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# THE CHICAGO SYLLABARY AND <br> <br> THE LOUVRE SYLLABARY <br> <br> THE LOUVRE SYLLABARY <br> <br> AO 7661 

 <br> <br> AO 7661}

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# THE CHICAGO SYLLABARY AND THE LOUVRE SYLLABARY AO 7661 

By RICHARD T. HALLOCK


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II. Reverse of the Chicago Syllabary

III-X. Autographed Text of the Chicago Syllabary

## LIST OF ABBREVIATIONS

| AJSL | American journal of Semitic languages and literatures (Chicago etc., 1884 |
| :---: | :---: |
| ana ittišu | Landsberger, B. Materialien zum sumerischen Lexikon. I. Die Serie ana ittišu (Roma, 1937). |
| A | Paris. Musée national du Louvre. Antiquités orientales. |
| AOF | Archiv für Orientforschung (Berlin, 1923-). |
| AS | Chicago. University. Oriental Institute. Assyriological studies (Chicago, 1931- |
| AS No. 4 | Meissner, Bruno. Beiträge zum assyrischen Wörterbuch II (1932). |
| AS No. 9 | Poebel, Arno. Studies in Akkadian grammar (1939). |
| Ass. | Assur field number. |
| BE | Pennsylvania. University. The Babylonian expedition of the University of Pennsylvania. Series A: Cuneiform texts, ed. by H. V. Hilprecht (1893-1914). |
| BIN | Babylonian inscriptions in the collection of James B. Nies (New Haven, Conn., 1917-). |
| BM | British Museum. |
| BMise | Weissbach, F. H. Babylonische Miscellen (Deutsche Orient-Gesellschaft. Wissenschaftliche Veröffentlichungen IV [Leipzig, 1903]). |
| Br . | Brünnow, Rudolph E. A classified list of all simple and compound cuneiform ideographs occurring in the texts hitherto published, with their Assyro-Babylonian equivalents, phonetic values etc. (Leyden, 1889). |
| BW | Barton, G. A. The origin and development of Babylonian writing. Part 1 (Beiträge zur Assyriologie und semitischen Sprachwissenschaft IX 1 [Leipzig, 1913]). |
| Cat. | British Museum. Catalogue of the cuneiform tablets in the Kouyunjik collection . . . . by C. Bezold (5 vols.; London, 1889-99). |
| CS | Chicago Syllabary (Oriental Institute Museum No. A 2480), published by D. D. Luckenbill in AJSL XXXIII (1917) 169-99 and republished in the present volume. |
| CT | British Museum. Cuneiform texts from Babylonian tablets, \&c., in the British Museum (London, 1896-). |
| DT | British Museum. Daily Telegraph accession. |
| Fauna | Landsberger, B. Die Fauna des alten Mesopotamien nach der 14. Tafel der Serie Har-ra= hubullu (Sächsische Akademie der Wissenschaften, philol.-hist. Klasse. Abhandlungen XLII 6 [Leipzig, 1934]). |
| Gesenius-Buhl | Gesenius, F. H. Wilhelm. Wilhelm Gesenius' Hebräisches und aramäisches Handwörterbuch über das Alte Testament . . . . bearb. von Dr. Frants Buhl (14. Aufl.; Leipzig, 1905). |
| GSG | Poebel, Arno. Grundzüge der sumerischen Grammatik (Rostock, 1923). |
| HGT | Poebel, Arno. Historical and grammatical texts (Pennsylvania. University. University Museum. Publications of the Babylonian section V [Philadelphia, 1914]). |
| HS | Thureau-Dangin, Francois. Les homophones sumériens (Paris, 1929). |
| ITT III | Constantinople. Asarı atika müzeleri. Inventaire des tablettes de Tello conservés au Musée impérial ottoman. III. Textes de l'époque d'Ur, par Henri de Genouillac. 2. partie (Paris, 1912). |
| JAOS | American Oriental Society. Journal (Boston etc., 1849-). |
| JRAS | Royal Asiatic Society of Great Britain and Ireland, London. Journal (London, 1834-). |
| K | British Museum. Kouyunjik collection. |
| KTS | Lewy, Julius. Die altassyrischen Texte vom Kültepe bei Kaisarije (Konstantinopel, 1926). |
| LAKF | Deimel, Anton. Die Inschriften von Fara. Liste der archaischen Keilschriftzeichen (Deutsche Orient-Gesellschaft. Wissenschaftliche Veröffentlichungen XL [Leipzig, 1922]). |
| List | List BM 29625, published by C. J. Gadd in CT XLI (1931) Pls. $47 \mathrm{f}$. |
| MAOG | Altorientalische Gesellschaft, Berlin. Mitteilungen (Leipzig, 1925-). |
| MAT | Smith, Samuel A. Miscellaneous Assyrian texts of the British Museum (Leipzig, 1887). |
| MVAG | Vorderasiatisch-aegyptische Gesellschaft, Berlin. Mitteilungen (Berlin, 1896-1908; Leipzig, 1909-). |
| Nabuchodonosor | Strassmaier, J. N. Babylonische Texte . . . . von den Thontafeln des Britischen Museums copirt . . . . [II.] Inschriften von Nabuchodonosor, König von Babylon . . . . (Leipzig, 1889). |
| NVB | Scheil, V. Nouveaux vocabulaires babyloniens (Paris, 1919). |


| OECT IV | Meer, P. E. van der. Syllabaries A, B ${ }^{1}$ and B, with miscellaneous lexicographical texts from the Herbert Weld collection (Oxford editions of cuneiform texts IV [London, 1938]). |
| :---: | :---: |
| OLZ | Orientalistische Literaturzeitung (Berlin, 1898-1908; Leipzig, 1909-). |
| PB | Deimel, Anton. Pantheon babylonicum (Romae, 1914). |
| R | Rawlinson, Sir Henry. The cuneiform inscriptions of Western Asia (5 vols.; London, 1861-84; Vol. IV, 2d ed., 1891). |
| RA | Revue d'assyriologie et d'archéologie orientale (Paris, 1884-). |
| Rm | British Museum. Rassam accessions. |
| ROEC | Thureau-Dangin, François. Recherches sur l'origine de l'écriture cunéiforme (Paris, 1898-99). |
| RTC | Trureau-Dangin, François. Recueil de tablettes chaldéennes (Paris, 1903). |
| S* | Syllabary A, published in Friedrich Delitzsch, Assyrische Lesestücke (5. Auf.; Leipzig, 1912) pp. 43-49. |
| SA | Thureau-Dangin, François. Le syllabaire accadien (Paris, 1926). |
| SAI | Meissner, Bruno. Seltene assyrische Ideogramme (Assyriologische Bibliothek XX [Leipzig, 1910]). |
| SAW | Meissner, Bruno. Supplement zu den assyrischen Wörterbüchern (Leiden, 1898). |
| $\mathrm{S}^{\text {b }}$ | Syllabary B, published in Friedrich Delitzsch, Assyrische Lesestücke (5. Aufl.; Leipzig, 1912) pp. 95-106. |
| SG | Delitzsch, Friedrich. Sumerisches Glossar (Leipzig, 1914). |
| SGT | Langdon, Stephen H. Sumerian grammatical texts (Pennsylvania. University. University Museum. Publications of the Babylonian section XII 1 [Philadelphia, 1917]). |
| Sm | British Museum. George Smith accession. |
| SLL | Deimel, Anton. Sumerisches Lexikon (Rom, 1925-37). |
| TU | Thureau-Dangin, François. Tablettes d'Uruk à l'usage des prêtres du temple d'Anu au temps des Séleucides (Paris. Musée national du Louvre. Textes cunéiformes VI [Paris, 1922]). |
| VAT | Berlin. Staatliche Museen. Vorderasiatische Abteilung. Thontafelsammlung. |
| Vok. Ass. 523 | Zimolong, B. Das sumerisch-assyrische Vokabular Ass. 523 (Leipzig, 1922). |
| WZKM | Wiener Zeitschrift für die Kunde des Morgenlandes (Wien, 1887-). |
| Yale Syll. | Yale Syllabary, published in A. T. Clay, Miscellaneous inscriptions in the Yale Babylonian lection (Yale oriental series. Babylonian texts I [New Haven, Conn., 1915] No. 53). |
| ZA | Zeitschrift für Assyriologie und verwandte Gebiete (Leipzig, 1886--). |
| ZDMG | Deutsche morgenländische Gesellschaft. Zeitschrift (Leipzig, 1847-). |

## INTRODUCTION

The Chicago Syllabary was first published by the late Professor D. D. Luckenbill in 1917 (AJSL XXXIII 169-99). Luckenbill's commentary was very brief, including only two pages of notes, with no general discussion. In 1920 Thureau-Dangin (RA XVII 31) made a few remarks on rare forms occurring in the text. In 1929 Ungnad (ZA XXXVIII 65-79) made a detailed study of the text, improving many readings and filling up a number of the lacunae. Included with his study was a reconstruction of the two parallel series á $|\mathrm{A}|$ nâqu and e a $|\mathrm{A}|$ nâqu, to the latter of which CS belongs.

Two fragments of texts identical with CS, 93042 and 81-7-27, 200 (both published in CT XII [1901] Pl. 27), were known before Luckenbill's publication. Luckenbill made some use of them, but seemed not to appreciate their full value. Thus, for instance, he failed to restore CS 41-44 and 48-50 on the basis of the parallel passages 93042 obv. 1-4 and 8-10; ThureauDangin restored line 43 , Ungnad lines 41 f . and 44, and the present writer has arranged the values in lines $48-50$ to accord with the parallel.

Subsequent to Ungnad's work a parallel text of great importance for the study of the Chicago Syllabary appeared. This is the sign list CT XLI (1931) Pls. 47 f . (hereafter called simply "List'), the first fifty-three lines of which run parallel to the latter part of CS (ll. 194306), while its remaining thirty-eight lines parallel the whole of another valuable syllabary, the text AO 7661, first published in V. Scheil, NVB (1919), republished by F. Thureau-Dangin as TU (1922) 37.

It was with these facts in mind that Professor Arno Poebel several years ago suggested to me a more extensive treatment of CS as a subject for my Ph.D. dissertation. Subsequently the scope of the work was widened to include the above-mentioned List as a whole, rather than just the part parallel to CS ; and then the desirability of rounding off the work by including also the syllabary AO 7661, parallel to the latter part of the List, became apparent. The inclusion of these texts has not only extended the work on the plane of textual and philological study but has also, to some extent, enabled it to rise to a higher level of research.

Although syllabary texts have been known and used since the earliest days of cuneiform study, they have on the whole failed to receive (in print, at least) the critical analysis which alone can derive all the information which they have to give. Of course, in the past, when scholars were fewer and the syllabary material less complete, it is entirely understandable that the syllabaries should have received rather superficial treatment. ${ }^{1}$ But in the present day we can and should go deeper. We need to discover and evaluate every scrap of evidence bearing on the origin and development of the syllabaries. That the syllabaries are historical documents representing a cultural phase of the periods from which they come is a point which should not need to be labored. The modern historian knows that he cannot afford to neglect any phase of culture, and he has a right to ask the syllabary scholar such questions as who wrote the syllabaries, when, and why-questions to which there have been in the past no

[^0]adequate answers. Furthermore, until the syllabaries take their place as historical documents against a historical background, even the purely philological evidence which they give cannot be completely understood and evaluated. ${ }^{2}$

In this direction lies the particular value to be derived from the inclusion of the two related texts in the present treatise. Because our three texts are closely related in subject matter, while differing sharply in scope and other features, their mere juxtaposition brings into focus many of the problems surrounding the origin and development of the syllabaries. Although all of these problems are not yet capable of definitive solution, there is no doubt that the history of the texts, in broad outlines, begins to emerge. It is earnestly hoped that other scholars will apply themselves to speed the final solution.

[^1]
## DESCRIPTION OF THE TEXTS

The Chicago Syllabary.-CS is written on a plano-convex tablet of rather light brown clay, measuring $20.8 \times 14.5 \times 4 \mathrm{~cm}$. Each face is divided into two columns. The text proper consists of 306 lines; the two columns of the obverse and the first column of the reverse contain 78 lines each, while the second column of the reverse contains 72 lines. To the latter column is appended a catch line, that is, the first line of the following text of the series, and also a four-line colophon, a translation of which is given in the next to last paragraph of this section.
Each of the four columns is divided into four subcolumns by three vertical lines. These dividing lines, though occasionally impinged upon by the signs, are on the whole well preserved. Two other vertical lines were drawn to keep the ends of the lines in the left-hand column of each face properly aligned (for the right-hand columns the right edge of the tablet served this purpose); these verticals have been largely, but not entirely, covered up by the writing. The scribe also ruled verticals on which to align the vertical wedges which begin each line; these verticals have been completely covered up, and only the perfect alignment of the vertical wedges and the depth to which they are sunk into the clay remain to attest their existence. ${ }^{1}$ Horizontal lines, slanting upward at an angle of about five degrees, were used to keep the lines of the text straight. The writing "hangs" from the line above, rather than resting on the line below. The horizontal lines are intersected by the heads of the vertical wedges and the tails of the slanting wedges, and they often disappear entirely where the text is closely written; also they are frequently very faint or invisible even where not covered by writing.

Of the 311 lines of the text, more than half have suffered some damage, though no line is completely missing. The upper left and lower right corners of the obverse and, correspondingly, the lower left and upper right corners of the reverse have been broken away, and most of the left edge is missing on both faces. Also missing is a piece from the lower left center of the obverse, covering parts of nineteen lines of column i. Three smooth grooves on the upper right portion of the obverse show where the digger's tool scraped the still moist tablet, defacing a number of signs; and many other minor injuries have occurred.
The upper two-thirds of column i of the obverse have suffered the most severe damage. In consequence it was particularly gratifying to discover, glued upside down on the reverse by the native discoverers of the tablet, a small piece belonging to this portion of the text, which restores the readings in lines 17 f . and confirms the conjectural restorations which had been made in lines 19-21. This piece, which does not appear in Luckenbill's copy, may be observed in his photograph of the reverse, at the lower left corner.

Like other syllabary texts, CS is written in excessively small characters, as one may readily understand from the fact that there are approximately ten lines to the inch. ${ }^{2}$ Because of the

[^2]tininess of the signs, they are unusually difficult to read wherever the surface of the tablet is not perfectly preserved. It is, indeed, largely on this account that a number of signs have been misread in the past and that several difficult passages may not, even now, be understood with certainty.
The writing, except in the second subcolumn of each column, ${ }^{3}$ is Neo-Babylonian. Clear-cut differentiations from the Assyrian script are found in the forms of the $\mathrm{Ta}_{\mathrm{a}}$ and ga signs, also in RU, KA, DA, id, and many others. In comparison with the earlier forms of the Babylonian seript the writing shows less obvious but equally decisive differentiations. When, however, we seek to discover in exactly what part of the Neo-Babylonian period our text was written, the sign forms are of little help, and other evidence is required to show that it was, in fact, written during the Seleucid regime.
The catch line mentioned above is separated from the last line of the text by an unusually heavy horizontal line. This fact and the fact that there are no horizontal lines between the catch line and the colophon or within the colophon show that these were not regarded as part of the text proper.

The surviving portions of the colophon may be translated as follows: "(1) [. . . . ; ] ]ike its original it has been written and collated. (2) [For the deity . . . of ] Babylon (3) [. . . (personal name) has caused . . . . (personal name)], his samallu, (4) [to write (it); and in the temple of . . . .] he has placed(?) (it)." The word šamallû is used to designate a scribe only in the Seleucid period (in the earlier period it is restricted to the meaning 'merchant's assistant," "clerk"). This is the closest indication of date which is found on the tablet.

Of the four subcolumns mentioned above, the second has in each line a Sumerian sign, the third presents the name of the sign, while the first and fourth give, respectively, the Sumerian pronunciation and an Akkadian translation.

The duplicates.-Of the two duplicates published in CT XII, Pl. 27, 81-7-27, 200, measuring $2 \frac{3}{4} \times 2 \frac{3}{4}$ in. ${ }^{4}$ and containing $8+24+27+0$ lines, differs from CS only in the method of writing a few values and equivalents. It also has vertical lines which divide the subcolumns. The other duplicate, 93042 , which measures $8.5 \times 8 \mathrm{~cm}$., ${ }^{5}$ lacks these verticals, had but one column on each face, and contained less than half of the text, as may be seen from the fact that the reverse begins with line 69 of CS, which appears there toward the end of the first column of the obverse. The fragment contains parts of $28+25$ lines, paralleling CS 41-93.

List CT XLI, Pls. 47 f .-The List, BM 29625 , which in size and shape resembles a NeoBabylonian business document, measures $12 \times 6.4 \mathrm{~cm}$. and contains six lines to the inch. ${ }^{6}$ Like CS and the syllabary AO 7661, it has two columns on each face, containing $24+24+$ $25+18$ lines, a total of 91 . Line 91 is the catch line, and below it is written " 91 " to indicate the number of lines-a feature not found in any of the other texts considered here. Space for five lines remains vacant at the end of the last column, leaving room for a colophon which for

[^3]some unknown reason (possibly because the text is a practice copy made in the scribal school) was not written.
A vertical line appears on each face to separate the columns. One horizontal line is drawn between the catch line (which is not set off from the text in any way) and the number " 91. ." Subcolumns, of which there are two in each column, corresponding to the first two in CS (the List lacks sign names and Akkadian translations), are not ruled, nor are the individual lines of the text separated by horizontal lines.

The text has suffered minor damage at a number of points, but is on the whole well preserved.

The writing in the first subcolumn ${ }^{7}$ is curiously inconsistent and cannot be definitely assigned to any period. The presence of distinctive Neo-Babylonian forms for several signs, for example da (1.16), e (1.17), ra (1.34), and far (1.61), clearly shows, however, that the text could not have been written before the Neo-Babylonian period. But the forms of the signs as a whole fit best with those of the Kassite period, while a few appear to be earlier. The conclusion which suggests itself is that the scribe was copying a much earlier original and tried half-heartedly to retain the forms which he found there. In several cases he gives different forms of the same sign: observe ur in lines 4 and 90 , dA in lines 16,41 , and 86 , im in lines 26 and 76 , KI in lines 42 and 67 , LUM in lines 59 and 68.

The syllabary AO 7661.-The Louvre syllabary AO 7661 measures $14.5 \times 9.5 \mathrm{~cm}$. Like CS it has four columns, containing $58+53+54+42$ lines, a total of 207 , excluding the catch line and the eight-line colophon at the end of the last column.

The four columns are each divided into three subcolumns, as against four in CS and two in the List (AO 7661 has Akkadian translations, but not sign names). Vertical lines, largely obscured by writing, form these divisions. Additional verticals, as in CS, are used to align the ends of the left-hand columns and the vertical wedges which begin the lines in the right-hand columns. The two lines serving this latter purpose, which are entirely covered up in CS, are not so here, since the first subcolumns have many blank spaces. Horizontal separating lines also are used, but only above lines in which the first two spaces are not blank. The horizontal line above the catch line, as may be seen from Scheil's photograph, again is much heavier than the others.

The tablet is on the whole well preserved. It has suffered serious damage only in the upper right edge of the obverse and the lower right edge of the reverse. Instances of minor damage are few.
For the writing in the first and third subcolumns ${ }^{8}$ precisely the same is true as in the case of CS: it is clearly Neo-Babylonian, but supplies no closer evidence of date.
The colophon, which is complete, tells us that the text is the first part of the tablet hum $|\mathrm{Lum}|$ hamâsúu, belonging to the series á $|\mathrm{A}|$ nâqu, ". . . . incomplete, copy of (a tablet in) Babylon; like its original it has been written and collated." It goes on to say that Bel-abeeriba, son of Nabu- . . - . . . the priest, has caused Nabu-šum-ibni, his šamallû, to write it for Ishtar of Uruk, his mistress, in order to obtain health, long life, the welfare of his family, and freedom from sickness, and has deposited it in the temple of Eanna. It ends by invoking a blessing on the user who does not harm the tablet (the exact meaning is not clear), a curse on him who removes it. The use of the word ssamallu for "scribe," as in CS, shows that the

[^4]text must have been written in the Seleucid era. This, again, is our closest evidence of date, as efforts to identify Bel-abe-eriba and his scribe have been fruitless.

Relationship of the texts to one another.-The catch line of CS presents the sign LUM, with the Sumerian value bum and the Akkadian equivalent hamâsu. When we note that the syllabary AO 7661 begins with this same equation, we know that this syllabary is an immediate continuation of CS. This conclusion is certified by the fact that List CT XLI, Pls. 47 f., beginning at line 194 of CS, runs parallel to the remainder of that text and continues to parallel the whole of AO 7661, ending at the same point.

Despite the close relationship between them, our texts represent three distinct types which differ sharply in scope and in degree of condensation. Most condensed is the List: its first 53 lines cover the same ground as the last 113 lines of CS, while its last 38 lines parallel the 208 lines of AO 7661. Its omissions involve chiefly compound signs, of which it lacks nearly half, and phonetic variants, of which it lacks more than half of those found in the other two texts.

CS, in its turn, is much more compressed than AO 7661. The difference lies mainly in the number of Akkadian equivalents. Seldom does CS give more than one equivalent, and never more than three, for each Sumerian value of a sign, while AO 7661 averages more than three, and in one case gives twenty-eight. It may also be noted that AO 7661 gives, on the average, more values per sign than CS; the difference in this respect, though far less striking, can hardly be fortuitous, and evidently it likewise represents a characteristic distinction between the two types of text. ${ }^{9}$

Relationship to the series.-CS and the syllabary AO 7661 are parts of a more comprehensive syllabary, which has come down to us in two parallel series of tablets. The more condensed series ea $|\mathrm{A}| n a ̂ q u$ contained only eight tablets, of which CS is No. IV; the enlarged series á $|\mathrm{A}| n \hat{a} q u$, to which AO 7661 belongs, contained forty-two tablets. ${ }^{10}$ The tablets of the enlarged series are so composed that a varying number of them (from four to eight, it appears) cover exactly the same ground as one tablet of the condensed series. Thus, for example, Tablets $9-15$ cover the same ground as Tablet II of ea $|\mathrm{A}|$ nâqu and may, therefore, be alternatively numbered as II 1-7. Since the numbers $20-38$ (covering the last two or three tablets parallel to III and all the tablets parallel to IV-VII) cannot as yet be definitely assigned, tablets in this part of the series can be designated only by this alternative numbering. AO 7661 is thus numbered V 1.
The List in CT XLI, in all probability, represents a third series, of which it is the only tablet yet known. This series presumably ran completely parallel to the other two series. It is clear, however, from the fact that the List parallels the end of Tablet IV and the beginning

[^5]of Tablet V of e a $|\mathrm{A}|$ nâqu, that this third series was not divided in exactly the same way as the other two. But the tradition which it followed in its divisions must have been related, for the List ends at the same point as AO $7661,{ }^{11}$ and it is likely that the tablet preceding the List in its series began at the same point as CS. ${ }^{12}$
${ }^{11}$ But the List apparently does not begin at the same point as an a $|\mathrm{A}|$ naqu tablet. giš-tená, its first sign, would occur toward the end of Tablet IV 3 according to Schuster's reconstruction (ZA XLIV 257). And, indeed, the fragment K 7703 (CT XI, Pl. 42), if obverse and reverse are correctly marked in the published text, practically rules out the possibility that gIš-ten $\mathfrak{d}$ began an á|A|naqu tablet, since it presents the sign ta-guna, which follows only eighteen lines after GIš-ten $\mathfrak{a}$ in CS (ll. 194 and 212), in the second column of the reverse.
${ }^{12}$ By exact calculation the preceding tablet, supposing it to show the same number of lines ( 90 , excluding catch line) and the same degree of condensation as the List, would cover 192 lines of CS and begin at the second line of that text. This result is arrived at through the proportion $53: 113:: 90: 191.9$; since 53 lines of the list cover 113 lines of CS, 90 lines of the preceding text should cover 191.9 lines of CS. This calculation establishes a presumption that the preceding tablet began near the point at which CS begins; and, this being so, it is reasonable to suppose that it actually began at the same point.

## II

## ORIGIN AND DEVELOPMENT OF THE TEXTS

The nature of the evidence.-In chapter i we noted that CS, AO 7661, and List CT XLI, Pls. 47 f ., were all Neo-Babylonian, the first two late Neo-Babylonian. The fact is that all the known texts of the series e a $|\mathrm{A}| n \hat{a} q u$ and $\mathfrak{a}|\mathrm{A}| n \hat{a} q u$ come from the late Assyrian and Neo-Babylonian periods. Already in chapter i, however, we found internal evidence that the list was a copy of a much earlier original, ${ }^{1}$ and in the following we shall observe further evidence that all of our texts have an extended history behind them. The internal evidence is, indeed, sufficiently strong to support firm deductions concerning the origin of the texts and to establish, in broad outlines, the course of development which they must have followed. The final proof of our conclusions, however, and especially the filling in of the details must await the discovery of texts from earlier periods.

The evidence of the sign order.-Quite obviously the material of our texts is arranged according to the forms of the signs in the second subcolumns; similar forms are grouped together, and there is no clear indication of the presence of any other principle of arrangement. ${ }^{2}$ It is also readily apparent that the order of the signs is based upon sign forms of a period much earlier than the Neo-Babylonian, from which our copies come. The sequence Ki, na, Ha (CS 92-115) may serve to illustrate this fact; these signs are markedly similar in their Sargonic and pre-Sargonic forms (ROEC 254, 13, 251), while their Neo-Babylonian forms could hardly be more dissimilar.
It would of course be very interesting to learn exactly which sign forms served as a basis for the sign order. In an effort to discover this, the signs as they occur in all the texts of the two series were drawn in a column and the corresponding signs from the various periods were placed in adjoining columns. The forms of the Lagash dynasty were thus found to show the greatest degree of similarity. The evidence is, indeed, not altogether conclusive, since, in the first place, our present knowledge of the early signs is inadequate, in the second place, the sign order is somewhat loose and has been subject to later influences, and, in the third place, judgment as to similarity of sign forms must often be to some extent subjective; in consequence, an earlier or later origin of the sign order cannot be excluded. What can be said with certainty is that no forms later than the monumental forms of Hammurabi could serve as basis for the sign order.

Similar evidence is presented by the forms of the signs as actually written in the second subcolumns of CS and AO 7661. These forms are in many stages of development, from early to late, with a fair predominance in favor of the Hammurabi script; only a minority are in the late Neo-Babylonian writing which is used in the other columns. There are very significant indications that at least two derive from pre-Hammurabi forms. The outstanding example is HA. CS 106-9 gives a form not found elsewhere, which is reasonably close to the earliest known linear pictographic form in the original horizontal position (cf. ROEC 251) but

## ${ }^{1}$ Cf. p. 5.

${ }^{2}$ Other syllabary texts are arranged according to the meanings or "alphabetically" according to the values. For the latter type of arrangement cf. Rm 2, 588, published by Meek in AJSL XXXVI (1919/20) 154-60, and the discussion by the present writer in AJSL LIII (1936/37) 45 f .
which diverges sharply from all the later forms. Another example is un; the sign is broken away in CS $47-50$, but the duplicate 93042 (CT XII, Pl. 27) obv. 7-10 presents a form identical with the gun $\hat{u}$ form of Ur III (ROEC421 and BW 268) but quite unlike the Hammurabi and later forms. Turning to the List, we find a similar situation. Its sign forms, however, are somewhat earlier, belonging predominantly to the Ur III and Gudea scripts.

Apparently all the scribes who copied the syllabary texts down through the centuries tried to preserve the early forms in the sign column. It is quite natural that the effort should not have been uniformly successful. This assumption accounts for all the facts we have noted. The fact that the forms in the List are earlier than those in the other two texts can be readily explained if we assume that the List is a copy of a much earlier original. ${ }^{3}$
Turning again to the sign order in our syllabaries, we may point out one invariable rule: a simple sign always precedes the signs derived from it. After it follow in the order indicated the sign forms $\mathrm{x} . \mathrm{x}$, i.e., the simple sign doubled (e.g. GA.GA, CS 29 ); x.x.x etc. (e.g. u.d.U etc. after u.v, Vok. Ass. 523 ii 70 -iii 11); and $\frac{\mathrm{x}}{\mathbf{x}}$, i.e., two identical signs placed one above the other (e.g. ${ }_{\text {LUMM }}^{\text {LUM }}$, AO 7661 ii 1). Then follow the forms x.y, i.e., the simple sign followed by a different sign; x -ten $\hat{u}$, i.e., the simple sign slanted; x -gunû, i.e., the simple sign with added vertical or horizontal strokes (e.g. ु..A, HA-ten $\hat{u}$, HA-gunû, CS 110-15); x-minnabi-gilim $\hat{u}$, i.e., two identical signs crossed (e.g. GẤnA-minnabi-gilimû, CS 282 f.); x-Šeššig, i.e., the simple sign with added slanting strokes; and $\mathrm{x}+\mathrm{y}$, i.e., the simple sign with another sign inserted into it. For the internal order of the signs in this group no rigid sequence was established. ${ }^{4}$ The form y.x, where it occurs, usually stands at the end of the sequence. This form is, indeed, very rare, except where the prefixed sign is an element represented in the late writing by gišpu. Evidently the addition of this element was regarded as modifying the meaning of the simple sign in somewhat the same way as the gunu and sesssig strokes; hence it seemed reasonable to list gišpu. $x$ under the sign $x$ instead of under Gišpu.

An arrangement analogous to the sequence of derived signs is sometimes carried out with independent signs. That is, the simplest sign comes first and is followed by similar signs in order of complexity. Thus, in CS, gIŠ (ll. 188-91) is followed by TA (1.211), which looks like an X.Y derivative of giš, pISAN (ll. 216-21), which looks like giš plus a vertical stroke, and gáva (ll. 276-80), which looks like grš plus several verticals. Although these signs in the later periods were clearly felt to be independent, the possibility that they were originally related is by no means excluded.

In general the signs of the series tend to fall into groups of similar forms. Three such groups may be observed in CS: Ká to IŠ (ll. 1-86), di to gir (ll. 87-119), gud to Kal (ll. 124-306). The sì sign (ll. 120-23), bearing no apparent relationship in form to the signs preceding and following, stands alone. Although there is no thoroughgoing principle to be seen in the way such groups are joined to form the series, it seems that an effort was made to put the simpler ones first. Tablet I (the Yale Syllabary) thus begins with the sign A, formed in the early writ-

[^6]ing by two parallel vertical (in the earliest writing horizontal) lines, and the other two groups in that text are likewise led by simple geometrical forms: an upright rectangle (lagab) and a vertical and a horizontal line (ME).

The evidence we have given for the age of the sign order applies, of course, to the order within the groups, not in the series as a whole. The facts suggest a theory that our texts originated in the "crystallization" of similar signs around certain basic forms. A disjointed collection of texts would thus result. Later on, presumably, the impulse to systematize caused these texts to be linked together into a series. At the same time, in order to include all the cuneiform signs in common use, ${ }^{5}$ a number of signs hitherto left out because they did not fit in with any group were either interpolated into (cf. the sì sign in CS) or added at the end of the series. ${ }^{6}$ Finally the material was divided more or less arbitrarily to produce subdivisions of approximately equal length.

Development of the Chicago Syllabary.-Ungnad has stated that CS was not only written, but also composed, at a late date. ${ }^{7}$ Evidence for this conclusion he finds in the following points:

1) In CS 222-75 are found many t compositions which are shown, not only by their description as such in the sign names but also by their very inclusion in this passage, to be mistaken for compositions of pISAN.
2) CS gives a number of Neo-Babylonian forms all deriving from one archaic sign; ${ }^{8}$ it gives sign names which indicate a Neo-Babylonian viewpoint; 9 it gives two lines in one place which are identical with two lines in another, except that the signs are differently explained; ${ }^{10}$ it apparently identifies one sign with another, quite different sign. ${ }^{11}$

As regards the first point, it must now be noted that the List, in its corresponding passage (ll. 15-41), contains at least six et compositions. ${ }^{12}$ Since the List, as shown under the following heading, represents a much earlier stage of development than does CS, we may safely assume that 1 compositions existed in this passage long before the Neo-Babylonian period. It is, indeed, entirely possible that they were placed here at the very beginning: since the archaic et sign contains no empty space in which to insert a sign, the similar pISAN sign may very early have taken its place in all the compound forms; these changed compositions may then very well have been grouped with the real PISAN compositions purely on the basis of form. ${ }^{13}$

Ungnad's other evidence indicates two things: first, that the text remained susceptible to change down into the Neo-Babylonian period; second, that the persons responsible for the late changes did not understand the original plan of the text. In view of this misunderstanding

[^7]we must assume that, if a true recomposition had taken place, wide divergences from the original, as exemplified in the List, would be found. But such is not the case. The late syllabaries, despite minor additions and changes, preserve the early framework substantially unaltered. And so we must conclude that texts such as CS and the syllabary AO 7661 arrived at their present form after an extended process of gradual change and were not, properly speaking, "composed" at all.

The texts have their share of the inconsequential errors that come from frequent recopying. We find, for instance, cases in which a correct and an incorrect reading appear side by side: CS 225 gives the Sumerian value of the sign PISAN+AN as dashégal, which is to be interpreted as $\mathrm{da-gal}$ and he égal; only dagal is correct, as only it has the required meaning, "width" (List, 1. 16, has only dagal), hegal being the common word for "abundance." A possibly similar case occurs in AO 7661 iv 11-14, where two values, $s u-u h$ and $s u-b u$, are written one above the other, and apparently only the latter is correct. ${ }^{14}$ The evident explanation of such occurrences is that the scribe had before him two or more different copies of the original, and where one of the copies contained an error he conscientiously recorded it as a variant. ${ }^{15}$

Occasionally the scribe provides two or more variant forms of one Sumerian sign. Note, for instance, CS 149-54: the first two lines of this passage give the early ab-gunut sign in its original form, while the remaining four give it in the form $A B+E S$ which it assumed after the Hammurabi period. Obviously the two groups were taken from different sources. Further evidence of conflation has been mentioned in the notes to CS 62 and to AO 7661 i 16.

Certain changes from the original text have been caused by the effort to abbreviate. One method of abbreviation is shown by CS 282 f . (also ll. 198 f ., practically identical), present-
 simple phonetic variants, i.e., different pronunciations of the same word, must each possess both the meaning here attributed to it and the meaning given to the other; the scribe has dropped the alternative equations $\mathrm{u}^{\nu} \mathrm{ul}=$ mêristu and al ${ }^{\circ} \mathrm{al}=q i r b \hat{t} t u$ because he felt they could be understood from the context. ${ }^{16}$ Similarly in CS 284-86, giving $\mathrm{ka}-\mathrm{al}=$ $d a n-n u, \mathrm{da}-\mathrm{an}=d a n-n u, \mathrm{ka}-\mathrm{al}=\mathrm{KA} . \mathrm{KA} \mathrm{si}-\mathrm{ga}$, we are perhaps to supply another line: da-an=KA.KA si-ga. Another type of abbreviation appears in CS 250-52, where three different signs, given with the values s ad (ll. 250 f .) and s abad (1.252), all have the same equivalent, qablum: it is clear that s ad and s abad are simple phonetic variants and should belong without distinction to all three signs; but the scribe saves three lines by giving each sign only one of the two values. ${ }^{17}$ Still a different method is used in AO 7661 i 41-45: to $\mathrm{gum}_{\mathrm{m}}$, gun, and gud , values of Lum , are given three out of the fifteen meanings ascribed to the value $\mathrm{g} \mathrm{u}_{\mathrm{z}}$ in lines 27-40, and it seems to be implied that these values possessed, in addition, all the other meanings attached to $\mathrm{g} \mathrm{uz}^{18}$ It must be noted that for none of these abbreviated passages do we have a parallel text giving the

[^8]passage in full as we would restore it; ${ }^{19}$ and it follows that all conclusions rest upon purely internal evidence.

