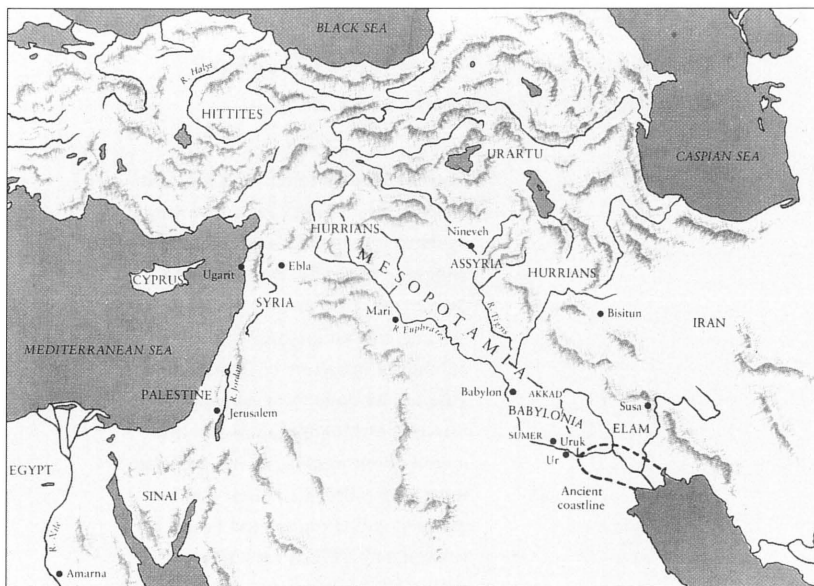


## **Bilingual Babel:**

### **Cuneiform Texts in Two or More Languages from Ancient Mesopotamia and Beyond**

**Jerrold Cooper**

**Ancient Mesopotamia was the birthplace of the earliest known writing system. It was also a land of ethnolinguistic diversity, that included Sumerians, who invented cuneiform writing, and an increasingly large number of speakers of Semitic languages. As cuneiform spread throughout Mesopotamia and into neighboring regions, it was adapted to write Semitic and other languages, and bilingual and even trilingual cuneiform tablets were produced, containing Sumerian texts and their translations, usually into Semitic Akkadian. Various formats were developed to set off the translation from the original, and the practice, which began around 2400 BC, continued almost to the beginning of our own era.**



Map of the Cuneiform World

Ancient Mesopotamia (present-day Iraq)<sup>1</sup> was a multilingual, multi-ethnic environment throughout its long history. Despite the cheek-by-jowl commingling of languages and cultures, there is virtually no evidence for ethno-linguistic conflict, and very little for ethno-linguistic prejudice, in the written records of three millennia.<sup>2</sup> Not every language used in Mesopotamia found written expression, and documents from Mesopotamia are overwhelmingly unilingual, but there were periods when it was deemed useful or necessary to produce texts in two (or even more) languages. Over the centuries, formats and techniques were developed that enabled two or more languages on a single document to co-exist as harmoniously and productively as the diverse inhabitants of ancient Mesopotamia themselves. After a brief consideration of writing's origin, the following discussion will illustrate the development of these formats and techniques, from their rather primitive beginnings at Ebla, just after the middle of the third millennium BC, to the trilingual inscriptions of the Achaemenid Persians from just after the middle of the first millennium BC.

Writing was invented at Uruk in southern Babylonia around 3100 BC. More precisely, the first system of notation that would develop, over several centuries, the capability to represent natural language, was invented there at that time. The choice of clay as a writing surface was felicitous both for the ancients—it was ubiquitous in a resource-poor land—and for us, since, unlike organic writing surfaces, clay tablets have survived the millennia very well. Early schematic pictographs quite soon evolved into abstract configurations of wedges (hence *cuneiform*, meaning wedge-shaped) formed by impressing a reed stylus on a wet clay tablet.



