

COMERS Communications 1

**ASPECTS OF GENRE AND TYPE IN
PRE-MODERN LITERARY CULTURES**

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CONTINUITY AND CHANGE IN THE MESOPOTAMIAN LEXICAL TRADITION

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0. The opening story of Woody Allen's *Getting Even* (1966) pretends to be a scholarly discussion of the recently published laundry lists of the novelist Hans Metterling. The interpretation of such lists as:

6 handkerchiefs
5 undershirts
8 prs. socks
3 bedsheets
2 pillowcases

involves a discussion of Metterling's habits and psychology in their relation to his creative work. Allen's message seems to be that nothing can be too silly to prevent scholars from inventing foolish interpretations.¹

The learned energy devoted to Mesopotamian lexical lists may seem to be a case in point. These lists often consist of nothing more than long strings of words or signs. Yet, the anthropologist Jack Goody gave pride of place to the Mesopotamian lexical list in the evolution of human cognition. He argued that a written list invokes aspects of classification not prompted by oral lists.² The prominent Assyriologist W. von Soden used these same lists as material for an interpretation of the 'nature' of the Sumerian people and their culture, where he perceived 'Ordnungswille' as a defining characteristic.³

1. At first sight the Mesopotamian lexical lists indeed are among the simplest and most boring types of text that mankind has ever produced. Yet the lexical list is one of the most characteristic features of Mesopotamian literacy. Throughout the three millennia of the history of cuneiform writing the lexical list has been more persistent than any other type of text. Notwithstanding their simple format, cuneiform lists exist in a large variety of types, and they have been put to use in several different ways.

The earliest examples in Mesopotamia are thematically organised enumerations of Sumerian words without any further explanation. They include for instance lists of trees, of birds, of fish, and of metal objects. These lists were rigidly standardised, and are attested from about 3100 BCE to about 1700 BCE. Archaic exemplars from Uruk⁴ are approximately contemporary with the very first examples of writing that have come

¹ [Editor's note. If I am not mistaken this 'motif' was first used by Kingsley Amis, by then an angry old man, in an interview where he stated that the only 'new' thing a specialist in English Romantic poetry could hope to discover would be Shelley's laundry lists.]

² Goody 1977: 74–111 (= ch. 5: 'What's in a List?').

³ Soden 1936.

⁴ A city in southern Babylonia; modern *Warka*.

to light. In a time span of over a millennium the lists remained virtually unchanged. This is remarkable, since a good portion of the words contained in them had become obsolete over time, and probably already early in this period – or so we think, since those obsolete words are never found outside the lists themselves. An illuminating example is the list of professions, which is a hierarchically organised inventory of functionaries of Uruk in the late fourth millennium. The earliest copies from Uruk are usually extracts written by pupils. The list was used as an exercise in writing. A few centuries later the same list of professions was still being copied, even though many of the titles and names of professions had gone out of use. At the same time, important new titles, which are widely attested in the contemporaneous administrative texts were not added to the list. The copies of the list of professions from Fara and Abu Salabikh, which are dated around the middle of the third millennium, are usually written by advanced scribes on large well-formed tablets. Over the centuries the lexical texts had acquired the status of monuments of tradition. Whoever copied these lists put himself in a long and venerable tradition that went back all the way to the very inception of cuneiform writing.

At the beginning of the second millennium the lists take on an entirely different function. The scribes of the Old Babylonian period (ca. 2000–1595 BCE) used the ancient tradition to create their own lexical corpus. In many respects this new corpus differs radically from what existed before. All the ancient thematic lists were reworked, and new ones were added. Among these new lists there are, for instance, a list of reeds and reed objects, and a list of wild animals. But more importantly the lists lose their rigidly fixed, almost fossilised character. Old Babylonian lists exist in a state of flux, with local ‘recensions’ at every centre of education. Moreover, the list format which hitherto had been used almost exclusively for thematic lists of words is now explored with a view to wider application, resulting in a number of entirely new text types. Before discussing some of these Old Babylonian lists it is useful to say a few words about their primary context: the school.

2. In ancient Mesopotamia scribes were educated at the *Eduba*. The literal translation of this Sumerian word is ‘tablet house’. We are best informed about the Old Babylonian school in Nippur.⁵ This school flourished in the eighteenth century BCE. Its organisation and day-to-day practice are known from a variety of sources. There are a number of literary compositions which describe life at school.⁶ These texts show, among many other things, the diversity of topics treated in school: music, arithmetic, language and writing, literature, drawing up contracts etc. The data contained in these so-called ‘Eduba texts’ have been summarised in various publications.⁷ Excavated remains of schools have led to the conclusion that education was basically a private enterprise. Architecturally the schools cannot be distinguished from common houses. A scribe who wanted to initiate his son in the art and science of writing did so at home. He may have accepted a few other children from the neighbourhood; but that was all there was to a school. Yet

⁵ Nippur, modern *Nuffar*, is a city in central Babylonia.