A further fact instructive for the development of our texts is that exact duplicates exist. The CS duplicates 81-7-27, 200 and 93042 (both texts CT XII, Pl. 27) have been discussed in chapter i. Duplicates which show only the most minute differences from AO 7661 are found in the fragments $93058-93062$ (CT XII, Pl. 21). The scribes who wrote these tablets sought complete accuracy and did not venture to make any changes. The colophon emphasizes that copies were made from an authoritative original and were collated. Evidently the copies which we have stem from a redaction made in the early Neo-Babylonian period. This redaction could not have been made before the Neo-Babylonian period, since we have found important changes that are clearly Neo-Babylonian. On the other hand, it must have been made some time before the fall of Assyria, for an extensive Assyrian text, 108862 (CT XXXV, Pls. 1-8), runs closely parallel to its late Neo-Babylonian counterpart, the Yale Syllabary.

Age and authority of the List.-The comparative simplicity of the List seems to indicate that it belongs to an earlier stage of development than the two syllabary texts. Evidence of its greater age has already been adduced. Further evidence follows:

1) In the writing in the first subcolumn the List uses several sign values that are distinctively early and avoids a number of sign values, used in the other texts, which seem to be distinctively late. Among the early sign values are gál (1.16), gá (11. 21, 25, 34), sig ${ }_{5}(1.51)$, and $g u_{4}(1.61)$, for which the corresponding lines of the other texts give respectively gal, $g a$ (and $g a ́)$, si-ig, and $g u .^{20}$ The late sign values used in CS: muš (ll. 212, 214), huš (l. 240), rim (1.245), kil (1.280) contrast with broken writings in the List: $m u-u s ̌$ (1. 10; cf. mušs in 1. 9), hu-uš (1. 27), ri-im (1.26), ki-el (1. 42). It is further to be observed that the writings $g \dot{a l}$, si $g_{5}, g u_{4}$, and $m u \tilde{s}_{5}$ used in the List are not otherwise attested as Akkadian values and would seem to be survivals from a period at which the texts were made by and for Sumerians.
2) As already indicated, ${ }^{21}$ the List gives earlier forms of certain signs in the sign column. Here we may observe one particularly interesting example: the duk sign in lines 65-68. The List gives the old form of this sign (ROEC 380), simpler than the old bi sign (ROEC 390), which evidently is the gun $\hat{u}$ of duk. AO 7661 (ii 36-47), on the other hand, gives the late form of the sign, which appears to be bi+a. ${ }^{22}$ In both texts the sign precedes the simple br. In

[^9]view of the rule that the simple sign precedes the signs derived from it, there can be no doubt that the sign order here was based on the simple duk sign and that the List is, in this passage at least, closer to the common original than is AO $7661 .^{23}$
3) The List tends to favor the shorter forms of values with amissible final consonants. Thus List, lines 85 f ., gives only the short values ta and da (sign tag), while the parallel passage AO 7661 iv $15-24$ first gives the longer value tag and then adds these shorter values. Similarly List, line 87, provides šeri, parallel to šerim and šerid of AO 7661 iv 27 and $33 .{ }^{24}$ We may also note the values šin (?) and nin (sign šem+gar) in List, lines 79 f., parallel to $1 u \mathrm{mgi}$ and ningi, AO 7661 iii 46 f . In the early period, as first contended by Professor Poebel, only the short values were used, and we should expect syllabaries from that period to give only those values, as the List in these cases does.
All of this evidence taken together unquestionably demonstrates that the List reflects an earlier stage in the development of the syllabaries than do CS and AO 7661 and that, in consequence, its statements must ordinarily be granted a higher degree of authority in cases of conflict between the List and the other texts.

It is necessary, nevertheless, to use the List with some caution, since it comes to us in a late copy, apparently made by a pupil. ${ }^{25}$ Several cases of carelessness in writing may be noted: the sIG $_{4}$ sign appears in line 61 in a peculiar and doubtless incorrect form, while the sign in line 62 and the compositions in lines 63 f. show the usual form; in line 69 the sign dUK.KAK.BUR is to be corrected to dUk.qA.bUR; ${ }^{26}$ line 76 gives a form of the šem sign which disagrees with the simple sign in the preceding line and with the compound forms in the following lines; šem + me in line 77 must apparently be read sem+munus; and pisan + na in line 29 is evidently an error for pisan+di. ${ }^{27}$ The most probable explanation of these inaccuracies is that the text was copied by an inexperienced student, a conclusion already suggested by the lack of a colophon.

So far as can now be discovered, the deviations of our copy of the List from its early original are only the minor ones we should naturally expect. There is, indeed, little doubt that the List on the whole presents the characteristics which the prototypes of our syllabaries possessed at an early period. Such lists, lacking Akkadian translations, were composed at a time when Sumerian was still a living language. ${ }^{28}$ In a later period, when Sumerian had to be learned in schools, it was naturally found desirable to add a column for Akkadian equivalents, thus creating the three-column syllabary of the type of AO 7661, and also, in some cases, an additional column for sign names, whereby the four-column text of the type of CS came into existence. The addition of these columns need not have taken place suddenly. Note that in

[^10]one case (in 1. 63) the List crowds in an Akkadian equivalent; perhaps more and more equivalents were inserted, and finally a separate column was allotted to them. Similarly sign names may well have been placed at first only beside signs which were, for one reason or another, difficult to identify, and only later given for all signs. Note that in certain texts (cf. CT XII, Pls. 1-9) the sign names are written, in tiny characters, in the same column with the Sumerian sign; doubtless this is a survival of a usage that preceded the placing of the sign names in a separate column. There seems to be no evidence to show with any exactness when the Akkadian column was incorporated; but the column with sign names, since in a number of cases these names apply only to the later forms of the signs, is evidently late.

## III

## TRANSLITERATIONS

## A. THE CHICAGO SYLLABARY

Obv. i
*1 [ $\mathrm{k} \mathrm{ka}-\mathrm{a}$
*2 [ $\quad . .$.
*3 [Y . . .
*4 [ $7 .$.
5 [Ygi-e
*6 [Y su-ub ${ }^{2}$
7 [Yli-il
8 [ ${ }^{1}$ "
9 [Y....
10 [rsi-ta
11 [ $\quad .$.
12 [ $\quad \ldots$
${ }^{*} 13$ [ $\mathrm{rba}-\mathrm{ra}$
*14 [T da-ag
*15 [Y a-la]
*16 [Ypi-sa-an
*17 [Ybu-ub-]bu-
18 [Y"] [
*19 [r al-]mu [
*20 [Ya-1a-]mu
*21 [Yki-ir-]ba-an
$22[Y \mathrm{gu}-\mathrm{u}] \mathrm{r}$



* Lines so marked are annotated in chap. iv A.
${ }^{1}$ The translations are offered merely as a convenience to the reader. In general they are the meanings given in the Assyrian dictionaries and are not intended to represent original research.
${ }^{2}$ Doubtful; cf. note.
${ }^{3}$ Text gi!

THE CHICAGO SYLLABARY AND AO 7661

| 23 ［ $\mathrm{Tga-a}$ | 1 ${ }^{\text {a }}$ | lg］a－gu－u | $l u-\hat{u}-u m$ | the precative particle |
| :---: | :---: | :---: | :---: | :---: |
| 24 ［ $\dagger . .$. | 氧金 | ］＂ | 2 | ＂ |
| 25 ［ $\mathrm{Y} \ldots$. | 全会 | ］${ }^{\text {c }}$ | 3 | ＂＂＂ |
| ＊26［rka－a | 边 | ＂ | ša d dpap－ sukal | Kaka $=$ Papsukal |
| 27 ［ $\mathrm{r} \mathrm{ga-a}$ | 完 1 | ＂ | sti－iz－bi | milk |
| ＊28［rga－ar | 育，1］ | ＂ | lil－du | a delicacy ${ }^{4}$ |
| ＊29［rga－ar－ga－ar ${ }^{\text {b }}$ |  | $g a[-m i n-n] a-b i$ | 2 | ＂ |
| ＊30［rga－ar |  | ga $[-i a-a]-k u$ | 3 | ＂ |
| ＊31［ ${ }^{\text {c }}$＂ | 號准］ | ［g］a［－a－a］－ku | 4 | ＂ |
| ＊32［Y＂ | 岛垅》 | ga－de－eš－še－kelku | 5 | ＂ |
| 33 ［ $7 . .$. | 复筒。 | $g a-. .$. | ］i－su | tree？ |
| ＊34［Tza－ba－an | 运会 | gis－pu－ga－ak－ku | $z a]$－ha－an | a vessel？ |
| 35 ［ T ú－tu |  | ＂］＂［ | Jti－ik－tum | a vessel？ |
| 36 ［r．．．． | 很会 | ］＂＂ | ［ $i(?)$ ］－tir－tum | wagon？ |
| 37 ［rúta－ab | 近 | ＂＂ | $s[a]-m u-\hat{u}$ | heavens |
| ＊38［r．．．． |  | $e-d i-n u$ | sa－a－bu－um | to bend down |
| ＊39［rla－a |  | ＂ | šáa dt és š－ed teess－ se－la | Tešela |
| ＊ 40 ［ $\mathrm{Y} \mathrm{ru}-\mathrm{u}$ |  | ］ |  se－ru | Tešeru |
| $*_{41}$［ ${ }^{\text {c }}$＂ |  | ＂］ |  tum度 | Eru $=$ Sarpanitum |
| ＊42［r＂ | 宗的省碞 | $\left.{ }^{\prime}\right]$ | šá d ${ }^{\text {d }}{ }_{4}$ aiš．su <br>  | Eru $=\ldots .$. |
| ＊43［ ${ }^{\text {b bi－ir }}$ |  | ＂］ | ša su －$s u$ bar－tú | Subartu |
| ＊44［ T e－din |  | ＂］ | si $i^{-} e^{7}-[r u]$ | （open）fields |
| ＊45［T＂ | 旬并合第 | $\mathrm{J} g a-p a-a p-\dot{u}-g u-n u-d e-e s$ Š | $k u^{1}\left[*^{\prime \prime}\right]^{\text {s }}$ | ＂＂ |
| ＊46［r＂ |  | ］＂－ki－ik－ki－in－bur－ru－u | ＊［＂］$]^{6}$ | ＂＂ |
| 47 ［rú－ug | 諺事刑］ | ka－lam－mu | $n i$［ $¢ 0]$ | people |
| ＊48［Y ú－nu | 闞我广1 | ＂ | su－［ub－tum ${ }^{\text {b }}$ ］ | dwelling |

＂Lildu presumably derives from a root $l_{s ̌ d}$ ，＂to suck＂（cf．Gesenius－Buhl，14th ed．）and thus means＂something which is sucked，＂in othe－ words，＂a delicacy．＂Cf．Hebrew 7wi＂j，＂a sweet cake．＂
${ }^{5}$ Doubtful；cf．note．
${ }^{6}$ Cf．note．

${ }^{7}$ Doubtful; cf. note.
${ }^{8}$ Luckenbill's transliteration gives this value, presumably by a misprint, as a-gam.
${ }^{2}$ The tula ša mê is perhaps a wave or, possibly, a breast-shaped water-jar.
${ }^{10}$ For ll. 72-75 cf. K 4174 (CT XI, Pls. 45-48) obv. i 42-45 (restored from Smith, MAT, Pl. 25, ll. 5 f., where the value in l. 6b, copied


| ${ }^{42}[\mathrm{ku}-\mathrm{u}] \mathrm{z}-\mathrm{bi}$ | $\operatorname{cic}^{\boldsymbol{L}} \mathrm{i}$ | " $=(=u)-k i-k i$ | $\stackrel{\text { šu] }}{ }$ |
| :---: | :---: | :---: | :---: |
| ${ }^{43}[\mathrm{ka}-] \mathrm{az}-\mathrm{bi}$ |  |  | $\stackrel{\text { šu] }}{ }$ |
| ${ }^{4}$ [ka-] za-bur | Ú[ $\mathrm{E}_{\text {i }}$ | " " | šu] |
| ${ }^{45}\left[\mathrm{~m}\right.$ at-] ${ }_{\text {¢ a m m-mi }}$ | Úl ${ }^{\text {a }}$ | " " | šu] |

${ }^{11}$ This writing originally, as Professor Poebel suggests to me, may well have been read $k a-z a b u$. $K$ ázabu, accented on the first syllable, could of course readily be abbreviated to kazbu , which is presumably the form from which kaz bi (cf. preceding note) and $k u z b u$ developed.

| ＊74［ r k$] \mathrm{a}-\mathrm{za}$－bur | 析 | $\boldsymbol{u}-m u-u$ |  | Kazabur |
| :---: | :---: | :---: | :---: | :---: |
| ＊75［ Y ma ］t－šam－mi | 银 | ＂ | 成＝mat sam－mi ${ }^{\text {ki }}$ | Mat Šammi（lit． ＂weed land＂） |
| 76 ［ 71$] \mathrm{u}-\mathrm{ub}$ | 年厂 | su－kal－lum | mi－su－ú | to wash |
| 77 ［ T s］u－kal | 年妡 | ＂ | su－uk－kal－lum | vizier |
|  | 製 | ＂ | $p a-s ̌ i-s ̌ u$ | a priest |

Obv．ii

| 79 | Yis |
| :---: | :---: |
| 80 | Ysu－us |
| 81 | Ysa－bar |
| ＊82 | Yú－ku－um |
| ＊83 | $\underset{\text { pis } \mathrm{s}_{10} 12}{ }$ |
| 84 | Ymi－il |
| ＊ 85 | Y is |
| ＊86 | Y［i－si－］is |
| 87 |  |
| 88 | Y dioril |
| 89 | Ysa－a |
| 90 | Y $\mathrm{rsi}^{\text {i }}$－ 1 im |
| 91 | $\mathrm{Y}^{\text {sid－}}{ }^{\text {l }}$ |
| 92 | Yki－ $\mathrm{i}^{1}$ |
| 93 | Y ku － $\mathrm{u}^{\text {d }}$ |
| 94 | Y gu －u |
| 95 | Ygi－e |
| 96 | Yir－siotu |
| 97 | Yga－gàr |
| ＊98 | Ybab－ru－da |
| 99 | Y＂ |
| 100 101 | $\begin{gathered} \text { Yha-an-bu- } \\ \text { ru-da } \\ \text { Yki-is-lah } \end{gathered}$ |


| 気 | $i s ̌$－šu |  |  | šáaldu－u | desert |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 包 | ＂ |  |  | $n a-a ́ s$－pan－t［um］ | overthrow |
| 运 | ＂ |  |  | e－pi－rum | dust etc． |
| 気 | ＂ |  |  | $t u r-b u-u^{2}-t u m$ | dust cloud |
| 院 | ＂ |  |  | ＂ | ＂＂ |
| 运 | ＂ |  |  | $\check{s c u-u k-k u-r u}$ | hostility（or the like） |
| 第》 | ＂ |  |  | ${ }^{\text {¢ }}$ ba－as ${ }^{\text {¢ }}$－s $u$ | heap of sand |
| 気示 | ＂ |  |  | ${ }^{\text {s }}$ ¢ $i-i^{7}-b u$ | outcry |
| 行 | sa－al－gu－ut－tu |  |  | $q a[-b] u-u$ | to speak |
| 年 | ＂ |  |  | di－i－nu | （legal）judgment etc． |
| 然 | ＂ |  |  | mil－！ku | counsel etc． |
| 哘 | ＂ |  |  | šul－mu | well－being etc． |
| 嵒 | ＂ |  |  | šá－na－nu | to equal etc． |
| 号 | ki－ku－u |  |  | $i r-s i-t u m$ | earth |
| 年 | ＂ |  |  | ＂ | ＂ |
| 為 | ＂ |  |  | ${ }^{1} m a-a{ }^{1}-t u m$ | land |
| 维 | ＂ |  |  | ša 委気－n n ［ $k i$－ $n i$－$n u$ | hearth fire |
| 家 | ＂ |  |  | $i r-s[i-t] u m$ | earth |
| 推 | ＂ |  |  | $q a q-q a[-r u]$ | ground |
| 4 4 |  |  |  | bur－［rum］ | hole |
|  | ［＂ | $-b a d-d a-1$ | ＂ | 2 | ＂ |
| 边 |  | －giš－pa－ | ＂ | 3 | ＂ |
| 维㟧 \＄ |  | －ut－ta－ | ＂ | maš－ka－nu | storage place |


| 102 | Yni－e | 人氟 | $n a-n u-u$ | šu－úu | his |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 103 | Yna－a | 战第 | ＂ | $a b-n u$ | stone |
| 104 | Ynu－u | 人莳 | ＂ | $l a-a$ | negative |
| 105 | Yna－a | 適 | ＂ | a－mi－li | man，gentleman |
| 106 | Yha－a | 504 | $k u-\hat{u}-\boldsymbol{a}$ | $l u^{13}-\hat{u}$ | the precative particle |
| 107 | Ya－a |  | ＂ | KA．KA si－ga |  |
| 108 | Yku－ú |  | ＂ | $n u-u$－nu | fish |
| 109 | Yku－ú－a | 5 | ＂ | ＂ | ＂ |
| 110 | Yza－ab | － | $k u-\hat{u}-a-a-a-k u$ | ha－la－qu 夫 $n a-b u-t u$ | to perish，flee；to flee |
| 111 | Yzu－bu－ud | $5$ | $k u-t e-n u-u$ | $z u-b u-u t-t u-u$ | a kind of fish？ |
| 112 | Yzu－gu－ud | $5 \times 4$ | ＂＂ | pa－tar－rum | a kind of fish？ |
| 113 | Yki－ir | 企边 | ku－gu－nu－u | šá－hu－u | pigfish？ |
| 114 | Ygi－ir | 敛边 | ＂＂ | šá－bat－ti | day of full moon |
| 115 | Ypi－es | 边 | ＂＂ | $n a-p a-s{ }^{\text {c }} u$ | to expand etc． |
| ＊116 | $Y{ }^{14}$ | MI | ma－mu－u | $t i-i t-t u$ | fig（tree） |
| ＊117 | $\mathrm{Yma-a}{ }^{14}$ | 场 | ＂ | ma－a－tum | land |
| ＊118 | Ybašbu－ur | 定止 | ma－gu－nu－u | haš－hu－ru | apple（tree）？ |
| ＊119 | Ydu－ur－ba | 鹤平 | ＂${ }^{\text {c }}$ | šá ${ }^{\mathrm{d}} \mathrm{nin}$－ šu－ma | Nindurba |
| ＊120 | Ysi－e | 秷 | su－nu | $m a-$ śá－lum | to be like |
| ＊121 | Ysi－i | 洤 | ＂ | sa－pa－nu | to overcome，destroy |
| 122 | Yza－ar | 鈴 | ＂ | sa－ar－ru | door socket |
| ${ }^{*} 123$ | $\mathrm{Y}^{\text {f } u^{1}-u \mathrm{~m}^{15}}$ | 栓 | ＂ | $n a-d a-n u \star s c ̌ u-m a$ | to give；garlic？ |
| 124 | Ygu－u | 筑 | $g u-u t-t u$ | $a l-p i$ | ox |
| ＊125 | Yba－ar |  | ＂ |  <br> ${ }^{\text {d }}$ NIN．EZEN + GUD ${ }^{16}$ | $\begin{aligned} & \text { Har }=\text { NIN.EZEN }+ \\ & \text { GUD }^{16} \end{aligned}$ |
| ${ }^{*} 126$ | rba－ba－ar | 年 | ＂ | ša d 年建 $b a-b a-a r$ d | \％Babar |
| 127 $* 128$ | Yga－ar | 分4 | ＂ | har－pu | early（planting etc．$)^{17}$ |
| ＊128 | Yzi－ib | AP | ＂ | šá ${ }^{\mathrm{d}} \mathrm{ur}$－金多 gir－rum | Urzib＝girru（lion） |
| ${ }^{*} 129$ | Yestou－ub | 为 | ＂ | $a r-s u-u p-p u$ | a grain？ |

${ }^{13}$ Text ku！
${ }^{14}$ Read in 1． $116 \mathrm{ma} \mathrm{a}-\mathrm{a}$ ，in 1.117 ＂$(=\mathrm{ma} \mathrm{a}-\mathrm{a})$ ．Cf．note．
${ }^{15}$ Possibly $\mathrm{r}_{\mathrm{z}} \mathrm{u}^{1}-\mathrm{um}$ ．Cf．note．

[^11]| ＊130 | Ya－1a－ab | M | $g u$－ut－tu | ${ }^{\top} a l-p i{ }^{\top}$ | ox |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 131 | $Y \mathrm{rg} \mathrm{u}_{4}{ }^{1}-\mathrm{ud}$ | 库 | ＂ |  | strong，hero；to jump |
| 132 | $Y \mathrm{gu}_{4}-\mathrm{ud}$－ma | 分 ${ }^{(1)}$ | ＂ | $\mathrm{d}_{\text {gu－ud－ma }}$ 寿 | Gudma |
| ＊133 | Ykad－ma | 为 | ＂ | ${ }^{1} k a d-m a y$ 平 | Kadma |
| ＊134 | Ydi－pa－ar | 为 | ＂ | d di－parts | Dipar |
| ＊135 | $Y$＇da（！）＇par | 为 | ＂ | $\mathrm{d}^{\text {da－par }}$ 为 | Dapar |
| 136 | Yka－mu－us | 为辰 | ＂ | ${ }^{\text {d }}$ ka－mu－uš4 | Kamuš |
| 137 | Y su－uš－gim | 平 | ＂ |  | Šušgim |
| 138 | Ygu－ga－rid |  | ＂ | dgu－ga－ri－id | Gugarid |
| ＊139 | Yku－šu－um | 年 | ＂． |  | Kušum |
| ＊140 |  | 荿 | ＂ |  | Rušban ${ }^{18}$ |
| ＊141 | $r^{1} a-a m^{1}$ | 平成 4 | šá－gud－da－ku－ku－ra－i－du | ＊$r i-i-[m u]$ | wild ox |
| ＊142 | Yi［l－］dag |  | ＂－$a-a-k u-r a-\quad$ a | $a-t[a-r u]$ | a kind of tree |
| ＊143 | Y＇ul ${ }^{\text {r }}$ | 佈》 | giš－pu－gu－ud－da－ku | $u l[-l u]$ | joy |
| ＊144 | Ydu－u | くす¢ | ＂ | $n[a-k a-p u s ̌ a ́ a l p i]$ | to gore，of an ox |
| ＊145 | Yru－u | 㒄 | ＂＂ | $n[a-k a-p u$ šá urîşi］ | to butt，of a goat |
| ＊146 | Yáb | $\xrightarrow{4}$ | $e-s ̌ u$ | $\left.a p-t \hat{u}^{18}\right]$ | opening etc． |
| 147 | Ye－ers | $\xrightarrow{\longrightarrow}$ | ＂［ | $b i-i-t u]^{\prime}$ | house |
| ＊148 | Y＂ | $\longmapsto$ | ＂［ | ．．．$\left.{ }^{19}\right]$ |  |
| ＊149 | Ygu－nu | － | $e-e s ̌-g u-n u[-u$ | ša g i | nether world |
| 150 | Yúnu | 寝 | ＂［＂ | $\underset{\text { šub-tum] }}{\text { gu-nu-u] }}$ | dwelling |
| ＊151 | Ynu－ú |  | $\ldots{ }^{\text {．}}{ }^{20}$ | ．．${ }^{21]}$ |  |
| ＊152 | Y ${ }^{\prime}-\mathrm{nu}-\mathrm{ug}$ | $\cdots$ | ＂ |  | Uruk |
| ＊153 | Ye－ri－im |  | ＂ | $\left.\ldots{ }^{\text {．．}}{ }^{22}\right]$ |  |
| ＊154 | Yú－ru－gal ${ }^{23}$ | － | ＂ | $s a^{\text {d }} \mathrm{n}$ è－ | Nergal |
| ＊155 | Y＂ | 穴莄 | šá－eš－še－ku－gal－la－i－du | $\underset{\left.\underset{\left.a-r a-a l-l u-u^{24}\right]}{\text { g al }}\right]}{\left.\underset{\sim}{24}]-m a^{24}\right]}$ | nether world |
| ＊156 | Yešgal |  | " | eš－gal－lu $\left.{ }^{24}\right]$ | palace |
| ${ }^{18}$ Doubtful；cf．note． <br> ${ }^{19}$ For possible restorations cf．note． <br> ${ }^{20}$ Sign name either eš－gunû or $\check{\text { šá－eššeku－eš－gišpa－idu（cf．note）．If the latter，then of course the first and last elements of the sign name }}$ in 1.155 would be represented by ditto marks． <br> ${ }^{21}$ Perhaps to be restored＂（ $=$ šub－tum）． <br> ${ }^{23}$ Cf．note． <br> ${ }^{22}$ Perhaps to be restored $i$－šit－tư．Cf．Ungnad＇s note to this line． <br> ${ }^{24}$ Doubtful；cf．note． |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

ev．i

|  | Y u－nu－gi |  | šá－eš－še－ku［－i－gi－gu－n | $d u$ | par－şu］ | grave |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 158 | ［Y］na－an－še |  | ＂$-k u-\hat{u}[-a-$ | ＂ | $\mathrm{d}_{n a-a n-s e ~}^{\text {a }}$ | Nanse |
| 159 | $[Y] n i-n a-a$ |  | ＂＂［ | ＂ | 戌们 $n i-n a-a^{\text {k }}$ i］ | Ninâ |
| 160 | Ysi－ra－ra |  | ＂＂［ | ＂ | $\xrightarrow[{s i-r a-r a^{\text {k }} \text { ］}}]{ }$ | Sirara |
| 161 | Ysi－i | 年 | ＂－gi－eš－t！$u$－ra－ | ＂ | mar－tu］ | gall |
| 162 | Y＂ |  | ＂$-s i-s a-a[-$ | ＂ | ＂（？）］ | ＂ |
| 163 | Yesti－mi－in |  | ＂－i－mi－na－a－ | ＂ | ［me－lu－ul－tú šá kip－ $\left.p i-e^{25}\right]$ | playing of the lute？ |
| 164 | Ya－ga－ri－in |  | ＂－tu－um－ma－ | ＂ | $\left[\begin{array}{c} {[u m-m u} \\ \left.n u^{25}\right] \end{array} \leqslant a\right. \text {-ga-rin- }$ | mother；mother |
| 165 | Y＂ |  | ＂－ga－na－te－na－ | ＂ |  | ＂；＂ |
| －166 | rab－zu | 成 | $z u-u$－eš－še－ku |  | $a[p-s u-u]$ | （sweet）waters |
| 167 | $Y$ ú－mu－un |  | и́－mu－nu |  | $u m[-m a-t u m]$ |  |
| 168 | Y＂ |  | ＂ |  | $m u-[u m-m u]$ |  |
| $\stackrel{-169}{ }$ | Y di－e |  | ＂ |  | $a-[b a-l u]$ | to carry |
| 170 | Ydi－e | 制近 | ＂ |  | $p a-g a[-. .$. |  |
| ＊171 | Y da－a | 它金 | ＂ |  | $b a-b a-l u[\star . .$. | to carry |
| 172 | Ysi－i | 它加》 | ＂ |  | $n a p-p[a-b u]$ | smith |
| ＊173 | Ynin－á－gal | 金が荗 | ＂ |  |  | Ninagal |
| ＊174 | Yku－us | $\square$ | $u s ̌-n u-t i l-l u-u$ |  | $m a-r u-[u]$ | fat，robust，etc． |
| 175 | Yku－ru－us | $p$ | ＂ |  | 2 | ＂＂＂ |
| 176 | Yku－ru－uš－da | $\square$ | ＂ |  | 3 | ＂＂＂ |
| ＊177 | Yku－u | $5$ | ＂ |  | $\underset{\substack{t a-a-b u s s^{\prime}\left\ulcorner p u^{1}\right.}}{ } \quad \operatorname{lat}-q u \curvearrowright$ | good，sweet；sweet |
| 178 | Yku－uk－ku－da | $\square$ | ＂ |  | $\stackrel{4}{4}$ | Kukkuda |
| 179 | Yka－ak－ku－da | 5 | ＂ |  | ${ }^{1}$ | Kakkuda |
| ＊180 |  | $>$ | ＂ |  | ${ }^{\mathrm{d}}$ | Bandiliša |
| ＊181 | Ysin－dili－bal］ | $F$ | ＂ |  | šin－di－is－「．．．${ }^{1}$ |  |
| ＊182 | Ytu－ba－ši－in | 4 | ＂ |  | $t u-b a-s{ }_{\text {c }}\left[-i n^{25}\right]$ |  |
| 183 | $r d a-b a-a n$ | $5$ | ＂ |  | šar－da－ab［－．．．］ |  |
| 184 | Ybi－ri－in | $\square$ | ＂ |  | $z i-i n-b u-h a-\left[t u^{26}\right]$ | a leather object ${ }^{66}$ |

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| 185 | Y ad | 寿 | $a-d u$ | ri－ig－［mu］ | voice，sound，etc． |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ＊186 | Yi－si－im | 人 | giš－pu－ad－da－ku | $p i-i r-u m$ ล $r i q[-q] u$ | sprout etc．；herb |
| 187 | Ygi－ir | く矿 | ［＂］＂ | ki－i－rum | oven |
| 188 | Yi－is | $\stackrel{\square}{7}$ | $g[i]-s ̌ u$ | $i$－şu | wood |
| 189 | Y＂ | \％ | ＂ | šá－bat－tim | day of full moon |
| ＊190 | Ygi－eš | 今 | ＂ | $i$－su | wood |
| ＊191 | Y mu－u | \％ | ＂ | ＂eme－sal | ＂（in）eme－sal |
| ＊192 | Ygišbar | 事 |  | bal－ți－it－tú | wood beetle |
| 193 | Yzi－iz | 为 | ＂ | sa－a－su | moth |
| ＊194 | $Y \mathrm{gu}-\mathrm{ru}$ | A | $g i s s^{-1}{ }^{\text {d }}$ te－nu ${ }^{1}-\hat{u}$ | $n a$－šu－u | to carry etc． |
| ＊195 | Yul ${ }^{27}$ | $\frac{4}{7}$ | $k i b-b u$ | $u l-l u ~ s ̌ a ́ a ~ k a l-b u ~$ | dog chain ${ }^{28}$ |
| 196 | Ya－da－min | 多 | ＂ | $t e-s s^{i}-e-t u$ | overthrow |
| ${ }^{*} 197$ | Yhu－ul | $3$ | ＂ | lim－nu | evil |
| ＊198 | Yul－ul | $3$ | ＂ | $q i r-b i-t i$ | fields |
| ＊199 | Yal－al | 险 | ＂ | me－riš－tú | cultivable land |
| 200 | Yki－ib | 隹 | ＂ | $k i-i b-b u$ |  |
| ＊201 | Y se－en－nu－ur | 竍 | ＂ | šal－lu－rum | medlar tree |
| 202 | Ydu－ru | 竍 | ＂ | BIT－tum |  |
| ＊203 | Yda－ru | Bry | ＂ | UD－ri－ku |  |
| 204 | Ypu－ub－rum | 际 | ＂ | pu－uh－rum | assembly |
| ＊205 | Yli－r ${ }^{\text {a }}{ }^{\text {g }}$ | 夺 | ＂ | ga－mi－rum | completeness？ |
| ＊206 | Ygi－estetin |  | giš－tin－na－ku | $k a-r a-n u$ | wine |
| ＊207 | $Y$＂ | －16 | tab－tin－na－ku | ＂ | ＂ |
| ＊208 | Ytu－ub | M以 | tab－tin－u－gu－nu－deš－še－ku | $n a-p a-s$ u | to crush |
| ＊209 | Y＂ | 企或 | tin－＂ | ＂ | ＂＂ |
| ＊210 | $\begin{aligned} & \text { Y sag-ku-ru- } \\ & \text { un } \end{aligned}$ | ＜\％\％ | $\begin{aligned} & t i n-k a ́ s-k a l-u-g u-n u-d e s ̌-s ̌ e- \\ & k u \end{aligned}$ | $s a-b u-u \approx s, a-h i-i t$ $k a-r a-n u$ | barkeeper；one who presses out wine |
| 211 | Yta－a | －10\％ | $t a-{ }^{\text {T}}{ }^{1} u^{1}-u$ | $u l-t u \leqslant a-n a$ | from；to |
| ＊212 | Yga－an－mus | 分为 |  | e－țú－tum | darkness |
| ＊213 | Ykab－ta | 成 | ＂＂ | ${ }^{\text {dd }}{ }^{301} k a b-t a$ | Kabta |
| ${ }^{27}$ Followed by erasure（cf．note）． <br> ${ }^{29}$ Or li－rum． <br> ${ }^{28}$ Doubtful；ullu perhaps a loan word from Sumerian ul． <br> ${ }^{30}$ Doubtful；cf．note． |  |  |  |  |  |


| *214 | Ya-1am-mus |
| :---: | :---: |
| *215 | Yla-al |
| *216 | Yma-a |
| *217 | Y" |
| *218 | Yga-a |
| *219 | Yba-a |
| *220 | Y" |
| 221 | Ypi-sa-an |
| *222 | Ye-tú-tum |
| *223 | Yti-il-har |
| *224 | Yi-ku |
| *225 | $Y \mathrm{da} \leqslant \mathrm{h} e e^{-g a l^{31}}$ |
| *226 | Ye-me |
| *227 | Ya-ma |
| *228 | Yú-1a |
| 229 | $Y^{\prime} \mathrm{S}_{\mathrm{S}} \mathrm{i}^{1}-1 \mathrm{a}$ |
| *230 | Y [is $\mathrm{s}-\mathrm{b}] \mathrm{u}-\mathrm{ur}$ |
| *231 | $\mathrm{r}[\mathrm{ga-zi}]^{32}$ |
| *232 | Y [ga-]'zi-gal ${ }^{1}$ |
| 233 | Y $\mathrm{ga-n} \mathbf{u} \mathrm{n}$ |
| *234 |  |



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| *235 | [ $\mathrm{Y} \mathbf{u r}$ ] |
| :---: | :---: |
| *236 | [Y . . . $]^{36}$ |
| 237 | [ $7 . . .$. |
| *238 | [ . .]. - |


|  | šá-pi-sa-an-ga-ku-ni-ir-ra-i[-d]u* ${ }^{\text {a }}$-rum |  |  |  | roof |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | * | " | $g u[-]$ šu-rum | beam |
| 等等 | " | -se-a | " | $q a[-] r i-t[\hat{u}]$ | granary |
|  |  | -še-a-tur-ra- | " | $i s-r[i]$ | small granary? |

${ }^{31} \mathrm{Cf}$. note.
${ }^{32}$ Completely preserved in Luckenbill's copy. A piece bearing this value and parts of the values in 11.230 and 232 has since been broken off and lost.
${ }^{33}$ Šá erroneous; cf. note.
${ }^{34}$ Doubtful; cf. note.
${ }^{35}$ Or "garden plot." Cf. Ungnad's note to this line, also Meissner, AS No. 4, pp. 14 f .
${ }^{36}$ Value gušur or gišur. Cf. note.

