

A peculiar aspect of the Mesopotamian script: the Diri-compound

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In this investigation, I would like to reflect upon two questions. The first relates to a particular type of complex logogram, which has been named a Diri-compound by Assyriologists after the *incipit* of a Babylonian lexical list containing this type of compound. This category of compound logogram should be of interest in the context of this meeting for it seems to be a peculiarity of the Mesopotamian script. The second pertains to the Ancient protagonists' viewpoint on their writing system. There is no evidence of a theory of writing proper as it was the case in China (*cf.* Françoise Bottéro's communication) – in the sense of a theory with explanations given in full text. However a certain type of texts, known as lexical lists, does shed some light on the Mesopotamian - or at least the Babylonian - conception of writing¹. Finally, it is crucial to differentiate as far as possible our conceptions from the ones of the ancient scribes and of course this is an almost impossible task.

A few preliminary points

An analysis of sign composition can be made from different perspectives. For example, the formation of signs can be examined from a sole structural or architectural point of view. Another way of tackling the problem of sign composition could include an interpretation of the various signs forming the complex sign *i.e.* the way the individual signs of the complex are to be understood and how they might relate to the pronunciation of the complex. This last point does not necessarily imply considering the genesis and the historical development of the sign².

Let us now consider the architecture of the sign *i.e.* the physical characteristics of the sign. One can distinguish two basic levels of structural composition in a cuneiform sign: (a) simple signs that can be defined as being formed of a simple grapheme *i.e.* the smallest graphic unit *vs.* (b) a complex sign that can be defined as being formed of several simple signs.

Several authors have examined in detail the various constitutive elements of complex signs accompanied by an interpretation of these elements, therefore this subject will not be treated here³. A notable fact, however, is that the Mesopotamian complex signs are formed in a similar way as the Chinese characters⁴.

A final point has to be addressed in this introductory section: the interpretation of the Mesopotamian signs. At the fully developed stage of the Mesopotamian writing system there are two or three potential interpretations of a sign. A sign can refer to one or several syllables, to one or several words and to a semantic classifier⁵.

¹ The lexical tradition has been qualified as a science of writing by N. Veldhuis [1997].

² N.B. We differentiate the physical expression of graphical entities : sign(A) ; sign(B) ; sign(A+B) *vs.* their meaning : sign(A) meaning A ; sign(B) meaning B ; sign (A+B) meaning C.

³ Recently Y. Gong [1993] and J.-J. Glassner [2000].

⁴ See in particular Y. Gong [1993].

⁵ This third interpretation is possibly redundant, and could be considered as identical to the logographic interpretation.

Definition of Diri-compounds

Diri-compound logograms are [A. Cavigneaux, 1980-1983 p. 625]: ‘*des logogrammes dont la lecture n’est pas égale à la somme des lectures de leurs composants*’, or less restrictively [M. Civil 1975 p. 125, 2004 p. 3]: ‘compound logograms whose reading cannot be inferred from their individual components’. For example, SI.A =/diri/: the opening line of the Diri lexical list is a typical Diri-compound, it is written using two logograms SI and A, that are not read /sia/ but /diri/.

Another way of understanding a Diri-compound is to consider it as opposed to an Izi-compound - also named after the *incipit* of the Babylonian list containing this type of compound – the constituents of which keep their original pronunciation⁶, in other words the sequence of signs are to be read one after the other.

Let us underscore that the above definitions imply that the Diri-compound only exists if its components are considered as independent entities. This last fact is verified in the Diri lists containing the names given to the signs by the ancient scribes⁷.

Babylonian lexical lists

The above definitions are not only based on our modern understanding of the Mesopotamian script, they are also grounded for a large part on our comprehension of the Babylonian lexical tradition and more particularly on certain types of lists, for instance the syllabaries and the so-called acrographic⁸ lists.

A lexical list is an enumeration of words or an enumeration of signs that are placed one after each other in column. Depending on the type of list and on the chronological period in question, the lists may contain one or several sub-columns; in the latter case the list can be associated with a table. The more ancient lists are single column enumerations of words and as far back as we can read their content with certainty, they are written in Sumerian. Starting in the Old Babylonian period the lists can exhibit the above mentioned table structure giving information on the pivotal words or signs of the enumeration in different sub-columns.

Let us now turn more specifically to lists of signs. Concerning the archaic period and the third millennium in general, there is little evidence of this type of list except for a list of signs from Ebla (Tell Mardikh, Syria). However, it is possible that this type of list goes back to the very beginning of writing; see for example the archaic Uruk list of vessels⁹. The ‘Ebla sign list’ is a list of signs; one text¹⁰ also provides the names of the signs *i.e.* Sumerian names with Semitic endings. It therefore appears that writing was imported with the lists of Sumerian words, in other words the study of the Sumerian writing could not be dissociated from the language it denoted. (*cf.* the similar case of the importation of Chinese writing to Japan).

⁶ M. Civil [1995 p. 2310]. See also MSL XIII [Civil 1971].

⁷ In particular see Y. Gong [2000], also D.O. Edzard [1980], A. Cavigneaux [1980-1983], Glassner [2000]

⁸ A list is called acrographic if its components are ordered according to their first sign.

⁹ R. Englund [1998 p. 95-98] ; Th.J.H. Krispijn [1991-1992].

¹⁰ TM.75.G.1907+12680.

Assyriologists differentiate the Old Babylonian lists from the lists of the first millennium, known as the canonical lists. The Old Babylonian lists exhibit variations from one site to another. The canonical version of the various lexical lists has a fixed order and a definite number of items, it is also considerably longer than its Old Babylonian counterparts. The canonical series¹¹ are the result of major work of compilation and edition of the lists known to the ancient scribes; the canonical versions of the lists were probably achieved around the 12th century B.C.