⁶ Recent translations of some of these texts are found in Civil 1985, von Soden and Römer 1990 and Vanstiphout 1997.

⁷ The *locus classicus* is Sjöberg 1975. See also Charpin 1986: 420–23; Waetzoldt 1989; Volk 1996. For a cautious view of the value of these texts, see Civil 1980.

the private nature of education does not mean that the teacher merely improvised his teaching. Scribal teaching was done on traditional lines, and it shows only a relatively narrow band of variation. We know quite a few details about the curriculum, because school tablets with teachers' models and pupils' exercises have been found in large quantities. The normal fate of an exercise tablet was a water basin, where it was to be returned to mere clay. Fortunately numerous tablets escaped this destiny: in Nippur several thousands of them have been found.

One type of school tablet combines two different exercises: one on the obverse and one on the reverse of the tablet. On the left side of the obverse the teacher wrote an extract from one of the lexical lists. This was a new exercise, treating something that had not been studied before. This extract was then copied several times on the right hand half of the obverse by a pupil. The reverse was used by the same pupil for repetition of an exercise studied earlier. By examining these obverse-reverse correlations it is possible to establish the curricular order of the exercises.

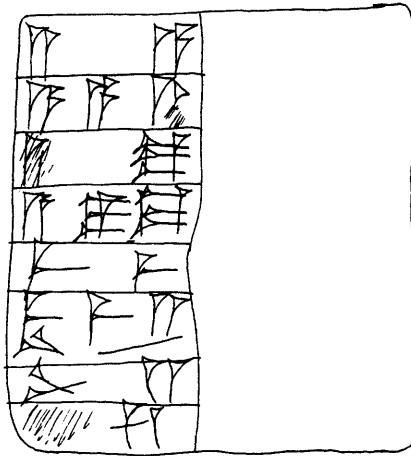


Fig. 1 N5147 (7.5x9cm). A-A A-A-A: easy signs.

3.1. The first list a pupil had to copy is called after its opening line A-A A-A-A.⁸ The exact length of this list is not known. No complete exemplar has been found so far, but it probably had between 100 and 200 lines. In this list, basic signs were introduced one by one, and then practised in combinations with other signs. The exercise is intended to drill the design of the most common signs of the cuneiform repertory. The entries do

⁸ In Assyriological jargon the text is called 'Syllable Alphabet B'. It is edited and discussed in Çiğ, Kızılyay and Landsberger 1959. A related and contemporary elementary exercise is called ME-ME PAP-PAP, or Syllable Alphabet A; but this was used only outside Nippur.

not have a ‘meaning’ in any accepted sense of that term. Figure 1 shows the first eight lines of *A-A A-A-A* in cuneiform. In this opening passage the easiest signs, consisting of only a few strokes each, are repeated. In most exemplars the writing is executed in oversized format, so that the pupil could practise each and every detail of the sign.

3.2. In some Nippur schools *A-A A-A-A* was followed by *TU-TA-TI*⁹ (Fig. 2). This exercise consists of sets of three syllables with permutation of the vowel in the order u-a-i. In its most common version the list has 116 lines, followed by the traditional subscript for school texts: “Nisaba (the goddess of writing) be praised!¹⁰” In this list the focus is not so much on the design as on the phonemic value (or ‘reading’) of a number of common signs.

1	𒌶 tu	9	𒌶 bu
2	𒌶 ta	10	𒌶 ba
3	𒌶 ta	11	𒌶 bu
4	𒌶 tu-ta-ti	12	𒌶 bu-ba-bi
5	𒌶 nu	13	𒌶 zu
6	𒌶 na	14	𒌶 za
7	𒌶 ni	15	𒌶 zi
8	𒌶 nu-na-ni	16	𒌶 zu-za-zi

Fig. 2 *TU-TA-TI*, lines 1–16. Each entry is preceded by a single vertical, here indicated as 𒌶.

3.3. Shortly after *TU-TA-TI* the student started to copy thematic lists of Sumerian nouns. Modern Assyriology refers to these lists as Old Babylonian *ur₅-ra*¹¹ (Fig. 3). This label is somewhat anachronistic, because *ur₅-ra* ‘loan’ is actually the opening line of the post-Old Babylonian versions of this composition. The entry belongs to a section ‘business terminology’, which was added to the body of the list, and in first position, only in Middle Babylonian times.¹² Even without this later addition, Old Babylonian *ur₅-ra* is considerably longer than *A-A A-A-A* and *TU-TA-TI*. In Nippur *ur₅-ra* consisted of six chapters or ‘tablets’, with each between 500 and 700 lines. The division of the contents over the chapters is summarised in table 1. In scribal centres outside Nippur other divisions were in use, although the subjects treated were roughly identical.

In the Old Babylonian period Sumerian had died out as a spoken language, though it was retained for a variety of textual types. An apprentice scribe therefore had to learn Sumerian as a second language. Going through all the entries of *ur₅-ra* the pupil gradually built up a Sumerian vocabulary.