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| ＊294［Y la－a］m－ma | 兩 | $g u-r u-s \breve{c}^{u}$ | ${ }^{\mathrm{d}} \mathrm{l}$－am－ma | Lamma |
| :---: | :---: | :---: | :---: | :---: |
| ＊295［ $\mathrm{rd} \mathrm{u}^{45}$ ］－na | 兩 | ＂ | šal－ṭu | mighty，victorious |
| ＊296［Y s］i－ig | F | ＂ | $d a m-q u$ | good |
| ＊297［Y siel］${ }^{\text {j }}{ }^{145}$ |  | ＂ | ＂ | ＂ |
| ＊298［ Y ． | 布 | ＂ | $h i(?)-i s c^{-l i-e-t u ́ u ~}$ |  |
| 299 ［Ye－si ${ }^{46}$ | 布嵒 | ＂ | ú－šu－u | maple tree（or dol－ erite？） |
| ＊300［Y si－li－ma | \％ | ＂ | $h u-u b-s ̌ a ́-s ̌ u-u$ |  |
| ＊301［Y ur－ru－ub | ATy | ＂ | $u r-r u-u b-b u$ | a kind of pot？ |
|  | 卉］ | ＂ |  | a kind of pot？ |
| ＊303［Y． | 每 1 | ＂ | $n a-s a-b u$ | container |
| ＊304［ ${ }^{\text {g u }}$－ru－u ${ }^{\text {c }}{ }^{47}$ | $\stackrel{\square}{\square}$ | ］＂ | $i t-l u$ | （young）man |
| ＊305［Ygi－ri－is ${ }^{47}$ | $\cdots$ | ＂ 1 | ＂ | ＂${ }^{\text {a }}$ |
| $\begin{aligned} & * 306 {[Y} \\ & \\ & 307 {[Y \mathrm{~h} \mathrm{u}-\mathrm{um}}\end{aligned}$ | $\begin{gathered} 3 \\ 3 \end{gathered}$ |  |  |  |
| 308 ［． | ． | k］îma labîri－šú šaṭir－ma bari | ．．．．like its original it has been written and collated． |  |
| 309 ［ |  | $\ldots . .] b a b i. l i^{\mathbf{k}} \mathbf{i}$ | ．．．．Babylon |  |
| 310 |  | ．${ }^{\text {melu }}$ ］šamall $\hat{\text { a }}$－šú | ．．．．his clerk |  |
| 311 | ．．．． | ．．．．．．u］－kin（？） | ．．．he has plac | （？）． |
| ${ }^{45}$ Doubtful；ef．note． | ${ }^{46}$ Doubtful； | Ungnad＇s note．${ }^{47} \mathrm{D}$ | Doubtful；cf．note． |  |

B．THE DUPLICATE TEXTS
1．81－7－27， 200 （CT XII，Pl．27）

Obv．i（＝CS 16－23）
1 ［Ypi－sa－an
2 ［Ybu－ub－bu－ub
3 ［Y＂
4 ［ral－mu
$5 \quad[Y a-1 a-m u$
$6[Y \mathrm{ki}-\mathrm{ir}-\mathrm{ba}-\mathrm{an}$
7 ［ $\quad \mathrm{gu}-\mathrm{ur}$
$8[\mathrm{~T}$ ga－a
Obv．ii $(=\operatorname{CS~87-110)~}$

|  | ［ $\mathrm{Y} \mathrm{di}-\mathrm{e}$ | 荋 | sa－al－gu－ut－tu | $q] a-b u(!)[-u]$ |
| :---: | :---: | :---: | :---: | :---: |
| 2 | ［ $\mathrm{Y} \mathrm{di}-\mathrm{i}$ | 埪 | ＂］ | $d i-i[-n u]$ |
| 3 | ［ $Y$ sa－a | 企 | ］＂ | mil－ku |
| 4 | ［Y si－lim | 迷］ | ＂ | šul－mu |
| 5 | ［Ysi－i | 楼］ | ＂ | šá－na－nu |
| 6 | ［ ${ }^{\text {ki－i }}$ | 㑪 | ki－ku－u | $i r-s i-t u m$ |
| 7 | ［Yku－ú ］ | 等 | ＂ | ＂ |
| 8 | ［Ygu］－ú | 㢇 | ＂ | ma－a－tum |
| 9 | IT $\mathrm{If}^{1}-\mathrm{e}$ | 姺 | ＂ | šá 筹－n e ki－nu－nu |
| 10 | Yir－si－tu | 空 | ＂ | ir－si－tum |
| 11 | Yga－gàr | 第 | ＂ | $q a q-q a-r u$ |
| 12 | Y bab－ru－da | 4 4 | šá－ki－ka－ku－giš－pa－i－du | hur－rum |
| 13 | Y＂ |  | ＂－bad－da－＂ | ＂ |
| 14 | $\begin{gathered} \text { Ya-an-bu-ru- } \\ d a \end{gathered}$ | 䜌 | ＂－giš－pa－＂ | ＂ |
| 15 | Yki－is－1àh | （全耍 | ＂－ut－ta－＂ | $m a s ̌-k a-n u$ |
| 16 | Yni－e | 令 | $n a-n u-\dot{u}$ | šu－ú |
| 17 | Yna－a | 哖 | ＂ | $a b-n u$ |
| 18 | Ynu－ú | 域 | ＂ | $l a-a$ |

$19 \quad \mathrm{Y}$ a－a
20 Yba－a
$21{ }^{\text {＇}} \mathrm{Y}^{1} \mathrm{a}-\mathrm{a}$
$22{ }^{\prime}{ }^{\prime}{ }^{\prime} \mathrm{ku}$ u－ú
23 ＇Y「ku－ú－a
24 ［Yza－ab

| 㱓 | ＂ | $a-w i-l u$ |
| :---: | :---: | :---: |
|  | $k u-\hat{u}-a$ | $l u-u ́$ |
| 成为 | ＂ | KA．KA si－ga |
| 5西 | ［＂］ | $n u-n u$ |
| 「3） | ［＂ | ＂］ |
| 走处哖 | $[k u-u-a-a-a-k u$ | $b a-l a-q u \leqslant n a-b u-t u]$ |

Rev．i（＝CS 213－39）

${ }^{48}$ Text＂！
${ }^{49}$ The text may have given also the wrong value begal，as does CS 225： da a b é－gal．

| 21 ［ ${ }^{\text {g }} \mathrm{ga-nun}$ | 叫析 | ］＂ | －nun－nu－na－ | ＂ | $g a-n u-n u$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 22 ［Y ú－šu－us |  | ］＂ | ＂ | ＂ | mi－it－rum |
| 23 ［Y ur |  | ］＂ | $-n i-i r-r a-$ | ＂ | u－rum |
| 24 ［ |  | ］＂ | ＂ | ＂ | $g u$－šu－rum |
| 25 ［Y |  | ］＂ | $-s e^{\prime}-a-$ | ＂ | qa－ri－tum |
| 26 ［Y．．．tur |  | ＂ | $-\check{s} e]-a-t u r-r a-$ | ＂ | is－rum |
| 27 ［ra－ra－ah | 角如 | ＂ | －še－a］－ | ＂ |  |

Rev．ii completely destroyed．

## 2． 93042 （CT XII，Pl．27）

Obv．（＝CS 41－68）

| 1 | $\mathrm{r}^{\prime \prime}(=\mathrm{ru}-\mathrm{u})$［ |  | $"(=e-d i-n u)$ |  |
| :---: | :---: | :---: | :---: | :---: |
| 2 | $r \times$ |  | ＂ |  |
| 3 | Tbi－ir |  | ＂ |  |
| 4 | Ye－din |  | ＂ | $s i-e-r u]$ |
| 5 | Y＂ | 铛动気 | $\begin{aligned} & g a-p a-a p-u-g u-n u-d e-e s ̌- \\ & \stackrel{s}{e}-k u \end{aligned}$ | －＂］ |
| 6 | Y＂ |  | ＂－ki－ik－ki－in－bur－ru－u | ＂］ |
| 7 | Yú－ug | 防附 | $k[a-l a m-m u$ | $n i$－šu］ |
| 8 | Y ${ }^{\text {－}} \mathrm{n} \mathbf{u}$ |  | ＂I | $s{ }^{\text {sun－ub－tum？］}}$ |
| 9 | Yka－nam | 隹 | ＂［ | ma－a－tum］ |
| 10 | Yka－1am | 年 | ＂［ | $r u-. . .$. |
| 11 | Ya－ma－áš |  | $d a-a k-s ̌ a-k i-s i-m[a-k u-\hat{u}$ | $\left.\hat{i}-d a-m a-d \chi^{2}-i-d u \leqslant s u-p u-r u\right]$ |
| 12 | Yki－si－im |  | ＂${ }^{\text {c }}$ | ki－si－im－mu］ |
| 13 | Y＂ | 第座军 | ＂$-s i-s\left[a-a_{-}\right.$ | ＂tar－ba－şu？］ |
| 14 | Y ú－tu－ú－a |  | ＂$\quad$－ni－ta［－ha－ | ＂man－za－zu šá alpi u immeri］ |
| 15 | Yú－tul |  | ＂${ }^{\text {c }}$ | ＂$u^{-t u l-l u]}$ |
| 16 | Yúbur |  | ＂－ga－ga［－a－ | ＂$\quad t u-l u-u$ ］ |
| 17 | Ya－gan | 成教侮区 | ＂${ }^{\text {a }}$ | ＂$\quad s i r-t u$ ］ |
| 18 | Yki－ri－im |  | ＂$\quad-g i-r a-a[-$ | ＂ši i－i－hu］ |
| 19 | Yzi－bi－in |  | ＂－ta－ka［－ | ＂nab－bil－lum］ |

${ }^{50}$ This writing evidently stands for $a r-h u \star n a-\alpha s_{s}-p a-k u$（cf．CS 239）．Presumably the scribe omitted the $b u$ by ac－ cident，then added it at the end of the space．


| 18 | Yi－si－i［š | 気市 | ＂ | ssi－i－hu］ |
| :---: | :---: | :---: | :---: | :---: |
| 19 | Ydi－e［ | \％ | sa－al－gu－ut－tu | $q a-b u-u]$ |
| 20 | Ydi－i［ | 尔 | ＂ | $d i-i-n u]$ |
| 21 | Ysa－［a | 告 | ＂ | $m i l-k u]$ |
| 22 | Ysi－［lim | 㐱 | ＂ | šul－mu］ |
| 23 | Ysif－i | 先 | ＂ | ša－na－nu］ |
| 24 | Yki［－i | 全 | $k i-k u-u$ | ir－sictum］ |
| 25 | riku－ú | 筬 | ＂ | ＂］ |

C．LIST CT XLI，PLS． 47 F．

| 1 | Y $\mathrm{gu}-\mathrm{ru}$ | 令 7 | $(194)^{55}$ |
| :---: | :---: | :---: | :---: |
| ＊2 | ral－al | $\ngtr$ | （199） |
| ＊3 | Ybu－ul |  | （197） |
| ＊4 | Yli－rum | 㓎 | （205） |
| ＊5 | Y | 成 | （206 f．） |
| ＊6 | Ytu－ub（！$)^{56}$ | 成场运 | （208f．） |
| ＊7 | Ysag－ku－ri－ $\mathrm{rai}^{1}$ | 的边 | （210） |
| 8 | Y | 早 | （211） |
| ＊9 | Y gán－mu ${ }_{\text {s }}^{5}$ | 䟢㷏了 | （212） |
| ＊10 | Ya－1am－mu－us | 盛 | （214） |
| ${ }^{*} 11$ | Y | 全 | （215） |
| 12 | Y | $\xrightarrow{\square}$ | （218） |
| ${ }^{*} 13$ | $r^{\prime} \mathrm{ma}-\mathrm{a}^{157}$ | $\stackrel{\square}{4}$ | （216 f．） |
| 14 | $r$ | $\xrightarrow{\sim}$ | （221） |
| ${ }^{*} 15$ | Y＇gánal $\mathrm{i}-\mathrm{ku}$ | $\cdots$ | （224） |
| ${ }^{*} 16$ | Yda－gál | 荗品 | （225） |
| ${ }^{*} 17$ | Ye－me | $\xrightarrow{\text { 来 }}$ | （226） |
| ${ }^{*} 18$ | Ya－ma | 哭 | （227） |
| 19 | Ysi－1a | 叫 | （229） |
| ＊20 | Ygi－zi |  | （231） |
| 21 | Ygánun | 唯 | （233） |
| ＊22 | Y ${ }^{\prime}-\mathrm{su}-\mathrm{us}$ | ASfirl | （234） |
| ＊23 | Yur | － | （235） |
| 24 | Y［．．．．］ |  | （237） |
| ＊25 | Ygá－al－ga | 管宁 | （243） |
| ＊26 | Yi－ri－im－ma | 盛常 | （245） |

＊Lines so marked are discussed in the annotations to the parallel passages in chap．iv A（the Chicago Syllabary）and B（the syllabary AO 7661）．
${ }^{55}$ These numbers，for 11．1－53，indicate the corresponding lines of CS．
${ }^{56}$ Text $\mathrm{tu}-\mathrm{u}$ ）！
${ }^{67}$ Doubtful；cf．note．

| ＊27 | Yar－bu－us | 田 | （240） |
| :---: | :---: | :---: | :---: |
| 28 | Yi－tim | 䢒 | （248） |
| ＊29 | rédi | 局可宜 | （253） |
| ＊30 | Yme | \％ | （254） |
| 31 | Yme－en | \％ | （255） |
| 32 | re－bal－la | 而 | （256） |
| 33 | Yélíl－lá |  | （258） |
| ＊34 | Ygá－bur－ra |  | （262） |
| ＊35 | Té－gir－sul | 为可戒 | （260） |
| ＊36 | Yésikil－1a | 4号穿 | （263） |
| ＊37 | Ygá－gi4－a |  | （261） |
| ＊38 | Ygur－dub | 析 | （269） |
| ＊39 | Ymu－na ${ }^{59}$ | H5s | （274） |
| ＊40 | Ybu－1u－ab ${ }^{60}$ |  | （272 f．） |
| ＊41 | $\mathrm{T}_{\mathrm{e}_{4}-\mathrm{da}-\mathrm{k} \mathrm{u}_{6}-\mathrm{a}}$ |  | （275） |
| ＊42 | Ye－ki－el | $\xrightarrow{\sim}$ | （279 f．） |
| 43 | Yga－na | $\xrightarrow{\sim}$ | （277） |
| 44 | Yka－ra | 恧 $\gamma$ | （281） |
| ＊45 | Ygí－ri | 先 | （282 f．） |
| 46 | Yka－al | 5 $\square^{4}$ | $(284,286)$ |
| 47 | $r^{\prime} d^{\prime}-a n$ | 5 | （285） |
| 48 | rri－ib | FF | （287） |
| 49 | rla－ab | $\left[\begin{array}{l} 4 \\ \hline \end{array}\right.$ | （289） |
| ＊50 | $Y^{\text {rdu }}$（？$)^{1}-\mathrm{un}$ |  | （295） |
| ＊51 | Y sig ${ }_{5}$ |  | （296 f．） |
| ＊52 | Ygi－ri | ［ ${ }^{-1}$ | （305） |
| ＊53 | $\mathrm{r}^{\mathrm{r}} \mathrm{guru}(\mathrm{s})^{101}$ | AFs | （304？） |


| 54 | Ybu－um | －1 | （i 1）${ }^{62}$ |
| :---: | :---: | :---: | :---: |
| ＊55 | Y $1 \mathrm{u}-\mathrm{um}^{63}$ | 边 | （i 24） |
| ＊56 | Ygu－um | 程年 | （i 41） |
| ${ }^{*} 57$ | Ygu－uz | 等 | （i 27） |
| ＊58 | Ynu－um | 先云 | （i 46） |
| ＊59 | Ylum | 和 | （i 47） |
| ＊60 | $Y \mathrm{gu}-\mathrm{um}-\mathrm{gu-um}$ |  | （ii 1） |
| 61 | Ymur－gu | 45 | （ii 9） |
| ＊62 | Yse－ig | 《发 | （ii 20） |
| ＊63 |  |  | （ii 33） |
| ＊64 | $Y \mathrm{dúg}{ }^{65}$ |  | （ii 32） |
| ＊65 | Y | 开 | （ii 36） |
| ＊66 | $Y$ Ý－Iu－ud | 命 | （ii 37） |
| ＊67 | Y ši－ki－it | 企严 | （ii 41） |
| 68 | Y 10 m | 令 | （ii 38） |
| ＊69 | Y |  | （ii 48－50） |
| 70 | Y | \＄ | （ii 51） |
| 71 | Y | ） | （iii 28） |
| ＊72 | Ymi－sa－al | 成访 | （iii 30） |
| ＊73 | Y $\mathrm{ku}^{66}-\mathrm{zu}-\mathrm{un}$ |  | （iii 31） |
| 74 | ［ 7 ．．．${ }^{67}$ |  | （iii 34？） |
| 75 | $Y$ |  | （iii 37） |
| ＊76 | Yse－im－bi－zi | $5-3$ | （iii 43） |
| ＊77 | Y＇šem－ša－1 $\mathrm{a}^{168}$ | 等 | （iii 51） |
| ＊78 | $Y{ }^{\text {fb }} \mathrm{u}^{69}-\mathrm{lu}-\mathrm{ug}{ }^{1}$ |  | （iii 54） |
| ＊79 |  |  | （iii 46） |

${ }^{62}$ This and the following numbers indicate the corresponding lines of AO 7661.
${ }^{63}$ Error for bu u u ？Cf．note to AO 7661 i 24.
${ }^{64}$ Doubtful；cf．note．Text $\mathbf{a}-\mathrm{ri}$－ $\mathrm{\sigma N}(?)$ ！
${ }^{65}$ Doubtful；cf．note．If correctly read dúg，this value belongs in the next line（l．65）．
${ }^{66}$ Text lu！Cf．note．
${ }^{87}$ Value $a-s i-1 a$ to be restored？
${ }^{68}$ Doubtful；ef．note．
${ }^{69}$ Text mu！Cf，note．

| ＊80 | Tni－in |  | （iii 47） |
| :---: | :---: | :---: | :---: |
| 81 | Yba－bi－ir | 開全第 | （iii 45） |
| 82 | Yšu－um | 開倉 | （iv 3，7） |
| ＊83 | Tzu－b［a］${ }^{70}$ | 等両合 | （iv 11） |
| ＊84 | Y su－bu ${ }^{71}$ | 5侖分 | （iv 11） |
| ＊85 | Yta | 開方 | （iv 24） |
| ＊86 | Y da | 等命 | （iv 23） |
| 87 | Y se－ri | 等节节 | （iv 27） |
| 88 | Ytu－ku | 而 | （iv 28） |
| ＊89 | Yti－bi－ir | $5$ | （iv 34－38） |
| ＊90 | Ysi－li－ig |  | （iv 39－41） |
| 91 | Y | $\infty$ | （iv 43） |

${ }^{70}$ Doubtful；cf．note．Text ba－．［．．］！
${ }^{11}$ Doubtful；cf．note．Text su－）！

|  | ］ | $l u$－um－mu | ［ $h a-m a-s{ }^{\text {su }}$ ］$]$ | $(\mathrm{i} 1)^{72}$ |
| :---: | :---: | :---: | :---: | :---: |
| ＊2［ $\mathrm{Y} \mathrm{h} u-\mathrm{uz}$ | 连1 | ＂ | $h a-s[a-p u]$ | （i 24） |
| ＊3［ $\mathrm{Y} \mathrm{gu}-\mathrm{u}] \mathrm{z}$ | 杵 | ＂ | $g a-s a-s$ u | （i 27） |
| 4 ［ ］ |  |  | bu－te－en－zu－u | （i 29） |
| ＊5［Y $\mathrm{gu-}] \mathrm{um}^{\text {m }}$ | 近 | ＂ | ＂＂ | （i 41） |
| ＊6［Ygu－］${ }^{\text {d }}$ | 连 | ＂ | ＂＂ | （i45） |
| ＊7［Ygu－］ $\mathrm{c}_{\text {z }}$ | 䢒 | ＂ | $b u-u r-r u-r u$ | （i 31） |
| 8 ［ ］ |  |  | $h u-u r-r u-m u$ | （i 37） |
| ＊9［Y n u－ú］ | 边 | ＂ | šá dan－nu dan－nu | （i46） |
| ＊10［Y lu－u］m | 迢连 | ＂ | $u n-n u-b u$ | （i47） |
| ＊11［Y gu－um－gu－u］m |  | lu－um－min－na－bi | $h u-t e-e n-z u-u$ | （ii 1） |
| ${ }^{*} 12 \quad[\gamma \mathrm{gu}-\mathrm{um}-\mathrm{g} u-$ | 䈅 | $\begin{aligned} & \text { lu-um-min-na-bi- } \\ & \text { bar-te-en-nu-u } \end{aligned}$ | gu－um－gu－um－šú－u | （ii 5） |
| 13 ［ $\mathrm{T} \mathrm{gu-uh}-$ šu？ | 发近 | ＂${ }^{\text {a }}$ | $g u-u h-s ̌ u-u$ | （－） |
| ${ }^{*} 14 \quad\left[\begin{array}{r} \mathrm{g} u-\mathrm{um}-\mathrm{gu}- \\ \mathrm{um}-\mathrm{ka}-\mathrm{a} \end{array}\right.$ |  | ．．．］．${ }^{73}-k a-s$ šá－ak－ku | la－sa－mu | （ii 6） |
| ＊15［Ylu－gu－ud |  | ．．．］．${ }^{73}-m i n-n a-b i-$ ［nin－d］a－min－na－bi | $k u-r u-u$ | （ii 7） |
| $16 \quad[\mathrm{Ymur}-\mathrm{gu}$ | 退 | ．．．．］${ }^{\text {．}}$ ．．${ }^{1}$ | $p u-\hat{u}-d u$ | （ii 9） |
| ＊17［Y si－ig | 迹穊 | ＂ | $l l_{\text {l－bit－tum }}$ | （ii 20） |
| ＊18［Yga－ár | 处变 | ＂ | $\begin{gathered} \text { šáa é - } \\ \text { rum }^{74} \end{gathered}$ | （ii 24） |
|  |  | ＂ | ＂$\quad$ eme－salu | （ii 25） |
| 20 ［ Y kul－la |  | ＂］ |  | （ii 26） |
| ＊21［ Y ši－ka－ba－ra］ |  | ［．．．－］um－min－na－bi－ bar－te－en－nu－u | šu－pa［－at dukdiqâri］ | （ii 32） |
| ＊22［Yla－ab－bu－šu］ |  | ＂＂ | ＂ | （ii 33） |
| ＊23［Y du－ug ］ |  | šáa－ka－šá－ak－ku－a－a－i－ | $d u \star k a r[-p a-t u m]$ | （ii 36） |
| ＊24［Y lu－ud ］ |  | ＂＂ | $l u-u t-[t u]$ | （ii 37 |
| ＊25［Y lu－u］m | 成盛险 | ＂＂ | $l u-u m-[m u]$ | （ii 38） |

＊Lines so marked are discussed in the annotations to the parallel passages of the syllabary AO 7661，chap．iv B．
${ }^{72}$ These numbers indicate the corresponding lines of AO 7661.
${ }^{73}$ For restoration of sign names in 11.14 f．cf．notes．
${ }^{74}$ Text［．．．］qu－rum！
${ }^{75}$ Or ba－ár；cf．note．

| ＊26 | Ys［i－］i | 等值荗险 | ＂＂ | ＂［ ］ | （ii 39） |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ＊27 | $Y{ }^{\text {rel }}$－$[\mathrm{p}] \mathrm{i}-\mathrm{ir}$ | 年荗荗 库 | ＂＂ | $k a-a n-n a-[t u m(?)]$ | （ii 40） |
| ＊28 | $Y \mathrm{~S}[\mathrm{i}-\mathrm{l} \mathrm{k}$ in |  | ＂＂ | ši－kin－nu | （ii 41） |
| ＊29 | Y［ur－ru－u］b（！） |  | ＂ | $u r-r u-u b-b u$ | （ii 42） |
| ＊30 | $Y[z u r-z u-u b]$ |  | ＂ | zur－zu－ub－bu | （ii 44） |
| ＊31 | ［ $\mathrm{Y} \mathrm{ku}-\mathrm{ru-um}$ | 第成险 | ＂ | $d a-a-m u$ | （ii 45） |
| ＊32 | ［ Y ba －har］ |  | $d u k-s i-l a-b u r-r u-u$ | ＊pa－ha－rum | （ii 48） |
| 33 | ［ $\mathrm{r} \mathrm{nun}-\mathrm{nur}-\mathrm{ru}$ ］ |  | ＂ |  | （ii 49） |
| 34 | ［Y1il－1u］ |  | ＂ |  | （ii 50） |
| 35 | ［ $\mathrm{Y} \mathrm{bi}-\mathrm{i}$ | 第并了］ | $k a-a-s ̌ u$ | šu－u－um | （ii 51） |
| 36 | ［Ypi－i | 等1 | ＂ | KA．KA si－g a | （iii 18） |
| ＊37 | ［ $\mathrm{Y} \mathrm{bi-iz}$ | 会命了 | ＂ | $n a-t a-k u$ | （iii 19） |
| ＊38 | ［ Ye －pir | 等 | ＂ | ka－an－nu | （iii 27） |
| 39 | ［Yka－ás | 第等 | ＂ | ši－ka－ri | （iii 28） |
| ＊40 | ［Ygi－is－ša－a］l | 成 |  | gi－sal－lu | （iii 30） |
| ＊41 |  | 有析 | ka－áš－na－ra－ku | $\check{s c} a-{ }^{\top} a^{1}-q[u]^{77}$ | （iii 31） |
| 42 |  |  | ＂［＂ | ša－qu－u］ | （iii 33） |
| 43 | ［Ya－s］i－1a | 等荗运》 | $k a-a ̊ s ̌[-i s ̌-s ̌ a-k u$ | ri－ša－a－tum］ | （iii 34） |
| 44 | ［ Y še－im］ | 算信 | ＂［＂ | $r i-i-q u]$ | （iii 37） |
| ＊45 | ［ Y sem－bi－zi ${ }^{\text {P9 }}$ ］ |  | šá－šem［－me－ku－ | －i－du＊．．．．］ | （iii 43） |
| ＊46 | ［ Y šem－mess－la］ |  | ＂－mu－nu［－sa－ | ši－meš－ša－lu－u？］ | （iii 51） |
| ＊47 | ［ $\mathrm{Y} \mathrm{bu}-1] \mathrm{u}-\mathrm{r}_{\mathbf{u}} \mathrm{g}^{1}$ |  | ＂－bu－lu－ug－ | ＂［ pal－lu－ku］ | （iii 54） |
| ＊48 | $[Y \cap u-u] g$ |  | ＂－muk－ka－ | ＂［ $n u$－u］k－tum ${ }^{80}$ | （iv 1） |
| ＊49 | ［ $\mathrm{Y} \mathrm{nu}-\mathrm{u}] \mathrm{n}-\mathrm{g}$［i］ |  | ＂$\quad$－ in －$d a-$ | ＂［ $\quad s a-a] b(?)-\dot{u}$ | （iii 47） |
| ＊50 | ［Ylu－um－g］i（！） | 第成呞㐱 | ＂＂ | ＂［＂］ | （iii 46） |
| 51 | ［ $\mathrm{r} \mathrm{bap-pi-r}] \mathrm{u}$ |  | ＂＂ | bap－pi－rum | （iii 45） |
| 52 | ［Y šu－u］m | 第筬命 | šu－ri－du | $t ¢-b a-b u$ | （iv 3,7 ） |
| ＊53 | $\left[\mathrm{Y}\right.$ su－b］${ }^{79}$ | 策車而 | ＂ | ＂ | （iv 13） |
| ${ }^{76}$ Text－gi－eš－tu！ |  |  |  |  |  |
|  |  | ${ }^{79}$ Doubtful；cf．note． |  |  |  |
|  | Text［ša－n］im！ | ${ }^{80} \mathrm{Or}[n u-u k-k a]$－tum；cf．note． |  |  |  |

THE CHICAGO SYLLABARY AND AO 7661


Col. i
E. THE SYLLABARY AO 7661 (THUREAU-DANGIN, TU 37)

|  | Ybu-um | $\xrightarrow{3}$ | ha-ma-šum | to break, crush, grind |
| :---: | :---: | :---: | :---: | :---: |
| 2 |  |  | ba-na-nu | to breathe heavily? |
| 3 |  |  | ha-ra-šum | to fasten |
| *4 |  |  | $r a-h a-s ̌ u m ~$ | to fasten? |
| 5 |  |  | si-i-bu | satiation? |
| 6 |  |  | ši-ib-bu-u | ? |
| 7 |  |  | $i-b a-b u$ | womb |
| 8 |  |  | ku-un-nu-u | to prepare |
| 9 |  |  | ku-tin-nu-u | to prepare repeatedly |
| 10 |  |  | ha-mu-u šá zum-rim | to care for(?), (said) of the body |
| 11 |  |  | sir-ri-ti \&sa-ra-rum | rope etc.; to press, force through |
| 12 |  |  | $h u-u r-p i$ GIG | delirium(?), a sickness(?) |
| *13 |  |  | mi-til-lu-tum | virile strength etc. |
| 14 |  |  | šáa-qum | calf (of leg)? |
| 15 |  |  | šu-up-lum | depth |
| *16 |  |  | $u n-n u-b u$ ® $b a-m a-s{ }^{\text {c }} u$ | to bear fruit; to crush etc. |
| *17 |  |  | $z a-m a-s ̌ u * a-m a-$-šu ${ }^{1}$ | to . . . ; to . |
| 18 |  |  | $k a-p a-l u m \leqslant s u^{88}$ | to twist, roll, wind; to roll up |
| 19 |  |  |  mu | rope; a vessel? |
| 20 |  |  | šu-bu-lu $\leqslant$ r $u$-ub-s $u$ | to transport; place of lying down |
| 21 |  |  | šu-ub-tum | dwelling |
| 22 |  |  | še-e-hu | tall |
| 23 |  |  | $n a-t$ - $u$-hu | ? |
| *24 | Yhu-uz | 号 | $h a-s$ ça-pu s ša-a-qu | to cut; calf (of leg)? |
| 25 |  |  | $p a-a-s ̧ u$ šá murși | to ravage(?), of disease |
| 26 |  |  | " šá šarri | " " of a king |
| *27 | Ygu-uz | $x$ | $g a-s a-s u$ | to cut to pieces etc. |
| 28 |  |  | bu-un-zu-u | to cry out? |
| 29 |  |  | hu-tin-zu-u | to cry out repeatedly? |
| * Lines so marked are annotated in chap. iv B. |  |  | ${ }^{88}$ I.e., $k a-p a-s u$. |  |


| 30 |  |  | ka－ra－bu | to pray？ |
| :---: | :---: | :---: | :---: | :---: |
| 31 |  |  | hu－ur－ru－rum | to dig through etc． |
| 32 |  |  | na－pal－su－bu | to cower |
| 33 |  |  |  | to break；to rend |
| 34 |  |  | $n a-a^{\text {J－b }}$ bu－tum | to perish，flee |
| 35 |  |  | ša－pa－lum | to be low |
| 36 |  |  | ap－par－ru－u | shaggy pig |
| 37 |  |  | $h u$－ur－ru－mu šá dukdiqâri | to smash，of pots |
| 38 |  |  |  | （new break）of pots |
| ＊39 |  |  |  | to urinate？ |
| ${ }^{4} 0$ |  |  | ${ }^{\mathrm{r}} p a(?)-a(?)^{1}-k a-l u$ šá ANŠU | ．．．．，of an ass |
| $\begin{gathered} * 41 \\ 42 \end{gathered}$ | Y gu －um | 它 | $g a-s ̧ a-s ̧ u \leqslant h u-t i n-z u-u$ <br> $k a-r a-b u$ | to cut to pieces etc．；to cry out repeatedly？ to pray？ |
| $\begin{gathered} * 43 \\ 44 \end{gathered}$ | Ygu－un | $x$ | $\begin{aligned} & g a-s a-s u \star b u-t i n-z u-u \\ & k a-r a-b u \end{aligned}$ | to cut to pieces etc．；to cry out repeatedly？ to pray？ |
| ＊45 | Ygu－ud | 努令 | $\begin{gathered} g a-s a-s u \approx b u-t i n-z u-u \\ \star k a-r a-b u \end{gathered}$ | to cut to pieces etc．；to cry out repeatedly（？）；to pray？ |
| ＊46 | Ynu－u | 乐 | šá dan－nu | powerful |
| ＊47 | Ylu－um | 家 | $u n-n u-b u$ \＆$s t-i-b i$ | to bear fruit；satiation |
| 48 |  |  | še－bu－u \＆ši－i－hu | to be satisfied；tall |
| 49 |  |  | $n a-m a-r i$ \＆$l a-h u-u$ | illumination；jaw？ |
| 50 |  |  | lu－um－mu | a vessel？ |
| 51 |  |  | $t a-b a-a s ̌-t a-n u$ | ordure |
| 52 |  |  | $t u-u n-n u-b u$ | to soil？ |
| 53 |  |  | $i-t a p-p u-s u^{\prime}$ | to break in many pieces |
| 54 |  |  | $r u-u s-s u-u$ | witchcraft？ |
| 55 |  |  | $e-s ̌ e-b u$ | to sprout |
| ＊56 |  |  | $\check{s} u-u s c^{-b u}{ }^{89} \leqslant \dot{u}-p u-u$ | $\begin{aligned} & \text { to grow abundantly(?); } \\ & \text { clouds } \end{aligned}$ |


| 57 |  | womb |
| :--- | :--- | :--- |
| $n 8$ | $n a^{90-s ̌ u-u}$ | to carry (or confusion?) |


| Col. ii |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Y $\mathrm{g} u-\mathrm{um}-\mathrm{g} u-\mathrm{um}$ |  | [ $\mathrm{lu} u$-tin-zu-u?] | to cry out repeatedly? |
| 2 |  |  | . [. . .] | . . . |
| 3 |  |  | ma-[. . . .] | $\cdots \cdot$ |
| 4 |  |  | ši-[. . . .] |  |
| *5 | Ygu-um-gu-um-rsu ${ }^{1}$ |  | $g u-u[m-g u-u m-s ̌ u ́-u]$ | ? |
| *6 | $\underset{k a-a ́ s^{91}}{Y g u-u m-}$ |  | $l a-s[a-m u]$ | to run |
| *7 | Y lu-gu-ud |  | $k u-r u-u \star m a-[t u-u ?]$ | short; mean, little |
| 8 |  |  | ka-tu-u | weak, poor |
| 9 | Y mur-gu | 起术 | $p u-u$-du šá [amêli] | shoulder, back, of a man |
| 10 |  |  | $e-s$ i-rum $h i(?)-[. . .$. | ? |
| 11 |  |  | $e-s i-e n-s s^{[ }[i-r u]$ | backbone |
| 12 |  |  | ar-ka[-tum] | rear, back |
| 13 |  |  | $t a-b a-a \check{s}-t[a-n u]$ | posterior? (lit. "ordure") |
| 14 |  |  | ma-a-tum $\leqslant$ [. . . ] | , . . . |
| 15 |  |  | $e-m i t[-t u m(?)]$ | impost |
| *16 |  |  | $m a-a l[-g u-u]$ | ? |
| 17 |  |  | $\operatorname{mar}[-. . . .]^{92}$ |  |
| 18 |  |  | $t a[-\ldots$. |  |
| 19 |  |  | $e[-. .$. | $\ldots$ |
| *20 | Y si- ${ }_{\text {i }}{ }^{1}$ |  | $l i[-b i t-t u m]$ | brick |
| 21 |  |  | $a-m a-r u m[\ldots]$ | heap of bricks(?) |
| 22 |  |  | šá-[. . . . ${ }^{93}$ |  |

${ }^{90}$ Or $t e$. Scheil copies the sign as a clear na; Thureau-Dangin indicates traces of an additional wedge which could make it $t$.
${ }^{91}$ The last two signs, k a-a $\mathrm{a}_{s}$, are actually written beneath KAŠ ${ }_{4}$ in the second subcolumn; cf. note.
${ }^{92}$ Perhaps to be restored $\operatorname{mar}[-g u-u]$; cf. note to preceding line. $\quad{ }^{33}$ Perhaps a s̆áa . . . . phrase was given here.

