imagined that Kharkhar was Van, and Yellapi Azerbaijan. In the Van inscriptions, *kharkhar* is not a proper name, but the theme of a common noun, meaning "a chief city," or, perhaps, "a citadel."


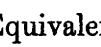
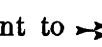
No. 155. . F. (26 + 103.) *khir*. R. Compare B. M. 42. 39, with Mr. LAYARD'S Variant. The word is *si.khir.ti*, from , "a circuit."


No. 155, a. *shar*. H. 50. Compare VI. 3, and VII. 52.

No. 156. . F. (190 + 52.) *khuras*. H. 52. Compare II. 47, and III. 9; and see IX. 12. It is a compound ideograph, and means "gold."


48. No. 157. . F. 190. *ille*. H. 52. Compare BOTTA, 17. 132, and 16. 136; with the plural sign it is equivalent to *illuti*; compare BOTTA, 17. 129, and 16. 133. It is an adjective, meaning "rich, valuable."

No. 158. . F. 282. *kib, kip, qib, qip*. R. Compare X. 9, and G. 3.51; also in the participle *we.za.qip*, after *az zi.qi.pe*, "I suspended on stakes," "I impaled," from .

No. 159. . *kabit*. H. 52. Equivalent to  , in the common phrase *shal.la.su kabit.ta esh.lu.la*, "his spoil, being immense, I carried away."

No. 160. . *kale*. H. 52. Compare B. M. 28. 28, and 42. It means "all," taking one of the plural affixes after it, *shu.nu*, m., or *shi.na*, f., "all of them."



No. 160, a. *ebu, epu, ep, eb*. R. Compare BOTTA, 164. 17. and 167. 22. Here a final *u* is required; in Ob. 145, however, it is inadmissible.


No. 161. . F. 157. *kam*. R. It commences the name of Cambyzes. This might not be conclusive, as this name is written with *n* in Egyptian, in place of *m*, the Persian having neither letter; while the interchange of this character with the following, as a formative of the ordinal numbers, might


be considered evidence of identity of value. I think, however, that the *sh'u.ur.kam* of R. 2. 22, compared with the *sh'u.ur.kam.ma* of I. 72, proves that the value terminates in *m*.

No. 162. . F. 200. *kan*. R. Compare BOTTA, 15. 29, and 2. 17.


Like No. 162, when added to numerals it forms ordinals.

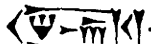
No. 163. . *kun*. H. 49. Compare B. M. 13. 5, and Ob. 43. It occurs repeatedly in the verb *esh.kun*, "I made," in the Benoni *sha.kin*, which is conjugated as a regular trilateral verb, though originally a causative of , "to be." So *facio* is connected with *fuo*.


No. 164. . F. (190 + 105.) *kaspa*. H. 49. Compare III. 58, and P. 1. 14, "silver."



No. 165. . *kas*. R. This value is given in the Assyrian syllabary. Compare also BOTTA, 6. 29, and 16. 36.

No. 165, a. *rash*. R. Compare Behistun detached inscriptions, Nos. 1 and 7. This terminates the name of Cyrus in the former.

No. 166. . F. 245. *kar*. H. 52. Compare IV. 68, and V. 2, *ka.â.ri* in the latter place is manifestly the plural written phonetically, which in the former is expressed by duplication of the character for "great."

No. 167. . *kir*. H. 52. Compare B. M. Stand. 45, with Mr. LAYARD'S Variants. This character admits a great variety of form.

49. No. 168. . *lab, laba*. H. 52. Compare BOTTA, 16. 7, and 17. 7. The name of the city seems to be *Kul.laba*.

No. 168, a. *qabal*. H. 52. It is transcribed by *qa.bal*, when in regimen; compare BOTTA, 2. 4, and 8. 9; and by *qab.li* after another noun; compare BOTTA, 145. 13, and 71. 1. It sometimes signifies opposition, as  in Hebrew, "Offering battle," is expressed by *ana obish qabli u takhazi*, of which the literal meaning seems to be, "making opposition and fighting." More generally, however, it signifies "the middle," as , "a heart," does in Hebrew. "*Sha qabal* of the western sea," in BOTTA, 1. 7, does not mean "on the coast of it," but "in the middle of it." The place intended is not Rhinocolura, or any country bordering on Egypt, but the isles of Greece, or at any rate Cyprus. That this is the true meaning is evident from a passage in the Nimrud annals. The king



rud inscriptions, as B. M. 84. 18, in *es. lula*, used for the more usual *esh. lu. la*, as *es. r'u. up* for *esh. ru. up*. It occurs also in *kha. lil*, and *we. khal. lil* from ללל, and in *kulil*, "entire."

No. 173, a. *sib, sip*. H. 52. It is interchanged with No. 188, which see. It has perhaps other values; and is liable to be confounded with No. 224, F. 201.

No. 174. <<<. *lim*. H. 52. The participle in B. M. 39. 24, is certainly *we. shal. lim. ma*; compare l. 29, where the same word occurs written with <|> (No. 101, b), as it should have been printed. Inscriptions yet unpublished leave no doubt as to this value.

No. 174, a. *kish, kush?* H. 52. See note on No. 103. The final consonant is certain. I infer the remainder from the verb <|>, or >|> <<<, which occurs in both forms, precisely as *a. qur* and *aq. qur*; and which consequently determines the first consonant to be *g, k*, or *q*; and from the noun *k'i. ish. sh'a. at*, i. 64, which may naturally be taken for the <<< <^ of the Assyrian inscriptions, as Ob. 15, occurring in a similar context. The verb *ak. kush* has, however, no affinities with which I am acquainted. It seems to mean, "I constructed, prepared, or procured."

No. 175. >|>. *leshan*. R. "A tongue or language." Compare BOTTA, 38. 60, and 42. 79.

50. No. 176. <|>. *mada, &c.?* "many." H. 52. The ideographic meaning is certain; and this is expressed by the derivatives of *mad* in the Achæmenian inscriptions.