⁹ *TU-TA-TI* is edited in Çiğ, Kızılyay and Landsberger 1959.

¹⁰ The edition does not contain the end of the list; but this appears on a few unpublished texts in the University of Pennsylvania Museum, Philadelphia.

¹¹ In earlier literature *ḪAR-ra* or *ḪUR-ra*.

¹² I.e. the second half of the second millennium (after 1595 BCE). However, in order to avoid confusion and to acknowledge the historical continuity between the Old Babylonian text and its later descendants it is advisable to keep the conventional modern name – but always bearing in mind that the scribes in Old Babylonian times would not have recognised the composition under this name!

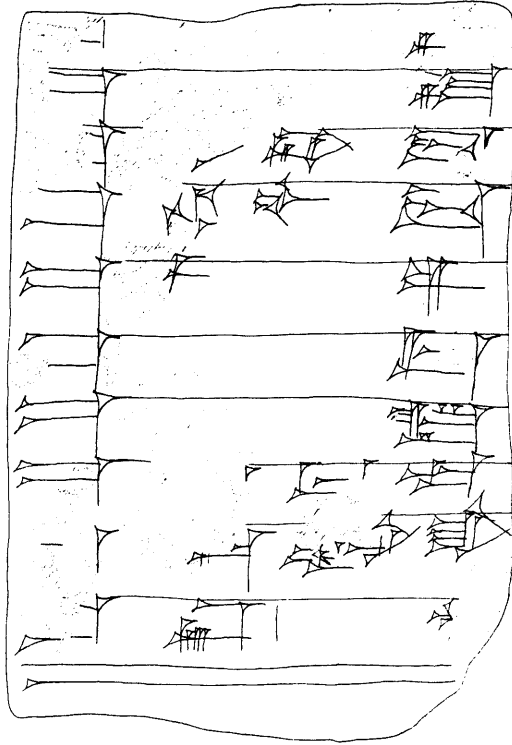


Fig. 3 UM 29-13-163 (7.5x7.8cm). ur_5 -ra exercise tablet: a list of wooden objects.

Chapter	Contents
1	trees and wooden objects
2	reed and reed objects; vessels and clay; hides and leather objects; metals and metals objects
3	domestic animals; wild animals; meat cuts.
4	stones and plants; fish and birds; clothing.
5	geographical names and terms; stars.
6	foodstuffs

Table 1: Nippur Old Babylonian ur_5 -ra

To demonstrate the style of ur_5 -ra the section ‘chariot’ is reproduced here in transliteration (Fig. 4). The numbers to the left represent the line numbers in the composite edition. Not every line is necessarily represented on every exercise tablet containing (part of) this section. Variants are not uncommon. Some exercises exhibit variants in the order of the entries as well; the significance of these will be discussed below. The list ur_5 -ra

contains many unusual and rare words. Accordingly the translation of some items in the example is uncertain.¹³

326	gis	gigir	chariot
327	gis	é-gigir	cabin of the chariot
328	gis	é-ùsan-gigir	box for whip of the chariot
329	gis	SUM-KA-A-gigir	(unidentified)
330	gis	kun-gigir	rear part of the chariot
331	gis	GUL-gigir	(part of) the yoke of the chariot?
332	gis	sahar-gi-gigir	'dustguard' of the chariot
333	gis	su-din-gigir	part of the pole of the chariot?
334	gis	su-lum-mar-gigir	tethering ropes of the chariot
335	gis	sag-kul-gigir	side poles ⁷ of the chariot
336	gis	sag-dúr-gigir	seat of a chariot
337	gis	gír-gub-gigir	footboard of the chariot
338	gis	mud-gigir	handle of the chariot
339	gis	gag-mud-gigir	peg of the handle of the chariot
340	gis	šudul-gigir	yoke of the chariot
341	gis	gag-šudul-gigir	peg of the yoke of the chariot
342	gis	umbin-gigir	wheel of the chariot
343	gis	gag-umbin-gigir	peg of the wheel of the chariot
344	gis	si-gigir	horn of the chariot
345	gis	gaba-gigir	front guard of the chariot
346	gis	gaba-gál-gigir	front guard of the chariot

Fig. 4 Nippur Old Babylonian *ur₅-ra* 1, 326–346 (composite text).

3.4. The fourth example is a list of signs. This extract is from a composition called (Proto-)Ea, again anachronistically after the opening line of a later version.¹⁴ Ea lists all possible phonemic values for each sign; it occasionally throws in a few impossible ones. In most cases a cuneiform sign can be used for different Sumerian words. Which word is meant can be derived from the context. In the example in Fig. 5 we see that /a/ and /duru/ are among the phonemic values of the sign A. When the sign is read /a/ it means 'water' or 'semen'; when read /duru/ it means 'wet'. The information collected in EA is absolutely necessary for writing and reading Sumerian. Without the realisation of the polyvalency of the cuneiform signs the writing system would have remained impenetrable.¹⁵ It was long held that Ea belonged with *A-A* *A-A-A* and *TU-TA-TI* to the elementary stage of learning to write, since it was surmised that familiarity with Ea was indispensable for any further use of the writing system. However, incontrovertible evidence of the exercise tablets shows that pupils who studied Ea had already copied long extracts from the thematic lists. In these lists they necessarily encountered polyvalent signs. The very first entry in chapter one of *ur₅-ra* is GIŠ KU, to be read as gis¹⁶taškarin (a

¹³ For the terminology of the chariot see Civil 1968 and Klein 1989.