THE CHICAGO SYLLABARY AND AO 7661

| ＊23 | Y Še－ib |  | $l i-b i t-t[u m$ eme－sal $]$ | brick（in）e me－sal |
| :---: | :---: | :---: | :---: | :---: |
| ＊24 | Yga－ár | 事处迷 | šá é－近 | wall |
| ＊25 | Yma－á ${ }^{94}$ | 尤逃 | ＂e［me－sal］ | ＂（in）eme－sal |
| 26 | Ykul－la | 积你 | ${ }^{\text {d }}$［ | Kulla |
| 27 |  |  | $t ¢[-t u(?)]$ | clay |
| 28 |  |  | mi［－．．．$]$ |  |
| 29 |  |  | $d a-r[a-\ldots]$ |  |
| 30 |  |  | $e-.[. .$. |  |
| 31 |  |  | $l i-b i[t-t] u m$ | brick |
| $\begin{gathered} * 32 \\ * 33 \end{gathered}$ | $\begin{aligned} & Y \text { ši-ka-ba-ra } \\ & Y l a-r^{r} a h^{1}-h u-s u \end{aligned}$ |  | šu－šub di－qa［－ri \＆$\underset{\sim}{6}] a-$ $p a-a t$ dukdiqôri （erasure） | $\begin{aligned} & \text { support(?) of }{ }^{\text {a }} \text { pot; } \\ & \text { brim(?) of pots } \end{aligned}$ |
| 34 | Y ú－ru | 为 54 | $t i-h u * i m-d u$ | buttress（？）；prop |
| 35 | Yba－an－da |  | $t a g-s ̌ i-r[u]$ | supporting wall |
| ＊36 | Y du－ug | 䉐隹 | kar－pa－t［um］ | pot |
| ＊37 | Y lu－ud | 第成浐 | $l u-u t-t u \leqslant n a-a l-p a-t u$ | （silver）vessel；ladle？ |
| ＊38 | Ylu－um | 第险 | lu－um－mu | a vessel？ |
| ＊39 | Ysi－i |  | ＂ | ＂ |
| ＊40 | Ye－pi－ir |  | ka－an－nu | （earthen）vessel |
| ＊41 | Y Ki i －kin | 策䠞 | si－kin－nu | （clay）vessel |
| ${ }^{4} 42$ | Yur－ru－ub |  | $u r-r u-u b-b u$ | a vessel？ |
| ＊43 | Yur－su－ub | 等耠倍 | $u r-s u-u b-b u$ | a vessel？ |

${ }^{94}$ Or ba－ár；cf．note．


TRANSLITERATIONS：AO 7661

| ＊44 | Ysur－su－ub | 年荗陾 | şur－şu－ub－bu | a vessel？ |
| :---: | :---: | :---: | :---: | :---: |
| ＊45 | Yku－ru－um | 笄帱席 | $t a-a-b u \star d a-m u$ | good（wine）；red wine |
| ＊46 |  |  | ku－ru－un－nu | （grape）wine |
| ＊47 |  |  | si－ka－rum $\leqslant$ ka－ra－nu | strong drink；wine |
| ＊48 | Yba－bar |  | $p a-h a-r u m \leqslant$ den－lil | potter；Enlil |
| ＊49 | Ynun－ur－ru |  | šu A dé－$a$ | Nunurru，i．e．，Ea |
| ＊50 | Ylil－1u |  | šu | Lillu |
|  | Ybi－i | 開 | šu－u＊šu－nu＊ga－bu－u | his；their；to speak |
| 52 |  |  | $n a-b u-u \star n a-q u-u$ | to call etc．；to pour out |
| 53 |  |  | hi－is－sa－tum | thought，perception |
| Col．iii |  |  |  |  |
| 1 |  | $\sim$ | $d a-b a-b u$ | to speak，complain，etc． |
| 2 |  |  | $a t-m u-u$ | to speak together |
| 3 |  |  | šá－su－u | to cry out，complain |
| 4 |  |  | ba－wu－u | to speak？ |
| 5 |  |  | $h \mathrm{ha}$－ba－bu | to cry out |
| ＊ 6 |  |  | $i q-b i-n u$ | ？${ }^{96}$ |
| 7 |  |  | $g a-d u$ | together with，and |
| 8 |  |  | šu－a－tum | that |
| 9 |  |  | ana－ku su－a－tum | I（upon）it |
| 10 | Ybi－e | 閨 | $q a-b u-u$ | to speak |
| 11 |  |  | $m a-r u-u$ | ？${ }^{96}$ |
| 12 |  |  | $b i-e-s ̌ u$ | ？97 |
| 13 |  |  | $a t-t a$ | thou |
| 14 |  |  | šu－a－tum | that |
| 15 |  |  | －ma－ru－u кı．тА | ？${ }^{98}$ |
| ${ }^{98}$ A grammatical term？ <br> ${ }^{97}$ Beš $u$ is perhaps a loan word from a root be（š）． <br> ${ }^{98}$ A grammatical term；кı．TA $=$ suffix？ |  |  |  |  |


| 16 17 |  |  | $a t-t a$ KIL．KI．TA <br> $\grave{u}$ NU．KIL $\& g a-d u$ | thou，．．．．suffix？ <br> and，not．．．．；together with，and |
| :---: | :---: | :---: | :---: | :---: |
| 18 | Ypi－i | \％ | KA．EA si－g a | ？ |
| ${ }^{*} 19$ | Ybi－iz | 寿劺 | $n a-t a-k u \leqslant b a-s$ a－su | to trickle；to flow？ |
| 20 |  |  | šá－pa－a－ku＊$n a-p a-s u$ | to pour out；to smash |
| 21 |  |  |  | ．．．．（new break） |
| 22 |  |  |  | ．．．．（new break） |
| 23 |  |  | tup－pu－li | to soil |
| 24 |  |  | $t i-i-k u$ | neck？ |
| 25 |  |  | $b i-s u-u^{101}$ | ？ |
| 26 |  |  | şa－ha－tum šá šamni | to press，of oil |
| ＊27 | Ye－pir | 策含 | kan－nu šá šikâri | receptacle for liquor |
| 28 | Yka－ás | 等合 | ši－ka－rum | strong drink ${ }^{102}$ |
| ＊29 |  |  | pu－ru－us－su | decision |
| ＊30 | Ygi－is－šá－a ${ }^{103}$ | 号 | gi－sal－lu | peak，point，etc． |
| ＊31 | Yku－šu－um |  | šáa－q－qu | providing drink？ |
| 32 |  |  | $n a-a-q u$ ® $n a-a-s$ u | pouring out（？）；to chew？ |
| 33 | Y šá－qu |  | šáqu－u | cupbearer？ |
| 34 | Ya－si－il－la | 筑等可 | ri－šá－a－tum | shout of joy |
| 35 |  |  | $e-b i-r u m \leqslant q u-\left\ulcorner l u{ }^{1}\right.$ | to pass over；voice |
| 36 | Ymu－ud | 左合离 | ＂＊＂ | ＂＂＂；＂ |

[^12]| 37 | Yse－im | 両盛等 | $r i-i-q[u . . .$. | aromatic herb，spice |
| :---: | :---: | :---: | :---: | :---: |
| 38 |  |  | $h i-p i\left[e^{-x}-s ̌ u\right]$ | （new break） |
| 39 |  |  | $u r-k[i-t u m]$ | plant，verdure |
| 40 |  |  | SIG［ ．．．．］ |  |
| 41 |  |  | ša［ $m$－mu］ | herb |
| 42 |  | $\llcorner$ | ．［．．．］ | －••• |
| ＊43 | Yse－im－bi－zi |  | ［．．．］ | $\cdots$ |
| ＊44 | Ybap－pi－ru | 会峏䣕 | bap［－pi－rum $]$ | beer，barley wine |
| 45 | Y＂ |  | ＂［ ］ | ＂＂＂ |
| ${ }^{4} 46$ | Ylu－um－gi |  | si［i－bu？］ | grape juice |
| ＊47 | Yni－in－gi |  | ＂［ ］ | ＂＂ |
| 48 | Ysi－ra－ás |  | dindic］ | Siraš |
| 49 | Y Se－im－bi |  | $a$－raq［－tum］ | green vegetables？ |
| 50 |  |  | $r i q[-q u]$ | spice？ |
| ＊51 | Y sem－mešla |  | ši［－meš－šá－lu－u？］ | box tree |
| ${ }^{*} 52$ | Y šem－bu－lu－ug |  | $p a[l-l u-k u]$ | oleander？ |
| ＊53 | Y＂ |  | ＂］ | ＂ |
| ＊54 | Y＂ |  | ＂］ | ＂ |

Col．iv

| ＊1［ r n$] \mathbf{u}-\mathrm{ug}$ |  | $n u-u k-k a-t u$ | $?$ |
| :---: | :---: | :---: | :---: |
| ＊2［Y］＂ | 等 5 近 | ＂ | ？ |
| ＊3［Y］${ }_{4}$ | 笄閨成 | $t a-b a-h u * h i-p i ́ e s-s$ šú šur－du－u | to slaughter；（new break） cracked，leaky？ |


| 5 6 |  |  | šu－up－pu－tum \＆$p u^{104}$ <br> ša－gam－ma šá－aš－šá－rum | shaking；to shake saw |
| :---: | :---: | :---: | :---: | :---: |
|  | Ysu－um |  | $t a-b a-h u * h i-p i ~ e s$－s－šu | to slaughter；（new break） |
| 8 |  |  | šur－du－u | cracked，leaky？ |
| 9 |  |  | $\check{s} u$－up－pu－tum 太 $p u^{105}$ | shaking；to shake |
| 10 |  |  | šá šá－aš－šá－rum | saw |
| ＊11 | $\begin{aligned} & Y \text { su-ba a }{ }^{106} \\ & \text { su-bu } \end{aligned}$ | Antin | šuk－lu－lu $\leqslant$ hi－pi eš－šù | perfect；（new break） |
| 12 |  |  | ša－ta bi－pi $i^{107}$ | ．．．（break）${ }^{107}$ |
| 13 |  |  | $t a-b a h i-p z^{108}$ | ．（break）${ }^{108}$ |
| 14 |  |  | bu－ma $h i-p i$ | ．．．．（break） |
| 15 | Yta－ag | 等盛 | $m a-h a-s u^{*}$ ® $n a-t u-u$ | to beat etc．；to beat |
| 16 |  |  | $r a-k a-s u * z a-k a-p u$ | to bind；to overthrow？ |
| 17 |  |  | si－niq－tu 太 hu－ut－tu－tu | constraint；to terrify？ |
| 18 |  |  | ša šu－stch šu－ ta－nu－du | to praise，exalt？ |
| 19 |  |  | šá šu－$g u-$ taš－šu－ru | to be strong |
| 20 |  |  | šá 号 a m | a kind of plant |
| 21 |  |  | la－pa－tum šá ka－la－ma | to touch，of anything |
| 22 |  |  |  | to touch，of a stick |
| ＊23 | Yda－a | 等会 | šuk－lu－lu 太 šá n a m－ $-\mathrm{ga} \text { ár-nu }$ | perfect；offense |
| ＊24 | Yta－a | 等鲕 | šuk－lu－lu šáa nam－ －g a ár－nu | perfect；offense |
|  | Yzi－il | 第盛苼 | $d a-m a-q u * d a m-q u$ | to be good；good |
| 26 |  |  | $b a-n u-\dot{u} \leqslant k u-u n-n u-\dot{u}$ | to build etc．；to set in order |
| 104 I．e．，su－up－pu－pu． <br> ${ }^{105}$ I．e．，$s u-u p-p u-p u$. <br> ${ }^{108}$ Doubtful；text $-u b(?)$ ．Cf．note． |  |  | ${ }^{107}$ Restore ša－ta－［qu］，＂to cut off＂＇？ <br> ${ }^{108}$ Restore $t a-b a-[b u]$ ，＂to slaughter＂？ <br> ${ }^{109}$ Written ${ }^{\text {a }}$ idíc．pa． |  |
|  |  |  |  |  |
|  |  |  |  |  |


| 27 | Y še－ri－im | 第金 |  | nail？ |
| :---: | :---: | :---: | :---: | :---: |
| 28 29 | Ytu－ku | 第荗盛 | $m a-b a-s ̧ u \quad$ šáa s subati <br>  | to full（weave？），of cloth to purify（？），of a bed |
| 30 | Ysu－uš | 败的等 | $n a-k a-s u \leqslant s ̌ d-r a-m u$ | to cut off；to cut off |
| 31 | Ygu－ru－us | 并佥令 | $n a-k a-s u \star s ̌$ ša－ra－mu | to cut off；to cut off |
| ＊32 | Y Sá－an | 氟等隹 |  | clever，wise |
| 33 | Y Se－ri－id | 金 | KA．KA si－ga | ？ |
| ＊34 | Yti－bi－ir | 第全㘼 | rit－tum $\leqslant q a-$ tum | hand；hand |
| ＊35 | Y＂ | 等盛気 | rit－tum $\leqslant q a-t u m$ | hand；hand |
| ＊36 | Y＂ |  | rit－tum $\leqslant q a-t u m$ | hand；hand |
| ＊37 | Y＂ |  | rit－tum $\leqslant q \mathbf{a - t u m}$ | hand；hand |
| ＊38 | Y＂ |  | rit－tum \＆qa－tum | hand；hand |
| ＊39 | Ysi－lig | 疑会突 4 | rit－tum $\leqslant$ qa－tum | hand；hand |
| ＊40 | Y＂ |  | $u p-n u$ | fist |
| ＊41 | Y＂ |  | ＂ | ＂ |
| ＊42 | Yut－tu |  | 全亚 | Uttu |
| ＊43 | $Y \mathrm{i}^{111}$ | $x$ | ．KA．KA si－g a | ？ |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| ${ }^{110}$ Text e！ ${ }^{114}$ Written SUMUN． <br> ${ }^{111}$ Or possibly bé ；cf．note． ${ }^{115}$ Written SAR． <br> ${ }^{112}$ Written tin．tir  <br> ${ }^{113}$ ． ${ }^{116}$ Written Gim． |  |  |  |  |


48 là baše-e murṣi-šúu ${ }^{m d} n a b \hat{u}$-šum-ibn̂̂ ${ }^{\text {amelunšamallâ-šú }}$
49 ú-šeš-țir-ma ina é-an-na ú-kin ameluum-man-nu
50 šá mu nu.gi.gi $u$ imi.LÁ.a ba.gar dištar ha-diš lippalis-su
šá ultu é-an-na ušêṣu-u ug-giš distar liš-te-idd-diš

TRANSLATION OF THE COLOPHON
44 First part (of the tablet) bu um lum | hamâšu (of the) series á a|naqu.
45 . . . . incomplete; copy of (a tablet in) Babylon; like its original it has been written and collated.
46 For Ishtar of Uruk, his mistress, Bel-ahe-eriba, son of Nabu-. . .-. . . ,
47 the mas (priest), for the life of his soul, the length of his days (i.e., long life), the welfare of his family, (and)

48 his freedom from sickness has caused Nabu-šum-ibni, his clerk,
49 to write (it); and in Eanna he has placed (it). The scholar
50 who does not alter(?) a word(?) and replaces(?) it on the support(?), may Ishtar regard him with pleasure;

51 him who from Eanna removes (it) may Ishtar wrathfully expose(?).

## IV

## NOTES

## A. THE CHICAGO SYLLABARY (LIST, LL. 1-53)

1. Since the two signs preserved in the sign name are crowded at the right, leaving much more than the necessary space for $k a$, the restoration [ $k a-a] n-n u$ cannot be regarded as altogether certain. No other possibility, however, presents itself.
2. For one of the Sumerian values of $k \AA=b a ̂ b u$ Luckenbill ${ }^{1}$ chose $k a-a n$. This value depends, of course, on the acceptance of a root k an for the Sumerian word for "gate." Such a root might be assumed, first, from the fact that k á is followed by an $n$ in certain phrases and, second, from the sign name [ $k a-a] n-n u$, which would seem to have originated in a root $k a n$. As to the sign name there is, as indicated above, some doubt, and it could not, in any case, be accepted as absolute proof
 lated ina hi-it-ti šá ba-a-bi (CT XVI, Pl. 29, II. 72 f.)," "in the bittu of the gate," where ka-n a-gé would most naturally be analyzed as $\mathrm{kan-ak-e}$, yielding a root kan . Also the compound
 gate (or door) beam(?)," literally "the beam(?) of the gate"; the meaning of the Akkadian ${ }^{\text {a }}$ "kanakku, which is shown by the inscriptions ${ }^{3}$ as well as by the writing with $k \AA$ to be part of a gate, fits well with this interpretation. Both of the above cases may, however, involve a word ( $\mathrm{g} \mathrm{i}_{\mathrm{s})} \mathrm{k}$ ana(k), or even a word kan which has no connection with the word for "gate." Furthermore, evidence against a root kan is found in [lú-en-nun]-ká="(=ma-aş-sa-ru) ba-a-bi(VR32,No.3,l.30), where, of course, a root $k a n$ would demand $k a-n a=k a n-a(k)$, "of the gate"; apparently only an assumption of textual corruption could account for the missing $n a$. Similar evidence is provided by the phrase šà - ká -t a, rendered in Akkadian ina libbi bâbi (IV R 21, right col., ll. 30 f.), which should be analyzed as ša (g) - $k a(-a(k))-t a$ : "in ( ta ) the heart ( $\mathrm{s} a \mathrm{~g}$ ) of ( ak ) the gate (ka)." Were $k a n$ the root of the word, we ought to have ša-kána-ta, to be analyzed ša(g)-kan-a(k)-ta, for the final $n$ would necessarily appear before a suffix beginning with a vowel. Post-Sumerian texts, however, often omit the genitive in constructions like this (cf. GSG $\S 386$ ), and therefore this evidence is not absolutely conclusive.

Thus it is as yet impossible either to prove or to disprove a root kan , and the restoration of one of the values of Ki remains doubtful. This value might be a variant pronunciation of $k$ á (such as $g a-a$ ) or an entirely new word.

3 f . The compound signs in these two lines must be derived from $\mathrm{K} A ́$, unless they are derived from $\in$. Since $K \hat{A}$ is a šešsig form of $E$ (cf. the forms ROEC 423 f .), which almost certainly appeared at the end of the preceding text of the series (i.e., Tablet III, the last section of which is completely missing), ${ }^{4}$ it is possible that other signs derived from E should appear here. However, the damaged signs preceding $i$-zu-tú in 1 . 3 , which can hardly be anything but $b a-a b$, representing the construct of $b a b b u$, "gate," and the traces at the beginning of the sign name in 1.4 , which seem to require that the first element of the name be restored as [ $k a-a] n$, make it probable that $\kappa \AA$ derivatives appeared in both cases.

[^13]$K a-a n$ in 1.4 was written out, like $g a\langle-n a\rangle$ in 1.282 (cf. note), instead of being represented by a ditto, to prevent the reader's mistaking the min which follows for a second ditto sign.

The sign in l. 3, as indicated by gi-dirig $\hat{u}$ in the sign name, is probably $\mathrm{K} \hat{A}$ with a slanting wedge attached at the end (for a possible É-gi-dirig $\hat{u}$ form cf. LAKF 734). Cf. Yale Syll. 277 ( $g i$-dirig $\hat{u}$ forms appear also in Yale Syll. 279 and 317): [ $Y \mathrm{~b}] \mathrm{a}-\mathrm{an}-\mathrm{lam}-\mathrm{mu} \mid$ |" $=b a-a n)$-ess-gi$d i$-ri-gu-u $\mid i r-b i s a-a-a t$. The sign name in K 4174 (CT XI, Pls. 45-48) iii 6: ú-šu-ub|GI.diri | gi$d i-r i-g u-u \mid a-t a-a t[-t u]$ points to KÁ.gI.DIRI as another possibility; but this restoration is made unlikely by the fact that syllabaries of the type of CS rarely treat such sign groups, confining themselves almost exclusively to single signs.

The sign name in l. 4 (for other sign names ending with minnabi-gilimû cf. 11.282 and 306) indicates a sign formed of two KÁ signs crossed. ${ }^{5}$ The meaning of the original pictograph would be "gate against gate," which connects clearly with the Akkadian equivalent nakri, "foreign," "hostile" (two É signs crossed, signifying "house against house," would admittedly fit the meaning more naturally). We may compare the kIB sign (l. 197), which is formed by two GIs signs crossed and is given the meaning limnu, "evil," "bad," also the pap sign, formed of two diLi signs crossed and representing "one (dili) against the other (dili), " which is commonly equated with nakru. It is quite possible that the sign in l. 4, in its later forms, became identical with Kib (the sign should, of course, be connected with the gun $\hat{u}$ form of ків, ROEC 171, not with the simple form, ROEC 170). It is also possible that the value here is the same as that given to кib in l. 197: bul.
6. Luckenbill's reading of the Akkadian as si-ir-ri cannot be correct. The first and third signs are $s u$ and $h u$. Of the middle sign only one horizontal and three vertical wedges are clear. Faint traces seem to exist both of a second horizontal, which would make $\dot{u}$, and of two or three of the four corner wedges needed for $u h$. It seems likely, then, that kit had its value $s u b_{4}$ here, although that value has been attested thus far only in Akkadian (SA, p. 26), and that suhbu (the more likely form) or $s \hat{u} h u$ is to be regarded as a loan word.

13 f . The two signs treated here, although their later forms are identical, and although both are named daqqu, were originally distinct. The value bà a belongs to ROEC 415, the value dag to ROEC 426. Cf. Thureau-Dangin in RA IX (1912) 79.
15. The first part of the sign name is probably to be restored as [šá-ši]- $\mathrm{r} i m-m a^{1}-k u$. Cf. the sign name in CS 271. Luckenbill's restoration as [ $\check{s} a ́-m e-s a-] a k-k u$ does not fit the traces and is ruled out on other grounds, since the mes sign (ROEC 363) is written differently from the PISÁN (ROEC 428a) and sangu (ROEC 419) signs in the Neo-Babylonian script (cf. SA, p. 26, Nos. 145 f.) and its name could thus hardly be applied to PISÁN. SANGU, on the other hand, though originally quite distinct, is at this time written exactly the same as PISÁN and could very well have lent its name, sitimmu, to pisÁn. No sign name belonging properly to pisán is known.

Note that HGT 108, l. 8, gives the Akkadian loan word as $a$-lu- $\dot{u}$-um, which should derive from a Sumerian root ala, whereas alallum in CS 15 must derive from a root a al. The apparent addition of an $l$ to the root seems impossible to explain.
16. HGT 108, 1. 7, gives the value [pi-] ze-em and the equivalent $p i$-sa(!)-nu-um to the simple sign PISÁn, not to PISÁn+a. Quite likely the broken sign in 1.8 (parallel to CS 15) was also PIsín. Probably when pisán was finished the text proceeded to give pisÁn +a with the same values and equivalents.

17-21. The values in these lines are restored with the aid of the newly placed fragment mentioned on p. 3.

[^14]19－21．The sign name＂$\left.=[\text { šá－ši］}]^{r} t i m-m a{ }^{1}-k u\right)-a-a-"(=i-d u)$ shows that the sign considered in these lines is and and who should expect that sign to appear also in the Akkadian spaces；but the Akkadian is ${ }^{\mathrm{d}}$（gloss） 50 ．Probably we are to understand that this is the regular Akkadian writing， as opposed to the Sumerian writing 盆佐．There exists，however，the alternative explanation that a principle of abbreviation is applied here；the syllabary may originally have presented three lines with the simple sign in the Sumerian and Akkadian spaces，followed by three lines with elyt in both spaces．In either case，there is no reason to doubt that both signs possessed the values given here，in accordance with the fact（noted by Poebel）that the simple sign frequently possesses the values of the compositions formed from it．
A question arises whether the sign treated in ll．19－21 is，in fact，based upon the Pisín sign and， hence，whether it properly belongs here．Note，first，that the form given in the Akkadian subcolumn of the duplicate text 81－7－27， 200 （CT XII，Pl．27）obv．i 4－6 can hardly be taken for PISÁN；it looks like UM and might actually represent the similarly written mEs．Reference may also be made to K13666（CT XXV，Pl．33）l．7：dal－mudub－bi－sag－g［a．．．．］（the following line has $d_{a-1 a-m u[. . .]), ~ w h i c h ~ s e e m s ~ t o ~ c o n n e c t ~ t h e ~ g o d ~ A l m u ~(o r ~ A l a m u) ~ w i t h ~ d ~ a n d r i c ~}^{\text {a }}={ }^{d} d u b b i s a g$ （PB，No．748），an epithet of Nabû，the god of tablet－writing；this 分席直 also represents the word dubbis ag $=$ tupšarru，＂scribe＂（ $\mathrm{S}^{b} 238$ ），and its connection with tablets indicates a derivation from dub，with which mes is closely related（cf．ROEC 363 and 385 ，and note that DUB，URUDU，and mes，all written exactly alike，appear together，followed by UM，in Tablet III 7 of our series，i．e．， 47760 ［CT XII，Pls． 14 f.$]$ obv．i）．These facts suggest a conclusion that the sign treated in ll．19－21 is $\operatorname{mes}(o r ~ d U b)+A$ ．If this conclusion is correct，however，it is very difficult to explain the use in these lines of the sign 谷折，correctly employed in the Neo－Babylonian writing only for sangu and Pisán （cf．note to 1.15 ，above）．To complicate the problem further，the sangu sign with the value lag is equated with kirbannu（ $\mathrm{S}^{\mathrm{b}} 241$ ；cf．HGT 153 v 2），which might be connected with the god Kirban of 1.21 ．

For dal－la－mu＝dmes－lam－ta－è－a and dal－mu＝dugal－gìr－ra cf．PB， No． 178.

26．Since ${ }^{\mathrm{d}}$ GA．GA is glossed $\mathrm{ka-ka}$（CT XXV，Pl．3，l．55；Rm 2， 289 ［CT XXV，Pl．29］ii 3； CT XXIV，PI．1，1．32）and since there would be no reason for the inclusion of this line in a syllabary of this type unless it provided a more or less uncommon value of GA，the Sumerian value of the sign as must be restored as ka （with Ungnad ${ }^{7}$ ），not ga ．

As the meaning of the formula šá ${ }^{d} \mathbf{X}{ }^{d} \mathbf{Y}$ has been commonly misunderstood or imperfectly under－ stood in the past，it may be well to state here exactly what this line is intended to express．［ ra a－a $\mid \mathrm{GA}]|"(=[g] a-g u-u)|$ šá $^{\text {dGA．GA }}{ }^{\text {d }}$ pap－sukal means that the sign GA，named gag $\hat{u}$ ，has the value k a when it appears in the Sumerian combination ${ }^{d}$ GA．GA，thus to be read ${ }^{d} k a ̀-k a ̀$ ，and that this Su－ merian god Kaka corresponds to the god Papsukal of the Semitic Babylonians．Cf．the discussion of the essentially identical formula šá ．．．．šu－ma in the note to l．119，below．

28－32．For the restoration of these lines see Thureau－Dangin，HS，p．10，notes 3 and 9．Cf．SA．Ni （text sa．A），l．69．Thureau－Dangin，loc．cit．，states that all of the signs treated in these lines are prob－ ably graphic variants of the same archaic sign，ROEC 417．An exception is gA．gA in 1.29 ，which，if its value is actually gargar ，and not simply gar，must represent a reduplicated form of ROEC 417.
$G a$ as the name of the GA sign in ll．29－33（also in l．34）is to be connected with the name $g \hat{u}$（ $\mathrm{Sa}^{\mathrm{a}}$ iii 48）， not with the＂reduplicated＂form gagut found in CS 22．Gag $\hat{u}$ without the case ending is written ga－ga－a，

[^15] 67－79．
as seen in CS 56 and 62. For other signs with alternative names of this sort cf. GI ( $g \hat{u}, g i g \hat{u}$ ), gu ( $g \hat{u}$, $g u g \hat{u}), \mathrm{zA}(z \hat{u}, z a z \hat{u}), \mathrm{zu}(z \hat{u}, z u z \hat{u})$, etc., cited by Christian in MVAG XVIII, Heft $1, \mathrm{pp} .40-42$.
34. In the Akkadian space the Sumerian loan word should, of course, appear as $z a-h a-a n-n u$, not $z a-h a-a n$. Cf. CT XI, Pl. 24 i 5: z a-ba-a n | v.GA. HI $\mid z a-h a-a n-n u$. Cf. note to CS 182.
38. Luckenbill doubtfully assigned this line and the Akkadian word sa-a-bu-um to the last gišpugakku sign. But since the parts of the tablet recently were more accurately fitted together there can be no doubt that $\grave{s} a b u$ belongs with the first edin sign.
$39 \mathrm{f} . \mathrm{L}$ a and ru must be restored (with Ungnad) as the values in 11.39 and 40 , since these are the values which edin bears in the combinations in the Akkadian space. ${ }^{8}$ Between tešs ela and tešseru there must have been an intermediate tešera. For the interchange of $r$ and $l$ cf. GSG $\S 66$. The $\check{s} a$ formulas in the Akkadian spaces of these two lines differ from the regular formula in not expressing the Akkadian equivalent of the Sumerian dtés - $e_{4}$-Edin. Properly we should have, if the Akkadian differs from the Sumerian (cf. note to l. 26), šá ${ }^{\mathrm{d} t} \mathrm{e}_{\mathrm{s}}^{\mathrm{s}}-\mathrm{e}_{4}$-EDIN ${ }^{\text {d. . . . , or, if }}$ the Akkadian is identical with the Sumerian (cf. note to l. 119), šád dé ě-e $\operatorname{c}_{4}$-EDIN šu-ma. But the scribe did not have room here for both the gloss te-eš-še-la/ru, which he felt to be essential, and the Akkadian equivalent; so he omitted the latter. The lines of course imply that the Akkadian equivalent is identical in writing and pronunciation with the Sumerian, since otherwise it could not have been left out.
 glosses to the Sumerian combinations. Apparently the purpose of this unusual arrangement is to treat the Akkadian spaces (beginning with šá d and ending with EDIN) in conformity with the two preceding lines. GIŠ. KU 'ŠE'. GIŠ.İ, since it does not have the divine determinative, is probably an attribute or symbol of the god and is perhaps to be taken as ${ }^{i} \mathrm{k} k a k$ šammašammi, "spear (shaft?) of sesame." Note that in 1.128 gir-rum, without determinative, is given as the equivalent of dur-zib.

43 f. The duplicate 93042 (CT XII, Pl. 27) obv. 3 f. shows that 11.43 and 44 have respectively the values bi -ir and e-din. ${ }^{10}$

45 f . These two lines, as shown by the signs (and value edin) preserved in the duplicate 93042 (CT XII, Pl. 27) obv. 5 f. and the sign names preserved in CS, present two variant forms of the EDIN sign. The first of the variants looks as if it were composed of GA, PAP, and an element which appears also in the signs in 11. 208-10, where it is described in the sign names as u-gu-nu-deš-še-ku. Evidently the sign name here (which Luckenbill read . . . . -tu) is to be read ' $g a-p a-a p-u^{\prime}-g u-n u-d e-e s ̌-s ̌ e-k u{ }^{1}{ }^{11}$ The second variant, which looks like GA.GAR.bUR, is named "-ki-ik-ki-in-bur-ru-u; the ditto is written over an erasure, apparently of the GA sign, which presumably was first written, then replaced by a ditto mark when the scribe noticed that ga appeared directly above in the sign name of the preceding line (cf. the sign name in 1.193 , where traces of an otiose bad exist beside " $[=b a d-d a]$ ). We may

[^16]note that a combination of the two variants, formed by substituting $\forall A R$ from the second for PaP in the first, thus GA.मAR.UGÚNU.DIŠ, would approximate very closely the archaic EDIN-gun $\hat{u}$ (ROEC 428).

The writing $\dot{u}-g u-n u$ for the name of UGÚNU in 1.45 evidently proves that $\mathbf{U}-g u-n u$ in the sign names in ll. 208 and 210 is to be read $u$-gu-nu, not gišpu-gu-nu (Luckenbill's reading), even though UGúnu as an independent sign is named giš-pu-gu-nu-u in 92693 (CT XII, Pls. 1-3) rev. ii 27. Strictly speaking, $u-g u-n u$ as used here is not the name of UGúvu but a phonetic value used as a name. In the naming of composite signs such as GA.Pap.UGÚNU.DIŠ, ${ }^{12}$ formed (whether actually or only apparently) of a sequence of separate signs, there is a clear tendency to represent the components by phonetic values rather than complicated names. As an example we may cite duk in duk.qA.bur, named duk in 38129 (CT XII, Pl. 24) obv. i 32, while as an independent sign it is named $\check{s} a-k a-s ̌ a ́-a k-k u-a-a-i-d u$ in obv. i 23. Furthermore, as regards the reading of $u$ as $g i s ̌ p u$, it must be noted that, although $u$ quite likely had that value, there is as yet no direct evidence for it.