No. 177. >|>. F. 247. *makh*. R. Compare vi. 24, and iii. 4.

No. 177, a. *sir, siru*. H. 52. Compare B. M. 12. 2. 10, and Ob. 17.



No. 178. >|>. *mal, mala*. H. 49. Compare BOTTA, 9. 18 and 12. 60, 16. 22 and 40. 20.


No. 179. <<. *man*. H. 49. Compare BOTTA, 146. 3 and 73. 9.


No. 179, a. *nish*. H. 49. Compare WEST. G. 4, with Variants; also *me. shak. nish*, "the causer to submit, the conqueror," B. M. Stand. 8, with Variants; <<= >|> <<<.


No. 179, b. *shar, sharru, sharra*. H. 50. It represents the word "king," both in the theme and in the inflexions. No. 155, a, expresses the value *shar* as a syllable. The phonetic equivalence of this syllable with the theme of the noun signifying "king" was long since known from the Achæmenian in-




scriptions. It was read *sar* by M. DE LÖWENSTERN, but without proof. In 1850 I published its value as *shar* in the Shaphel participle *we.shar.sh'i id.*


No. 180. . *mar, war.* R. In *mar.ra.tu*, which I derive from , "bitter." This is one of the values in the Assyrian syllabary.


No. 181. . F. 280. *mir, wir.* R. Compare I. 37 and 68; BOTTA, 16. 31, and 12. 21. This occurs in the common word *gi.mir*, or *gi.wir*, the theme, of which *giv.ri* is the genitive; see No. 140. I believe that this word in every instance signifies "circuit, compass, entireness," and that it has no relation but an accidental one to the *gi.mir.ri*, *κιμύριοι*, by which the Persian *Saka* is rendered in the Achæmenian inscriptions. *Ana gimri-shu*, after the name of a country, is not, "with its nomades," but, "throughout its circuit," that is, "the whole of it." The title of Sargon in BOTTA, 19. 28, *kamish Samirina u gimir Bit-Khumria*, is "the conqueror of Samaria and of the circuit of Beth-Omri;" and it means the same as that in 32. 19, *sapin Samirina kala Bit-Khumria*, "the sweeper away\* of Samaria (and of) the whole of Beth-Omri."


No. 182. . *mars.* H. 52. It is interchanged in some very ancient unpublished inscriptions with, *mar.se*, and, when followed by the plural sign, with *mar.su.ti*. This is a common adjective, and appears to signify "detached, isolated."



51. No. 183. . *nab, nap.* H. 52. This is evidently the value in B. M. 22. 32, 35; the last words in which are *nap.shat.su* and *yen.nab.t'u.û*, connected with the *na.pish.ti.shu* and *yen.na.bit* of other inscriptions, containing similar passages. The value is quite certain, though I cannot give full proof.


No. 183, a. *ă?* H. 52. It seems to have this value in  , *ă.khar*, "other, different, various," Heb. . In PORTER, 2. 1, it seems to represent No. 2. Compare VI. 44.




No. 184. . F. (29 + 170.) *nav, nam.* H. 52. Compare III. 61 with PORTER, I. 15.

No. 185. . F. 66. *nin, nina.* H. 52. Compare I. 19 with R. 1. 6. This is completely distinct both from No. 83, F. 205, and from No. 145, F. 248.


\* The Arabic root  is interpreted "fando abstersit (ventus pulverem) de facie terræ."

No. 186. . *nina, ninu*. R. Compare BOTTA, 41. 53, and 45. 43. This is only used in the name of the city Nineveh, and it is then generally followed by the determinative .






No. 187. . *nir*. H. 52. "Authority, government;" used also, as the latter English word, for a district of country; a common word, for which *n'e.ir* and *ne.ri* are used.

52. No. 188. . F. 164. *sib*. H. 52. This is of very common use in all the Assyrio-Babylonian inscriptions, including the Achæmænian. From its taking *bi*, *bu*, and *ba* after it in its inflexions, it is evident that it terminates in *b*, and is to be referred to a root ending in . It has the two meanings, "place," or rather "circuit," and "cause;"\* and as  has these meanings, I cannot doubt that it is the root required. See GESENIUS, p. 934.



No. 189.   . *sukh*. H. 52. See B. M. 12. 19.



No. 190. . *sun*. H. 52. Compare BOTTA, 36. 9, and 40. 12.


No. 190, a. *kul*. H. 52. Interchanged with No. 151, a; compare B. M. 12. 2. 13, and 70. 12. The same word occurs 76. 4; it is *kullat*, "the whole."


No. 191.  , . F. 244. *eli*. H. 49. Colonel RAWLINSON has remarked that a  is often added to this character without altering its power; but I think that this is an expletive word, like *kirib* and others, and no part of the character. This *eli* corresponds to the Hebrew , signifying "upon, over, in addition to."





No. 192. . F. 141. *eri*. H. 52. Compare VIII. 8, and IX. 15.


53. No. 193. . F. 33. *pal, bal*. H. 52. Compare BOTTA, 43. 101, and 51. 90. The plural "years" is expressed by *pa.le* in this last place, as it is, adding a final , in VII. 10, and R. 2. 20. In the name of *Tabal* it is occasionally used; but it never denotes *bul*, as I valued it in my former paper.


No. 194.  . *pul*. H. 52. Compare B. M. 51. 1. 10, and Bel. 30. This is perfectly distinct from the preceding.


No. 195. . *pul, bul*. R. Interchanged with the preceding. Compare B. M. 45. 32, and 50. 2, 3; also 51. 1. 10, and Bel. 24.


No. 196. . F. 231. *sur*. H. 49. In the names of Tyre and of Egypt.







\* See Colonel RAWLINSON'S Analysis, p. vi. The word seems to be written at length,    , in VI. 18.

No. 197. . *gar*. H. 52. Interchanged with No. 99, a, in Qar Dunnyash. See BOTTA, 1. 23.