**Multicolumn bilingual wordlist from Ebla in Syria, ca. 2400 BC. A Sumerian word in one case (the box around each group of signs) is followed by its Semitic equivalent in the case beneath it. Sometimes there is a pronunciation gloss for the Sumerian, added in a case between the Sumerian word and its translation.**

figure 1

Texts were first written from right to left, with small numbers of signs (names, words, short phrases) enclosed in cases (similar to *figure 1*); when the left edge of the tablet was reached, a new row of cases was begun at the right, just beneath the first row. At some point, certainly by 2000 BC but probably by 2500, scribes began turning the tablets ninety degrees counterclockwise, so that the rows of cases became vertical columns, and the signs themselves were carefully arranged within the individual cases from left to right in the order that they were to be read. The cases eventually elongated into lines. Smaller tablets had only one column of lines per side (e.g., *figure 9*); larger tablets might have two (e.g., *figure 12*) or more (e.g., *figure 3*) columns. By about 2900 BC, phonetic writing based on the rebus principle had developed. The sign for mouth, Sumerian *ka*, could be used to write the syllable /ka/, etc. Thus, it became possible not only to express grammatical elements and foreign names in cuneiform, but to write foreign languages as well. In the course of three millennia cuneiform would be used to write a variety of languages from the Persian Gulf to the Caucasus, from Anatolia and Egypt to Iran.<sup>3</sup>

Uruk was a Sumerian city, and the language of the first tablets was Sumerian. But Sumerian, a linguistic isolate, was not the only language of southern Mesopotamia. From very early times, eastern Semitic dialects were spoken in Babylonia, and geographical names betray the presence of other linguistic groups that probably predated both Sumerians and Semites in Mesopotamia. While Semitic speakers were dominant in northern Babylonia (Akkad) and Sumerian speakers in the south (Sumer), Semitic speech could be heard in the south and Sumerian in the north. Writing, however, seems to have been a Sumerian thing; when Babylonians of the mid-third millennium BC wrote, they almost always wrote in Sumerian, whatever their mother-tongue may have been. Our earliest Sumerian literary texts (as opposed to administrative or

legal documents), which date from about 2500 BC, were written by scribes with Semitic names.<sup>4</sup>

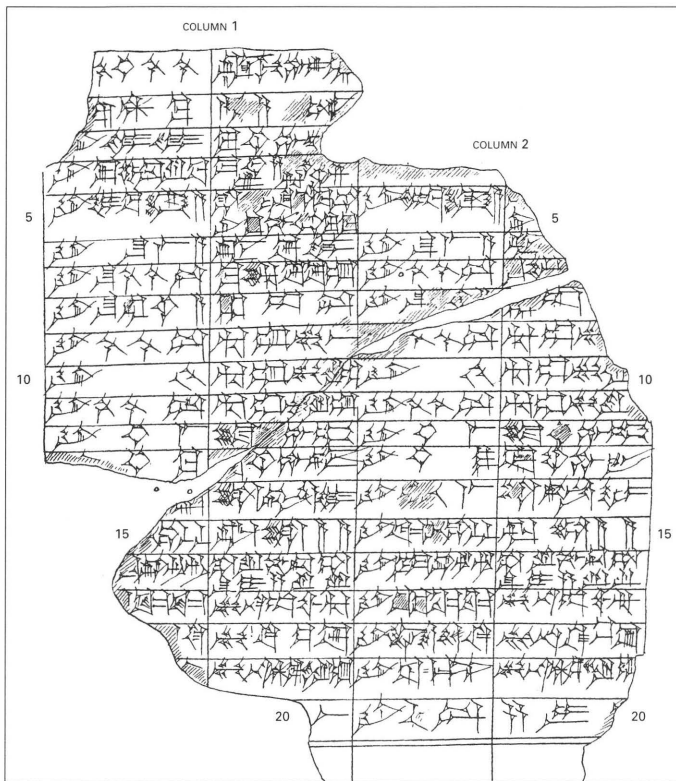
By that time, cuneiform writing had spread to Mari on the middle Euphrates, and beyond it to Ebla, forty miles south of Aleppo in Syria, less than one hundred miles from the Mediterranean. Living far from any Sumerian speech area, the scribes of Mari and Ebla adapted Sumerian cuneiform to write their own Semitic dialects, which were related to, but different from, the Semitic then spoken in Babylonia. The system that they developed was very complex. Most nouns and even verbs were written with Sumerian signs used as logograms, that is, the Sumerian word was read as its Semitic equivalent. Pronouns, prepositions, conjunctions and proper nouns were written phonetically in Semitic, using rebus-derived phonetic values of the Sumerian signs (e.g., Sumerian *si* “horn” followed by *in* “straw” used to write the Semitic preposition *sin* “toward”). Thus, scribal education in Semitic-speaking Syria entailed learning the Sumerian cuneiform system as well as the local adaptation of phonetic sign values for writing Semitic. The most important teaching tool was sign lists organized semantically or by sign form, which the students copied and learned by heart to master the repertoire of more than four hundred cuneiform signs.<sup>5</sup>