Ll. 45 f. ought to have the same Akkadian equivalent as 1.44 , namely şêru. In cases like this, where several variant sign forms are given for the same value, the usual practice is to give the same equivalent for all. Thus in CS 206 f . two signs with the value ge stin are both equated with karanu, in CS 208 f . two signs for tub are equated with napâsu, in CS 250 f . two signs for s a d are equated with qablum, in CS 267 f . two signs for dan are equated with $z a k \hat{u}, z u k \hat{u}$. Similarly in AO 7661 iv $34-38$ five signs for tibir are equated with rittu, qâtu. Exceptions do occur, however, e.g. in CS 270 f., where two signs for emedub are both equated with sutu but the second is also equated with sirmu, and in AO 7661 iv $39-41$, where the first of three signs for silig is equated with rittu, qâtu, while the second and third are equated with upnu. We cannot, therefore, be certain that an exception did not also occur here.

48-50. The order of the values given to un in these lines must be $u$ - nu (l. 48), $\mathrm{ka}-\mathrm{n}$ a m (l. 49), ka-1 a m (1.50) as in the duplicate 93042 (CT XII, Pl. 27) obv. 8-10. Luckenbill restored the value in 1.50 as $[\mathrm{u}-\mathrm{nu}(?)]$; but two vertical strokes are preserved at the end, indicating [k a $1 \mathrm{a}] \mathrm{m}$. This being so, Luckenbill's restoration of the equivalent in 1.50 as šub-[tum] becomes impossible, and we read $r u$-[. . . .]. At the beginning of the equivalent in $1.48 \breve{s} u$ is preserved, and Luckenbill's reading $m a-[a-t u m]$ is therefore out of the question; perhaps we should read $s u-[u b-t u m]$.
54. Since man- ${ }^{\lceil } z a-z u^{1}$ takes up less than half of the Akkadian space, it cannot be the complete equivalent, as Ungnad apparently assumed it to be. In the break after manzâzu Luckenbill restored šáalpi $u$ immeri, on the basis of Yale Syll. 161 ( $=$ CT XXXV, Pl. 4, l. 64), where the sign treated is lu, with the value 1 ug ; and this seems to be the most likely restoration. An alternative possibility is that $p u$-ha-lu was given as a second equivalent; cf. 93080 (CT XIV, Pl. 11) obv. 13, where the $d a k-s ̌ a-k i s i m a k u$ sign with inserted lu.máš is glossed [ú-tu]-ú-a and equated with pu-ha-lum.

62 and 64. The sign with inserted GA, already given in 11.56 f ., is repeated here, and likewise the sign with inserted Gir, given in 1.58 , is repeated in 1.64 . The fact that lines dealing with identical signs are not consecutive requires some explanation. The explanation may be that 1.62 (or one of the previous three lines) begins a passage inserted from a different syllabary. But it should be observed that within a series formed of the same basic sign with a variety of inserted signs the usual rules of sign order do not obtain (cf. p. 9, n. 4). In the present case the scribe may very well have placed 1.64 where it is, instead of directly after 1.58 , for the convenience of representing the value and equivalent, which are the same as in 1.63 , by means of the ditto sign. The reason for the separation of 1.62 from ll. 56 f . is, however, not apparent.
65. Ha-ru-bu, the Sumerian value, is probably an error for $\mathrm{ba}-\mathrm{ru-ub}$, which appears in the duplicate 93042 (CT XII, Pl. 27) obv. 25.
68. With $g i$-id, the name given here for the sa sign, cf. the names $s a-g i-t u$, DT 40 (CT XI, Pls. 29-32) obv. ii $42, g i-i-d u$, $\mathrm{S}^{\text {a }}$ iii $70, g i-d a$ (in $a-g i-d a-k u$ for A.SA), 79-7-8, 300 (CT XI, Pl. 37) rev. (wrongly

[^17]marked obv.) ii 7, and sa, CS 69. Professor Poebel would explain sagitu as derived from sa-gid, "the long or high sa," so named to distinguish it from di, named sa-al-gu-ut-tu (CS 87), i.e., saIugud, "the short or low sa." The explanation given by Christian (MVAG XVIII, Heft 1, pp. 43 f. and 46 f.) that each is formed from two phonetic values of the sign in question: sagitu from sa and gid, salguttu from sal and gud, seems much less satisfactory, since neither a value gid for sA nor a value gud for dr is attested. The name $g \hat{d} d u$ is then either abbreviated from sagitu under the influence of the equation of SA with the Akkadian gîdu, "sinew" (cf. Clay, BE X 24, note to l. 10, and BE XIV 26, note to l. 18; only the plural form of this word, gidati, seems to occur), or directly derived from this Akkadian word. Gi-id in CS 68 must be a scribal error for $g i-d u$, since there is no reason why an abbreviated form should be given here.
69. $S a$, which appears in the sign name here, alternates with $g i-d a$ (cf. note to 1.68 ) as the name of sA in compound forms. It occurs also in 81-4-28 (JRAS, 1905, p. 830) obv. 28 f.

SA.A is undoubtedly an error for sa.ni, ${ }^{13}$ as shown by the sign name sajaku (=sa.ì̀); the duplicate 93042 (CT XII, Pl. 27) rev. 1 gives the correct form. sA.A may, however, have been one of the late variants of the archaic sign ROEC 417, since GA.A as well as GA.NI (CS 30 f .) is attested as such. The original form of the sign, of course, has no connection with SA ; it looks like the gunu of GA (ROEC 416).
70. Since sign names based on Semitic values are rare and dubious in the texts of this series, $\hat{u}-\mathrm{mu} u-u$ is better than šam-mu-u (Luckenbill's reading) for the name of $\hat{t}$. Cf. the short form $-\hat{u}-a-$ in the sign name in 1.65. Um $\tilde{a}$ is presumably formed by two $u$ 's with a helping consonant $m$ between, plus the nominative ending $-u$. The use of $m$ (from original $w$ ?) instead of गaleph as the helping consonant is unusual but, in view of the affinity between $m$ and $u$, should occasion no surprise.
72-75. These lines, with $\dot{G}$ (gloss) ${ }^{k i}$ in their Akkadian spaces, must be understood as implying that $t^{k} \mathbf{i}$ was used, with the pronunciations given, in Akkadian as well as in Sumerian, since if the Akkadian name of the city were different it would have been necessary to add it. A like interpretation, of course, applies to the form $\times$ (gloss) ${ }^{k}{ }^{\text {i }}$ in its other occurrences (ll. 152 and 159 f.) and to the forms ${ }^{\mathrm{d}}$ (gloss) x
 $\check{s a}$. . . sǔu-ma (cf. note to l. 119) formulas, these forms present a combination containing the sign under discussion, bearing the value given to it in the first space. Unlike the lines with the sáa . . . formulas, lines with these forms do not present a strictly logical equation, since they state that the $\operatorname{sign} \mathbf{x}=\mathbf{x}^{\mathbf{k}}$ i or ${ }^{d} \mathbf{x}$. Evidently the mere addition of a determinative was not regarded as sufficiently significant to require the use of the more elaborate formula. The fact that in one case (1. 126: ša $\left.{ }^{d} G_{U D D} a-b a-a r{ }^{d}{ }^{d} G U D\right)$ the complete formula is used seems, however, to indicate that a logical difficulty was felt.
75. The reading mat-šam-mi (with Ungnad), as against Luckenbill's kur-šam-me (misprint for -mi correctly shown in copy), is certified by the writing ma-[.]-sáam (to be read ma-ǎs-sa-am according to the collation of Professor Geers) for the value of $\dot{u}^{k i}$ in Smith, MAT, PI. 25, I. 6 .
78. As Ungnad pointed out, the value must be read [ $\mathrm{s} \mathrm{u}-\mathrm{k}$ a] 1 in accordance with the duplicate 93042 (CT XII, Pl. 27) rev. 10, not [s u (?) - k a] 1 (Luckenbill's reading).
82. The tablet has $\mathfrak{u}-\mathrm{ku}-\mathrm{um}$ (not úšu-um) and is thus in agreement with the duplicate 93042 (CT XII, Pl. 27) rev. 14.
83. Luckenbill read sa-ba-ar-dab(?), while copying the last sign correctly as mes (or DUB). Comparing the equation sabar-peš-peš=turbutum (II R 32, No. 3 ii 9), Ungnad assumed a value piš for the mes sign, and read the value here sa-ba-ar-pišio, a reading accepted by Thureau-Dangin, HS, p. 26. Before a final adoption of this reading, however, one would like to have more evidence.
85. Luckenbill read the Akkadian as šu-uk-kur(?), while copying the last sign in such a way that Ungnad wished to read šu-uk-mur/bur(!). A further cleaning of the tablet, however, has shown the
${ }^{13}$ First noted by Thureau-Dangin in RA XVII 31.
last sign to be a clear $s \stackrel{s}{ }$; Professor Geers therefore suggested the reading ${ }^{〔} b a-a s ̣ 1$ - $s ̣$, which fits so well with the traces, and also with other meanings of the iš sign, that there can be no doubt as to its acceptability. Baş̧u, meaning "sand," "sand dune," may be compared with the other equivalents of iš, šadúu (value iš), "desert" (Poebel), and epirum (value sabar), "earth," "dust."
86. Luckenbill's reading of the Akkadian as $i-h u$, which gave no apparent sense, is invalidated by the traces which exist of a third sign in the middle of the space. The first sign, damaged at the end, could be si. Evidently the word is to be restored as ${ }^{\top} s i-i{ }^{\top}-h u$. Compare 32582 (CT XII, Pl. 28) rev. 13 (A.IGI $=$ i s i $\check{s}=s i h[t u])$ and Ass. 3024 i $9(\mathrm{~A}+\mathrm{IGI}=\mathrm{i}$ s i $\mathrm{s}=s i h t u) .{ }^{14}$
98. The value is clearly to be read $\mathrm{hab}-\mathrm{ru-da}$ (with Ungnad) as against Luckenbill's kir$r u-d a$, since $b a-a n-b u-r u-d a$ in 1.100 for the same sign is obviously a phonetic variant.
106. The Akkadian $k u-\dot{u}$ is (with Ungnad) undoubtedly a scribal error for $l u-\dot{u}$, which appears in the duplicate 81-7-27, 200 (CT XII, Pl. 27) obv. ii 20. Apparently the proximity of the sign name $k u-\dot{u}-a$ occasioned the error.
110. The value $\mathrm{za}-\mathrm{ab}$, given here to $\mathrm{HA} A$, is to be restored in Yale Syll. 13, where $A+\forall A$ has the meanings halâqu, na>butu, nar(?)q $\hat{u} .{ }^{15}$

111 f . छA-ten $\hat{a}$, as inscribed on the tablet, is practically identical with $\quad \mathrm{A}$, the only apparent difference being that in HA-ten $\hat{u}$ the lower of the initial two wedges slants slightly downward. ThureauDangin in RA XVII 31 notes the appearance of an archaic form similar to GA-tenu. Cf. RTC 30 obv. i 2; 32 obv. ii 3 and rev. i 2 (Lugalanda).

116 f . The text gives in the Sumerian spaces of these lines " $=\mathrm{pi}-\mathrm{e} \%$ ) (l. 116) and ma-a (1. 117). Ungnad is certainly correct in inverting them to read respectively $\mathrm{ma}-\mathrm{a}$ and " $=\mathrm{ma}-\mathrm{a}$ ). This correction provides the value ma (not pes) for mA=tittu, "fig," and thus allows an explanation of ma -na, "mina," as "stone fig" (Poebel).
118. Read with Ungnad baš-hu-ur and haš-hu-ru, as against Luckenbill's tar-bu-ur and tar-hu-ru. For a discussion of the hašhûru-tree see Meissner in MAOG XI 1/2 (1937) p. 41.
119. The Sumerian value is clearly $d u-u r-b a$ ( $n$ ot $d u-u r-k u$ ). Luckenbill's reading of the Akkadian, šá ${ }^{\text {d}}{ }^{\text {NIN.MA-gun }} \hat{u}$ MA-gun $\hat{u}$, seemed unintelligible. A thorough cleaning has since revealed that the tablet has, in fact, šá ${ }^{\mathrm{d}} \mathrm{n}$ in -MA-gun $\hat{u}$ šu-ma.

The šá . . . . šu-ma formula (which occurs also in CS 220 and 253) always, unless the text is corrupted, incloses a sign group or "ideogram" which contains the sign treated, bearing the value given to it in the Sumerian space. It diverges from what may be called the basic formula, typified in šá su-bir ${ }_{4}$ su-bar-tú (l. 43; cf. note to 1.26 ), in representing the second, or Akkadian, term of the equation by šu-ma, the Akkadian pronoun meaning "the same," which indicates that the Akkadian equivalent is written and pronounced the same as the Sumerian "ideogram." $\check{S}$ a . . . šu-ma is used whenever the Sumerian and Akkadian terms are identical, except when the "ideogram" consists merely of the sign treated and a determinative, in which case one writing, e.g. ${ }^{d} \mathbf{x}$ or $\mathbf{x}^{k i}$, serves for both terms (cf. note to ll. 72-75). ${ }^{16}$
${ }^{14}$ Cited by Delitzsch, SG, p. 28.
${ }^{15}$ Cf. TU 35 rev. ii $18: ~ z a_{4}(=N O N)=a-a l \mid n a-a^{3}-b u-t u$, where possibly the $a l$ is an error for $a b$, since the two signs are often very similar in the Neo-Babylonian writing.
${ }^{16}$ Luckenbill (AJSL XXXV 55-61), discussing the šá . . . šu-ma and related formulas, concluded that the appearance of the sign treated in the "ideogram" in the Akkadian space was often coincidental and that when it so appeared it did not necessarily have the value given in the Sumerian space. Thus he interpreted CS 220: $\gamma$ ' $(=\mathrm{b} a-\mathrm{a}) \mid$ PISAN |
 god $\mathrm{d}_{\mathrm{z}}$ a -pISAN.pISAN and believed that the passage tells us nothing concerning the pronunciation of pIsan in the latter. Much of his argument was based on a wrong translation of $s a j$ (d) . . . šu-ma as "a name of (the god) . . . "; since in several passages šu replaces šu-ma-cf. e.g. 92691 (CT XII, Pls. 10 f.) obv. ii 14: Y i-di-ig-na|maš.GứqAr | šá ididigna(maš.qứqAR) šu and 38128 (CT XII, Pls. 25 f.) rev. i 2: Y su-uk|lagab+a|šá suk(lagab+a)lum šu and note to AO 7661 i 46 - while šu-mu or šu-mi never appears, šu-ma must be the pronoun and cannot be the word for "name."

Ungnad (OLZ XX [1917] 1-7), in an extended treatment of this subject, arrived at the conclusions outlined above. Passages in which the sign treated does not appear in the "ideogram" in the Akkadian space he regarded as ipso facto

120 f . For a discussion of the values se and si given here to the sign sì, their relationship, and how they may have originated, cf. Poebel in JAOS LVII (1937) 62-65.
123. The Sumerian is probably to be read su-um; but $z u-u m$ is possible. The upper and lower horizontal wedges of the first sign are so deeply impressed as almost to have obliterated the wedge or wedges between them: traces of two horizontal lines are visible there, but so faintly that we cannot be sure they represent wedges; furthermore, the upper and lower horizontals are closer together than is usual in the su sign. But probably the two strongly marked vertical wedges at the end are decisive for the reading su . Note that the zu sign is made in two different ways on the tablet: on the reverse the two verticals are as we see them here (cf. zv in ll. 166, 254, 293); but on the obverse (this line is on the obverse) the first vertical is much fainter and is moved toward the center of the sign, cutting through the horizontal wedges (cf. zu in 11.3 and 111 f.).
125. Luckenbill read the Akkadian $\check{s a}$ d $\mathrm{ba}-\mathrm{ar}-\mathrm{ru}$ dinin-ezen.bi. His reading of the last sign (which his copy shows as EzEN + bAD) is evidently based upon CT XXIX, PI. 44, 1. 11: [. . . $]^{\mathrm{d}_{\text {GUD }}}$
 for ${ }^{d}$ GUD ; and ${ }^{d}{ }^{\text {NIN.EZEN }}+\mathrm{BI}$, since it occurs nowhere else and since the Akkadian equivalent of ${ }^{d}{ }^{d}$ GUD would be likely to contain a GUD, is probably to be corrected to ${ }^{d_{\text {NIN.EZEN }}+\text { GUD, }}$ which occurs fairly

 Ungnad suggested. There are, indeed, certain difficulties in reading it so. Ha-ar does not look like a gloss on the tablet (but the writing is so small that it could not readily have been made smaller); the broken sign following $\mathrm{ba}-\mathrm{ar}$, though it cannot be r u , as Luckenbill read it, does not particularly suggest GUD; and, finally, EzEN +GUD is not written quite as we should expect. Nevertheless, there being no satisfactory alternative, the suggested reading is probably correct.
126. The phrase ša ${ }^{\text {d GUDba-ba-ar }}{ }^{d}$ GUD is rather peculiar. The position of the gloss indicates that it applies to both the Sumerian and the Akkadian ${ }^{d}$ Gud, and the text thus informs us that the Akkadian equivalent is identical in writing and pronunciation with the Sumerian. But this information, when the "ideogram" consists merely of the sign treated and a determinative (cf. note to ll. 72-75), is everywhere else conveyed simply by a single writing of the "ideogram," such as ${ }^{\text {d }}$ (gloss) GUD which occurs in 11. 132-40. The apparent explanation of the form in our passage is that, in this one case, the inaccuracy of the equation GUD $={ }^{d}$ GUD impressed the scribe so strongly that he used the more elaborate and accurate formula.

Ungnad wished to read the value $\mathrm{ma}-\mathrm{ba}-\mathrm{ar}$ on the basis of $\mathrm{r}_{\mathrm{m}} \mathrm{a}^{1}-\mathrm{ba}-\mathrm{ar}$ in the parallel text 81-2-4, 480 (CT XI, Pl. 44) l. 3. But CS 126 shows the typical form of Ba, with the bottom horizontal protruding to the left and slanting downward, a form which mA never even approaches in the writing of CS. Since, on the other hand, the sign in the parallel text can hardly be read ba, ${ }^{17}$ it appears that mabar and babar must be considered phonetic variants.
 (cf. note to 1.26 ) GUD, with the value $\mathrm{zi}-\mathrm{ib}$, appears in the combination in the Akkadian space.
corrupt. He listed eight such cases, only two of which he was able to emend. An additional case, from a text subsequently published, may be cited here: Vok. Ass. 523 ii 63 gives $Y \mathrm{gi}-\mathrm{e}|\mathrm{J}|$ šá $\mathrm{gi} \mathrm{i}-\mathrm{e} m i-h i-i l-t u$. Here gi-e in the Akkadian space has presumably replaced $u$ with an unpronounced determinative (what determinative, since the meaning of mihiltu is unknown, cannot be decided). But note that the parallel text 92693 (CT XII, Pls. 1-3) obv. i 41 gives the Akkadian as simply mi-hi-il-tum. For another such case cf. CS 253 and note. Ungnad's theory, even though it leaves a number of passages without a satisfactory explanation, must be accepted as the most reasonable and self-consistent. Luckenbill (op. cit. p. 58) himself admitted exceptions to his interpretation, e.g. in the case of (Y ta-a r) $\mid$ (кUD) | šáa al-tar al-ta-ru, 47760 (CT XII, Pls. 14 f .) rev. i 47 ; and on the basis of this interpretation he (loc. cit.) suggested a restoration which can be proved wrong (cf. p. 52, n. 8).
${ }^{17}$ Mr. C. J. Gadd of the British Museum kindly collated this passage for me. He writes, in part: ". . . although the sign is not perfectly clear, it almost certainly has not the characteristic Assyrian form of ba."

Luckenbill, holding a different theory about such passages (cf. p. 55, n. 16), here took the first part of the GUD as PA and the two slanting strokes at the end as the division mark. ${ }^{18}$
129. The tablet has $a^{r}-s u-u p-p u$, not $a r-z u-u b-b u$, as Luckenbill copied and read it. This word, as shown by the doubled consonant at the end, is a loan word, apparently derived from estub, with change of $t$ to $s$ (by partial assimilation to $\check{s}$ ) and change of $s$ to $r$ (Poebel).
130. Ungnad corrected $\mathrm{a}-1 \mathrm{a}-\mathrm{ad}$, Luckenbill's reading of the value of $\mathrm{GUD}=a l p u$, to $\mathrm{a}-1 \mathrm{a}-\mathrm{ab}$. The tablet gives a clear ab. The value alab is of course taken over from Akkadian alpu.
133. Ungnad read kár-ma, Luckenbill only ...-ma (?), in the Sumerian and Akkadian spaces. The tablet has $k a d-m a$, which is a simple phonetic variant of $g u_{4}-u d-m a$ in the preceding line. Cf. ${ }^{(d)} \mathrm{kUD}$ glossed $q u-u d-m u$ and $q a-a d-m u, 47760$ (CT XII, Pls. 14 f .) rev. ii 28 f .

134 f . In addition to the two variants dipar and dapar given here for ${ }^{d} G U D$, a third, $d a-$ $\mathrm{pa}-\mathrm{ra}$, appears in II R 51, No. 1 obv. ii 13.
139. Luckenbill read the Sumerian value and the gloss in the Akkadian space as sk-ku-um, which Ungnad accepted. But the first two signs of the gloss are undoubtedly $k u$ and $s u^{r}$ respectively, not the reverse. So we must read $k u-s ̌ u-u m$.
140. Luckenbill read $\mathrm{ru}-\mathrm{ga}(?)-\mathrm{b}$ an (?) in both the Sumerian and the Akkadian space. The second sign can apparently be nothing but $u s$; the third, though the form is strange, is more likely to be $b$ an than anything else. We read $r u-u s-b a n(?)$.
141. Read in the sign name gud-da, not gut-ta.
142. For the restoration of the Sumerian as $i[l-] d$ a $g$ and the Akkadian as $a-t[a-r u]$ cf. Ungnad's references. The text clearly favors these readings.
143. On the basis of $S^{b} 98$ : Y ú-lu|UL $\mid u l-l u, u l-[l u]$ (not $u l-l[u-l u]$ ), or possibly $u l$-[lu šá kal-bu] as in CS 195, is to be restored in the Akkadian space.

144 f . In accordance with K 2034 obv. ii $3 \mathrm{f} .+80-7-19,308$ obv. 4 f . (both texts CT XII, Pl. 33 ):

$$
\begin{array}{c|cc}
\mathrm{d} u-\mathrm{uUL} & "(=n a-k a-p u) & \text { šá alpi } \\
\mathrm{r} \mathrm{u}-\mathrm{uUL} & " & \text { ša uriṣi }
\end{array}
$$

it seems advisable to restore the Akkadian sections of these lines not merely with the verb nakâpu, as Luckenbill did, but to add $\check{s a}$ alpi in the first line, šá urîşi in the second.
146. In the Sumerian space Luckenbill read a š. A more thorough cleaning now reveals the Lid sign, which here has the value á $b$. This discovery disposes of the value $a x_{6}$ which Thureau-Dangin (HS, p. 3) assigned to the AB sign purely on the basis of this passage. In the Akkadian space the most likely restoration is $a p-t u$, in accordance with $S^{\mathrm{b}} 188$ : Y ab|AB|ap-tum.
148. The Akkadian equivalent for $\mathrm{AB}=\mathrm{e}-\mathrm{e}$ s might be e-šu or $\mathrm{ABe}-\mathrm{e} \mathrm{s}^{\mathrm{k}} \mathbf{i}$. Cf. K 247 (CT XIX, Pls. 42 f.) obv. ii 8 f.:

$$
\begin{array}{r|r}
\mathrm{AB} & e-[\check{s ̌ u ?]} \\
\mathrm{ABe}-\mathrm{e} \mathrm{~s}^{\mathrm{k}} & \check{s} u \hat{a} l\left[u^{k}{ }^{\mathrm{k}}\right] .
\end{array}
$$

For the restoration $e-[s ̌ u]$ cf. SAI 2485.
149. Since the value $\mathrm{gun}(\mathrm{u})$ for UNU ( $=$ AB-gun $\hat{u}$ ) is attested only in the combination GI. $\mathrm{UNU}=$ $\mathrm{gi}-\mathrm{gun}(\mathrm{u})_{4}$ (cf. Br. 2498 f ., where the sign in question is mistaken for nisag), the Akkadian is to be restored, with Ungnad, [šá gi-g un $\left.u_{4} g i-g u-n u-u\right] .{ }^{19}$
${ }^{18}$ It may be noted that in syllabaries of the type of CS the division mark is used in place of the perpendicular dividing line, first, where signs belonging in one space go over into another (cf. CS 15, 46, 222, etc.; Yale Syll. 129-31), second, where two or more equivalents, each of which should be given a separate line, appear in the Akkadian space (ef. CS 10 f ., 110,177 , etc.). Since the Sumerian-Akkadian equations in the $s \not{ }^{2} .$. . formulas are presumably taken from vocabularies which presented the two terms, as e.g. dur-zib and gir-rum, in separate columns divided by the perpendicular line, the division mark might well have been used between the two terms of the sáa . . . . formulas. But it is, in fact, so used only once, namely in AO 7661 i 46.
${ }^{19}$ According to Professor Poebel the form gi-gunu $u_{4}$ is always used in inscriptions from the time of Gudea onward, while in the older inscriptions the word invariably appears as giguna, written gi-gù-na (for references see the index to Thureau-Dangin, Die sumerischen und akkadischen Königsinschriften [Leipzig, 1907], under gikana).
151. Although the form of the sign is different from that in the preceding line, it may be identically described as eš-gunu, since it is so described elsewhere (Br. 4793); another possibility is ša-eš-še-ku-eš-giš-pa-i-du (cf. e.g. Yale Syll. 96). Nu - ú in the Sumerian space gives the only evidence for the value $n u_{7}$ of this sign (Thureau-Dangin, HS, p. 25). Possibly it is an error for $u-n u$, the value in the preceding line, although in that case it should have been represented by a ditto. If $n u-u$ is correct, the two values $u n u$ and $n u$ (being simple phonetic variants) must of course belong interchangeably to both signs, $A B-g u n \hat{u}$ and $A B+E s$
152. The Akkadian must be restored as UNUú-nu-ugki ; Luckenbill wrote only "uruk(?)." The pattern $X$ (gloss) ${ }^{k^{i}}$ is taken from ll. 72-75 (cf. note to those lines); the gloss might, indeed, have been omitted.
153. Ungnad restored the Akkadian as $i$-šit-tú, which is equated with pIsAN+ud (CS 245) and URU+Níg ( $\mathrm{S}^{\mathrm{b}} 263$ ), both with the value erim. But the meaning of $i s{ }^{\text {sittu }}$, "treasure house," is so remote from "dwelling," the basic meaning of unv, that this restoration is more than doubtful.

154 f . The value urugal, as applied to und in l. 154, is likely to be erroneous, as it hardly seems possible that the sign for "dwelling" could also be used for "great dwelling," which should be the literal meaning of urugal. UNU must, indeed, have had the value uru, intermediate between its values $u n u$ and eri(m). It appears with the value eri or ere (or perhaps re) in the name of the god Nergal: ${ }^{\text {d }}$ è eunu-gal, which should be given in our passage. Quite likely ll. 153-55 originally appeared as follows:

| Y e-ri | UNU | $\ldots$ |
| :--- | :--- | :--- |
| Y " | UNU | šá dn è -UNU-g al šu-ma |
| Y ú-ru-g al | AB+GAL | $\ldots .$. |

In a later period the amissible $m$ of erim was restored at the end of the value in 1.153 , and the ditto mark in 1.154 thus came to stand for erim, which did not fit into the name of Nergal; some scribe, confused by this and feeling that the value urugal in the following line did fit into the name of the god, then placed $u-r u-g a l$ in 1.154 and ditto in 1.155 . If this explanation be accepted as correct, the value urugal for unu (HS, p. 38) becomes invalid.

In the combination $A B+G A L=u r u g a l$ in 1.155 , $A B$ has the value $u r u<u_{n} u_{5} .^{20}$ The fact that it shares the values $u r u$ and $u n u$ of und illustrates again Professor Poebel's thesis that the simple sign often had the values of its $g u n \hat{u}$ and compound forms.

In the Akkadian space of l. 155 Luckenbill's restoration qabru, "grave," is possible; but arallu, "nether world," as the more fundamental meaning of the ideogram, is more likely.

Simply by an oversight, Luckenbill restored the sign name in 1.155 as " $=e-e s)-"(=g u-n u-u)$. It must, of course, be šá-eš-še-ku-gal-la-i-du. Two lines below, in 1. 157, šá-eš-še-ku is repeated (instead of being indicated by ") because that line stands at the top of a new column. Note the similar repetition of the name $\dot{u}-d u-u$ in Yale Syll. 161.
156. Since the meanings of es and $u r u<u n u$ are practically identical, we should possibly restore for $\mathrm{AB}+\mathrm{GAL}=\mathrm{e}$ sgal the same equivalent as for $\mathrm{AB}+\mathrm{GAL}=u \mathrm{rugal}$, i.e., arall $\hat{u}$, or else the synonym qabru (suggested by Luckenbill). More likely, however, is ešgallu, the Akkadian loan word from Sumerian ešgal.
158. Ungnad restored ${ }^{\mathrm{d}}$ NinÂ in the Akkadian space. But in accordance with the overwhelming preference of CS for the pattern (gloss) $x$ (cf. note to ll. 72-75) we should rather restore $d_{n a-a n-s ̌ e A B+b A . ~}^{\text {a }}$

159 f. Restore the Akkadian spaces $A B+$ HAni-na- $a^{k i}$ and AB+yAsi-ra-raki respectively, with Ungnad.
162. The restoration suggested by Ungnad, "(=mar-tú), is doubtless correct, since wherever, as
 that value.
here, two different (though related) signs in successive lines have the same value, they have the same equivalent also (cf. e.g. ll. 206-9 and 250 f.). AB+Pa ( $=$ si), given in the preceding line, is the usual ideogram for martu in Akkadian. For the rationalization of our sign AB+šEšs=martu we may note that šes and šes - a (ŠL $331: 8$ ) are commonly equated with marru (<mariru), "bitter," of which martu (<marratu? < máriratu?), "gall," may originally have been the feminine form.
163. Luckenbill read the value eš-še-mi-in; the text actually has esti-mi-in, which accords perfectly with the composition $A B=e$ š plus the numeral $i-m i n$. Ungnad suggested that
 XIX, Pls. 30-32) rev. ii 19, and that the Akkadian should be restored from there as me-lu-[ul-tú] $s a_{a} k i p-p i[-e]^{21}$ But this identification, somewhat favored by Luckenbill's misreading, rests entirely upon the similarity between ešimin and ešmin. Ešimin may actually have a quite different meaning; it might, for instance, be the name of a temple.

164 f . The equivalent to $\mathrm{AB}+\mathrm{T} \mathrm{C}$ and $\mathrm{AB}+\mathrm{GANA}-\operatorname{ten} \hat{a}$, both with the value agarin, may be $u m m u$ (with Luckenbill) or agarinnu, or both. Cf. Sbles: Ya-ga-ri-in $|\mathrm{AB}+\mathrm{TU}| u m-m u$ and Rm 604 (CT XIX, Pls. 32 f .) obv. 12: amaa-ga-ri-inf̣|a-ga-rin-nu. Whatever the equivalent, it should be the same in both lines (cf. note to l. 162).
166. Ungnad correctly restored the Akkadian $a[p-s u-u]$, as against Luckenbill's $a[b-z u]$.
169. Luckenbill restored $a-[b a-t u]$ as the equivalent of $U M \in \mathbb{N}$ with the value $d$ é. Since the true equation is $u \mathrm{gu}-\mathrm{d} e ́=n a^{\circ} b u t u$ (IV 1 of $a b a t t u$ ), this equation would be doubly inaccurate. Such inaccurate equations do sometimes occur. But $a-[b a-l u]$ is a more probable restoration. Note that 1.171 gives babâlu for umún with the value $\mathrm{d}_{\mathrm{a}}$.
171. The crowding of the signs at the beginning of the Akkadian space shows that there must be another word in the break, a fact for which Luckenbill allows in his copy but not in his transliteration. Possibly $a$-ba-lu is to be restored, or perhaps eme-sal.
173. The size of the break at the end of the line demands the restoration of another sign, for which Luckenbill does not allow. Undoubtedly we are to read $d_{n}$ in-áa $_{\text {-gal }}$ [UMÚN].
174. Luckenbill's copy left out two of the horizontal wedges as well as the tail of the first vertical of $k u$ in the value $k u-u s$. All of the omitted strokes are, indeed, quite faint.
177. Luckenbill took the first sign of the third equivalent as $\mathrm{L} \sigma$, and Ungnad suggested the reading $d i b-s ̌[\hat{u}]=d i s ̌ p u$. But the first sign, though damaged, is clearly ur rather than Lu , and the two slanting wedges preserved from the second sign forbid the reading šu. A reading $d a s^{s ̌}-\Gamma p u^{1}$ is thus indicated, $d a s ̌ p u$, "sweet," being a synonym of țâbu and matqu. Note that in Sm 1300 (CT XI, Pls. 35 f.) rev. 12 f . both $t a-a-b u$ and $d a-d s ̌-p u$ are given for $u s ̌-n u-t i l-m i n-n a-b i^{22}$ with the value $\mathrm{ku}-\mathrm{uk}-\mathrm{ku}$.
180. The last sign in the value cannot be sin, as Luckenbill read it with a query. Probably it is ša (with Ungnad) written over an erasure. Ba-an-dili-ša, the complete value, would seem to be a variant by metathesis of šindiliba, given in the next line, with the first and last consonants interchanged and $i$ in the first syllable changed to $a$.
181. Ungnad is right in saying one should expect in the Akkadian space something like sin-di-lıb(?)$b a(?)$ instead of $\sin -d i-i s-\ldots$. . But the next to last sign is a clear Grš. The last sign could be $b a$, but seems too long. Note that, while in Luckenbill's copy it is merely lightly shaded at the junction of the

[^18]two surviving wedges, actually the surface of the tablet below and to the right of those wedges is completely destroyed. An (?), which Luckenbill restored in the small break at the end of the Sumerian value, might have been squeezed in there; but there seems to be no reasen to expect it. Cf. Sm 1300 (CT XI, Pls. 35 f.) rev. 10 f.:

182. In the Akkadian space there ought to be tu-ba-si[-in-nu]; but, since there is scarcely room in the break for more than one sign, we are probably to read $-i n$. Note that in 1.34 also a Sumerian loan word appears in its Sumerian form in the Akkadian space.
186. The second equivalent, which Luckenbill left unrestored, is probably riq[-q]u, an approximate synonym of $p i-i r$-um, the first equivalent of U.AD, value $\mathrm{i}-\mathrm{si}-\mathrm{im}$.
190. The sign arš with the value gi-eš (or, conceivably, me-eš) apparently must be restored on the rev. of the fragment K 8298 (CT XI, Pl. 33), the obv. of which parallels CS 143-45. The first three lines (on the remaining two lines the equivalents are completely destroyed) then read as follows:

The equivalent rit-tum is otherwise unknown.
191. The scribal notation eme-sal, indicating, of course, that the sign and value occur with the meaning given only in the eme-sal dialect, appears only here in CS, unless it is to be restored in 1. 171. It is found also in AO 7661 ii 23 and 25.
192. Luckenbill read the Akkadian $t i(?)-d i-i t-t u$; the first sign, however, as his copy showed, is clearly bal. So we read bal-ti-it-tú, with Ungnad. For the meaning of baltittu cf. ll. 262-64 of HAR- ra $=$ bubullu, Tablet 14 (Landsberger, Fauna, p. 20), where it is equated with the Sumerian uh-gis, "wood insect," ub-ti-bal (var. uḩ-AN-ti-bal), "omen(?) insect," "3 and ub-giš-ùr-ra, "beam insect."