Use and format of the lists also show discrepancies between one period and another. The Ea¹² list of signs appears to have been very much of use in the Old Babylonian schools to teach the Sumerian writing system to the apprentice scribes¹³. In the Old Babylonian period the Ea lists consisted of an enumeration of signs displayed in one column or an enumeration of these signs along with their Sumerian readings -*i.e.* pronunciations given in syllabic writing using a determined set of signs- placed on each line to the left of the sign under discussion. The last mentioned may represent a logogram with more than one meaning and/or be used as a phonogram with several possible pronunciations, in this case each new reading gives rise to a new entry. The canonical version of the Ea list from the first millennium B.C. generally has three or four sub-columns giving from left to right: the reading of the logogram, the logogram and an Akkadian translation. The four column lists add the name of the logogram.

Diri lists¹⁴

Diri compounds already existed in the middle of the third millennium B.C., and they may even have been in use at the very beginning of writing in archaic Uruk. However evidence of the Diri list itself dates to the Old-Babylonian period. We know of several different Old-Babylonian lexical traditions which show quite similar structural characteristics (*i.e.* Nippur, Sippar, 'Oxford'). The Middle Babylonian lists come from Ugarit, Emar and Boghazkoy; in Old-Babylonian Nippur the Diri list appears to have been studied after Ea and the acrographic lists¹⁵ and in Middle Babylonian Ugarit the Diri list also seems to come after the Izi acrographic list.

As we have already said, our modern cognition of Diri compounds strongly depends on our comprehension of the various lexical lists. For example, Ea is the list of basic signs; the so-called acrographic lists, like Izi, Kagal and associated lists, are essentially composed of signs that are to be read and pronounced one after the other *i.e.* as a usual sequence of signs; Diri is the list of compound logograms that are not to be pronounced the way they are written or, in a larger perspective, compound logograms with non-trivial readings. Let us note that although modern scholars give distinctive features to the various lists relative to writing, in fact there is no such clear cut between the items of the different types of lists. In other words Ea does not only contain basic signs, it also gives some Diri-compounds and the same can be said for Izi ; the Diri lists also enumerates compounds that are to be read as Izi-compounds *etc.*

¹¹ A lexical series is a lexical list that covers several tablets.

¹² The lists are named by their *incipit*. This Babylonians also referred to the lists in this way.

¹³ See N. Veldhuis [1997] ; E. Robson [2001].

¹⁴ The series Diri has been edited by M. Civil in MSL XV [2004].

¹⁵ N. Velhuis [1997 p.81].

Content of the Diri lexical lists

A difficulty in the analysis of the list is due to the fact that there are usually several possible readings for each character forming part of the compound. In other words a compound might look like a Diri-compound according to the above definitions, but after a more careful analysis might turn out to be either an Izi-compound or a phonetic writing. One purpose of the Diri list must have been to show the difficulties in interpreting certain compound logograms.

For example, puzur₄ is written KA×GAN₂-t.ŠA (DN 27; DO 26; DU1 44; D1 45-55); KA×GAN₂-t. – an explicit modern transliteration of the sign – represents the character BU₃. M. Krebernik [1998]¹⁶ has suggested with respect to the texts of the Fara period that BU₃.ŠA is in fact a phonetic writing of /puzar/ or /puzra/.

The contents of the Diri lists can be divided into several categories¹⁷. I suggest the following grouping:

1) Diri-compounds proper

IGI.A (DN 135; D2:110) and IGI.BI (DN 136; D2:111) read /imhur/ ‘foam’, written ‘the water’s eye’ (IGI.A) and ‘the beer’s eye’ (IGI.KAŠ).
KI.E.NE.DI (D4:272) read /ešemin/ ‘the double rope’ written ‘the place where one plays’.
UD.DU (DN 307-314 ; DO 242-253 ; DS6:13-26 ; Dug1:131-162) read /e/ i.e. ‘to go out’, written with the logograms ‘sun’ and ‘go’.
KI.SU.LU.UB₂.GAR (D4 270-71; DO 342; DS-2 :06’) read /ugnim/ ‘army, troops’ written ‘the place where one puts down the leather bag’

2) Mixed writings

This group has writings containing logograms along with phonograms or morphophonograms.
GIŠ.PI.TUG₂ (DN 205; D3:63) and GIŠ.TUG₂.PI (DN 204; D3:62-62a) read /geštu/¹⁸.
SU.KUR.RU.KI (DO 547; D4:86) read /šuruppak/¹⁹

3) Phonetic or morphophonetic writings

GIŠ.ŠIR.GAL (DN 195; DS4:4) read /gišnugal/²⁰
IGI.DU (DN 122-126b; DO 102-105) read /igištu/
Let us remark that these phonetic writings can be more or less precise.

The reduplicated signs, which open the lists, clearly belong to this group. The explanation of the inclusion of this type of items in the list is that the reduplication of the signs gives rise to phonetic changes:

KA×LI.KA×LI read /mumun/
UD.UD read /dadag/
UD.UD read /huhud/ [...]
MI.MI read /kukku/ (DN 30-43)

¹⁶ p.295.

¹⁷ See also M. Civil MSL XV [2004], p.3.

¹⁸ Here GIŠ and TUG₂ give the pronunciation of the sign PI.

¹⁹ SU is a phonetic indication and KI a graphic semantic classifier.

²⁰ ŠIR is to be read nu₁₁.

ŠIR is the name Assyriologists give to the sign, this name does not always coincide with the Babylonian name.

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Series:

ATU: *Archaische Texte aus Uruk* (=Ausgrabungen der Deutschen Forschungsgemeinschaft in Uruk=Warka)

MSL : *Materialien zum sumerischen Lexikon*

RLA: *Reallexikon der Assyriologie*

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