And so the first bilingual texts emerged. In mid-third millennium Babylonia, native Semitic speakers either lived in bilingual communities and knew Sumerian, or had sufficient access to Sumerian speakers and Sumerian traditions that learning the Sumerian language was not a major obstacle. They used the same Sumerian sign lists as native Sumerian speakers, not to learn the language, but to learn the writing system. But at distant Ebla, where Sumerian was an exotic tongue, students not only learned from imported Sumerian lists, but developed their own *bilingual* lists, adding a Semitic translation for each Sumerian word or phrase, and sometimes including a pronunciation gloss,

using simple phonetic signs to indicate how a Sumerian sign or group of signs was pronounced (*figure 1*). The entries were arranged vertically in columns: Sumerian sign(s)—(phonetic gloss)—translation—Sumerian sign(s)—(phonetic gloss)—translation—etc. In appearance, these bilingual lexical lists look very much like any other list or document from Ebla, that is, no effort was made to arrange the entries in such a way that the Sumerian and Semitic were clearly distinguished from one another, or that the tablets could be easily scanned for a particular Sumerian entry or Semitic entry. Some tablets distinguish the Semitic translation by following it with a single wedge, similar to the single, double and triple wedges used on later tablets to mark glosses or to separate Sumerian from Akkadian in bilingual texts (*figures 10* and *12*). But at Ebla this use of the wedge is quite inconsistent: Some tablets nearly always add it, whereas others use it only occasionally and, it seems, quite randomly.<sup>6</sup>

In Babylonia proper, it would be another five hundred years before pronunciation glosses and translations were added to Sumerian sign lists. Even as Sumerian began to die out as a spoken language there, the tradition of written Sumerian remained strong; much like Latin in Europe, it was retained for legal and administrative purposes until 1600 BC, and for religious and magical purposes Sumerian survived almost to the beginning of our own era.<sup>7</sup> Writing in Semitic in Babylonia began on a large scale with the dynasty founded by Sargon of Akkade (ca. 2300 BC); the dynasty's capital, Akkade, somewhere near Kish, gave the name Akkad to northern Babylonia (distinguishing it from southern Babylonia, Sumer) and the name Akkadian to the language group that subsumes the various Babylonian and Assyrian dialects that were used in Mesopotamia and beyond for the next two thousand years.<sup>8</sup> When, sometime after 2000 BC, Babylonian scribes began adding Akkadian translations to their lexical lists, they put them in a parallel column to the right of the

Sumerian (*figures 2 and 3*). Thus, Sumerian and Akkadian were clearly distinguished from one another, and the Sumerian column could easily be scanned to find a desired entry. The Akkadian column could even be covered so that ancient students could test themselves. Sumerian pronunciation glosses were put in a column to the left of the Sumerian entries, and native sign-names, when included, were put in yet another column between the Sumerian and the Akkadian (*figure 4*). An additional column could be



**Multicolumn bilingual wordlist from Nippur in Babylonia, ca. 1750 BC. Each column is subdivided by a vertical ruling into two sub-columns. Sumerian words and phrases describing various human characteristics are listed in the left sub-column, with Akkadian (Semitic) translations in the right sub-column.**