The sign name is $\check{s} a ́-g i s c^{r}-\check{s} e-k u^{1}-b a d-d a-i-d u$, not $\check{s ̌ a ́-g i-s ̌ u-b a d-d a-i-d u, ~ a s ~ L u c k e n b i l l ~ t o o k ~ i t . ~ T h e ~}$ formula for signs of this type is invariably $\check{s} a-\mathrm{x}-k u-\mathrm{Y}-i d u$.
194. With this line begins List CT XLI, Pls. 47 f.

The sign name, which Luckenbill left unrestored, Thureau-Dangin, in his notes on the text in RA XVII 31, restored as [gi-su-te-nu]- $u$. But the first sign is completely preserved and is, in fact, though confused by an extra wedge left over from an erasure, clearly $g i s$ and not $g i$. We read, therefore, giš-「te-nul-u. It may, furthermore, be noted, as against the possibility of a form gišu- here, that the nominative ending $-u$ appears in general only at the end of composite sign names; the internal elements in such names appear either in their original Sumerian form (usually a phonetic value) or with an $-a$ added, depending on the type of formula involved. ${ }^{24}$ Before -ten $\hat{u}$ (or -tena-) the original Sumerian form always appears. Thus in CS 268 we find -ga-na-te-na-, in CS 281 ga-na-te-nu-u, as opposed to the Akkadian form $g a-n u-\hat{u}(=g a n \hat{u}<g a n a u)$ given in CS 276. For further examples cf. Christian in MVAG XVIII, Heft 1, p. 58.
195. The value is ul, not ul-lu (Luckenbill's reading). After ul in the Sumerian space
${ }^{23}$ For the meaning of ub -ti-bal cf. Landsberger, op.cit. p. 127, note to 1.263 , and the references which he gives.
${ }^{24}$ An apparent exception to this rule occurs in certain cases in which the first element of the name is represented by
 ever the first element of the sign name is written out the short form is given, this usage of the ditto sign must be regarded as a scribal inaccuracy. In the case just mentioned the name must therefore be read not mâšu-gešpu-minnabi but maš-gešpu-minnabi, as given in Yale Syll. 252.
is one of the nine deep round holes, presumably made by the butt of the scribe's stylus, which appear on the reverse of the tablet. Traces of a second sign show at the edges of this hole. They indicate, however, another ul and were probably made under the influence of the value ul-ulin l. 198. Perhaps the hole was used, in this instance, as a form of erasure. At any rate, it is inconceivable that the scribe would so obliterate a sign which was intended to be read.

Placed as it is between giš-ten $\hat{u}$ and giš-tinnaku, the KIB sign in Il. 195-205 must be regarded as a GIŠ composition; it is, of course, formed of two gIŠ signs crossed. It might therefore more properly have been named giš-min-na-bi-gi-li-mu-u (cf. the name of the similarly formed sign in 1. 282); evidently the name $k i b-b u$ was used instead for the sake of convenience.

197-99 (List, ll. 2 f.). Line 199 (al-al) corresponds to List, 1. 2, 1. 197 (h u-u l) to List, l. 3. Probably, though not certainly, the List preserves the original order. The value in l. 198, ul-ul, a simple phonetic variant of al-al, does not occur in the List. The equivalents in ll. 198 f., qirbittu and mêrištu, are synonyms and belong without distinction to ul-ul and al-al. Cf. note to 11. 282 f.
201. Šallurum, a loan word from the Sumerian šennur, is an unusual example of the interchange of $n$ and $l$. Cf. GSG $\S 65 \mathrm{f}$.
203. The last sign in the Akkadian space is $k u$, not $\check{s} u(?)$ (Luckenbill's reading). This correction has already been made by Thureau-Dangin (RA XXI [1924] 144) on the basis of AO 8870 (op. cit. pp.


205 (List, l. 4). Thureau-Dangin (HS, p. 12) would read the Sumerian gúb-rum instead of li-rum. But the value gu b of li was not in common use in any period, nor do we know a Sumerian writing li- rum which might explain the use of this uncommon value.

206 f . (List, 1. 5). These two lines both present the sign GEŠTIN with the value gi-eš-tin and the equivalent $k a-r a-n u$, although l. 206 analyzes the sign as grš.tin, 1. 207 as tab.tin. Since, however, the syllabary is at this point concerned with giš compositions, only the analysis as giš. Tin can properly belong here. Furthermore, this analysis fits the meaning (cf. Poebel in ZA XXXIX [1930] 147) and the archaic form of the sign (ROEC 372); the analysis as Tab.tiv fits only the late form of the sign, and therefore 1.207 must be a late insertion. Note that in the List gešicin is represented only once.

The writings of the sign as GIŠ GEŠTin (1.206) and tab geštin (1.207) are obviously employed to emphasize the statement of the sign names giš-tin-na-ku and tab-tin-na-ku that the first part of the gEŠTIN sign is in 1.206 regarded as GIŠ, in 1.207 as tab. This usage is, of course, in close analogy to the double writing found e.g. in GIŠ + BAD BAD (1.192), which aids in the identification of the usually very tiny inserted signs. These helps in reading, since they do not occur in the List, are evidently of late origin.

208 f. (List, l. 6). These two lines present the signs tab.tin.ugúnu.diš and tin.UGúnu.Diš, neither of which fits into the sequence of aIs compositions, with the value $\mathrm{tu}-\mathrm{ub}$ and the equivalent na$p a-s ̧ u$. In the List, however, GEŠxin is appropriately followed by a sign which could be described as geštin.ugúnu.diš (value $t u-u b$ [text $t u-u>!]$ ); and this is doubtless the form which originally appeared in CS. Line 208 simply mistakes the first element for tab instead of giš, while I. 209, presumably under the influence of the sign in 1.210 , drops the first element completely.

The early forms of the sign found in the List, given in ROEC 373, show that the first part is similar to if not identical with geštin, but that the latter part cannot actually be ugGnu.diš.

For the reading -u-gu-nu- instead of -gišpu-gu-nu- (Luckenbill's reading) in the sign names in 1l. 208 and 210 cf . note to 1 ll .45 f .

210 (List, l. 7). For sagkurun CS here gives a sign tin.kaskal.ugúnu.diš, while the List has geštin.ugúnu.diš, just as for $t$ ú $b$ in the preceding line. The original, correct form must of course have begun with geštin. The sign in CS suggests túb with Kaskal inserted (or possibly a šešsig form of túb). An inserted kaskal in the form in the List might have been overlooked, because of its small-
ness, by either the ancient or the modern copyist; and the appropriateness of kaskal, in view of the equivalents sabu and şahit karannu, is enhanced by the fact that it is used in early Sumerian texts in place of Br for the meaning šikâru (cf. ŠL $166: 8$ ). It is, of course, quite possible that the List has a correct form, that both tưb and túb+kaskal were used for sagkurun; thus we should have another instance of a simple sign with the value of one of its derived forms. For suggestive speculations concerning the word s agkurun and the possible significance of the ideogram in CS 210 , cf. Poebel in ZA XXXIX (1930) 152, n. 1.

In List, l. 7, we should expect the value (corresponding to $\mathrm{sag}-\mathrm{ku}-\mathrm{ru-un}$ in CS) to be sag-$\mathrm{ku}-\mathrm{ri}-\mathrm{in}$, rather than $\mathrm{sag}-\mathrm{ku}-\mathrm{ri} \mathrm{ni}$. The final i may, however, be a survival of the Semitic genitive, since the form sagkurun, though not yet satisfactorily explained, would seem likelier to have a Semitic than a Sumerian origin.

212 (List, l. 9). The value of ta-gun $\hat{u}$ meaning $e-t \underline{u}-t u m$ is to be read $g a-a n-m u s, ~ n o t ~ g a-~$ an-zer (Luckenbill's reading), as shown by Ungnad on the basis of $\mathrm{S}^{\mathrm{b}} 103$ f.:
and K 7703 (CT XI, Pl. 42) rev. 2, ${ }^{27}$ the latter of which provides the value $\mathrm{ga} \mathrm{a}-\mathrm{an}-\mathrm{mu} \mathrm{s}_{5}$ for the $\operatorname{sign~ta-gunû~(with~horizontal~instead~of~vertical~gunû~strokes).~List,~l.~9,~has~gán-mu~šis~(or~gá~-~}$ $\mathrm{mus} \check{s}_{5}$ ) for the sign ta-gun $\hat{u}$; the same writing of the value appears in HGT 117, 1. 19, but only the first part of the sign is preserved there, so that it is impossible to tell whether it is TA-gun $\hat{u}$ or TA+mi.
 parently be explained only on the supposition that $g$ án-muš or $g a-a n-m u \check{s}_{5}$ was a traditional Sumerian writing of the word ganmus. Ungnad correctly restored the sign name as $t a-\quad$ - $u-n u-u^{\top}$.
213. Luckenbill (AJSL XXXV [1918/19] 60, note 3) suggested the restoration of the Akkadian as ${ }^{~ r d} k a b-t a$, and Ungnad took it as certain. Although the traces of the first sign, both in CS and in the duplicate 81-7-27, 200 (CT XII, Pl. 27) rev. i 1, do not fit the dingir sign very well, the sign apparently cannot be anything else. Instead of $\mathrm{d} k a b-t a$ we should of course expect ${ }^{d} k a b-\operatorname{tara}-g u n \hat{u}$ or ${ }^{\mathrm{d}_{\text {TA-gun }}} \hat{u}$ (cf. notes to ll. 72-75 and 119). Probably the text originally had ${ }^{\mathrm{d}}{ }^{\mathrm{TA}}$-gun $\hat{u}$ and the gloss replaced the Ta-gun $\hat{u}$ sign. It would seem, indeed, that the phrase ${ }^{d}$ (gloss) $x$ originated in such errorsa scribe copying from two different copies, one with the correct ${ }^{d} x$, the other with the incorrect ${ }^{d}$ (gloss), combined the two to make ${ }^{\mathrm{d}}$ (gloss) $\mathbf{x}$ (cf. p. 11)-and that its use was subsequently extended to passages where no such error had occurred.

214 f . (List, ll. 10 f .). Ungnad read the gloss in CS $214 \mathrm{a}-\mathrm{lam-mus}$, as against Luckenbill's $\mathrm{a}-\mathrm{lam} \mathrm{m} \mathrm{zer}$, on the analogy of the value in CS 212. A-1am-mu-us in List, 1.10 , proves this reading correct. Note also the writing $\mathrm{a}-1 \mathrm{a}-\mathrm{mus}$ in K 7703 (CT XI, Pl. 42) rev. 4.

While CS 214 f. and the duplicate 81-7-27, 200 (CT XII, Pl. 27) rev. 2 f. give the sign ta+br for both $a-1 a m-m u s$ and $1 a-a l$, List, ll. $10 f$., gives ta + KaK (value $a-1 a m-m u-u s)$ for the first, TA+HI (value left blank) only for the second. The List, if it accurately represents the original at this point (cf. p. 13), probably preserves a correct differentiation. For an indication of the
${ }^{25} \mathrm{Cf} . \mathrm{Sm} 107$ (CT XI, Pl. 20) ii 7.
${ }^{26}$ Restored from OECT IV, No. 84, 1. 101.
${ }^{27}$ The rev. of the fragment K 7703 (on the obv. too little is preserved for restoration), paralleling CS 212-15, reads as follows:

| Yga-an-muss |  |
| :---: | :---: |
| Yga-an-mu ${ }_{\text {g }}$ | TA-guna [ |
| Ykab-ta | TA-guna [ |
| Ya-la-mus | $\mathrm{TA}+\mathrm{HI}$ |
| Yla-al | TA+ HI |
| Yla-al | TA+HI |

meaning of TA + KAK note the item " $7 \mathrm{qa}, 10$ shekels of TA + KAK" which appears in an Ur dynasty temple receipt (ITT III, No. 5258 obv. 2) otherwise devoted to dairy products.
In CS 214 šu-ma, "the same," in the Akkadian space should mean that the Akkadian is identical with the Sumerian, that is, alammuš, not alammušsu as Ungnad believed. Since an ordinary word should have the nominative ending, the conclusion is suggested that alammusis a god's name which did not always have the divine determinative (if it had, the Akkadian space would necessarily read ${ }^{\left.d_{T A}+H I\right) . ~ P o s s i b l y ~ i t ~ i s ~ t h e ~ r e a d i n g, ~ o r ~ a ~ r e a d i n g, ~ o f ~ t h e ~ w e l l ~ k n o w n ~}{ }^{d_{L i L}}$ (PB 1818).
216-18 (List, Il. 12 f.). Ll. 216 f. give PISAN with the value $\mathrm{ma}-\mathrm{a}$, equivalents $a$-la-ku and $b i$ -$i$-tú, and l. 218 equates the value $\mathrm{ga-a}$ with $b \hat{\imath} t u$; according to a principle of abbreviation (cf. p. 11) the passage implies also the equation $\mathrm{ga} \mathrm{a}-\mathrm{a}=a l a k u$. Now, since the value m à belongs properly to the eme-sal and gá to the main dialect, we should expect $g$ á to be given first and $m a ̀$, following it, to be definitely indicated as an eme-sal value. The fact that $m$ à is placed first apparently can be explained only on the assumption that CS was given its present form by a scribal school which agreed with the eme-sal in using the pronunciation $m$ à and therefore naturally placed it first. The school involved evidently is that of Nippur, which, as Professor Poebel has frequently pointed out, preferred the eme-sal pronunciation of certain words with $m$ in eme-sal, $g$ in the main dialect. ${ }^{28}$

The traces in List, 1. 13, seem to indicate a value ${ }^{r} m a-a^{1}$ or ${ }^{\prime} m a^{1}$, though ${ }^{\mathfrak{r}} \mathrm{b} a-\mathrm{a}^{1}$, as in CS 219 , is not ruled out.

219 f . The reading $\mathrm{b} a_{4}$ for pisan probably derives from one of the minor dialects, and thus it is possible that it had that value in ${ }^{d} \mathbf{z}$ a -PISAN.pISAN originally only in that dialect. Since Zababa is the god of Kish, it is reasonable to suppose, as pointed out in GSG §75, that it was in the dialect of that city that PISAN $=b \hat{\imath} t u$ was pronounced ba .

222-75 (List, ll. 15-41). This long passage dealing with PISAN compositions takes up more than a sixth of CS and nearly a third of the List. ${ }^{29}$ Its apparently disproportionate length is partly explained by the fact that it contains not only compositions of PISAN but also of $\frac{1}{1}$ (cf. p. 10). The signs may be divided into three groups: first, ideographic compounds; second, phonetic combinations with PISAN; third, phonetic combinations with E.

The first group, by far the largest, comprises the following lines: CS 222-30, 234-35, 236(?), 237-41, $243(?), 247-48,250-52,254-55,264-65,267-68,270-75$ (35 lines)-List, Il. 15-19, 22-24, 25(?), 27-28, 30-31, 38-41 ( 17 lines). In this group it is generally not possible to determine which signs had PISAN and which had ta as their basis, though certain of them can be proved to be t compositions from the parallelism of CS 237-39, 241, 248, and List, 1. 24, with the passage HGT 106 iv 11-17 containing sign groups that begin with E .

To the second group, PISAN compounds with values beginning with ga or ga ( ma ), are to be ascribed CS 231-33, 249, 261-62, 269 ( 7 lines)--List, 1l. 20-21, 34, 37 ( 4 lines).

To the third group, e compounds with values beginning with e or $€$, are to be ascribed CS $242(?)$, 244, 245(?), 246, 253, 256-60, 263, 266 ( 12 lines)-List, Il. 26(?), 29, 32-33, 35-36 (6 lines).

A difficulty in discriminating between the second and third groups is caused by the fact that, in both CS and the List, the gá and e signs are written exactly alike where they appear in the Sumerian values. It has been the practice to read é . . . . wherever bitt ( $u$ ) . . . . appears in the Akkadian space. But this admittedly is not a valid criterion, since pisan too, with the values mà ga, and $\mathrm{b} a_{4}$ (cf. CS 217-19), is equated with bîtu. In one case at least (cf. note to 1.262 ) it can be shown that we must read gat even though bît does appear in the Akkadian space; and it is quite possible

[^19]that g á - would be correct also in other cases where we have read é - (i.e., CS 256-60, 263, 266List, 11. 32-33, 35-36).
223. The value of PISAN $+\mathrm{BAD}=u p \hat{u}$ ša šame is $\mathrm{ti}-\mathrm{il}-\mathrm{har}$ (Luckenbill read ti-il- ${ }^{\text {) }} .^{30}$ Note the similar value $\mathrm{giš}-\mathrm{har}$ of $\mathrm{GIš}+\mathrm{bad}=$ baltittu in l. 192. Any connection between tilhar and gishbar, since the meanings given, "overcasting, of the heavens" and "wood beetle," are apparently irreconcilable, would seem to be out of the question. Yet it is curious to note that II R 47 ii 39 equates our PISAN + BAD, glossed [. . . - -]ár r, with bultîtu, of which baltittu is a variant. Ungnad (in his note to l. 192) may, however, be right in correcting the sign to GIŠ + BAD and restoring the value as [giš-ba-]ár.

The sign Pisan + bad does not occur in the List, and CS 222 f. are therefore late additions.
224 (List, 1. 15). Ungnad suggested that pisan+dill, value $\mathrm{i}-\mathrm{k} \mathrm{u}$, equivalent $i-k u$ šá nâri, stands for gána + dill, an interpretation which is reinforced by the reading gána i-ku in List, l. 15. But Ungnad's further suggestion that nâri (A.ì) is a mistake for eqli (A.SKi), though reasonable, is far less certain. Since dili.gána, which also properly designates the $i k u$ which is a measure of area, is occasionally used as ideogram for $\hat{\imath} q u$ (according to Professor Poebel a loan word from Sumerian e (g)), "ditch" (cf. SAI 19), our GÁNA + dili could equally well have been so used.

225 (List, l. 16). $\mathrm{Da} \leqslant \mathrm{h}$ égal in the writing of the value means that this is to be read either dagal or hegal. The List has only da-gal, and only this, of course, is correct (cf. p. 11).

226 f . (List, 1 ll .17 f .). Eme and ama are presumably dialectal variants, the former belonging to the eme-sal or, more likely, to a special dialect within the main dialect.
228. With the value $u$-la given here to pISAN $+\mathrm{U}=q a b l u m$ cf. the values sad and sabad given in CS 250-52 to PISAN+U, PISAN + bad, and PISAN+IGI-gunu, all equated with qablum. On the strength of CS 250 Ungnad reasonably regarded ula as suspect. His suggestion, however, that ú might be a mistake for $s a$, and la for ad, would require definite proof. It may be noted that possibly the inserted $u$ in 1.228 was originally a different sign from the $U$ in 1.250 , one being ROEC 257, the other ROEC 474. This line (as also ll. 250-52) has no parallel in the List and is therefore presumably a late insertion.
230. Judging from l. 264, where PISAN + Iš.HU.RUM has the value išhurum, one may suspect that the pa inserted here is a gloss with the value ishur, perhaps to be connected with the sign name gišṭuru.

231 (List, 1. 20). pISAN + Ás $^{S}=\mathrm{ga}-\mathrm{zi}$ would seem to be a phonetic combination in which pISAN bears its value g á and Áša value zi shortened from zi z . Gi-zi (perhaps indicating a value gi for PISAN) in List, 1.20 , evidently developed from gazi by assimilation of the first vowel to the second. This development points to a stressing $\mathrm{gaz}_{\mathrm{z}}$, since as a rule only unstressed vowels are subject to assimilation.
232. Na-áš-pak šá ka-si-i, the equivalent of PISAN + Áš. $\operatorname{GAL}=\mathrm{ga}$ a zi-g al, can hardly be correct, since the construct should not appear before ša. The duplicate 81-7-27, 200 (CT XII, PI. 27) rev. 20 has the correct $n a-a ́ s$-pak ka-si-i. A translation of the Akkadian as "(the place of) the pouring out of cassia" could readily be reconciled with a rendering of $\mathrm{ga-zi}-\mathrm{gal}$ (taking gal as from the root g ál) as "(the place where) cassia is placed." A difficulty in the way of this rendering, however, is that we should certainly expect GÁL and not gal in the ideogram if the meaning were "placed." If we take gal as "great," then gazi-gal should mean "the large cassia," indicating a variety different from gazi in the preceding line; but it seems impossible to reconcile this interpretation with the Akkadian equivalent.

[^20]234 (List, l. 22). The tablet has ú-šu-uš (with Ungnad), not ú -ku-uš (Luckenbill's reading). $\cup-s u-u s$ in List, 1.22 , lends further confirmation to this reading.

235 f . (List, 1. 23). Luckenbill restored the value in both lines as ur (?). List, 1. 23, giving ur, places the value in l. 235 for PISAN + NIR $=$ u-rum (loan word) beyond question. In l. 236, however, the value for pISAN+NIR=gu-šu-rum ought to be gušur (or gišur) to serve as basis for the Akkadian loan word gušuru. Apparently, indeed, the value gušur can belong properly only to GIŠ.PISAN+NIR, i.e., giskùr. This combination, however, after its pronunciation changed by vowel assimilation from $\mathrm{giš}-\mathrm{u} r$ to $\mathrm{guš}$ - ùr, presumably came to be regarded as gisgusur, with unpronounced determinative, whereby PISAN+NIR by itself was considered to have the value gušur.
238. Ungnad proved that the Akkadian is to be read is-ri as against Luckenbill's giš-ri.

240 (List, l. 27). Ungnad read the value $\mathrm{ar}-\mathrm{h} u$ š (Luckenbill read ar-ruš) on the basis of the writing ar-hu-uš for the value of q UR + bar and tùr+[sal] in 38129 (CT XII, Pl. 24) obv. ii 69 and 71 (the parallel 93041 [CT XII, Pl. 18] ii, last two lines, has ar-h u š ; in both texts the Akkadian equivalent, presumably rêmu, is completely destroyed). This reading is now made absolutely certain by the writing ar-hu-us in List, l. 27.

241 f . PISAN+mUNUS is evidently a phonetic writing, PISAN standing for é and munus having its value mí. The value in l. 242 (represented by $h i-p \hat{\imath}$ e $\mathrm{c}-\mathrm{s}-\mathrm{s} \hat{u}$ ) presumably was e-me or something similar, of which $\mathrm{a}-\mathrm{m}$ a in l .241 is a simple phonetic variant (cf. e me and a mas variant pronunciations of PISAN+DINGIR in ll. 226 f .). A connection with the frequently occurring e.munus (cf. ŠL $324: 306$ ) is probable, as suggested to me by Professor Poebel, and this probability indicates a pronunciation émífor that combination.

243 (List, l. 25). The writing pisan-al-g a in List, l. 25, may be read either gá-al-g a or ma -al-g a; and perhaps the PISAN sign is used here, rather than simple GA or ma, which would have fixed the pronunciation one way or the other, as a means of indicating that both pronunciations were used: galga in the main dialect, malga in the eme-sal. This conjecture fits in with K 197 (CT XII, Pls. 34 f.) obv. i 13 f., where the first line gives [g a]l-g a (first restored by Pinches in JRAS, 1908, p. 582) as the gloss to PISAN + GAR $=m i l-k u$, while the second provides [MA].AL.GA (Luckenbill's restoration) as the eme-sal writing (and pronunciation) of the same word. Whether, as Luckenbill suggests, galga is a loan word from the Akkadian (galga<malga<malku= milku) remains uncertain.
244. Luckenbill read the equivalent of PISAN $+\mathrm{GAR}=\mathrm{e}-\mathrm{ga-ra}$ as bitt zu-har-ri-e, which Ungnad translated "Kinderstube." But the sign which Luckenbill read $z u$ is a clear kJ , and the equivalent must therefore be read bît ku-mur-ri-e. In PISAN + GAR pISAN (pronounced e) stands for bîtu and GAR (pronounced gara) for kumurru. Cf. níg-gar (a) and níg-gar-gar (a) =ku$m u r-r u-u ́$, ana ittišu, Tablet 4 iii 11 f . (Landsberger, ana ittišu, p. 60). For kumurrû (synonym of šukunnû) ${ }^{31}$ meaning the artificial ripening and drying of dates cf. ibid. pp. 197-99, 207.

245 (List, l. 26). Ungnad's reading of the value as e-rim (against Luckenbill's e-rin) receives additional confirmation from $\mathrm{i}-\mathrm{ri}-\mathrm{im}-\mathrm{m}$ a in the List.
246. The second sign of the Sumerian value of pISAN+UD $=b \hat{i} t u i b-b u$ is ta, not GA (Luckenbill's reading), and the whole is thus to be read $e-t a-a m-u d$. A reading $e-t a-a m-t u$ would be very strange, since $t a m t u$ is known neither as a Sumerian word nor as a pronunciation of uD. Possibly it represents a conflation of $e-t a-a m$ and $e-u d(=t a m)$; but $t a m$ as the pronunciation of the inserted UD is not very satisfactory, for UD is not known to have had that value in Sumerian.
$250-52$. The values s ad and sabad are, of course, simple phonetic variants. For the disap-
${ }^{31}$ For a discussion of the origin and meaning of the collective singular formation exemplified by kumurrâ and šukunnu, cf. AS No. 9, pp. xif. and 140.
pearance of $b$ between two vowels cf. GSG $\S 44$. For the principle of abbreviation involved in these lines cf. p. 11.

253 (List, 1. 29). ${ }^{d} \mathrm{Na}-\mathrm{mu}-\mathrm{e}(?)-\mathrm{du}$, inclosed within šá. . . š̌ $\iota-m a$ in the Akkadian space, must represent a corruption of the text, since it does not contain the sign PISAN $+\mathrm{di}=\mathrm{e}-\mathrm{di} .{ }^{32}$ The original text must have had ${ }^{d} n a-m u-e d i(=$ PISAN + dI $)$, ${ }^{d} \mathbf{x}(=n a m u)-e d i$, or something similar. Professor Poebel suggests $\mathrm{d}_{\mathrm{n}} \mathrm{ammu}(=i \mathrm{i})$ as a possible restoration of the first part of the name. dN ammu-edi might mean "Nammu of the courthouse."

A text parallel to CS, 47779 (CT XII, Pl. 21) rev. (text obv.!) 2, provides d[na]-mu-un-di, in which $u n$ should perhaps be read e.$^{33}$ If the sign is actually UN , possibly we should read $u \mathrm{n}$ instead of e also in CS, where the text allows either reading. Namundi , however, apparently could be explained only as an erroneously nasalized form of $n a m u d i$, contracted from the original namuedi.

In List, 1. 29, the inserted sign appears as na instead of di; in view of the value édi, the natural presumption is that the sign stands for E+DI. NA, very close to di in form, will then be an error, either of the writer of the tablet or of the copyist.
254 (List, l. 30). With the sign PISAN + KASKAL $=\mathrm{me}-\mathrm{e}=t a-h a-z u$ compare the early sign ROEC $448^{\text {bis }}$, which appears to be our sign doubled and which, preceded by kaskal (cf. ROEC 169), has the meaning "battle" in texts of the Agade period (e.g. HGT 34 ii $26 ; 35,1.3$ ). Other signs having the value m e and the meaning tahazu are ag and ag + sab, also lagab+? (Yale Syll. 103; CT XXXV, Pl. 3, l. 3; HGT 104 obv. ii 11).

260 (List, l. 36). PISAN + Gír.su $=$ e $-\mathrm{gír}-\mathrm{su}$ represents, of course, the temple of Ningirsu at Lagash. The relation of the ideogram to the equivalent bit naq-mi-i, which should mean "house of burning," is not apparent. Any possibility of reading bit naq mi-i, "house of pouring out water(?)," is apparently excluded by the parallel text 36991 (CT XII, Pl. 22) rev. i 11-16, where naqmêtum in b $\hat{t} t$ na-aq-mi-tum, equated with PISAN $+\mathrm{GI}_{4}$, would seem to be from the same root as naqm $\hat{u}$ (note that this text gives the equivalent bit te-lil-tum to both PISAN+Gír.SU and PISAN+GI4).

261 (List, 1. 37). The sign in List, l. 37, has GI $4 . \mathrm{A}$ inserted, while the sign in CS has only $\mathrm{Gr}_{4}$. Since, clearly, we have here a phonetic writing of the value $\mathrm{ga}-\mathrm{g} \mathrm{i}_{4}-\mathrm{a}$, the former should be correct. Note, however, that the parallel text 36991 (CT XII, PI. 22) rev. i 15 also has PISAN+GI4.

262 (List, l. 34). The value must be read gá-bur-ra, notébur-ra (Luckenbill's read-


263 (List, l. 36). Thureau-Dangin in RA XVII 32 f . showed that the value here should be read é-sikil-l a as against Luckenbill's é-el-la. The Akkadian, too, is probably to be read é-sikil-la, for if we read bitu el-la there would be no apparent explanation for the $-a$ ending.
265. Luckenbill's reading of the value as ú-su-tú is possible, but ú-su-ud makes a more normal Sumerian word.

269 (List, l. 38). Ungnad read the equivalent of PISAN $+\mathrm{DUB}=\mathrm{ga}-\mathrm{du}-\mathrm{ub}$ as šá $d u-u p-p u$ (so also Luckenbill) and translated this as "Tontafelbehälter," comparing gádub-ba, which has that meaning in Ur III texts. His interpretation receives support from the value $g u r-d u b$ of PISAN+GI in List, 1.38 ; for PISAN + GI occurs in archaic texts where it may be rendered "basket" (cf. examples cited in ŠL 243). But the Akkadian, if read šá $d u-u p-p u$, could hardly have the meaning "tablet receptacle" or, indeed, any meaning suitable to this passage. Apparently it is gar-du-up-pu, loan word from an original Sumerian gardub which on the one hand became gadub by dropping the $r$ and on the other hand became gurdub by assimilation of the $a$ in the first syllable to the $u$ in the second. If this assumption is correct the first element of the compound is, as Professor

[^21]Poebel points out to me, not gá, "house" or "box," but gar, which is equated (ŠL 597:2 f.) with uhhuzu, "to cover," "to plate," and ihzu, "a covering" or "a plating." In these equations the Sumerian gar of course has its usual meaning, "to lay (something upon something)." The gar $d u b$, then, evidently is to be understood as a covering ( g a r ) which is also a tablet ( $\mathrm{d} u \mathrm{~b}$ ) ; and this could be only a case tablet. Apparently the ideogram PISAN + dub is a "picture" of the tablet inclosed in its envelope. But the sign in the List, pisan +GI, seems impossible to explain on the basis of this interpretation and hence, if this interpretation is correct, apparently must be regarded as a scribal error.

The name of the inserted sign is of course dub-ba, not um-ma (Luckenbill's reading).
270. The tablet has $s u-u$-tú, not su-ub-tú (Luckenbill's reading), as equivalent of PISAN $+\mathrm{dub}=$ e-me-du-ub. Since, as Professor Poebel points out to me, the literal meaning of eme-dub apparently is "mother tablet" (cf. e $\mathrm{me}=u m m u$ in 1.226 ), and since the ideogram is the same as in the preceding line, the meaning here too is doubtless "case tablet." This meaning for the Akkadian sutu, as well as its common use as a measure of 10 QA , presumably derives from a general meaning "receptacle."
271. The second equivalent of pIsan + šid $=\mathrm{emedub}$ must be read ši-ir-mu (Luckenbill: ši-ir$g u l[?])$. Since the value and the first equivalent are the same as in the preceding line, sirmu too should have the meaning "case tablet." This sirmu would most naturally be expected to derive from a verb šarâmu meaning "to cover over" or the like. But šarâmu is commonly translated "to cut off" or "to break off." We may, however, note the use of the possibly cognate ${ }^{34}$ haramu in Cappadocian texts in the meaning "to inclose (a tablet) in an envelope," ${ }^{35}$ also tuppum harmum as "a tablet inclosed in an envelope." ${ }^{36}$ Where šarâmu is used in connection with tablets it seems, on the contrary, to indicate the breaking off of the envelope. ${ }^{37}$ Perhaps, therefore, the literal meaning of širmu is "that which is to be broken off," i.e., the outer envelope which has to be removed in the presence of the judge before the tablet can be accepted as evidence in court.

272 f. (List, l. 40). The use of the rare value $u$ íb in the writing of the Sumerian $b a-1 u-u$ úb-ba is permissible here only because that value occurs in the "ideogram," PISAN+ha.Lu.f́b. In the sign name lu.tr, named $l u-u b-b a$ (Luckenbill's $l u-q u$ is out of the question), is treated as a single sign, presumably in order to save space and because the combination was regarded as having the value lub. ${ }^{38}$ Hu-1u-ub, given in List, l. 40, must be corrected to hu-lu-ub!-ba!.

Unfortunately the Akkadian equivalents in 11.272 f ., which might have helped to explain the Sumerian, are imperfectly preserved. We may at any rate observe that balubba is balub plus another element. Probably it is the genitive $b a l u b-a(k)$ with the governing substantive (e or gá?) left out, although it may possibly have developed from a combination balub-é (or -gá or $-m$ à or $b a_{4}$ ) meaning "the $b a l u b$ tree as a dwelling (of a deity or some animal)."

274 (List, l. 39). Although PISAN+mUNU is here given the same value, $\mathrm{mu}-\mathrm{nu}$, and the same equivalent, $t a-a b-t u$, as are given elsewhere to moNu alone, it hardly seems possible that the meaning is simply "salt." We may compare the combination $\mathbf{t} . \mathrm{MUNU}$, rendered bît tâbti, with the mean-
 nakasu (SL 12:32 and 43).
${ }^{35}$ Cf. VAT 13515 (transliterated by Eisser and Lewy in MVAG XXXV (1930) Heft 3, p. 48) 1. 8 and Clay in BIN IV, No. 114, 1. 11. I am indebted to Professor Poebel for these references.
${ }^{36}$ Lewy in OLZ XXIX (1926) 752. For a different interpretation, with references, cf. Christian in WZKM XXXVI (1929) 13-17.
${ }^{37}$ Cf. AO 5429 (RA IX [1912] 22) 1. 23; also the Cappadocian letter KTS 5a, I. 23, where the sense of Sé-er-ma-am is not very clear.
${ }^{38}$ Note that the value $u b$, in both Sumerian and Akkadian, is found only after 1 u . Cf. CT XXXV, Pl. 4, l. 54


ings "salt desert" ${ }^{39}$ and "salt-container." ${ }^{40}$ Since E.MUNU = "salt desert" occurs only in the inscriptions of the later Assyrian kings in reference to a district at the foot of Mount Bikni in Media, a district presumably unknown to the earlier Babylonians, whereas salt-containers must have been used very early, the meaning "salt desert" would seem to be secondary. ${ }^{41}$ Probably, therefore, PISAN + munu means "salt-container" and our passage indicates that this was called a "salt" in the spoken language.