No. 198. . *gat, qati*. H. 52. See No. 102, a; and compare BOTTA, 94. 3, and 146. 7.


54. No. 199. . F. 39. *rab*. H. 49. "Great."

No. 200. . *rab, rap*. R. Compare BOTTA, 9. 14, and 65 bis, 5.





No. 201. . F. 74. *rub, rup*. H. 52.   and    are used in two copies of an unpublished inscription; this word occurs i. 61, and Ob. 15.

No. 202. . F. 75. *rad, rat*. R. In *Pu.rat.te*, "the Euphrates."

No. 203. . *rav, ram, rama*. H. 52. Compare B. M. 40. 2, with Mr. LAYARD'S Variants. In BOTTA, 145. 22, it must be read without the final *a*; and it never denotes the entire word *ramani*.

No. 204. . *rim*. H. 52. This value, given in the Syllabary, had been previously recognised by me. I recollect that the evidence for it was conclusive, but I cannot now refer to it.



No. 204, a. *kil, gil, kir*. H. 52. The verb in Ob. 145, where this character occurs, must be read *yet.ta.kil.ma*; it is evidently from the same root as *yet.tak.lu.ma*, Ob. 62, mentioned under No. 125, a. This value occurs also in *ta.kil.tu*, "blue," BOTTA, 67, 12; where it is joined with *ar.ga.ma.nu*, "purple," as in Hebrew. The character begins a name which I take for the Biblical "Gozan," and which I read *Gil.za.ni*, B. M. 13. 7. The easiness of the transition from *l* to *u* is universally admitted. The Syllabary makes it *kir*. I have met no instance of its being to be read thus; but *lib* is often used for *rib*.




No. 205. , , , . F. 241. *rin*. R. It is used for the termination of the name of Samaria, BOTTA, 122. 16, in place of the *ri.na* of 145. 11.

No. 205, a. *rish*. H. 52. "A head, source, or beginning," as in the cognate languages. It has this value also in *sutrish*, "a eunuch," from *שׂרשׂ*, a word of very common occurrence; and in *warish*, "an heir," BOTTA, 146. 13, the dative of which, *warshi*, occurs two lines below.

No. 205, b. *shak, shaq*. R. Compare B. M. Stand. 8, with Mr. LAYARD'S Variants.



55. No. 206. , . F. 255. *shab, shap* (*shib, ship*, R.) H. 52. Compare Variants of B. M. 39. 21; also BOTTA, 39. 94, with 43. 113; and 5. 12, with II. 16. The value *ship*, given by Colonel RAWLINSON, is justified by comparing BOTTA, 51. 102, and 43. 113; and it occurs in the name of Borsippa, as sometimes written *Bard.ship*;\* but I consider the proper vowel to be *a*. A similar license occurs with respect to the following character and several others.


No. 207. , , . *shaq, shak, shaq, shiq*. H. 52. Compare B. M. Stand. 23, and Variants. It is interchanged with *sha.a'k*. The last form is used in the Khorsabad inscriptions, and represents *sh'i.iq*; compare BOTTA, 16. 6, and 167. 6. This led me to think that it was a different character; but I am now satisfied, that it is a calligraphic variant of the older form. It is used in BOTTA, 67. 12, before the words for "purple" and "blue," given under No. 204, a; and, whether it be a determinative or not, I cannot doubt that it denotes "cloth," *ṣū*.


Probably the character was designed to represent in a rude way the ancient loom. I have no doubt that the cuneatic characters all originally represented objects, or groups of objects; though it may probably not be possible to show what they represented in more than a few instances. In my former paper I mentioned "the house," *bit*, "the wall of the city," *ir*, and "the star," *il*, as figurative characters. The first, No. 129, represents invariably what it signifies, as does the preceding character *bab*, "a gate;" as Colonel RAWLINSON pointed out. Other instances of such figurative characters are *rish*, "a head," No. 205,† and *kap*, "a hand," No. 232. In the last two instances of my former paper the characters signify not what they represent, but something figuratively connected with it. The *wall* signifies a city, the *star* signifies a god. Another such instance is that now before us. The number of compound characters is very considerable; and these are, generally speaking, ideographic compounds. Thus, the word which signified "a star," originally *shu*, but perhaps different


\* In Colonel RAWLINSON'S Commentary he reads the name in this form, *Bart.sel.ah*. In my former paper, p. 67, I read it *Barra.sip.va*. The final character, which I read *va*, and Colonel RAWLINSON *ah*, is a non-phonetic determinative.


† The first form, which is the oldest, represents the head and neck in a recumbent posture; the two horizontal lines, representing the neck, are often made to diverge to the right.


afterwards, is represented by a combination of two characters, the *star* itself (which if it stood alone would denote "a god"), and something which was pronounced *nab*, and which was probably intended for "the firmament."

No. 208. . *shug, shuk, shuq*. H. 52. Compare BOTTA, 164. 22, and 165. 17; the former has *me.shuk*, the latter *mesh.uk*. See No. 21.


No. 209. . *shud, shut*. R. Compare BOTTA, 125. 4, and 147. 4.


No. 210. . *shal*. H. 52. In *shal.lat*, "a spoil," used also for "wives, women," the character itself denoting "a woman," and being as such used for the determinative of females; also in *shal.shi*, "three,"\* and several other words.

No. 211. . *shin, shun*. R. It is the affix "their" of both genders. Compare BOTTA, 165. 17, and 164. 23; 27. 51, and 42. 86.

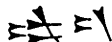
No. 212. . *shar, sharru*. H. 50. Used only for "king," and its inflexions. See No. 179. 6.





No. 213.  F. 214. *shar, sharru*. H. 50. Used as the preceding.

No. 214. . *shir*. H. 52. Compare Ob. 166. and 188; in the former place we have *we.mash.shir* in the singular; in the latter, *we.mash.shi.ru* in the plural.


No. 215. . *shur*. H. 49. Compare BOTTA, 41. 44, and 45. 35.