*figure 2*

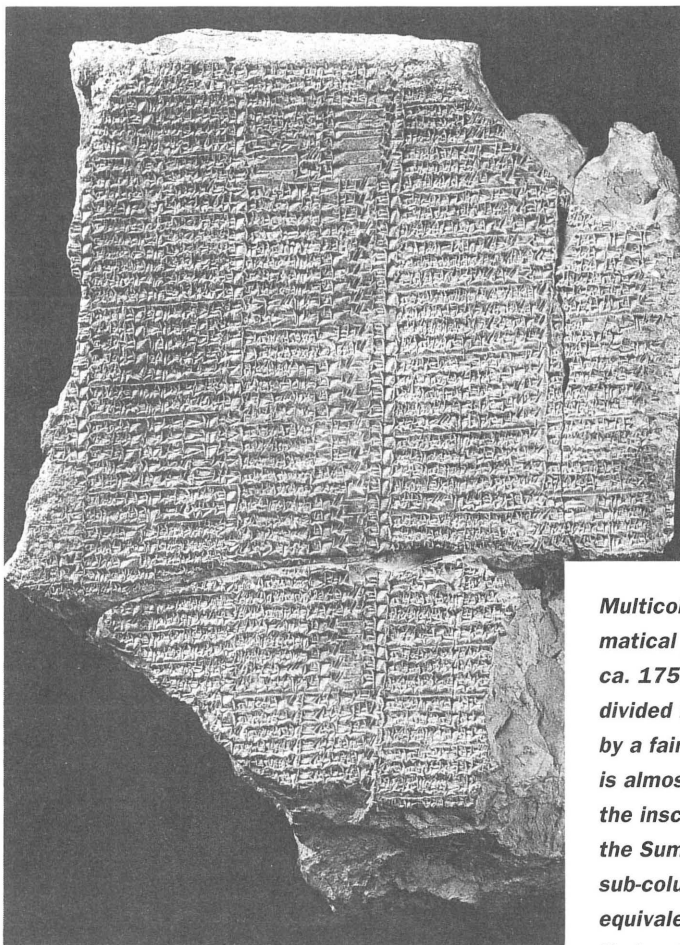


figure 3

**Multicolumn bilingual grammatical paradigms from Nippur, ca. 1750 BC. Each column is divided into two sub-columns by a faint vertical ruling which is almost entirely obscured by the inscription. On each line, the Sumerian form is in the left sub-column and its Akkadian equivalent is on the right. Horizontal rulings across each column mark off groups of similar forms.**

added to the right of the Akkadian for Akkadian synonyms or even translation into a third language (*figure 5*).<sup>9</sup> This parallel column layout was ideally suited to such lists, where individual signs or groups of signs were translated and otherwise glossed. It was certainly superior to the earlier format used at Ebla, and it continued in use for all lexical lists for nearly two millennia.

After 2000 BC, Babylonian scribes not only translated the lists that they used for reference and learning; they