List, l. 39, has the sign pISAN + Tim; presumably the scribe merely left out the gun $\hat{u}$ strokes (or the inserted kur, if the late form were used) which change tim to munu. Mu-gur, the value in Gadd's copy of the List, is surely to be corrected to $m u-n a$ or possibly $m u-u n$.

275 (List, l. 41). In the value e-da-ku-ú-a for PISAN+ $E_{4}$.DA. $\mathrm{KU}_{6}$ the final $a$, like the final $a$ in $b a l u b b a$ in 1.272 , must be assumed to represent an element represented in the ideogram by pisan. In a-da-k $u_{6}-\mathrm{a}$, the writing of the value in List, l. $41, \mathrm{~A}$ is probably to be read $e_{4}$, although the original pronunciation of the value was doubtless adakua. The rare values $e_{4}$ and $\mathrm{k} \mathrm{u}_{6}$ are used in imitation of the writing in the ideogram.

279 f. (List, l. 42). Ik-lu (l. 279), ik-kil (l. 280), and e-ki-el (List, l. 42) are three variant forms of the loan word from the Akkadian eqlu.

281 (List, l. 44). The tablet has, as equivalent of GANA-ten $\hat{u}=\mathrm{k} \mathrm{a}-\mathrm{r} \mathrm{a}, n a-p a-h u$ ša A.meš, not $n a-a s ̌-p a k$ šáa A.meš (Luckenbill's reading). ${ }^{42}$ Napahu has the meanings "to blow," "to kindle," "to shine," "to rise (of the sun or a star)," etc., none of which fits very well with the phrase "(said) of waters." Perhaps we are to translate "to shine (or glitter), of waters," although it does not seem very likely that Sumerian would have a special word for such a meaning. What we should expect is ša dšamaš in place of $\check{s ̌ a}$ A.MEŠ, and perhaps that is what the text originally had.

282 f. (cf. List, l. 45). Cf. II. 198 f., where the sign giš-minnabi-gilimu (= кıв, actually named kib-bu) has the same values and equivalents as are given here to gana-minnabi-gilimû. In view of the meanings given-qirbîtu, "fields," mêrištu, "cultivable land"-it would seem that these values belonged originally only to the gána composition which we have here, since the simple gána means "field," while gaš means "wood."

In the sign name $g a$ is doubtless a mistake for $g a-n a$, which appears in the preceding line. $G a\langle-n a\rangle$ here was written out, instead of being represented by a ditto sign, to prevent the min which follows from being mistaken for a second ditto sign standing for te-nu-ú.

According to Gadd's copy, List, 1. 45, gives to this sign the value gir-ri. This value apparently must be a mistake deriving from the value $k$ ára of GÁNA-ten $\hat{u}$ in the preceding line; note $k i r i ́$ as a variant of $k$ ára in Yale Syll. 158 f.

284 (List, 1. 46). Since k al in the meaning dannu never occurs in the inscriptions, where always $\mathrm{kala}-\mathrm{ga}$ (or with syncope $\mathrm{kal-ga}$ ) is used as the adjective, the equivalent here ought to be, as suggested by Poebel in Studia Orientalia I (Helsingforsiae, 1925) 120, ša k al-g a dan-nu; but the scribe did not take the trouble to be so scrupulously accurate. The same is true of DT 40 (CT XI, Pls. 29-32) rev. ii 17, where Kal with the value $\mathrm{ka}-1 \mathrm{a}$ is equated with dan-nu. It would, indeed, be grammatically possible for $\mathrm{kala}(\mathrm{g})$, as active participle, to be used in early times for the intransitive adjective, but the pronunciation should be $k a l a$, not $k a l$; and, in any case, such a usage would not be likely to survive in the late syllabary texts.

[^22]Luckenbill read the sign name $g u-r u-u$ ．A thorough cleaning of the tablet has since revealed the verti－ cal wedge that changes $u$ to šúu．The tablet thus offers gu－ru－šu，the proper name of the sign，derived from its value gurus．

288．It may be noted that in the Akkadian space，giving šá A．KAL（pronounced $e_{4}-1 a_{6}$ ）il－lu ni－ $i^{j}-l u$ šá méme，no division mark separates the two Akkadian equivalents of a．kal．This is in accord－ ance with the usual lack of a division mark in the šá ．．．．formula between the Sumerian combination and the equivalent（cf．p．57，n．18）．A division mark here between the two equivalents would of course cause doubt whether the second equivalent belonged to $e_{4}-1 a_{6}$ or simply to $1 a_{8}$ ．That both equiva－ lents do in fact belong to $e_{4}-1 \mathrm{a}_{6}$ is further shown by K 9928 （CT XI，Pl．28）rev．，where ni－lu，illu， and $i-\Gamma$ ．．${ }^{1}$ ša mê ${ }^{p 1}$ are among the equivalents of $e_{4}-1 a_{6}$ ．

289 （List，l．49）．In the Akkadian space the tablet has ur－kal（as Ungnad suggested），not zu．kal （Luckenbill＇s reading）．
291－94．This passage gives four names of more or less identical tutelary deities in animal form；the first three lines have Semitic names in both Sumerian and Akkadian spaces，while the fourth line（1．294） has in both spaces the Sumerian name 1 a m ma ，which is usually translated in Akkadian inscrip－ tions by lamassu（given here in 1．293）．

295 （List，l．50）．The restoration of the value of $\mathrm{kAL}=s a l-t ̣ u$ as $[\mathrm{d} \mathrm{u}]-\mathrm{n}$ a（as against Luckenbill＇s ［ga（？）］－n a）is made probable by ${ }^{r} \mathrm{~d}_{\mathrm{u}}(?)^{1}-\mathrm{u} \mathrm{n}$ in List， 1.50 ，and also by the equation of šal－tis with［B］t̛R－n a（IV R $13,1.24 \mathrm{~b}$ ）and búr－n a－bi（TU 51 rev .15 f ．），in which Bứr is presumably to be pronounced $\mathrm{d}_{9}$ ．

296 f ．（List，l．51）．Ungnad hesitated to read［s］i－ig and［s］i－i because in Luckenbill＇s copy the break seemed too big；but on the tablet there is，on the contrary，too little space for $[\mathrm{e}-\mathrm{s}] \mathrm{i}-\mathrm{ig}$ and $[\mathrm{e}-\mathrm{s}] \mathrm{i}-\mathrm{i}(?)$ ，which Luckenbill read．Furthermore，the corresponding line of the List gives for Kal the value sig．（here probably to be read si，a value which the sign sig $_{5}$ must have had， though it is not yet specifically attested）．Although the Sumerian section of 1.297 is now almost en－ tirely broken away（note that when Luckenbill＇s copy was made it was in slightly better condition）， the reading si－i，of which Luckenbill saw traces，is reasonably certain，because it is exactly what should be expected．

The Akkadian must，of course，be read dam－qu，with Ungnad，not dun－qu（a misprint in Luckenbill＇s transliteration；his copy shows a clear dam）．

298．In the Akkadian equivalent the somewhat damaged first sign can hardly be bar，as Luckenbill suggested（for the form of this sign cf．p．64，n．30）．Apparently it cannot be anything but hi． The reading（ $h i$－iš－li－e－tú or $h i ⿱ 亠 䒑-m i l-l i-e-t u ́)$ and the meaning of the equivalent，however，remain un－ certain．Nor does there seem to be any clue for the restoration of the Sumerian value．

300．The value si－1i－ma is to be restored，with Ungnad，on the basis of SAI 10833.
301 f ．Cf．AO 7661 ii $42-44$ ，where the values $u r r u b$ and $s u r s u b$ ，and the additional value ursub，are given to the sign duk；and cf．the note to those lines on p． 74.

303．The Akkadian must be read $n a-s a-b u$ ，not $n a-a-b u$（Luckenbill＇s reading）．The sign for $\$ a$ lacks one of the upper wedges，but it could hardly be read otherwise．$N a_{s} \hat{a} b u$ is of course the word that ap－ pears more commonly，in the later period，in the form nans $A b u$ or namşabu（for the rules governing nasalization cf．AS No．9，pp．142－54，especially p．152）．

304 f．（List，ll． 52 f．）．List，l． 52 ，with the value $\mathrm{gi}-\mathrm{ri}$ ，apparently corresponds to these two lines，which give etlu as the Akkadian equivalent of kal．The value giri derives of course from the root $\mathrm{gurus}_{\mathrm{s}}$ ，or rather from a variant giris ，the final $\mathfrak{s}$ of which is treated as an amissible consonant．For the two destroyed values in CS 304 f ．Ungnad supplies gu－ru－uš and gu－ru； other possibilities in place of $\mathrm{gu}-\mathrm{ru}$ are $\mathrm{gi}-\mathrm{ri}$ and $\mathrm{gi}-\mathrm{ri}-\mathrm{is}$ ．The broken value in List，l．53， might well be kal，with the pronunciation guru（s）；it might，however，equally well correspond to the destroyed value in CS 303 ，in which case its reading would be quite uncertain．

306．Šitnunu，＂to rival each other，＂given here in the Akkadian space，is given in BMisc，Pl． 10 i 7 ，
as equivalent of the gilim $\hat{u}$ form of Ur , with the value, according to Weissbach's copy, ur.daf. Gab(?), read (ibid. p. 28) ur-tab-hu. Luckenbill consequently restored the value in CS 306 as $u r-$ $\mathrm{d} a \mathrm{~b}-\mathrm{bu}$. The Sumerian sign he failed to indicate, but his reading of its name as [ur-ru-]min-na-bi-gi-li-mu-u shows that he wrongly regarded it as an UR derivation. Since it follows the simple kal sign it must, as Ungnad saw, be composed of two kal signs crossed. The sign name thus is to be restored $\left[g u-r u-u s{ }^{\prime}\right]-{ }^{-} \min n a^{1}-b i-g i-l i-m u-u$. The value might, indeed, be the same as for the gilimu form of UR, but a value $u r t a h b u$ is not very satisfactory for either ideogram. ${ }^{43}$

For the correspondence between the gilim $\hat{a}$ signs and the Akkadian reflexive or reciprocal $t$-forms (mithuṣu, šitnunu, tidûku, etc.) cf. AS No. 9, pp. 12 f.

## B. THE SYLLABARY AO 7661 (LIST, LL. 54-91)

i 1-23 (List, l. 54). This passage, providing no less than twenty-eight equivalents for the sign Lum with the value bum , offers many difficulties of interpretation. Only the first equation, with hamăsu, which appeared as catch line at the end of CS and which is undoubtedly to be restored in the first line of 38129 (CT XII, Pl. 24), ${ }^{44}$ can be regarded as standard. The remaining twenty-seven equations presumably represent specialized usages of some sort. The meanings given vary so widely that they cannot be traced back to a single basic idea. The fact that the meanings of a number of the equivalents are as yet unknown or known very imperfectly adds to the difficulty and makes any final interpretation of the passage at this time impossible. It may at any rate be said that for the Sumerian hum to have been used at one time and place in all these meanings is out of the question. Some of the equivalents may represent dialectal variants or forms used in the familiar speech; others may have belonged to technical terminologies. At least two of them apparently represent scribal errors. These remarks apply in general to all long lists of equivalents given for one sign and value in syllabaries of this type.
i 4. Ra-ha-šum is evidently a phonetic variant of $h a-r a-s ̌ u m$ in the preceding line. Note that the dim sign is equated with marhâšu and harâsu (ŠL $94: 7$ and 4), while various combinations beginning with dim are equated with mabrášu (ŠL $94: 32 \mathrm{f}$. and 36 ). The more easily pronounced marhâšu may be presumed to derive by metathesis from mabrašu. The root rabašu might then have been deduced from marhašu.
i 13. Since abstract nouns in Sumerian are usually formed with the prefix na m (cf. GSG § 121), it is surprising to find mêtillûtu here equated with the simple bum.
i 16. To all appearances, the repetition of bamâsu signalizes the beginning of a section extracted from a different source. Cf. note to CS 62.
i 17. $Z a-m a-s ̌ u$ and $a$-ma-šu are possibly wrong variants which have arisen from ha-ma-šu by a mistake in the first sign ( zA has, in this script, two wedges less than GA ; A , one less than zA ).

i 24-26 (cf. List, l. 55). The value buz no doubt has some phonetic connection with bum (note that both have the equivalent |  |
| :---: |
| $a q u$ |
| ,$l l$ |
| $l l$ | 4 and 24 respectively), as do also the following values guz , $\mathrm{gum}, \mathrm{gun}, \mathrm{gud}$, and perhaps nu and lum . It cannot, however, be assumed from this that the change of $m$ to $z$ (or $z$ to $m$ ) is a regular phonetic phenomenon. 38129, as in the case of bum, gives only the first equivalent, i.e., haşapu. List, 1.55 , gives the value as $1 \mathrm{u}-\mathrm{um}$; but this, since the writing lum for the last value of the sign lum in List, 1.59 , evidently is to be read 1 um , is likely to be a mistake of the scribe (apparently a pupil) for $\mathrm{bu}-\mathrm{uz}$. With this change the sequence of the values of LOM in the List becomes the same as in 38129, varying in only one particular, as explained in the following note, from that of AO 7661.

[^23]i 27-40 (List, l. 57). The phonetic connection of the value $\mathrm{guz}_{\mathrm{z}}$ with the following values gum , gun , and gud is evidenced by the fact that each of these values is given the first, third, and fourth of the fifteen equivalents given to $\mathrm{guz}_{\mathrm{z}}$. A connection with the value bum is indicated by the equivalent šapalu (l.35) as compared with šuplu (1.15) for $\mathfrak{b u m}$.

Evidently the value guz must be restored in 1.3 of 38129 . According to the published text there is no lum sign in that line, although the ditto mark for the sign name appears; but it will be noted that the Lum sign in 1.2 is somewhat below its proper position, and apparently it actually belongs in 1. 3, while the sign belonging in 1.2 is broken away. With this restoration we find guz equated with gaşassu (and butinzû), just as we should expect from AO 7661. In l. 7 of 38129 , following gum and gud , the value [gu-] uz appears again, equated with hurruru and hurrumu, given in 11.31 and 37 of AO 7661. Evidently this value is given twice in 38129 in order that the first two equivalents, gaşâşu and hutinzû (earlier doubtless written in one line), may be conveniently represented by "s" as belonging to the values gum and gud in ll. 5 f . In the List the position of guz in the sequence of values corresponds to that of the second $\mathrm{guz}_{\mathrm{z}}$ in 38129. Evidently that is the original position of $\mathrm{guz}_{\text {, and }} 38129$ has it in both the right and the wrong place, A0 7661 only in the wrong place.
i 39. Scheil's ${ }^{45}$ reading rahâşu ša šêpi is probably correct, though the meaning is difficult to conjecture. Where rahâ̧̧̧u is used with sêêpu in connected texts it seems always to mean "to wash." But it is unlikely that the Sumerians would have a special word for washing the feet. Perhaps the phrase is a euphemism meaning "to urinate."
i 40. Scheil took the combination at the end of the line as Giš. Girr, for which we have an equation with $k u r s ̧ u$, "foot shackles." But Thureau-Dangin's ${ }^{46}$ copy provides Pa.Gìr, i.e., the anšu sign.
i 41-45 (List, l. 56). It is possible, though not certain, that in giving to $\mathrm{gum}, \mathrm{gun}$, and gud three of the fifteen equivalents already given to the value guz the scribe means to imply that these values possessed all the other equivalents of $\mathrm{guz} . \mathrm{Gum}_{\mathrm{m}}$ and gun are, of course, simple phonetic variants. Gud may be related to $\mathrm{guz}_{\mathrm{z}}$ through an intermediate gud or, possibly, it may be a survival of an early writing $\mathrm{gu}-\mathrm{u}_{4},^{47}$ representing $\mathrm{gu}(\mathrm{m})$ or $\mathrm{gu}(\mathrm{z})$.
i 46 (List, l. 58). The value nu , or rather the older num , is connected with the value 1 um and is, perhaps, the original form of that value, since according to the rule given in GSG § 64 the $n$ of $\mathrm{n} u \mathrm{~m}$ would change to $l$. The Akkadian space has the rather curious ša dan-nu*šu, for which the duplicate 93058 (CT XII, Pl. 21) obv. i 7 provides šád a n-LUM [. . . .], while 1.9 of 38129 has šá d an- nu u dan-nu. Originally the combination in the Akkadian space must have been da LUM, read da-núm, the common writing of dannum in early Akkadian texts. It is unusual that a combination representing an Akkadian instead of a Sumerian word should be given in this manner. Also unusual is the division mark in the formula in AO 7661; though this use of the division mark is quite reasonable, this is its only occurrence in the šá formula (cf. p. 57, n. 18); presumably its use here is due to the special circumstance that an Akkadian combination is involved.
i 47-58 (List, l. 59). Unnubu and šîbu (1.47) and lummu (1.50) here given as equivalents of LUM $=$ 1 um have been equated above (II. 16, 5 , and 19) with LOM $=\mathrm{bum}$. In addition šebâ and ši $h u=$ $1 \mathrm{um}(1.48)$ are apparently to be connected with šizb $\hat{u}$ and $\check{c}$ ŝh $h=\mathrm{bum}$ (ll. 6 and 22). A phonetic connection between the words $l u m$ and $h u m$ thus seems indicated, although a regular change from $h$ to $l$ or $l$ to $h$ cannot be shown to have existed in Sumerian.
i 56. In Scheil's opinion šu-uš-bu stands for šưšubu (Scheil šuššubu!), the šafcel form of ešêbu. But since the šafcel of ešêbu is unknown, and since it could, in any case, hardly be shortened to šušbu,
${ }^{45}$ References to Scheil without further specification refer to his study of the text in NVB.
${ }^{46}$ References to Thureau-Dangin without further specification refer to his publication of the text, TU 37.
${ }^{47}$ Cf. the writings $m u-u_{4}$ and $t u-u_{4}$ for values of túg in HGT 102 obv. iii 6 f. Cf. also Poebel, " Zu dem Lautwert $\mathfrak{u}$ des Zeichens ud," OLZ XVIII (1915) 75-78.
what we have here is probably an accidental interchange of the first two signs, and we are thus to read $u s ̌-s ̌ u-b u$, the frequently occurring picel form. Cf. $1 \mathrm{u} \mathrm{m}=u n n u b u$ in 1.47 .
ii 1 (List, l. 60). As a variant to the usual $\mathrm{gu-um-gu-um}$, given in AO 7661 and the List as the reading of LUM.LUM, 38186 (CT XII, Pl. 26) obv. ii 4 provides $\mathrm{gu-gu-mu}$, formed by dropping the final $m$ of the first syllable and adding a short $u$ at the end.
ii 5 . As seen by Scheil, the sign $\underset{\text { LUM }}{\text { LUM }}$ must be corrected to ${ }_{\text {LUM }}^{\text {LUGU }}$, since it is clearly intended to render the value g úm-gúm-šu phonetically. Line 12 of 38129 , where the latter part of the sign is destroyed, must also have had this form, as shown by the sign name $l u$-um-min-na-bi-bar-te-en-numu.
ii 6 . The gloss ka - ás beneath $\mathrm{KA}_{4}$ in the ideogram apparently must belong at the end of the value, being placed where it is because there was no room for it in the first space. Thus the value is
 lent, which Scheil transliterates la-si-mu (accidentally leaving out the brackets), could be read, according to Scheil's and Thureau-Dangin's copies and Scheil's photograph, either $l a-s[i-m u]$ or $l a-s[a-m u]$; but la-sa-mu in 1.14 of 38129 makes that the probable reading here. Since k a š4 by itself means "to run," the addition of gumgum must represent a modification of that meaning; perhaps it represents onomatopotically the sound made in a certain kind of running, $g u m g u m k a s t h e n ~ m e a n-~$ ing "to run clumpingly" or something similar. For the sign name in 38129 the traces in the copy suggest [ $l u-u] m-k a-s ̌ a ́-a k-k u$; but if the sign in 38129 is the same, as it presumably is, the name must of course be " $(=l u-u m)-"(=\min -n a-b i)-k a-s ̌ a-a k-k u$.
ii 7. With $\underset{\text { LUM.GAR }}{\text { LUM. }}=1 \mathrm{ugud}=k u r \hat{u}$ cf. LagAb $=1 \mathrm{ugud}=k u r \hat{u}$ (ŠL 483:36). The sign name in 1.15 of 38129 should of course be [lu-u] m-min-na-bi-[nin-d]a-min-na-bi (written in two lines), but the copy seems to indicate [. . . . -] $0 \mathrm{D}-\min -n a-b i$ as the first element in the name. If the copy is correct, the scribe presumably, under the influence of the sign value 1 ug ud , wrote $[l u-g u$ - $] u d$ by error.
ii 16. The equivalent given here for $\mathrm{sig}_{4}=\mathrm{murgu}$ is to be restored (with Scheil) as mamal[-gu-u]. Cf. K 197 (CT XII, Pls. 34 f.) obv. i 20 f.:

$$
\begin{array}{r|l}
\mathrm{ma} \mathrm{a}-\mathrm{al}-\mathrm{gi}_{4}-\mathrm{a}^{\mathrm{k} i} & \begin{array}{l}
m a-a l-\Gamma g u^{1}-u \\
\mathrm{siG}_{4}
\end{array} \\
m a-a l-g u-u .
\end{array}
$$

Malg $\hat{u}$ is here doubtless not the city name but a word of unknown meaning derived from the Sumerian murgu . Although the change from $r$ to $l$ is not exampled in Sumerian except under certain specific conditions (ef. GSG $\S \S 66,57$ ), the two sounds are so close that the change can be readily accepted; quite likely the intermediate pronunciations margu (or mulgu) and malgu existed in Sumerian. Possibly mar $[-g u-u]$, as another form of the loan word, is to be restored in the following line. Note that the city Malgú, written $m a-a l-g i_{4}-a^{k i}$ in the passage quoted above, is occasionally written "ideographically" with $\operatorname{sig}_{4}{ }^{\mathbf{k}}{ }^{i}$; cf. e.g. the date formula for the tenth year of Hammurabi.

Professor Poebel draws my attention to the writing $\mathrm{mur}_{7}\left(=\mathrm{sig}_{4}\right)-\mathrm{g} \dot{\mathrm{u}}$ in the equation $\mathrm{mur}_{7} \mathrm{mu-ur-gu}=a-m a-r u m, \mathrm{~K} 4323$ (CT XVIII, Pls. 36 f .) obv. i 18, a writing which, like the parallel $b$ àn-da for $b$ ànda, belongs to a late (post-Sumerian) period. The equivalent amâru, given to $\mathrm{sIG}_{4}=\mathrm{si}-\mathrm{ig}$ in l. 21, may well have been given here for murgu in one of the breaks in the Akkadian subcolumn.
ii 20, 23 (List, l. 62). Scheil copied and transliterated the values in these two lines as si-g a and še-ba; Thureau-Dangin's copy, on the other hand, has si- $\mathfrak{f}_{\mathrm{i}} \mathrm{g}$ l and še-ib. Since sig and še $b$ are the common values, Thureau-Dangin's readings are more acceptable, and, indeed, they seem to be supported by Scheil's photograph. In the Akkadian space of 1.23 Scheil read simply $l i-b i t-t[u m]$;
but the size of the break requires something more，which，since $\xi \mathrm{eb}$ is the eme－sal word for ＂brick，＂corresponding to main dialect sig，is doubtless the scribal note eme－sat．
 ［e－ga－a］ $\mathbf{r}$ ，with $i$－ga－ru，while ll． $5-10$ equate E．sig $_{4}$ ，value $[$＂$(=\mathrm{e}-\mathrm{ga}-\mathrm{ar})$ ］，with＂$(=i-g a-$ $r u$ ），la－a－nu－um，me－lu－u，da－am－tum，ga－at－tum，e－mu－qu；the additional equivalents here given to E．sIGa apply also，of course，to $\mathrm{SIG}_{4}$ ．E．Note also the nasalized pronunciation ingar given in $V \mathrm{R}$ 42，11．56－57 gh：

$$
\begin{aligned}
& \text { 隹 } \mathrm{n}-\mathrm{garsig}_{4} \text { " }(=a-b a-r u) \\
& \text { 自" } \operatorname{sig}_{4} / l a-a-n[u] \text {. }
\end{aligned}
$$

For the eme－sal pronunciation amar see the following note．
ii 25 ．From the copies it cannot be decided whether the e me －SAL value given here is to be read ma －ár or ba－ár．Scheil copies the sign in question as a clear ba，while Thureau－Dangin makes it less certain，but still rather ba than ma ．A consideration in favor of the reading ba is that $a b a r u$ ，an equivalent of éssig $_{4}$（cf．preceding note），may be a loan word derived from ésig $_{4}$ ． But in view of the frequently observed equation between initial $g$ in the main dialect and $m$ in the eme－sal（cf．GSG $\delta 875 \mathrm{f}$ ．），and since the eme－sAL pronunciation of e．sig ${ }_{4}$ is in fact given as á－mar in VR 11 f．ii 50 and iii 1：
the reading m a must be regarded as decidedly preferable in our passage．

given in the List．The fact that the horizontal dividing line which everywhere else separates lines with different sign values is omitted between 11.32 and 33 （its appearance in Scheil＇s copy is shown by his photograph to be an error）suggests that these two lines were at first devoted only to the first
 of the two Akkadian equivalents now given in 1.32 was then written in 1 ． 33 ．Subsequently the scribe discovered he had omitted the value labbusu．He therefore inserted it in the blank space in l．33， and then he erased the Akkadian equivalent in that line and added it at the end of 1.32 （note that this is the only line on the tablet which extends beyond the right edge of the column；note also that the traces left over from the erasure in I．33，as represented in Thureau－Dangin＇s copy，fit with the theory that ša－pa－at ${ }^{\text {duk }}$ diqqari was written there）．The scribe then put the ditto sign in the Akkadian
 advertently erasing also the latter part of the two siga signs and thus turning both into LUM，and replaced it with two šu＇s．At this point he concluded that it was practically impossible to squeeze
 confusion between $\mathrm{SIG}_{4}$ and Lum exists also in the corresponding lines of 38129 ，where according to the copy the name of the $\mathrm{sign}_{\text {sig }}^{4}$ ． $\mathrm{SIG}_{4} . \mathrm{St}$ in 1.21 is evidently to be restored as $[l u$－］um－min－na－bi－bar－ te－en－nu－u（written in two lines），properly the name of цum．lum．súf．
In place of the values si－ka－ba－ra and la－rablobu－šu given in AO 7661 Gadd＇s copy of the List shows úri－un in 1．63，tin（？）in 1．64．The former is perhaps to be read，as Professor Poebel suggests to me，làh－bu－sú－a．Apparently the only possible explanation of the second value is that the single sign representing it is $⿴ 囗 十 ⺝ 丶$ and that it actually belongs in the next line，render－ ing the first value of duk as dùg or $d u_{10}$ ，parallel to $d u-u g$ ，the first value of duk in 1.36 of AO 7661 ．
ii 36－47（List，11．65－68）．In both AO 7661 and 38129 the sign duk appears in its late form，which looks like bi＋a，while the List has the simple，early form of which bi is the gunu．The fact that dux
precedes bi of course presupposes the early form offered by the List. For a discussion of the development of the duk sign from the early form to the late bi+a cf. pp. 12 f .
ii 37 (List, l. 66). The value $u$-lu-ud given in the List, as against $1 u-u d$ in $A O 7661$, is presumably an older form of the value.
ii 38 f . (List, l. 68). Lummu, here equated with $\mathrm{duk}=\mathrm{lu}-\mathrm{um}$ and $\mathrm{si}-\mathrm{i}$, is perhaps the same word as the lummu equated with $\mathrm{LUM}=1 \mathrm{um}$ in i 50 and $\mathrm{Lum}=\mathrm{bum}$ in i 19 .
ii 40. The value epir given here to $\mathrm{Duk}=k a n n u$ and in iii 27 to $\mathrm{BI}=k a n n u$ ša šikâri is, according to Professor Poebel, evidently a loan word from the Akkadian epru, "earth"; e pir should therefore mean "earthenware," "earthen pot." The value is not given in the List.
ii 41 (List, 1. 67). According to Professor Poebel šikin also is a loan word, deriving from Akkadian šiknu, "sediment," and consequently must mean a vessel made from clay deposited by a stream. The corresponding value in the List is si-ki-it, which, if correct, derives from an Akkadian word šikittu<šikintu, the feminine form of šiknu. Šikinnu, the equivalent in AO 7661, is of course, in its turn, a loan word from the Sumerian šikin.
ii 42-44. It is clear that the values $u r r u b, u r s u b$, and $s u r s u b$ are related in some way, although at present no completely satisfactory explanation of the relationship can be given. It seems most probable, as Professor Poebel points out to me, that urrub originated from urzub by assimilation of $z$ to $r$. Since an assimilation of this sort is not attested in Sumerian or Akkadian, it would seem that the word was borrowed, in both of these forms, from one of the neighboring languages to the east or north. The form zurzub ( $=\mathrm{sursub}$ ) is then perhaps to be explained as a vernacular transformation of the foreign urzub. In this connection we may observe that the sign ur had the values sur and zur as well as ur (cf. the discussion of these values by Professor Poebel in a forthcoming article; ur is given the value $\mathrm{zu}<\mathrm{zur}$ in HGT 105 ii 18). This fact, indeed, suggests another possible explanation. If at an early period the writing $u r-z u-u b$ was used for zurzub it might in a later period have been read $\mathrm{zur-zu}^{\mathrm{z}} \mathrm{ub}$ by scribes who were acquainted with the word, $u r-z u-u b$ by those who were not.

The omission of these values from the List may be due to their being foreign loan words. Ll .29 f . of 38129 have only urrub and zurzub. Note that the values urrub and surs ub are given also, in CS 301 f., to the Kal sign, while in AO 2162 (Thureau-Dangin in RA VI [1907] 130)
 It will be observed that the value $u r s u b$ is attested with certainty only in AO 7661. The duplicate text 93058 (CT XII, Pl. 21) obv. ii 3 provides the variant $u r-s u-u b$.
ii 45-47. The value of duk here given as $\mathrm{ku}-\mathrm{ru-um}$ appears in the variant form $\mathrm{ku}-\mathrm{ru}-\mathrm{un}$ in 93058 (CT XII, Pl. 21) obv. ii 5. For the relations between $\mathrm{kurum} / \mathrm{kurun}$ on the one hand, kurunnu and karânu on the other, cf. Poebel in ZA XXXIX 149, n. 2. The deductions made there may be summarized as follows: Very early the Sumerians borrowed the Semitic root krm, "vineyard" etc., presumably in the form *karam, from which developed the three forms *karan (the basis for the Akkadian loan word karânu), kurum, and (under the influence of the true Sumerian word gurun, ${ }^{48}$ "fruit") kurun (the basis of the Akkadian kurunnu). Poebel, op. cit. pp. 149 f. (and cf. pp. 146 f .), also points out that šikaru, as here equated with kurum , has its general Semitic meaning, "strong drink," while in its usual equation with Sumerian k a š (cf. e.g. iii 28) it has the special meaning (peculiar to Akkadian) "date wine."
ii 48 (List, l. 69). duk.qa.bur, "potter," evidently means literally "the fashioner of pot (and) jar." DUK of course means "pot"; qA presumably represents a small jar or cup, whence its common use as a measure of capacity; bur, sometimes used for a stone vessel, ought here to be (as Professor Poebel suggests to me) the active participle of a verb meaning "to fashion (on the potter's wheel)" or the like, a meaning which might derive from an earlier meaning "to fashion (vessels out of stone)."

[^24]The equation of dUk.qA.bur, value $b a-b a r$, with $d_{e n-l i l}$ (as also the equation with déea in the following line) is not strictly accurate, since the intention of course is to equate dDUK.QA.BUR, not just duk.qa.bur, with the god's name Enlil. Properly the Akkadian space should read šá diduk.qa.bur ${ }^{\text {d}}$ en-lil; cf. especially CS $230,264,276$. For dduk.qa.bur as one of the names of Enlil in the god lists cf. CT XXIV, PI. 5, 1. 42, and Pl. 22, l. 102 (LIŠ wrongly written for QA). The name dbabar of course designates Enlil as having created mankind out of clay in the manner of a potter; cf. Genesis 2:7.

The sign in List, 1.69 , has KAK in place of QA. This is apparently a mistake arising from the similarity between these signs in their earlier forms (cf. ROEC 164 and 317).
ii 49. With this line, equating duk.qA.bur, value nun-ur-ru, with šu (= nunurru) and déa, we may compare CT XXV, Pl. 48, l. 7:

$$
\text { Y nun-úr-ra }{ }^{\text {d}}
$$

where the god Ea, as equated with douk.qA.bur pronounced nunurra, is described as "of the potter," that is, as the patron deity of the potters. Cf. also CT XXIV, Pl. 14, ll. 40-43, where ${ }^{d} n u n-$ $u r_{4}[-r a]$ and $\left.{ }^{d} n u n-s x^{a} r\right]$, as well as diduk.qA.BUR with the pronunciations $n u n-u r_{4}[-r a]$ and $\mathrm{nun}-\mathrm{s}[\hat{\mathrm{s}} \mathrm{r}]$, are equated with dé- $a$ (the signs broken away are restored from the parallel passage CT XXIV, Pl. 27, ll. 9 f.).
ii 50 . Lillu is a third deity whose name is written with duk.qA.bur. As indicated by $s{ }^{2} u(-m a)$, the name of this god in Akkadian is the same as in Sumerian. Professor Poebel points out to me that the shorter value lil was also used, as shown by comparison of $\mathrm{S}^{\mathrm{b}} 359$ : Y li-il|lul $\mid$ lillu with CT XXIV, Pl. 26, l. 107: dill dumu-dingir-mah-gé|d"(=1il!)dUk.qA(written Liš!).bUR, from which, in accordance with the system used in this god list, the unabbreviated parallel passage CT XXIV, Pl. 13, ll. 59 f., is to be restored

$$
\begin{array}{l|l}
{[d i l} & \text { dumu-dingir-]mab-a-gé } \\
{\left[{ }^{d} "\right. \text { DUK.QA.BUR }} & \text { dumu-dingir-ma]h-a-gé. }
\end{array}
$$

The god Lillu was a son of the goddess Dingir-mah of Adab, whose husband dsul-pA-è - a is equated with Enlil. For discussion of the god Lillu cf. H. Radau, BE XXIX 1, p. 18, n. 6, and H. Holma, Die assyrisch-babylonischen Personennamen der Form quttulu (Helsinki, 1914) p. 70.
iii 6. The horizontal wedge appearing here before $i q-b i-n u$ as well as in 11.15 and 42 is perhaps, as Professor Poebel suggests to me, used to indicate that the word is a grammatical term explaining a syntactical function of Sumerian bi. Maru in l. 15 is a well known grammatical term, the opposite of hamtu. In l. 42 the Akkadian section is unfortunately destroyed. The form iqbinu evidently derives from $q a b \hat{u}$, an equivalent of bi. For the use of such a horizontal wedge in king lists, probably to indicate the omission of a king, cf. Poebel in ZDMG LXXXXI xlv (abstract of a paper read at the Deutscher Orientalistentag zu Hamburg, 1926).
iii 19. The value $b i z$ of bI is of course secondary. It originated from the circumstance that the word $\mathrm{bi}(\mathrm{z})$, having dropped its final $z$, was written in the old Sumerian with the sign br.
iii 27. The value e pir is given in ii 40 to duk = kannu. Since it must be presumed to mean "earthen pot," the value can belong properly only to DUK, not to BI (= DUK-qun $\hat{u}$ ), which depicts the liquid contents of a DUK.
iii 29. For k a $\check{s}=p u r u s s \hat{u} \mathrm{cf} . \mathrm{k} \mathrm{a}-\mathrm{a} \check{s}=p u r s \hat{u}$ and purussû, SAI 411, and $\mathrm{ka}-\mathrm{a}$ š-bar$=p a-$ ri-is Eš.bar (=purussê), CT XVI, PI. 43, ll. 74 f ., and IV R 9 obv. 47 f ., where bar corresponds to the participle paris and $\mathrm{ka}-\mathrm{a}$ š to puruss $\hat{\mathrm{u}}$.
iii 30 (List, 1.72). The strange value gi-is-šá-al given here to bI.gǏ̌ seems to be a mistake for $\mathrm{gi}-\mathrm{is}-\mathrm{sa}$-al or gi-sa-al. mi-sa-al, the value in List, 1.72 , might be read $\mathrm{gi}_{6}-\mathrm{sa}$ al ; but since the syllable g i elsewhere in the List is represented by GI (ll. 20 and 52.) and $\mathrm{GI}_{4}$ (l. 37) it seems more probable that we are here to read mi-sa-al(<mišsal), the eme-sal form of the value.
iii 31 (List, l. 73). Lu-zu-un, in the List, is surely to be corrected to $k u(!)-\mathrm{zu}-\mathrm{un}$, a phonetic variant of kusum .
iii 43 (List, I. 76). The value $\mathfrak{S e - i m - b i - z i}$ given here to the simple šEm sign is given in List, 1. 76, to a strangely written sign (note that the bI at the beginning appears in its late form, quite contrary to its other representations in the List), perhaps the result of an erasure. This strange form might, indeed, have been intended for the simple ŠEm. But the value šembizi, evidently compounded of šem $+b i z i$, ought properly to belong to a compound sign formed of sEm + an element representing bizi. In 38129 (which gives for the simple šEm, in ll. 43 f., only the values [a-s] iIa and [še-im], omitting mud as well as šembizi) this value probably was given to the first ŠEm composition, in 1. 45, where only slight traces of the inserted sign remain and its designation in the sign name is completely destroyed. It is likely, therefore, that List, 1.76 , also had a sem composition. The traces suggest Sem+munus. But in l. 45 of 38129 the inserted sign cannot be munus, for, if it were, $m u-n u[-s a]$ in the sign name in the following line would have been represented by a ditto mark. If these two texts gave a Šem composition for the value šembizi, it follows that AO 7661 must have done so too. Evidently it was the presence of the simple šem in the following line (placed for convenience before SEM + GAR, with which it shares the value bappiru and equivalent bappiru) which caused the original compound sign in AO 7661 to be mistaken for the simple SEM.