¹⁴ All versions of this list are edited in Civil 1979.

¹⁵ Lists such as Ea have been particularly instrumental in deciphering Sumerian. Without it and related compositions the reading of many cuneiform signs would still be unknown to us.

tree).¹⁶ Later in the same chapter the same combination is to be read ^{giš}dur₂ (a board), and ^{giš}tukul (a mace). We must assume that the teacher orally explained how the sign combination had to be pronounced in each case. Ea therefore did not introduce new material; it presented the student with the systematisation of an aspect of cuneiform with which he was already familiar from practice.

gloss	sign	gloss	sign
1 𒀭 á	A	10 𒀭 ku-ù	KU
2 𒀭 ia	A	11 𒀭 ku-ú	KU
3 𒀭 du-ru	A	12 𒀭 sú-uš	KU
4 𒀭 e	A	13 𒀭 tu-uš	KU
5 𒀭 a	A	14 𒀭 su-úh	KU
6 𒀭	A.A	15 𒀭 ši-i	KU
7 𒀭 sa-ah	HA.A	16 𒀭 bé-e	KU
8 𒀭 am	A.AN	17 𒀭 bi-id	KU
9 𒀭 še-è̄m	A.AN	18 𒀭 du-ru	KU

Fig. 5 Proto-EA 1–18

3.5. The fifth example is a passage from a list of standard phrases and expressions used in contracts Fig. 6. It is called Old Babylonian ki-ulutin-bi-še₃,¹⁷ after its first entry. This is one of the few exercises with immediate relevance for the duties of a scribe. At Nippur it is relatively rare.¹⁸

18 in-sum	he gave
19 in-na-an-sum	he gave to him
20 in-na-an-sum-me-eš	they gave to him
21 in dab ₅	he took
22 in-na-an-dab ₅	he took for him
23 [in-na-an-dab ₅ -eš]	[they took for him]
24 in-la ₂	he paid
25 in-na-an-la ₂	he paid him
26 in-na-an-la ₂ -me-eš	they paid him

Fig. 6 Old Babylonian Ki-ulutin-bi-še₃; 18–26

3.6. A final example is the so-called *mathematical list*. Such lists are in fact generally mere tables of multiplication or other forms of mathematical or conventional correlation. There are different formats, but the most common type runs:

¹⁶ In this case the sign GIŠ is not a phonological part of the word as such, but belongs exclusively to the *writing*. It indicates that the following word denotes a tree or a wooden object. Other so-called ‘determinatives’ denote birds, fish, geographical names, or copper objects. In modern transcription determinatives are represented in superscript.

¹⁷ In modern literature the bilingual first millennium version of this list is called *ana ittišu*, which is the Babylonian translation of the expression ki-ulutin-bi-še₃.

¹⁸ The passage has been reconstructed from unpublished sources. See provisionally Roth 1979: 291–301.

1	6
2	12
3	18
4	24 etc.

The table continues thus up to 20 times 6, and goes on with 30, 40 and 50 times 6. In the sexagesimal system used in ancient mesopotamia the table of six can equally be used for division by 10, which in fact happened.

These examples show that the list format was now employed in a variety of ways for a variety of educational purposes. Primary education in Nippur ended with copying collections of proverbs.¹⁹ These *Proverb Collections* use literary Sumerian, and therefore provide a transition to the next educational phase, in which the pupils are confronted with literary texts. The organisation of the proverbs in a list-like format links them to the lists discussed above, so that we can say that proverbs straddle the two phases through which a Nippur schoolboy had to go.²⁰

4. An important difference between the Old Babylonian lists and their third millennium predecessors is the flexibility of the former. The extreme conservatism of the early lists is alien to the nature of the Nippur school texts. A schoolmaster knew the lists by heart and transmitted this knowledge to his pupils. There are a number of features that demonstrate that the teacher did not use a master copy. The passage from *ur₅-ra* in figure 4 is known from several exercise tablets, none of which is the exact duplicate of any other. Every single exercise presents its own individual version, even though the deviations are usually small. Broadly speaking the text was standardised, but each realisation is unique on numerous points. The passage is organised by a few basically graphemic rules. Items beginning with the same sign are listed together. Lines 327–328 begin with ^{gis}e₂-; 333–334 with ^{gis}su-; 335–336 with ^{gis}sag-; and 345–346 with ^{gis}gaba-. Moreover, in the passage 338–343 we find those parts of the chariot which can have a ‘peg’ resulting in pairs of items such as ‘handle of the chariot’; ‘peg of the handle of the chariot’ etc. The sign for ‘peg’ is KAK, an easily recognisable sign consisting of only a few (three) strokes. The visual effect is then a series of entries every second one of which begins with the sign KAK. Every exercise which preserves the chariot passage obeys these simple rules of organisation. Whatever variants the exercises may have, they do not separate ^{gis}sag-kul-gigir ‘side bars’ from ^{gis}sag-dur₂-gigir ‘seat’, even though the two items are hardly connected by any semantics. These variants cannot be explained in any meaningful way by arguing backwards to a single ‘original text’, nor by the assumption of ‘errors’ or ‘corruptions’ in the process of transmission. Instead of using such rather spineless alibis for our poor understanding, we will approach the phenomena described by trying to investigate the place where these ‘texts’ were primarily stored: memory.