56. No. 216. . *tab, tap*. R. Compare VI. 20, and III. 63.

No. 217. . *tag, tak, taq*. R.

No. 218. . *tig, tik, tiq*. H. 49. In *tik.un*, "a talent, standard," from ; also in *we.bat.tiq*, "cutting off." B. M. 84. 14. The preceding word is incorrectly printed, the last character but two in it should be , an old form of No. 79. I read *kappe-shunu webattiq*, "their hands I cut off."  has this meaning precisely.

This character when it stands alone is used for some part of the human body. In B. M. Stand. 9, we have *mekabbis tik aybi-shu*, "the trampler on the

\* The only other of the lesser numerals known to me is , *ar.ba.a'h*, "four," which occurs Bel. 39, and on the Khorsabad Bulls. *Shanu* also is used for "second;" and I have already observed, that *mi* represents "a hundred." This will suffice to show that the Assyrian numerals are Semitic, which, considering the strange prepositions that are in use, could not have been with propriety assumed as a matter of course.

— of his enemies;” and the same word is used before the name of a river, and must signify its side or bank. Whether it means “side” or not, and how it is to be read, I am not prepared to say. I think, however, I have ascertained that the words referred to in section 21, as following this, do not mean “the sea,” as I supposed on Colonel RAWLINSON’S authority, but, the “bitter, or salt, rivers;” portions of the Euphrates and Tigris where the tide flows. In support of this view, I refer to B. M. 13. 9, 10, which may perhaps mean, “the sea of Chaldea, where the bitter rivers (*here* those of the Delta) are united,” *yegapu* being from the root 𐎶𐎠𐎶; and the following *shini* corresponding to 𐎶𐎶, “there.” At any rate, the sea seems in this place distinguished from the bitter rivers. I am quite aware that *marrati* alone, without *barti*, is used for “the sea,” both in Ob. 84, and in Beh. 5; but I do not consider this inconsistent with the view that I have just announced.

No. 219. 𐎶𐎶𐎶𐎶. F. 16. *takh*. R. Compare VI. 37, and VIII. 16.

No. 220. 𐎶𐎶𐎶, 𐎶𐎶𐎶. *takhaz*. R. “Battle.” Compare BOTTA, 138. 3, and 71. 2.

No. 221. 𐎶𐎶. *til*. H. 52. “A heap.” In the name of Thelassar, *Til.ash.shuri*, B. M. 68. 12; and in B. M. 13. 11, where we have *kima til abubi espun*, “like a heap of corn I swept away.” See note in p. 354.

No. 222. 𐎶𐎶𐎶. F. 26 + 135. *tar*. H. 52.

Colonel RAWLINSON valued this character as *thra*, and it is certain that it replaces *it.ra* in the name *Sh'i.it.ra.a'n.takh.ma*; compare Beh. 62, and the sixth detached inscription. But as no other character is known with a value consisting of two consonants followed by a vowel, I should, on the authority of this passage alone, read it *tar*. *Shi.tar.an* is in fact scarcely distinguishable in pronunciation from *Shitran*, which is what the full form gives. This value is confirmed by the form of the participle *we.shat.tar*. B. M. 42. 42; *a* is generally used for *i* before *r*; but *tra* would be contrary to all analogy as a termination; nor could it with propriety follow a *t*. This character preceded by *di* (No. 24) is used for “Babylon;” but I believe it was the name of a different city, the capital of Nabopolassar, to which Babylon succeeded. Babylon seems to have been all but destroyed by Sennacherib, and to have been completely rebuilt by Nebuchadnezzar. The name *Ditar*, which is an element in some proper names, may very well have belonged to this city.

No. 223.  $\llcorner \llcorner \llcorner \llcorner$ . F. 26 + 76. *tar*. H. 52. It is interchanged with the preceding. B. M. 42. 42. This character, preceded by  $\llcorner$ , signifies "a forest," III. 23, and B. M. 38. 10. I am not sure how this is to be read. It may be a compound ideograph; or  $\llcorner$  may be a determinative, as it very often is.

No. 224.  $\llcorner \llcorner$ . F. 201. *tur, thur*. R. "A child, small." Compare Beh. 5, 7. The value *thur* occurs in *el.thur*, B. M. 16. 48; which is for *esthur*, "I wrote" ( $\text{רשט}$ ), by a *euphonic* change which is very common.

57. I add some additional characters which I inadvertently omitted in the alphabetical series, or of which I observed the values after it was drawn up.

No. 225.  $\llcorner \llcorner$ . F. 184. *ig, ik, iq, yeg, yek, yeq*. H. 52. This is interchanged with No. 19. It occurs in *yek.nu.shu*, "they submitted," Beh. 43, and *yep.pal.ig*, Niphal from  $\text{פלל}$ , Ob. 74. It decidedly differs from No. 21. Another common word which it terminates I read *we.sham.ik*, supposing the root to be  $\text{שם}$ . I believe the meaning of the expression in which it occurs to be "I oppressed them as servants," "I put them to hard labour." It was severer treatment than transporting them to another country.

This had also an ideographic value, which I do not know. In the following cases it has, perhaps, an augmentative import. *Bil* was called  $\llcorner \llcorner \llcorner$ , "— lord," and a goddess who is joined with him was called  $\llcorner \llcorner \llcorner$ , ——. The name of this goddess was, I believe, "Gula."

No. 226.  $\llcorner \llcorner$ . *arrab, arrap*. H. 52. In the names of cities, *Arrab.il*, *Arbela*, and *Arrap.kha*, written *Ar.rap.kha* in Bel. 27.

No. 227.  $\llcorner \llcorner$ . *Ashur*. H. 49. The name of Assyria and its chief god.

No. 228.  $\llcorner \llcorner \llcorner$ . F. 263. *bal, pal*. H. 52. A compound ideograph; "child, male," that is, "son." Interchanged with No. 1, a, in the names of *Marduk-baladan* and *Nabopolassar*.