Although this šembizi is probably the same as the phonetically written šem-bi-zi, Scheil's restoration of the equivalent here as $t e[r-t u m$ ša pi-ha-tim], in accordance with the usual restoration of the equivalent of šem-bi-zi in K 4378 (CT XIX, Pl. 29) obv. ii 3 remains doubtful. ${ }^{49}$

Šmbizi is quite possibly a longer form of the value šmbi given to šEm+rar-gun $\hat{u}$ in iii 49 , if we assume that $\mathfrak{s e m b i}$ is actually $\mathfrak{K e m b i}(z)$, as $b a ̀ n$ is $b a ̀ n(d)$. Compare the value biz of BI in iii 19 (cf. note).
iii 44-48. For a thorough discussion of these lines cf. Poebel in ZA XXXIX 156-60.
iii 46 f . (List, ll. 79 f .). Ni-in ( $=\mathrm{nin}(\mathrm{g})$ ), the value given to Sem+gar in List, 1.80 , is clearly an abbreviated form of $\mathrm{ni}-\mathrm{in}-\mathrm{gi}$ in l .47 of AO 7661. The value in List, l. 79, parallel
 sible, but would be a very unusual writing) and evidently is an eme-sal form of $n$ in (g). For the correspondence between main dialect $n$ and eme-sAL $\check{s}$ cf. Poebel, GSG $\S 83$, and in ZA XXXVIII 84-87. For the change of $n$ to $l$ in $l u m g i<n i n g i ~ a n d ~ f o r ~ t h e ~ r u l e ~ g o v e r n i n g ~ t h i s ~ c h a n g e ~ c f . ~$ GSG $\S 64$. In 1.49 of 38129 the intermediate form $[\mathrm{nu}-\mathrm{u}] \mathrm{n}-\mathrm{g}$ [i] is apparently to be restored.
iii 51 (List, l. 77). This line, giving Šem+munus = šm-mes-la, is evidently paralleled by List, l. 77, where the sign, which looks like šem+me, can easily be an error for sem +munus. The value, in which only the final -la is certain, can hardly be sem-mes-la but might be rsem$s a^{\top}-1 a$. Šemssala, stressed šemšalà or šèmstá, could yield the syncopated form sémšla or šemšá; šemešla could then readily be explained as an alleviation of the pronunciation $\mathfrak{s e m s x l a}$. Note that the sign is a phonetic rendering of the Sumerian word.
iii $52-54$ (List, l. 78). The value še mbulug is here given to three different signs, šm +mug , ŠEM+IGI, and ŠEM+... 38129 (l. 47), however, has only one sign, ŠEM+buLUG; the value there apparently must be restored simply $[b u-l] u-\left\ulcorner u g^{1}\right.$, since, if the copy is correct, space forbids the restoration of [sem-bu-1]u- ${ }^{〔} \mathbf{u} g^{1}$. The List likewise has only one sign, which is too
${ }^{49} \mathrm{~K} 4378$ obv. ii $1-3$ reads as follows:

$$
\begin{aligned}
& \text { g is "ša pi-h[a-...] } \\
& \text { sem-bi-zi "s śa pi-ha[-...]. }
\end{aligned}
$$

According to Professor Poebel this section of the text, like the sections beginning at obv. i 1 , obv. ii 4, and obv. ii 13 , started by equating lagabii-gi-inlagab with some verb, then gave other "ideograms" for the same verb and for nouns derived from it, and finally, perhaps, offered equations with nouns unrelated but similar in form, showing at least the same consonants; if the ditto in obv. ii $1-3$ does in fact stand for tertu, the verb at the beginning of the section might quite well have been tôru.
much damaged to be identified; the value, copied as ${ }^{\top} \mathrm{mu}-1 \mathrm{u}-\mathrm{ug}^{1}$, evidently is to be corrected to $\mathfrak{r b u - l u - u g}$. Bulug is of course an abbreviation of šmbulug; the initial sem, considered as a kind of determinative, could be read or omitted; it is omitted in the Akkadian equivalent pallukku. Presumably the broken sign in 1.54 of AO 7661 is to be restored from 38129 as šem+ bulug (rather than sem + bal, which Thureau-Dangin, HS, p. 32, n. 11, would restore on the basis of the passage cited below), which is doubtless the original and correct phonetic representation of the value sembulug.

For the restoration of the Akkadian equivalent as pa[l-lu-ku] of. Rm 367 (SAW, autog. Pl. 23) obv. 21 f .:

The fact that the determinative GIŠ is sometimes used and sometimes omitted apparently means there was some doubt whether the pallûku should be regarded as a tree and suggests that it was actually a bush.
iv 1 f . As compared with the two signs ŠEm+mug and ŠEM+Tin given here for $\mathrm{nu} u \mathrm{ug}=n u$ $u k-k a-t u, 38129$ (1. 48) has only šem + mug. ${ }^{50}$ The spacing of the signs in the Akkadian space there and the trace preserved of the next to last sign seem to indicate a reading [nu-u]k-tum; but perhaps the trace is actually a scratch and the spacing not accurately represented in the published text, so that the preferable $[n u-u k-k a]$-tum (or [nu-ka]-tum) would become possible. Doubtless there is a phonetic connection between $n u g$ and $m u g$. Note that the value $n u g$ is not given in the List. Despite the fact that šEM+mUG was used for palluku as well as nukkatu, any connection between the meanings of the two words is very doubtful.
iv $3-10$ (List, l. 82). The repetition of ll. 3-6 in ll. $7-10$ without any variation apparently must be purely accidental. An alternative explanation would be that $l .7$ originally gave not su-um, as does l. 3, but a variant value such as $s u m$, $\check{s} u$, or $\check{s} u n$; but it is by no means customary in the texts of this series to give long identical lists of equivalents to different values of the same sign, and a case such as this would be, with six equivalents not only identically written but paired in the same way, is without example in the whole of á $|\mathrm{A}|$ nâqu.
iv 11-14 (List, ll. 83 f.). $S u-u h(?)$ and $s u-b u$, written one above the other in the first space, are certainly to be regarded as separate values for $T A G=\stackrel{y}{c} u k l u l u$ etc. Scheil, comparing su.UB.su.UB= suklulu (Br. 206), believed that the passage gave one value, subsubu, to be emended to subsubu. But for such a reduplicated form we should naturally expect the sign representing it to be doubled. Furthermore, single values, no matter how long, are never written in two lines in AO 7661. Finally, as noted below, both the List and 38129 (ll. 53 f.) evidently give two values which correspond to this passage.

Since a phonetic connection between $s u b$ and $s u b u$ would be difficult to explain and since we have no reason to expect a value $s u b$ for tag, the second sign in the value $s u-u b(?)$, written over an erasure, is probably to be read $b$ a or $u b$. The curious presentation of the values su-ba(!) and su-bu together apparently must be taken as a form of abbreviation; presumably the text from which AO 7661 was copied gave the values $s u b a$ (or $s u b$ ) and $s u b u$ in two separate sections, the first containing all the Akkadian equivalents given here, the second with perhaps two of those equivalents; our scribe combined the two sections in order to regain the space lost in the inadvertent repetition of the previous four lines (cf. preceding note).

Regarding the restoration of the values in ll. 53 f . of 38129 and in List, 11.83 f., it is to be noted

[^25]that these stand at the same place in the sequence of tag values as do suba and subu in A0 7661 (the sequence, if we disregard omitted values, is otherwise the same in 38129 and the List as in A0 7661, except for the inversion of $d a$ and $t a$ in the List). This fact makes it probable that these values correspond to suba and subu. The probability is strengthened by the equivalents given in 38129: "( $=t!a-b a-b u)$ in 1. 53, corresponding to $t a-b a b i-b i$ in 1.13 of AO 7661, and s suk-lu-lum in 1. 54, corresponding to s $u k-l u-l u$ in 1.11 of AO 7661 . The values in 11.53 f . of 38129 may then be tentatively restored as $[\mathrm{s} u-\mathrm{b}]$ a and $[\mathrm{su}-\mathrm{b}] \mathrm{u}$; the traces at the end of the value in 1.53 , if correctly copied, would not allow the reading [s u-u] b, and this fact makes it probable that the first value in AO 7661 is $\mathrm{su-ba}$ rather than $\mathrm{su-ub}$. The values in List, 11.83 f., appearing in the published text as ba[.].] and su-د, may be read respectively $\mathrm{zu-b}[\mathrm{a}]$ and $\mathrm{su}-\mathrm{bu}$. These restorations are, of course, merely the most probable of the various possibilities.
iv 23 f. (List, ll. 85 f.). The values $d a$ and $t a$ for tag provide additional proof of the amissibility of final $g$ in Sumerian (cf. GSG §39). In the List the value tag is omitted because at the time the List was composed tag did not have that value but only the abbreviated values ta (g) and $\mathrm{da}(\mathrm{g}) .38129(\mathrm{l} .56)$ has only one of these abbreviated values, either [da-] a or [ta-] a.

iv 32. This line states that tag in the combination nun.me.tag=emqu has the value $\begin{aligned} \text { zan } \\ \mathrm{n}\end{aligned}$. The whole combination has the value gasan, as shown by the phonetic variant gasam given for nun.me.tag = enqu (a variant of emqu) in CT XI, Pl. 49, 1. 21. nun.me clearly must have been regarded as having the value ga . Very likely the sign tag originally had its value $s \mathrm{um}$ in this combination, the whole word being, perhaps, originally $g u s u_{m}$, which could readily become $g a s a m$ by a change of both vowels (cf. urud, arad, ered, "slave"). The analysis of nun.me.tag as $\mathrm{ga}-\mathrm{s} \mathrm{an}$ by the ancient scribes indicates very clearly that in the Sumerian system of writing the so-called "ideograms" were regarded as representing nothing but phonetic values. Gasan= emqu of course has nothing to do with g a šan (sign rgi-gunû) =bêtu, bêlu, šaqũ, etc. (cf. 92693 [CT XII, Pls. 1-3] rev. ii 27-33), the $n$ of which is original (on san < sen $=n i n$, cf. Poebel in ZA XXXVIII 86 f.).

It seems likely that šan (or possibly ša m) was given as the value of tag also in 1.60 of 38129, where the equation is [tag.gam.m]e (for this restoration cf. SAI 2482)=šad-áš-ša-rum instead of nun.me.tag = emqu. In ll. iv 6 and 10 of AO 7661 tag in tag.gam.ma = sasásaru is pronounced $\mathfrak{s} u$ m. But šum is unlikely to have appeared here, as it has already been given in 1.52 ; and the other values which might be expected here, šuš and guruš, are out of the question as values of tag in this combination. A reading šagamme<šmgamma<šugamma could, of course, be readily explained.
iv 34-38 (List, l. 89). These lines give the value tibir and the equivalents rittu and qatu to the simple tag and to tag with the insertions šu, ud (not sab; cf. below), ku , and br. We have here another example of the fact observed by Professor Poebel that the simple sign frequently had the values of its compounds. The great variety of the compound signs given here for the same value and the same equivalents is rather surprising. Perhaps all the signs given here resulted from a confusion, due to the tiny writing of the inserted sign, out of one original sign, which would presumably, in view of the meanings given, be the sign with inserted šu (="hand"). It is, however, also possible that the signs were used in different senses, comparable, for instance, with our use of "hands" for the indicators on a clock. In its various writings tibir may thus literally mean "the hand which is, or has to do with, an ud, ku, or bi." In the List (1. 89) only one sign, tag+ba (an error for tag+Šu?), is given for the value tibir. Ll. 62-64 of 38129, as they must be restored, give for tibir $=$ ritt $u$ the signs tag+sud, tag+ud, and tag+inu, but omit tag+bi. The inserted sign in 1. 63, written like sab, exactly as in 1.36 of AO 7661, is shown by $u t$-ta- ${ }^{\prime} a^{1}$ in the sign name to be UD; and this proves that the inserted sign in 1.36 of AO 7661, despite the fact that it is written differently from the inserted UD in l. 39, must be ud and not sab (as taken by Thureau-Dangin, HS, p. 34).
iv $39-41$ (List, l. 90). In 1. $39 \mathrm{TAG}+\mathrm{dd}=\mathrm{silig}$ is equated with rittu and qâtu, while in ll. 40 f . TAG+GUD and TAG+KU $=$ silig are equated with upnu. The first equation (with rittu and qâtu) may well be a mistake. In view, however, of the closeness between the meanings, it can scarcely be said that Sumerian tibir is correctly represented only by rittu and qatu, Sumerian silig only by upnu. Possibly the composer of this passage took this method of indicating that the meanings $u p n u$, rittu, and qatu belong without distinction to tibir and silig.

For the value silig the List ( 1.90 ) has only one sign, tag+Ga, which is presumably to be corrected to TAG+GUD. This value apparently must be restored for the sign tag +GUD in 1.65 of 38129. We should expect $u p-n u$ to be given in the Akkadian space of that line. But since the $-n u$ should then appear in the preserved right half of that space (which is blank), perhaps the text actually had "(=ri-it-tum).
iv 42. Line 66 of 38129 has in the Akkadian space, instead of ${ }^{\mathrm{d}}{ }^{\text {TAG }}$ +TGG given in AO 7661, simply ${ }^{[d]}$ Tag. Since the passage treats compositions of tag, this must be regarded as an error here, although it is conceivable that the name of the god Uttu, usually written with tag+Túg, was also occasionally written simply with tag.
iv 43 (List, 1. 91). This line, which is the catch line for the next tablet in the series, seems to supply an
 (op. cit. p. 1), such a value should cause no surprise. The only doubt is caused by the similarity between the sign for $i$ and the sign for $b$ é (which we actually find as a gloss for Hz in SGT 55 rev. iii 7). It is presumably on account of this doubt that Thureau-Dangin does not include this value among his Sumerian homophones, even though the gloss, as both he and Scheil copy it, is preferably to be read i.

## PLATES





COLUMN 1 CONTINUED


COLUMN 1


OBVERSE
COLUMN II CONTINUED


REVERSE
COLUMN I


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COLUMN II

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## PLATE X

REVERSE
COLUMN II CONTINUED



[^0]:    ${ }^{1}$ For a discussion of the early misapprehensions which surrounded the syllabaries, cf. the introduction to F. Lenormant, Les syllabaires cunéformes (Paris, 1877). Lenormant (pp. 9 f.) recognized that the name "syllabary," based on the belief that the left subcolumns of the texts presented syllabic values for use in the writing of Akkadian, was a misnomer. He accepted, however, the prevalent notion (which undoubtedly exists in many minds even today), adopted without any sort of proof, that the Akkadian words in the right subcolumns represented ideographic values.

[^1]:    ${ }^{2}$ Another feature of past neglect, in the study of all classes of texts, has been the failure to give adequate attention to purely external features. The detailed descriptions in chap. i, it should be said, have resulted from the precept and example of Professor Poebel, whose careful observation of, and reasoning from, such features in the new Khorsabad king list represent a model of their kind.

[^2]:    ${ }^{1}$ These verticals may have been drawn, as in the case of $A O$ 7661, only for the right-hand columns. The beginnings of the left-hand columns are insufficiently preserved to give evidence.
    ${ }^{2}$ The British Museum duplicates of CS, 93042 and 81-7-27, 200, have respectively ten and eleven lines to the inch (for this information I am indebted to Professor F. W. Geers). The Yale Syllabary, which is of exactly the same type as CS, contains a few more lines and has slightly greater dimensions, and its writing must be of almost exactly the same

[^3]:    size. Similarly, the syllabary AO 7661 would seem to have writing of the same size or slightly larger. Syllabary texts belonging to other classes show as few as five, as many as twelve, lines to the inch. Unfortunately, past publications fail to mention the size of the writing, and most of them do not provide the dimensions of the tablets, from which it could be approximately deduced. Such information could be of particular importance in the assignment of doubtful fragments.
    ${ }^{s}$ The writing in the second subcolumns of CS and the related texts is discussed on pp .8 f .
    ${ }^{4}$ Cat., p. 1808.
    ${ }^{5}$ Information communicated by Professor Geers.
    ${ }^{6}$ Professor Geers, who communicates this information, adds that the writing, though much larger than that on the two duplicates mentioned above, is less legible because of the condition of the clay.

[^4]:    ${ }^{7}$ For the writing in the second subcolumn see p. 9.
    ${ }^{8}$ For that of the second subcolumn see pp. 8 f.

[^5]:    ? Note that a text of the same type as CS-38129 (CT XII, Pl. 24), the first part of which parallels AO 7661-gives fewer values than AO 7661; this is certain, even though the text is much broken and often difficult to restore. When we seek other cases in which parallel texts of the two types may be compared in this respect, we find only one case in which both texts are sufficiently well preserved for exact comparison: 92693 (CT XII, Pls. 1-3), of the type of AO 7661, and Vok. Ass. 523 ii 59 -iii 18. The former presents 18 signs with 54 values ( 3 values per sign), the latter 14 signs with 39 values ( 2.79 values per sign). The difference is inconclusive. However, if we remove from the former the four signs (with five values) which are absent in the parallel, we arrive at 14 signs with 49 values ( 3.40 values per sign), and the difference between it and Vok. Ass. 523 becomes greater than that between AO 7661 and CS.

    In our texts the average number of values per sign is as follows: List, $1.73 ; \mathrm{CS}, 2.38 ; \mathrm{AO} 7661,2.89$. It will be noted that the proportional increase of $A O 7661$ over $C S$ is about half that of $C S$ over the List.

    The average of equivalents per value is: $\mathrm{CS}, 1.11$; AO 7661, 3.15.
    ${ }^{10}$ These statements derive from the latest reconstruction of the two series (Schuster in ZA XLIV [1938] 255-58), based in part on unpublished texts. The first reconstruction was made by Ungnad (ZDMG LXXI [1917] 121-25), who presented a revised outline in ZA XXXVIII (1929) 65-67.

[^6]:    ${ }^{3}$ Cf. p. 5, where the same assumption is used to explain the earlier forms in its first subcolumn.
    ${ }^{4}$ One example may indicate the difficulties in the way of deducing an established order. In the whole of the two series the form $x . y$ occurs before $x$-gun $\hat{a}$ five times, never after, while the form $x+y$ occurs after $x-g u n \hat{u}$ three times and never before. We should then expect a regular order $X . Y, X-g u n u, X+Y$. But, in fact, $X+Y$ occurs after $X . Y$ in the sequence only once, while it occurs before $X . Y$ three times.

    In a series formed of one simple sign with a variety of inserted signs we should expect the signs to be arranged according to the forms of the inserted signs. But such is not the case: the sign order seems to be almost completely haphazard.

[^7]:    ${ }^{5}$ A rough calculation, allowing for the many breaks, indicates that the series contained about four-fifths as many signs as Brünnow's sign list.
    ${ }^{6}$ Tablets V and VIII (little is preserved of VI and VII) contain a much larger proportion of "isolated" signs, that is, signs which bear no relation in form to the signs preceding and following, than Nos. I-IV.
    ${ }^{7}$ ZA XXXVIII (1929) 68, note to ll. 28 ff . Ungnad referred, of course, to the final shape of the text. He was well aware that the sign order goes back to an earlier period.
    ${ }^{8}$ Cf. note to CS 28-32.
    ${ }^{9}$ Cf. notes to CS 45 f., 208 f.
    ${ }^{10}$ Cf. note to CS 282 f .
    ${ }^{11}$ Cf. Ungnad's note to CS 196.
    ${ }^{12}$ Cf. the analysis given in note to CS 222-75.
    ${ }^{13}$ Professor Poebel informs me that pISAN was presumably the basic form of $\epsilon$, which looks like a double gunut of pISAN. By the rule that the simple sign originally had the values of the more complicated signs, pisan may once have had the value e; when later PISAN = e was generally replaced by E, PISAN yet retained the value in the compound forms.

[^8]:    ${ }^{14}$ Cf. fuller discussion in notes. For the preservation of wrong variants among the Akkadian equivalents cf. AO 7661 i 4 and 17 and discussion in notes.
    ${ }^{15}$ This practice is not confined to syllabary texts. Professor Poebel has pointed out that the so-called text glosses are really variant writings from the copied originals.
    ${ }^{16} \mathrm{Cf}$. Poebel in ZA XXXVII (1928) 252 f. for remarks on this type of abbreviation. For the possibility of such an abbreviation in CS 120 f. cf. Poebel in JAOS LVII (1937) 62-65.
    ${ }^{17} \mathrm{Cf}$. GSG $\S 44$.
    ${ }^{18}$ For other abbreviations cf. notes to CS 19-21 and 288 and to AO 7661 ii 48 f.

[^9]:    ${ }^{19}$ Such a parallel exists, however, for an abbreviated passage in Yale Syll. Ll. 182 f . give the sign sig.Lam with the values še and še š (simple phonetic variants), še with equivalent baku, šeš with pašǎsu. We assume še= $p a s ̌ a s u$, š e $\check{s}=b a k \hat{u}$. Now the passage K 8284 (CT XI, Pl. 37) (rev.) ii 1-4, from a fragment of a fuller parallel to Yale Syll., must be restored to give, first to še, then to še š, the equivalents bak $\hat{u}$, piššatu, pašǎsu ša šamni. Although only the Akkadian column is preserved here, there does not seem to be any other possible restoration.
    ${ }^{20}$ It should be noted that early sign values are occasionally used in the late syllabary texts in passages in which the sign in question is being treated; thus CS uses the sign values gá (sign PISAN) and gu4 (sign quD), but only in representing values of pISAN compositions and of gud respectively. This is not true of the List except in the case of ga, and there perhaps by accident.
    ${ }^{21}$ Cf. p. 9.
    ${ }^{22}$ How the dUK sign arrived at its late form is not readily apparent. Professor Poebel offers the following explanation: BI, originally the gun $\hat{u}$ form of DUK , in the course of time lost its $g u n \hat{u}$ strokes and became identical with dok; it then became necessary, in order to distinguish between the two signs, to use another sign for the values and meanings of the early DUK, and the sign DUK+A (original meaning presumably "water jug") was utilized. As yet, however, the form dUK + a has not been found in early texts, while a form BI + (LAKF 642) is found in the texts from Fara. Possibly this latter form influenced the adoption of the late form of duk. It may be observed that a similar development took place in the form of the GURUN sign. The early form of this sign (ROEC 381) is the simple dOK +KUR; while the late form, by

[^10]:    analogy to dur, has added an inserted $A$, to the bottom of which the original kUr, having lost one wedge, is attached (admittedly this explanation does not solve all the puzzles connected with the GURUN sign).

    Poebel in AOF IX (1933/34) 285, n. 95, points out the necessity of distinguishing in transliteration between the two forms of DUK.
    ${ }^{23}$ For another case in which the List may possess a more correct sign form cf. note to CS 261.
    ${ }^{24}$ Cf. remarks on these passages by Poebel in JAOS LVII 44 f.
    ${ }^{25}$ Cf. p. 5. Since, as mentioned on p. 4, n. 6, the text is rather difficult to read, there may be some inaccuracies in the published text which are not the fault of the Neo-Babylonian copyist.
    ${ }^{26} \mathrm{Cf}$. note to AO 7661 ii 48 f .
    ${ }^{27}$ Cf. note to CS 253.
    ${ }^{28}$ Lists of this type belonging to a Nippur series are to be found in HGT (Nos. 111-28), and several further examples appear in SGT.

[^11]:    ${ }^{16}$ Doubtful；cf．note．
    ${ }^{17}$ Doubtful；perhaps to be read har－bu．

[^12]:    ${ }^{99}$ Probably to be restored as $b i-i \xi-s u$ ，a loan word from Sumerian biz．
    ${ }^{100} \mathrm{IZ}$ might be only the beginning of a broken sign on the original from which AO 7661 was copied．Professor Poebel suggests a reading $t a-p[a-l u]$ corresponding to $t u p-p u-l i$ in the following line．
    ${ }^{101}$ Biş̂ presumably a loan word derived from a Sumerian form bizi．
    ${ }^{102}$ Here more specifically＂date wine．＂Cf．note to ii 45－47．
    ${ }^{103}$ Error for gi－iš－sa－al？Cf．note．

[^13]:    ${ }^{1}$ References to Luckenbill without further specification refer to his publication of CS in AJSL XXXIII 169-99. All significant changes from his readings are explained in these notes.
     no doubt correct. It also inserts before $\mathrm{k}\{-\mathrm{n} \mathrm{a}-\mathrm{g}$ é another $\mathrm{g} i \mathrm{~s}$, which may or may not be correct.
    ${ }^{3}$ Cf. e.g. I R 53-58 iii 50 and I R 65 f. i 36.
    ${ }^{4}$ Note that E immediately precedes K Á in $\mathrm{S}^{\text {b }}$, where the order of signs in 11. 232-53 is similar to that in 11. 1-67 of CS.

[^14]:    ${ }^{6}$ For this type of sign cf. AS No. 9, p. 13.
    ${ }^{6}$ Luckenbill's restoration of the pap sign in 1.4 , reading the first element of the sign name $d i-l i$, is out of the question, since it does not fit into the order of the signs and is in fact treated elsewhere in the series, i.e., at the beginning of Tablet I 5 , given in CT XII, Pl. 16 (where its name is pappu). PAP, if it did appear here, would have to be regarded as a late insertion; while such insertions do occur, they are not frequent, and there is no reason at all to expect one here.

[^15]:    ${ }^{7}$ References to Ungnad without further specification refer to his note on the line in question in ZA XXXVIII（1929）

[^16]:     formulas (cf. p. 55, n. 16) suggested restoring the Sumerian values in CS 39-41 as te-estse-la, te-estseru, and dSarpanitum (or e-ru); but the duplicate fragment 93042 (CT XII, Pl. 27) in its first two lines, parallel to CS 41 f ., gives the value as ", which means that CS 41 f . must have the same value as CS 40 (and only the value $r u$ could serve these three lines).
    ${ }^{9}$ Luckenbill's reading giš.ku.tu.ni cannot be correct, as the latter part of the sign read mu has only two horizontal wedges instead of four (cf. $t u$ in 1.56 , at beginning of Akkadian equivalent).
    ${ }^{10}$ Thureau-Dangin in RA XVII (1920) 32 first made and discussed the restoration of bi-ir in l. 43.
    ${ }^{11}$ It is indeed possible that $\check{s} e-k u$ at the end is actually $t u$ and that the slanting stroke taken as part of $e \check{s}$ is part of a division mark. In that case $t u$ would begin the Akkadian equivalent ( $t u[-s a b-r u] ?$ ), and the preceding signs could be read $u$-gu-nu-deš-še-ku. However, the sign taken for $k u$ in this interpretation merely touches the vertical line dividing the subcolumns, and thus there is no reason for the use of a division mark or for the indentation of the Akkadian equivalent. Also, the vertical stroke taken for deš could well be just a scratch. Finally, the two parts of the sign read tu are farther apart than they should be, as may be seen by comparison with the $t u$ beginning the equivalent in 1.56 . Consequently this alternative interpretation is less probable.

[^17]:    ${ }^{12}$ For examples of such sign names cf. Christian in MVAG XVIII, Heft 1, pp. 97-109.

[^18]:    ${ }^{21}$ If the identification is correct, the Akkadian might equally well be restored as kip-pu-i$\leqslant m e-l u l[-t u \hat{u}]$, as given in 81-4-28 (Pinches in JRAS, 1905, p. 830) rev. 45, where the value of KU. HUL is broken away. (The sign-name there must be corrected to " $(=t u-k u l)-b a r-t i n-r a-a-n u-t i l(!)-l u-u: t i l$ has been miscopied as $u$, and $l u-u$, which is forced over into the right-hand column, has been wrongly taken as the first Akkadian equivalent; correct SAI 8140-8142 and SLL 536: $293 a$ and $b$. For the name of the ght sign cf. Yale Syll. 304.) The same two equivalents appear in 82-8-16, 1 (CT XI, Pls. 49 f.) rev. ii 7, where ki.e.ne.di is glossed e-se-me-in; cf. K 40 (CT XII, Pls. 46-49) obv. ii 47-49, where KI.E.NE.DI. ${ }^{\text {d INNANNA, KI.šU.E.ZA. }}{ }^{\text {d INNANNA, and KU. }}$ GGL, all without gloss, are equated with kip-pu-u.
    ${ }_{22}$ The sign is given with $K I$ at the end; but this, since it is not represented in the sign name and since the equivalents are not place names, is probably erroneously borrowed from the preceding lines. Two more equivalents in II. 12 f . are broken off; ll. 13 f. give the equivalents $a-h u-[u]$ and $s i d-d a-a[t(?) \ldots]$ for the same sign and value.

[^19]:    ${ }^{28}$ For mà as the pronunciation of PISAN at Nippur cf. the expression gùnu-um-mà-mà-a, "that they will not bring suit," which occurs repeatedly in legal documents of the Hammurabi period (e.g. BE VI 2, No. 35, 1. 15; No. 45, I. 17; No. 64, 1. 18).
    ${ }^{29}$ Cf. the even more extensive passage Yale Syll. 38-112, taking up nearly a quarter of that text, which contains compositions of lagab, a sign which, like pisan, offers a very convenient space for placing inserted signs.

[^20]:    ${ }^{30}$ The form of the HAR sign in CS, with four slanting wedges in line, a vertical wedge, and another slanting wedge at the bottom of the vertical, is unusual but quite consistent in its six occurrences (11. 81, 98, 127, 192, 223, 244). AO 7661 ii 9 shows a similar form, with an extra slanting wedge before the head of the vertical wedge. The sign in CS 223 is quite certain. Luckenbill mistook the vertical for a horizontal wedge; but even that change does not make the sign an $\mathrm{T}_{\mathrm{A}}$, as shown by the forms of ${ }^{\mathrm{A}}$ A given in 11.82 and 288.

[^21]:    ${ }^{32}$ For a discussion of the šá . . . súu-ma formula cf. note to l. 119.
    ${ }^{38} \mathrm{Mr}$. C. J. Gadd, who very kindly collated this passage for me, writes: "The sign in question is not clear, but, while e is not impossible, I think u n is still the more probable reading."

[^22]:    ${ }^{39}$ Cf. R. C. Thompson, The Prisms of Esarhaddon and of Ashurbanipal (London, 1931) Pl. 8 iv 46.
    ${ }^{40}$ Cf. Nabuchodonosor 441, 1. 2: . . . ištên $n^{e n} b \hat{t} t(=\hat{E}) t a b t i(=$ muñ) $u$ sah-li-e, "one container of salt and cress(?)."
    ${ }^{11}$ Professor Geers informs me that the sandy district of Brandenburg in Prussia was once called the "Sandbüchse des heiligen römischen Reiches" ("Sandbüchse" being of course the sand box formerly used to sprinkle sand for ink-blotting). It seems that the salt desert, by a similar metaphor, was called the "saltcellar."
    ${ }^{42} \mathrm{Cf} . \operatorname{Rm} 2,414$ (CT XIX, Pl. 40) 1. 2: кÁR.KÁR|"(=n[a-pa-hu]) šá rdl[s̆amaš(?)] and V R 42, 1.47 cd : KÁRk a r-k a rKár |i-tan-pu-hu.

[^23]:    ${ }^{43}$ No conceivable reading of the value as it appears in the Weissbach text provides an orthodox Sumerian verbal stem. It is possible, however, that šitnunu, as well as šitpusu, the other equivalent, is not an infinitive, but a substantive meaning "strife" or the like.
    ${ }^{44}$ This text is of the same abbreviated type as CS. The first column of the obverse, transliterated on pp.36-38, parallels the whole of AO 7661. In the following it is cited simply as 38129.

[^24]:    ${ }^{48}$ On the connection between the signs gurun and duk cf. p. 12, n. 22.

[^25]:    50 The sign is described as ŠEM+m0G by the sign name, " $=$ ša-šem $[-m e-k u])-m u k-k a-$ " $(=[i-d u])$, but is curiously written as ŠEM.mUG.mणG. mUG.mUG might be taken for the búr sign, which is so written in 38130 (CT XII, Pls. 12 f.) rev. i $4,8,42$, and the whole sign then understood as ŠEM+búr. But the evidence of the sign name, as well as the parallelism with AO 7661, requires that the first mUG be taken as the inserted sign and the second as the customary repetition of it, despite the fact that otherwise in this particular passage the inserted signs are not repeated.