¹⁹ For which see now Alster 1997.

²⁰ For these phases see also H. Vanstiphout in this volume.

5. Recent cognitive-psychological studies have demonstrated that long-term memory, unlike a computer's hard disk, does not store a text as one long string.²¹ Memory uses the redundancy inherent in every piece of language, or every text. Part of this redundancy is created by the rules and restrictions of the genre or textual type to which the piece to be stored belongs. In order to recall a nursery rhyme one uses the patterns of metre and rhyme that govern the genre and that restrict the number of possibilities for each word. In other genres, such as the oral epics sung by traditional singers in former Yugoslavia the genre restrictions will not so much fix every single word, but rather preserve the general outline and style of the story in question. In actual practice two performances of 'the same' epic may prove to be very different in wording and length. Still, singers and audience are likely to experience and accept these different 'versions' as identical, as long as each one fulfills the requirements for this specific epic tale.²²

In the section 'chariot' of Old Babylonian *ur₅-ra* there are three basic rules. First, on the most general level, the style of *ur₅-ra* requires that it be a list of nouns. Second, the semantic range is given by the fact that the passage deals with chariots and parts of chariots. Third, the graphemic rules discussed above determine the organisation of the passage at its surface level. The first two requirements are so general as to be of little importance here. The third rule, however, as we have seen, leaves room for interpretation, or for variants. Memory does not function as a passive storage room where one can store and retrieve at will anything one likes. Quite to the contrary, memory proves to be a formative element actively involved in the production of lexical lists.

In several respects the lexical text in the memory of the ancient teacher is not equivalent to any text found on clay tablets. In the first place the memory text is more abstract, and capable of producing all the variants found in the actual exercises. In the second place, and more importantly, Old Babylonian copies of *ur₅-ra* are always unilingual Sumerian. Bilingual, i.e. Sumerian-Babylonian versions only appear in post-Old Babylonian times. But there is evidence demonstrating that the text in the memory of the Old Babylonian teacher was bilingual. First, the pupils who used the text in their exercises had only just begun to learn Sumerian; without Babylonian translations the lists evidently made little sense to them. Second, the Babylonian translations occasionally leave traces in the Sumerian text: in some rare cases a Sumerian item is omitted and the Babylonian equivalent is found instead. Apparently the pupil confused the Sumerian with its translation – a confusion not difficult to understand since the Sumerian lists actually contained quite a lot of words borrowed from Babylonian. A less accidental, but rather structural way in which the covert Babylonian translation transpires through the Sumerian surface is found in those cases where an identical Sumerian term is repeated two, three or four times. We know from the later bilingual versions that these Sumerian words were traditionally provided with more than one Babylonian translation. The repetition makes sense only if these translations were somehow included in exercising the passage. Third, there is actually a list of human beings (another type of thematic list), which is cited in an Old Babylonian literary text by its bilingual opening line, even though all copies we have of this particular list are unilingual.²³

²¹ See the fascinating study by Rubin 1995.

²² For this method of reproduction of a 'text', and some implications of performance see also Russo 1992; Kilmer *forthc.* and Kramer in this volume.

²³ See Civil 1985: 74, commentary to l. 14.

Thus the text as written down preserves only half of the ‘text’ as it was memorised. This distinction between written text and memory text is not restricted to thematic lists. The sign list Proto-*Ea* (see fig. 5) is found in two formats: with glosses and without glosses. The exercises without glosses can be shown to have been written by more advanced pupils. Presumably they knew the glosses by heart, and did no longer need to *write* them down. After all, it is difficult to imagine what purpose Proto-*Ea* could have served in the total absence of glosses.

The exercise tablets we have are then the material products of the performance of the lexical compositions. This situation is almost diametrically opposed to the performance of dramatic texts. We have the *text* of Shakespeare’s plays. But any historical *performance* of these texts, for instance in the famous Globe Theatre, must be reconstructed from whatever external evidence can be adduced.²⁴ The Old Babylonian lexical compositions as *texts* are lost forever, since they existed primarily in memory. But we can partly reconstruct them from the imperfect reflexion that we find in the remains of their *performance* on tablets.