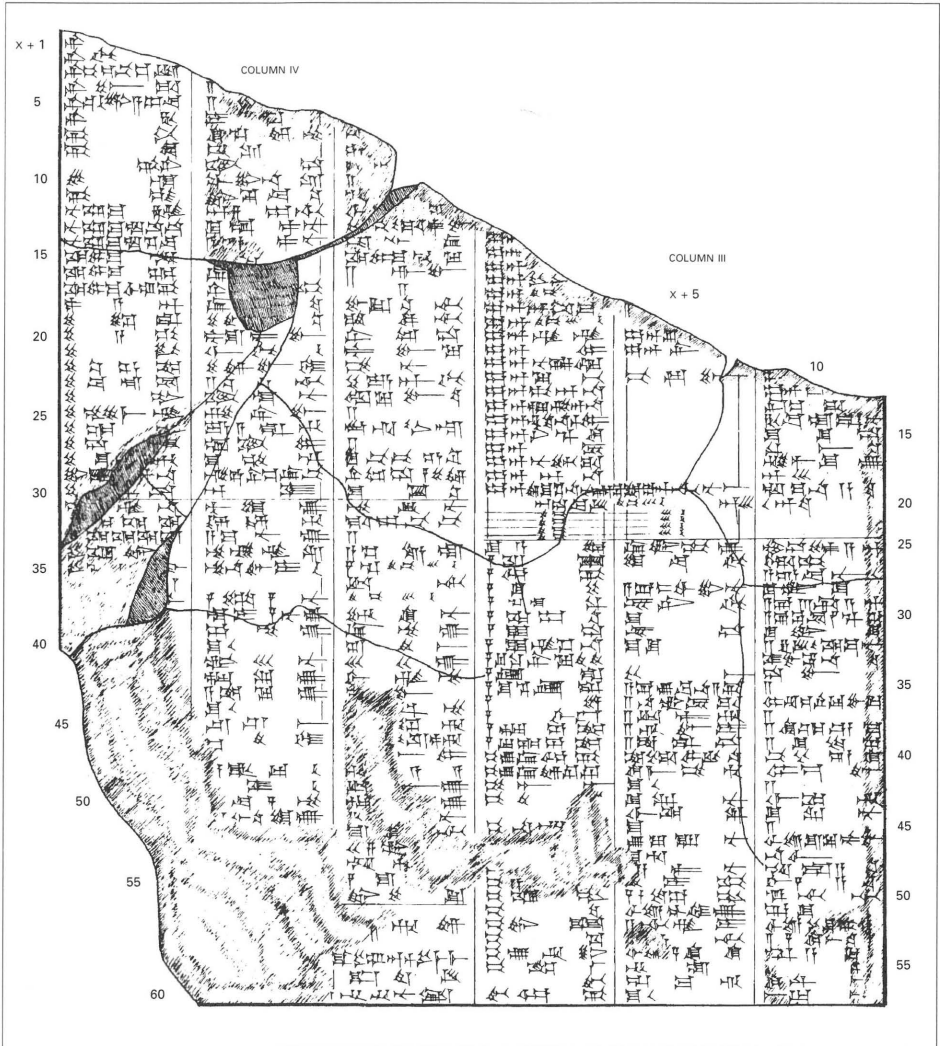
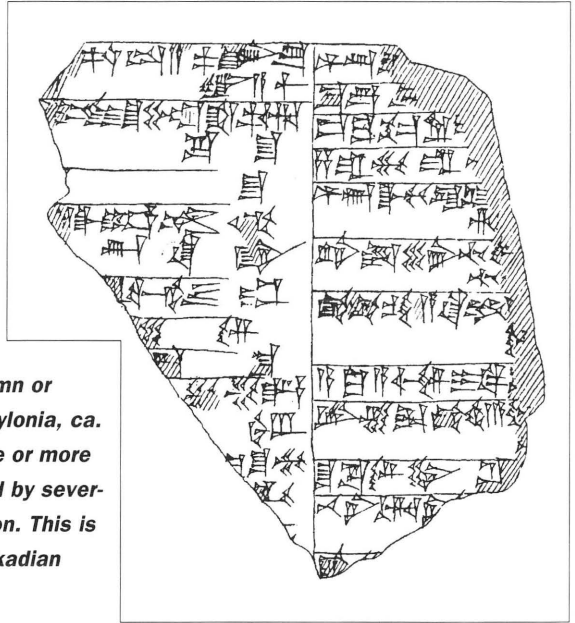


figure 5

**Thematic lexicon from Uruk, 5th-4th century BC. Because this is the reverse of the tablet, the right-hand column is read before the left-hand column, even though the direction of each written line remains left-to-right. Each column is divided into three sub-columns: Sumerian word-Akkadian translation-second (explanatory) Akkadian translation. The horizontal rulings separate semantic categories (stars, food and agricultural products, human types and classes.) Note the four short horizontal lines with "fresh break" written in smaller characters after line 20 in column iii, indicating that four lines of the original text were broken at this point.**

figure 6



**Fragment of a two-column hymn or incantation from Girsu in Babylonia, ca. 1900 BC. In each column, one or more lines of Sumerian are followed by several lines of Akkadian translation. This is the oldest extant Sumero-Akkadian bilingual literary text.**

also began to provide full Akkadian translations for the Sumerian literary texts they copied—myth, epic, hymns, proverbs and incantations. But unlike the period after 1600 BC, when Sumerian texts were as a rule accompanied by an Akkadian translation, in this earlier period, translations were quite rare, often from outlying areas, and by their appearance and quality betray themselves as the work of inferior scribes, either students who needed a “pony” to learn Sumerian, or scribes who never learned Sumerian well enough in the first place. The rarity of these early bilinguals, compared to the thousands of unilingual Sumerian tablets of the same period, is eloquent testimony to the strength of Sumerian tradition in the Old Babylonian (2000-1600 BC) academy.