No. 229.  $\llcorner \llcorner$ . *gar*. H. 52. Compare B. M. 15. 40, with the fifth epigraph on the *Nimrûd* Obelisk, B. M. 98.

No. 230.  $\llcorner \llcorner$ . *din*. H. 52. Compare BOTTA, 145. 18, and 81. 3.

No. 231.  $\llcorner \llcorner \llcorner$ . *zig, zik, ziq*. H. 52. See Note, p. 339.

No. 232.  $\llcorner \llcorner \llcorner$ . *kab, kap*. H. 52. In *mekabbis*, "trampling on," *Kappe*, "hands" (see No. 218), and in *er.kab*, "I (in ships) embarked," from  $\text{כב}$ . B. M. 14. 19.

No. 233.  $\leftarrow \nabla$ . *kul*. H. 52. Used for "all," B. M. Stand. 43; and in *kul.lu.la*, Ob. 13. This character has another value in *we.x.t'a.a*; B. M. 39. 25, which seems to signify "cutting," or "carving;" and in *x.ti*, "a canal or aqueduct." B. M. 42. 43.

No. 234.  $\nabla$ . *kul*. H. 52. Interchanged with No. 190, a. Compare Ob. 31 and 50.

No. 234, a. *lit, liti*. H. 52. BOTTA, 148. 5.

No. 235.  $\nabla \nabla$ . *sik, zik*. H. 52. For the former, which seems its proper value, compare BOTTA, 46. 59, with III. 40. In BOTTA, 47. 85, it is used in *zik.ri*, "a name,"  $\nabla \nabla$ .

No. 236.  $\nabla \nabla \nabla$ . *shiv, shim*. H. 52. The participle, B. M. 60. 28, in which it is preceded by *we.ba.a'sh*, proves that it begins with *shi*; while the last word on BELLINO's cylinder fixes the final consonant as *m* or *v*. The word which occurs so frequently, when the furniture of the king's palace is spoken of, must thus be read *shim.le*, that is, "raiment."

58. The following are some additional values of characters already given :

No. 12, a.  $\nabla \nabla$ . *ar*. H. 52. In *argaman*, B. M. 69. 1. 7; a rare but most certain value.

No. 31, b.  $\nabla \nabla \nabla$ . *tab, tap*. H. 52, = No. 216. Compare BOTTA, 146. 18, and 43. 74.

No. 31, c. *mu*. H. 52. In *kimuti*; compare BOTTA, 47. 67, and 61. 91.

No. 31, d. *mish*. H. 52. In *shimish*, B. M. Stand. 3. See No. 53, b (p. 363).

No. 37, b.  $\nabla$ . *shiv, shim*. H. 52, = No. 235. Compare BOTTA, 147. 14, and 146. 18.

No. 56, a.  $\nabla$ . *dib, thib*. H. 52. This value is given in the syllabary; and it occurs in the word *thib.bul.ti*, "dyed stuff" (from  $\nabla$ ), B. M. 43. 12. The word which follows, *bir-mi*, is deserving of attention. It appears to be an Indo-European equivalent of the Hebrew  $\nabla$ . I suspect that  $\nabla$ , when it stands alone, often signifies "well," and is to be read *thib*.

No. 70, c.  $\nabla$ . *kin*. H. 52. The participle *shakin* is written in some unpublished inscriptions with this character in place of No. 86.

No. 103, a.  $\nabla$ . *kish*. H. 52. See note on No. 103, and what is said on No. 174, a. This is the addition made to numerals to form adverbs of order.

No. 201, a.  $\rightarrow\text{𐎶}$ . *zi*. H. 52. Compare B. M. Stand. 51, and Variants. The word is *we.sho.zi*, *zi* (for *iz*), "I fix," for  $\text{𐎶}$ .

59. The following groups, beginning with the character for "God," have different values from what they would have if that character were wanting.

No. 237.  $\rightarrow\text{𐎶}$ . *Asshur*. H. 52. Interchanged with No. 227.

No. 238.  $\rightarrow\text{𐎶}$ . *Bil*. H. 52. Compare BOTTA, 51. 85, and 43. 96. This is the name which Colonel RAWLINSON reads Derceto.

No. 239.  $\rightarrow\text{𐎶}$ . *Gula?* H. 52. Used for the last combination of characters mentioned under No. 225.

No. 240.  $\rightarrow\text{𐎶}$ . *Khum*. R. Compare BOTTA, 151. 3, and 65. 5.

No. 241.  $\rightarrow\text{𐎶}$ . *Ishtar*. H. 52. Compare BOTTA, 57. 102, and 51. 89.

No. 242.  $\rightarrow\text{𐎶}$ . *Ishtar*. H. 52. "A goddess," i. 50; as a proper name, in an unpublished inscription in British Museum.

No. 243.  $\rightarrow\text{𐎶}$ . *Marduk*. R.

No. 244.  $\rightarrow\text{𐎶}$ . *Marduk*. R.

No. 245.  $\rightarrow\text{𐎶}$ . *Marduk*. R.

No. 246.  $\rightarrow\text{𐎶}$ . *Nabu*. H. 49.

No. 247.  $\rightarrow\text{𐎶}$ . *Nabu*. R.

No. 248.  $\rightarrow\text{𐎶}$ . *San*. H. 49.

No. 249.  $\rightarrow\text{𐎶}$ . *Shamash*. H. 52.

60. The following characters are more of the nature of ideographs than any which I have yet mentioned :

No. 250.  $\text{𐎶}$ . *u, e, in, uti, ati, &c.* H. 49. The plural termination, whatever it may be.

No. 251.  $\text{𐎶}$ . *eshrup, eshru, shirip, &c.* H. 52. It expresses the idea "burning;" as in *batele-shunu, batelate-shunu ana 𐎶 te 𐎶*, i. e. *ana shiripte eshrup*, "their young men and their young women with burning I burned. This occurs in the annals of the builder of the N. W. palace at Nimrûd; in other inscriptions  $\text{𐎶}$ , *up* is added to form the verb "I burned."