6. Having acquired a bird’s eye view of the body of Old Babylonian lexical texts and the ways in which they were transmitted and used in scribal education, we may justifiably ask: “What were they good for?”. Obviously they were instrumental in learning how to read and write, but is that sufficient to explain their contents? We have seen that the thematic lists contain numerous obscure words. Proto-*Ea* lists nearly all the familiar signs, with all the values (‘readings’) a pupil needs to know; but in addition it also includes uncommon signs and values which have little if any relevance for someone who is struggling to master the writing system. For an administrative or commercial career the school curriculum contains much that is irrelevant. Moreover it has almost nothing on Babylonian writing; yet a number of highly important textual types, such as administrative and business letters, were conventionally composed in Babylonian only. Now generally speaking the lack of a direct relation between curriculum and scribal practice is not in need of explanation. Most formal schooling throughout the ages has hardly been ‘practical’ in the utilitarian sense of that term. But this observation does not absolve us from trying to explain the texts as they are. If they were not directed at practical utility, what did they aim at?

In earlier discussions of this problem the Mesopotamian lists were described as science (“Wissenschaft”).²⁵ Somehow every list was as a remote ancestor of disciplines familiar to us. The multiplication tables are mathematics; *Ea* belongs to linguistics; and the thematic lists were assigned to the natural sciences: the list of stones to mineralogy, the list of trees to dendrology, the list of animals to zoology etc. This approach has two drawbacks. First, even though both zoology and the Mesopotamian list of animals name and classify numerous animals, this is about all they have in common. This ‘ancient zoology’ is disappointing and can hardly account for the energy invested in copying and transmitting these texts over the centuries. Second, a number of important lists needs

²⁴ On this point see also Kramer in this volume.

²⁵ The term “Listenwissenschaft” was introduced by von Soden 1936. Von Soden’s argumentation is manifestly coloured and informed by the racist ideologies the author then embraced. This did not prevent the essay from becoming a ‘classic’ which was twice reprinted and is much quoted even today.

to be disregarded in this interpretation. This is true of the two most elementary (in the fullest sense) lists in the Old Babylonian curriculum: *A-A A-A-A* and *TU-TA-TI*. But also the list of wooden objects cannot easily be accommodated to any modern scientific discipline. Yet physically all these lists belong together; they are found on the same tablet types, under the same circumstances, and were used by the same people in the course of their scribal education.

Actually, what all lists have in common is their concern with *writing*. This is perhaps most obvious for the elementary lists (*A-A A-A-A* and *TU-TA-TI*) and the sign list *Ea*. But it is also true for the thematic lists. In a mixed logographic-syllabic writing system, such as cuneiform, the distinctions between orthography, spelling, and meaning are not as sharply defined as they are (or seem to be) in an alphabetic script. We have seen that the thematic lists do in fact include an element of graphemic organisation. And it seems fair to say that even the multiplication tables are at least as much about writing as they are about computing. Multiplication tables are most useful when they have been learned by heart. However, the sexagesimal system that was used in cuneiform mathematics was complicated enough to justify *copying* the tables on tablets in order to exercise number writing and computation *in writing*. Old Babylonian lexical lists are not about stones, birds, or language. They are about writing, and it is from their treatment of the writing system that the whole corpus acquires its unity. It is worth noting that this Old Babylonian attitude towards literacy and the writing system itself differs fundamentally from ours. For us the written text is a mere wrapping. It contains words combined into sentences, and connected to an argument. These words, sentences and arguments are what matters to us; not the writing as such. The writing only guarantees the preservation of the text. But to the Mesopotamians the writing system itself was a subject of inquiry. The lists not merely record the writing system as it is used. They analyse the system from various angles and in a theoretical way. The point of learning the lists is not simply to acquire the technique of writing. The pupil who had gone through this curriculum knew all the ins and outs of the highly complex cuneiform writing system. This ‘science of writing’²⁶ was itself mainly preserved in memory. Indeed, the written documents, the exercise tablets, were not to be preserved at all. They were to be recycled to be inscribed over and over again – by other exercises.

7.1. Between the end of the Old Babylonian period and the first millennium, lexical lists from Mesopotamia proper are rare. The first millennium lists can be regarded as developments of their Old Babylonian counterparts. Most lists and types still exist, but they are expanded at great length. Thematic lists are now always *bilingual*: Sumerian and Babylonian. The six chapters of Old Babylonian Nippur *ur₅-ra* were expanded into a series of twenty-two tablets, and two tablets of a different nature and format were added in front.²⁷ The sign list *Ea* is also provided with a Babylonian column and has become several times as long as it was. All conceivable (and some inconceivable) Sumerian equivalences of one Babylonian word are collected in a newly created type of list. Notwithstanding these later additions the first millennium corpus is continuous to the Old Babylonian tradition. This fact has given rise to the concept of the ‘forerunner’. The

²⁶ In Sumerian *nam-dub-sar-ra*; in Akkadian *tušarrūtum*, both abstract formulations derived from the words for ‘scribe’.