Full translation<sup>10</sup> was only one solution to the increasingly felt difficulty in understanding Sumerian texts. Another was to gloss just certain Sumerian words and phrases, although the criteria used for selecting *which* words and phrases to gloss often elude us. A text will not infrequently gloss a rather simple Sumerian word, leaving

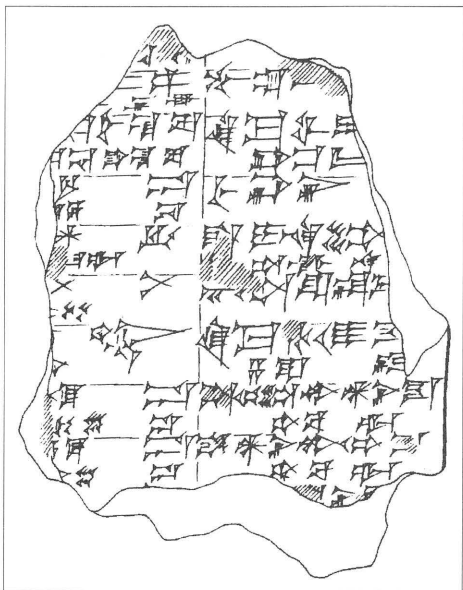


figure 7

**Fragment of proverbial insults to women from Nippur, ca. 1750 BC. The Sumerian text in the left-hand column is translated into Akkadian on the right. The smaller signs beneath each line of Sumerian indicate the Sumerian's pronunciation.**

elements unexplained which seem much more difficult to us. These glosses are usually written in smaller script, squeezed above, below or to the side of the Sumerian text.<sup>11</sup> Full translations, however, could not be stuck wherever there happened to be room; they had to be allotted their own space when the tablet was planned out.

Two basic formats for arranging the Sumerian and Akkadian text emerged:<sup>12</sup> parallel columns, as the lexical lists, with the Sumerian original on the left and the Akkadian translation to the right (*figures 7, 8, 11*), or inter-linear translation, where one or sometimes more lines of Sumerian are translated into Akkadian immediately below the Sumerian (*figures 6, 9, 10, 12*). Over the course of the second millennium a distinct preference for the interlinear format emerged, so that by the end of the millennium most bilinguals were interlinear. The reason for this preference quite likely has to do with tablet shape and size: Cuneiform tablets can be narrow or wide, that is, one column (per side, e.g., *figures 9 and 10*) or multi-column (e.g., *figures 3*

and 12). Parallel-column lists, whose entries are single words or phrases, can fit even on narrow tablets, but the parallel column format would not work well for literary texts on narrow tablets without squeezing the single Sumerian lines and their Akkadian translations into short multi-line blocks. In fact, this is what often happened for the few types of texts that continued to be transmitted in the parallel column format, mainly proverbs and other compositions associated with the scribal school.