No. 252.  $\text{𐎶}$ . *egre*. H. 52. B. M. 42. 49, "I invoke," from  $\text{𐎶}$ ; another copy shown me by Mr. LAYARD has  $\text{𐎶}$ . Compare also BOTTA,

43. 110. It was probably used for other forms of the verb; and, when preceded by the character for "stone" (No. 125), it signifies "a seal," that is, it would seem, "a speaking stone."

No. 53, b.  $\text{𐎶}$ . *shimish, ish, shi, &c.* H. 52. It expresses the idea "servant, or serving," alone, or more frequently with the complement  $\text{𐎶}$ , *shim* (No. 37, b, see p. 361) prefixed to it. Compare the Variants in B. M. Stand. 3, 5, where *shimish* is expressed by  $\text{𐎶}$  alone, by  $\text{𐎶}$   $\text{𐎶}$ , and by  $\text{𐎶}$   $\text{𐎶}$ , *shi.mish*.

61. There are several other characters of which the values are partially known to me. I have ascertained, for instance, that the value is of the form *Cil* or *shaC*, the first or last consonant, here expressed by *C*, being alone doubtful. I have reserved these values, and also about twenty, which are given in the Syllabary, but which I have not recognised in any inscription.

It may be deemed satisfactory that I should compare the results at which I have arrived with those announced by Colonel RAWLINSON in his Memoir.

To the above 252 characters I have given 344 phonetic values; as to 177 of which I agree with Colonel RAWLINSON; I differ from him as to 49; but in many instances the difference only consists in my giving to the terminating vowel the value *e* or *o*, which he ignores, and for which he substitutes either *i* or *u*. The remaining 118 values are new, being omitted by him altogether.

Of the 177 values which we have in common, 100 were first published by me in my former paper, and in the lithograph which I circulated at the Meeting of the British Association in 1850. For the remaining 77 I have acknowledged my obligations to him.\*

24th November, 1852.†

\* I have inadvertently marked No. 25, a, with H. 52, instead of with B. ; but I have included it in the number here given; I have also given him credit for No. 206, and some others to which his claims are equally doubtful.

† This is the date of the completion of this Postscript. The commencement was put to Press in the middle of October.

## APPENDIX.

(*Referred to in Foot-note at the end of Section 1.*)

I have thought it best to make no change in the text of the earlier sections of this paper; leaving them as they were written nearly a year ago. I will here, however, add an important chronological rectification, arising from a discovery which I recently made. In the Khorsabad inscription, BOTTA, 65. 2, I found what I had long sought in vain,—the date of the conquest of Babylon. The war is said to have commenced in the twelfth year of Sargon. It is also stated here, as well as in 151. 13, and other texts, that *Marduk-bal-adan*, king of Chaldea, was subdued after he had held Babylon for twelve years.\* This is just the reign given in the Canon to the king called *Μαρδοκεμπίδος*; and I cannot hesitate to adopt the opinion, that this name is a corruption of *Merodach Baladan*. Chevalier BUNSEN has suggested that the  $\mu\pi$  represents the Babylonian *b*, as it does in modern Greek; the value of  $\beta$  being *v*. This, and the similitude of  $\delta$  to  $\lambda$ , will account for the change. The final element in the royal name was dropped, as it perhaps was in popular language. This leads to the opinion, that *Αρκιανός*, who is given in the Canon as the successor of the preceding king, was no other than Sargon; and that *Ιουγαίος*, who is given as his predecessor, was *Yagin*, or *Yakin*, the father of *Marduk bal adan*. All the names in the Canon appear to be more or less corrupted. The dropping of the initial letter in the king's name may perhaps be accounted for by his being the sixth king in the Canon; the initial letter having been mistaken for the numeral character for *six*, which is sometimes made so as to resemble a sigma.†

\* [The account of this war is given at considerable length. I give the following summary from the Bulls. The king calls himself *Shakin tabde Marduk-bal-adena, shar Kaldi; aybu shinu, sha, ki la sibbi* (the gods), *sharrut* (Babylon) *ebushuwa takshudu rabitu qatsu*. BOTTA, 44. 32-34. "The effector of the destruction of Marduk-bal-adan, king of Chaldea; that enemy, whose hands, though the gods did not sanction it" (compare 1 Kings, xii. 15), "of the kingdom of Babylon had made a great acquisition."—November, 1852.]

† [It is more probable that *Αρκιανός* represents *Har-kena*, which would be the Chaldaic form of *Shar-gena*. The Chaldeans used *h* for the sharp sound of *s*, which is initial in this name; see on



The idea of the king of Assyria being only lord paramount of Babylon, and not its immediate king, must, I find, be abandoned. Colonel RAWLINSON has pointed out, that what I supposed to mean "lord paramount of" is in fact a conjunction, "and also."\* Sargon and the other kings of Assyria called themselves "king of Assyria and also of Babylon;" and it would appear from the Canon, that they did this when they were not *de facto* sovereigns of Babylon. Why, then, it may naturally be asked, did Sargon deviate from this custom, which appears to have prevailed before as well as after his time? How came it that for twelve years he called himself king of Assyria *only*, or at least without the addition of Babylon? And why, after his twelfth year, did he turn upside-down the pavement slabs of his palace, in which he had omitted this title, and had dedicated his palace to a series of gods from which the Babylonian Nebo was excluded;—evidently, as it appears to me, with a view to bury in oblivion what he had written on these reversed slabs;—and then inscribe on the other side of the slabs the new title, "king of Assyria and also of Babylon," and the new dedication to a series of gods among whom the Babylonian Nebo holds a conspicuous place? It seems evident to me, that a powerful reason for this must have existed; and I think I have obtained a clue to the whole proceeding.

The facts as obtained from the sculptures are these:

1. When *Sargon* conquered *Marduk-baladan*, each of them had reigned twelve years.
2. *Marduk-baladan* is called the son of *Yagin*, the last element in whose name is the same as the last element in that of *Shargin*, as the name may be better transcribed.