²⁷ See above, footnote 12.

unilingual Old Babylonian lexical lists are treated as forerunners to the first millennium bilingual composition. The implication of this concept is that the bilingual format is to be regarded as the authority, whereas the unilingual lists were so to speak in a less advanced stage of development.

It is important to note that, whatever their relationship to the Old Babylonian corpus, the first millennium lexical texts have an entirely different nature. The development from the Old Babylonian to the first millennium corpus cannot be understood in terms of textual tradition alone. This development has no internal necessity. It is explained by the different role assigned to lexical texts – and to texts in general – in the late period.

7.2. In addition to acquiring a bilingual format (or more precisely a Babylonian column) the most conspicuous change in the lexical tradition is its *standardisation*. We remarked above that there is not *one* Old Babylonian list of wooden objects. Each scribal centre had its own version, and even the extant copies from Nippur show important variation among themselves. By the end of the second millennium a *textus receptus* emerges.²⁸ This standard text remains in use during the whole first millennium and is attested over a large geographical area. The standardisation of the lexical lists is not an isolated phenomenon. Omen collections, medical texts, and literary texts all receive a standardised recension. This development is accompanied by the creation of a specialised technical vocabulary referring to faithful copying. A colophon may indicate that a text is complete, that it has been collated, and where the original came from. Some medical tablets contain the remark that they have been copied “hastily”: tablet typology shows that these were extract tablets, which were not meant to be links in the chain of tradition, but were rather produced for or by a working physician for practical purposes. Another well-attested term is *hepi* ‘broken’. This Babylonian term is not found in the colophon but within the text, and it indicates that the original was damaged at that point. Now standardised lexical lists tend to become obsolete rapidly, for the text can no longer be adapted as was regularly done in the earlier periods. Therefore three column texts were created, in which a Sumerian word was explained by two successive Babylonian ones. Columns i and ii are identical to the entries in the standard lexical text; column iii explains the obsolete Babylonian word of column ii by a current one. All these phenomena point to a growing respect for the *written* text. The memory of the teacher is no longer the place where knowledge is stored: reliable knowledge is now found on clay tablets, and stored in libraries or archives. Lexical lists are no longer used exclusively as exercises for pupils. They are upgraded to become crucial sources of a venerable tradition.

7.3. The standardisation of other textual types, such as omen collections, literary and medical texts, brought with it a new function for the lexical corpus. Traditional texts are constantly in need of interpretation and actualisation. Since this can no longer be done by updating the texts themselves, hermeneutical tools need to be created. And for this the lexical texts proved eminently useful. Learned commentary texts use the lexical tradition to explain difficult words or phrases. Some of these commentaries comply with

²⁸ For the standardisation process in Mesopotamia see Civil 1979: 168–69; Rochberg-Halton 1984; Lieberman 1990.

what we would call sound philology. But other commentaries use all the complexities of the cuneiform system for their exegesis.²⁹ One of the more straightforward procedures is to analyse a *Babylonian* word into its component syllables, and then to explain each of these syllables as a *Sumerian* word.³⁰ A comparison to the Old Babylonian material shows clearly that the lists were not originally created for this kind of pastime, but, at the same time, that they were perfectly suitable for their new function.³¹

7.4. In summary, we have described three closely connected aspects of changes affecting the place of the lists in the cultural system. First the lists have acquired a new status: from schoolboys' exercises they have evolved into a learned tradition. Second, their primary mode of existence has moved from the teacher's memory to clay tablets in a library. Third, they were given a hermeneutic function in the process of preserving other texts. Moreover, and this is the fourth and final change to be discussed here, first millennium lexical lists are found in a context that differs significantly from the Old Babylonian scribal school. The list format is as simple as can be, and was used from the inception of writing itself. The possibilities offered by the format are further exploited in the first millennium. In first millennium tablet collections ('libraries') the most important group of texts, both quantitatively and ideologically, is invariably the corpus of omen compendia. Each omen collection is specialised for the interpretation of a specific groups of 'signs'. An important example is *Enūma Anu Enlil*,³² so called after the opening line of its introduction. This is a huge collection of astronomical and meteorological omens. Its main focus is on the heavenly bodies: movements, risings, conjunctions, eclipses, and such phenomena as haloes or colour variations. Other topics are rains, storms, and earthquakes. Another such collection is *Šumma ālu* 'If a city ...' (again its opening line); this series contains 'chance encounters' omens. It interprets observations of cities, houses, doors, animal behaviour, human sexual practice, the digging of a well, etc.³³ Other omen series may be labeled 'physiognomic' (describing and interpreting the bodily appearance of humans), 'diagnostic' (describing and interpreting the symptoms of diseased people), and 'teratological' (describing and interpreting monstrous births, both human and animal).³⁴ Assurbanipal's famous library consisted for the greater part of copies of these and other series of divinatory handbooks. In all the corpus of omen texts comprises several hundreds of chapters (corresponding to tablets), with tens of thousands of individual omens. A short example is taken from the collection of terrestrial omens (*Šumma ālu*) from the chapter on cats:

²⁹ For the various exegetical techniques used in bilinguals and commentaries see Maul 1997 and the literature mentioned there.