No. 75; and the character which is transcribed by *gena* in the name of Sargon is transcribed by *kena* in the name of the Chaldean king *Yakin*. I have no doubt that ἀρχω and שרר are etymologically connected; double *r* being apt to pass into *rkh*. The title "king of kings" is in fact represented in B. M. 12. 2. 8, by *Shar. khu sha. a'r. khe* for *sharru sharre*. This is literally "the kings of kings," in the plural of excellence.—November, 1852.]

\* [Colonel RAWLINSON led me into error by the confidence with which he asserted that this word was a conjunction. It is most certainly a noun, and denotes, I believe, "High Priest." The latter of the two characters of which it consists is repeatedly used on the cylinders between the names of the person who worships and that of the deity. The former, I believe, is ideographic, and signifies what is great in its kind.—November, 1852.]

3. This Yagin had for his capital city *Qarduniash*, called also *Bit-Yagin*, which was on the Shât-el-Arab near Bassora.

4. (And what is the key to the whole) *Shargin* speaks of *his father*\* as being king in Assyria and *Qardunias*.—Botta, 153. 3.

From these facts I infer that Yagin, the king of Chaldea, conquered Assyria; that he died in 721 B. C., dividing his dominions between his two sons, Shargin, who had Assyria, and Marduk-baladan, who had Chaldea, including Babylon; and that in 709 B. C., Shargin drove his brother out of Babylon, and reigned there for five years. Of the subsequent history I am as yet unable to speak; but it appears to me, that the supposition I have made fully explains all the difficulties connected with the change of style in the Khorsabad inscriptions, and the careful concealment of what the king had originally written. A difficulty of another nature yet remains. Why did Shargin in his inscriptions omit all mention of his father? The answer may be, because his father never styled himself king of Assyria, which Shargin considered the highest title of all; but treated Assyria as a dependency upon Chaldea, of which latter country Shargin was never king. His brother continued to rule there, though he was driven out of Babylon.

This change brings down the conquest of Babylon by Sargon twenty-two years, and his accession nineteen years, below the dates which I assigned to these events in my former paper.

17th May, 1852.

#### POSTSCRIPT TO THE APPENDIX.

I have allowed the text of the Appendix to remain as it was written; but I have rectified my views as to the relationship between Sargon and Marduk-baladan. I am satisfied that they were not brothers. Colonel RAWLINSON has cited some extract from Abydenus, to which I have not the means of referring, which describes Sargon as a gardener to his predecessor, whom he deposed. This predecessor (who must have been the Shalmaneser of Scripture) is re-

\* [Whatever be the exact import of this rather obscure passage, it is certain that Sargon is not speaking of his actual father, but of a series of his predecessors; none of whom had heard of the country of Ionia, from which he was invaded.—November, 1852.]

ferred to as alive in the sixth year of Sargon. So at least I understand the passage, BOTTA, 74. 3: "The gods who went before me within it I caused to dwell." This is after he had mentioned the conquest of *Bilsharusur*, the name of whose city, which is illegible, was changed to *Qar-Bara*. I have never seen any similar expression elsewhere; and the meaning of the words "who went before me" (*alikut makhriya*) is fixed by many passages to be, "my predecessor." But, whoever was the father of Sargon, it seems certain that the 27th year of Nabonassar (which began 20th February, 721 B. C.) was the first year both of Sargon in Assyria and of Marduk-baladan in Babylon; while the 39th of Nabonassar (beginning 17th February, 709 B. C.) was the first of Sargon in Babylon. It was the year after his conquest of it, as the 27th Nab. was the year after Sargon's usurpation of the crown. During the civil war which probably accompanied this event, Marduk-baladan made himself master of Babylon; for I greatly doubt the identity of his father and the *Ιουγαίος* of the Canon. I may here observe, as it seems not to be generally admitted, and as an assumption of the contrary has furnished a groundwork for some hostile criticisms, that it is quite certain that the Canon of Ptolemy, in these early times at least, counted as the first year of a king that which began next after his accession, not that in which his accession took place. This was called *the beginning of the reign* of the new king, not his *first year*. Thus, on the Nimrud Obelisk, lines 25, 26, the king first mentions a conquest which he made in the beginning of his reign (which would be styled the last year of his predecessor) and then the conquests of his first year.

But to pass from Sargon to his successor. In July last, I observed the name of Belib in the inscription on BELLINO's cylinder, as having been made king of Mesopotamia by Sennacherib, when he conquered Marduk-baladana, king of Qar-dunyas, as he is called, in his first campaign. In another unpublished inscription of the same king, which was shown me by Mr. LAYARD, it is said that in the fourth campaign Marduk-baladan was again defeated and driven to an island; and that Sennacherib made his son Ashurnadim king of both Chaldea and Mesopotamia. Comparing this with the Canon, in which *Βηλίβος* appears as king for three years, I inferred that the king who was appointed by Sennacherib in his first campaign must have been the king whose first year was the 46th of Nabonassar (beginning 15th February, 702 B. C.) and that

Ashurnadim\* must be the Apronadius of the common editions of the Canon, *Ἀπρανάδιος* in the most correct manuscript; the *σσ* having been converted into a *ω* by a mistake of some copyist. It appears, then, that Belibus was made king of Mesopotamia before the 15th February, 702 B. C. This was in the first campaign of Sennacherib; and it may be doubted, whether this was in his first year, or in the beginning of his reign, that is, the last year of Sargon, which of course must be his 19th. From other inscriptions of Sennacherib it appears, that he was occupied in the beginning of his reign in the construction of public works, and that this war originated in an attack made by the Babylonians after he had been some time king. I am therefore of opinion, that Sargon died in his 18th year, and that the first campaign (*gir*) of Sennacherib began in his first year.† It appears, however, from the Canon, that the reign of Sargon at Babylon terminated in the course of his 17th year, the 43rd of Nabonassar. After that there was an *Ἀβασιλευρον* of two years; and it must be to this interregnum, and not, as I formerly supposed, to that which began 16 years later, that the passage in Alexander Polyhistor refers. He says, that after the reign of the brother of Sennacherib, Acises reigned for 30 days; and then Marodach Baladan slew him, and held the kingdom six months. Then Elibus reigned for three years, and was in his third year defeated by Sennacherib, who made his son Asardanius king, retiring himself to Assyria. This may very well represent what happened, if we assume the Elibus of Polyhistor to be the Belibus of the Canon, the Belib of the inscription; and the Asardanius of Polyhistor to be the Assurnadim of the inscription. It would then appear, that in the 17th year of his reign over Assyria, his fifth at Babylon, Sargon made one of his sons king of Babylon; that this son was not acceptable to the Babylonians,

\* This name occurs in B. M. 61. 5, written *Ashur. ad. me*, with  $\llll\lll$ , No. 76, the value of which I now think to be *ade* rather than *ad*. In this place it must have a different value; or (what I think more probable) a  $\lll$  must have been omitted. In two other unpublished inscriptions, it is written *Ashur. na. din. me*, with  $\lll$ , No. 22, which must admit the value *dim* as well as *din*. The addition of *me* or *mi* to proper names ending in *m* may be considered regular; it occurs in very many instances.

† It is certain that the 44th of Nabonassar was the 18th of Sargon, and that the first *campaign* of Sennacherib began in, and for the most part coincided with, the 45th of Nabonassar. The only doubt is, whether this 45th of Nabonassar was called the 19th of Sargon or the first of Sennacherib. I think the latter; but I admit that it is open to controversy.

and was not placed as a king in their Canon ; that after an interval of about a year, Acises became king in his room, and that he gave place to Marduk-baladan, the former king, who recovered the kingdom and retained it for about six months ; the time at which this happened being that of the death of Sargon.

The results that I have obtained may be thus summed up :

- A. N. 27 = 1st Sargon = 1st Mardok-baladan.  
 A. N. 38 = 12th „ 12th. Sargon conquers Babylon.  
 A. N. 39 = 13th „ His first at Babylon.  
 A. N. 43 = 17th „ His fifth at Babylon ; he gives the kingdom to his son.  
 A. N. 44 = 18th „ A son, name unknown, reigns at Babylon ; not acknowledged, and this called the first of the interregnum. Sargon dies.  
 A. N. 45 = 1st Senna- } Acises and Marduk-baladan at Babylon. 2nd of  
                   cherib. } interregnum. Belib made king by Sennacherib.  
 A. N. 46 = 2nd „ 1st Belib.  
 A. N. 48 = 4th „ 3rd Belib. Sennacherib dethrones him, and makes his son Ashurnadim king.  
 A. N. 49 = 5th „ 1st Ashurnadim.  
 A. N. 52 = 8th „ 4th „

It is as yet uncertain how much, if at all, after this Sennacherib reigned. The Annals on the Kouyunjik bulls extend no further than his 6th year ; but Colonel RAWLINSON says, that his 8th is mentioned on the lost cylinder of Colonel TAYLOR, of which he possesses a copy.\*

A difficulty presents itself immediately in respect to harmonizing the above results with what we read in the second Book of Kings. It has been evident to me for several years, that the numbers in the present text cannot *all* be correct. *Some* error has crept in. I endeavoured in my former paper to produce harmony between the Assyrian inscriptions and the Biblical text, by reducing the reign of Manasseh from 55 to 25 years ; but I see now, that a

\* These results were known to me in July. The Academy not being then sitting, I sent a statement of what I considered an important and interesting discovery to the Athenæum, the Editor of which acknowledged the receipt of my letter on the 31st July, but did not publish it. I had, however, an opportunity, of which I availed myself, of making it public at the meeting of the British Association on the 2nd September.

correction of a different nature must be made. It is certain from the inscriptions, that Sargon conquered Samaria, and carried away the people in his second year, the 28th of Nabonassar, or 720 B. C. This accords with the received chronology, and we may confidently infer, that this was the 6th year of Hezekiah; his 4th year, in which Samaria was first attacked by the Assyrians under Shalmaneser, who was then king, being the 26th of Nabonassar. The sacred text does not say that Shalmaneser carried away the Ten Tribes, though commentators have assumed that he did. It was "the king of Assyria;" that is, Sargon, the successor of Shalmaneser. Hezekiah's illness was 15 years before his death, and consequently, as he reigned 29 years, in his 14th or 15th year. The embassy of Merodach-baladan, which followed this, was in his 15th, which would be the 10th year of Sargon, B. C. 711; but Sennacherib's invasion was in his third campaign, 701 B. C. It appears to me, that all difficulty would be removed, if in 2 Kings, xviii. 13, we read "twenty-fourth" or "twenty-fifth" for "fourteenth;" and that a correction of this nature is absolutely necessary. It appears from 2 Kings, xx. 6, that a deliverance of Jerusalem from "the king of Assyria," was promised subsequently to the illness of Hezekiah. This is inconsistent with the common view, which places this illness *after* the invasion of Sennacherib; but it is quite consistent with my view, that the illness was in the 10th year of Sargon, as we know that Sargon invaded Palestine and took Ashdod in his 11th year. The words "In those days," at the beginning of 2 Kings, xx., prove nothing as to chronological order. The Assyrian inscriptions speak of foreign conquests first; and then we have "In those days," meaning, "within the preceding period," a city or palace was built, or the like. Assuming, as I do, that the illness of Hezekiah was 11 years previous to Sennacherib's invasion, the former, as a domestic transaction, would be recorded last. As to the statement in the book of Tobit, that Sennacherib's murder took place almost immediately after his return from the siege of Jerusalem, I do not feel myself called upon to speak. Sennacherib records his exploits for three, if not five, years after his return; and this is a difference which no corruption in the text of that book can account for. The inference from this seems a very obvious one; but this is not the place for discussing the Canon of Scripture.

5th November, 1852.