³⁰ The last tablet of the Epic of Creation is an illustration – on the grandest scale possible since it has cosmic meaning – of a procedure much like this. See Bottéro 1977.

³¹ A concomitant reason for this development may well be that, after all, already in Old Babylonian times the lexical lists, or at least lexical procedures, were sometimes used as material for poetic invention, as Civil 1987 has brilliantly shown.

³² For the history and function of the series see Koch-Westenholz 1995. See also Baigent 1994 and Reiner 1995: 15–24. Van Soldt 1995 is an edition of the solar omens. The series, or at any rate its methods and techniques, had an enormous influence on classical astronomy and astrology, for which see Barton 1994 and especially Pingree 1998.

³³ For a brief description see Cryer 1994: 161–67 with references to earlier literature.

³⁴ All these series are briefly described in Cryer 1994. See also Kraus 1939 and Bottéro 1985: 65–112 (on physiognomy); Labat 1951 (on diagnostics); Bottéro 1985: 1–28 (on teratology).

If a white cat is seen in the house of a man the country will suffer hardship.
If a black cat is seen in the house of a man the country will prosper.
If a red cat is seen in the house of a man the country will be rich
If a spotted cat is seen in the house of a man the country will not thrive.
If a yellow³⁵ cat is seen in the house of a man the country will have a good reputation.

Omen texts are generically related to lexical lists in at least two ways. Firstly, in an omen an observation is related to an explanation or interpretation. This is formally equivalent to an entry in most types of lists, where a sign is linked to a gloss, or a Sumerian word to a Babylonian one. Secondly, omens are found in systematic collections. Omens and lexical lists both have a horizontal and a vertical reading. The vertical reading uncovers the system behind the individual items. In both lexical lists and omen collections the system produces unlikely or utterly impossible items. The short passage from the cat omens cited above is a case in point. Whether cats in all these colours actually existed in ancient Mesopotamia is not relevant. The set of colours is a standard set, recurring everywhere in Mesopotamian tradition, and found also *passim* in the omen collections. In the lexical tradition this same set of colours is used for unripe dates. I cannot imagine what a white or red unripe date may be like, but they are listed anyway. And they are faithfully translated into Babylonian.

7.5. From the outset lexical lists have been the prime medium for bearing and transmitting knowledge. It is not by chance that the omen tradition more or less mimicked their format. Omen specialists were undoubtedly among the intellectuals of their times, in that they were highly trained in a specialised technique based on writing and reading. The interpretation of terrestrial and celestial signs is a hermeneutic procedure not unlike reading and understanding cuneiform. This similarity actually transpires through the technical vocabulary of the time. The two most important divinatory techniques were extispicy and astronomical divination. Extispicy is the interpretation of the entrails, almost always the liver, although other organs are also used, of a sacrificial animal, generally a sheep. In the ritual preceding the slaughter the gods are asked to “write a reliable message” on the liver.³⁶ The message transmitted by heavenly bodies was sometimes called *Šitir Šamê* ‘celestial writing’³⁷ The formal similarity between omen compendia and lexical lists has its pendant in this terminology. Extispicy and astronomical divination are forms of *reading*.³⁸

8. Using the concept ‘genre’ in the traditional manner, that is to say solely as a means for categorising texts and textual types is hardly a fruitful undertaking. It is bound to be frustrating, because there will always be texts defying such classification. It is also misleading, because it tends to obscure the fact that textual types are related to each

³⁵ Or ‘green’. As in most Semitic languages the Babylonian word for ‘green’ and ‘yellow’ is the same.

³⁶ Some 350 reports of such divinatory procedures intended to ascertain divine advice about political and military matters, together with an introduction on the technique and terminology, are found in Starr 1990.

³⁷ As in extispicy, the celestial omen collections were also used to interpret reported sightings of the phenomena. Some 560 reports are found in Hunger 1992.

³⁸ For the perceived near identity between divinatory signs and writing, see also Bottéro 1974 and Vanstiphout & Veldhuis 1996. For divination as such see e.g. Oppenheim 1977: 206–27 and Reiner 1995: 61–79.

other in a dynamic way. Lexical texts from the various periods discussed here are so different in use, status, and mode of existence that they can hardly be put under a single heading. Yet it would be foolish to deny that they represent one and the same textual type, albeit used in very different ways. Also, it makes little sense to say that omen compendia are in reality, or by their deepest nature, lexical texts. Omens are a category of their own, and there is no danger of confusing the two textual types. It does make sense, however, to state that omen compendia by adapting themselves to the format of the lexical lists, appropriate part of the phenomenal prestige of the lexical tradition and of its significance in Mesopotamian intellectual history.

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