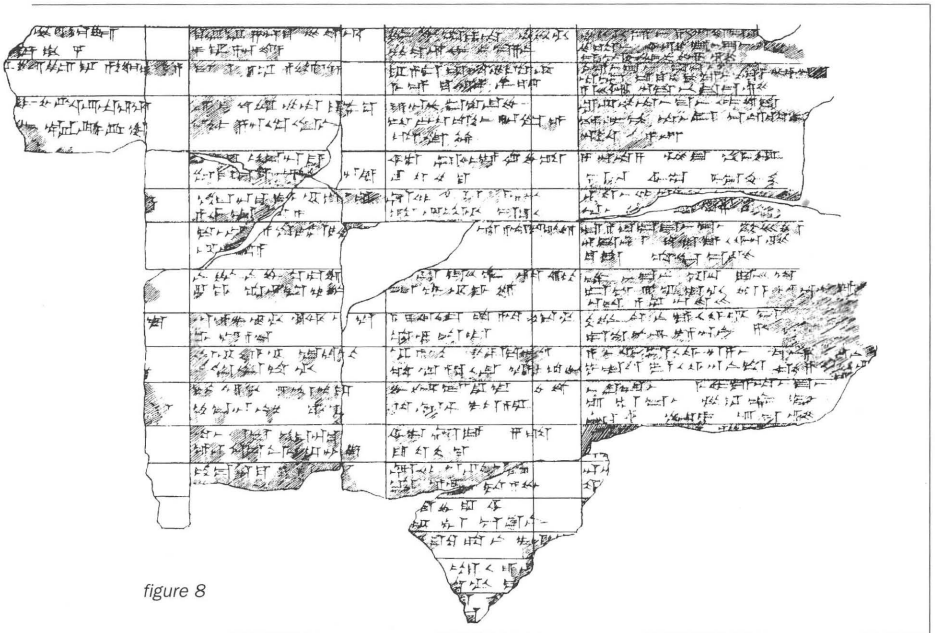


figure 8

**Fragment of trilingual lyric poem from Ugarit on the Levantine coast, but probably written at the Hittite capital Hattusas in central Anatolia, 14th century BC. The four columns, from left to right, contain i) the Sumerian text, ii) the Sumerian written phonetically to indicate its pronunciation, iii) an Akkadian translation, iv) a Hittite translation. Despite the double vertical rulings dividing the columns, only the right-most of each pair of rulings marks the end of one column and beginning of the next. Horizontal rulings group the individual poetic “lines” of the text together, each of which occupies several lines on this tablet because of the relative narrowness of the columns. The tablet is thought to have been imported to Ugarit in antiquity from the Hattusas, the Hittite capital.**

Even when such a text appears on a multi-column tablet (*figure 11*), the lines retain a squeezed, list-like look, and it is certainly no accident that precisely those literary texts most closely associated with the school maintain the format of the list, which was the pedagogical tool *par excellence*.

The interlinear format has the advantage of fitting well both single and multi-column tablets, but it harkens back to the Ebla lexical lists with the same disadvantage:

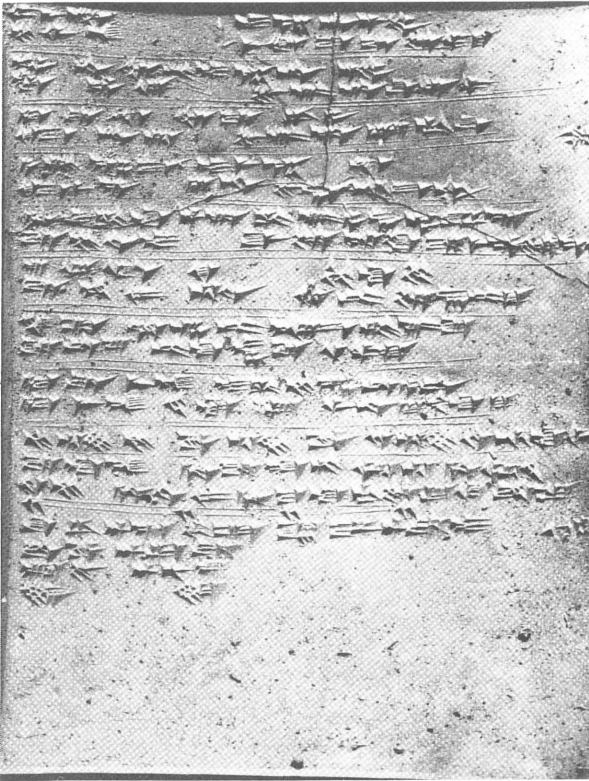


figure 9

***Reverse of a poetic royal blessing from Emar in Syria (due east of Ebla on the Euphrates), 13th century BC. Double horizontal rulings pair each Sumerian line with the Akkadian translation beneath it. Near the end, three lines occur between double horizontal rulings: the Sumerian text, set off from its two-line Akkadian translation by a single ruling. After the final double ruling with its superimposed sets of double wedges (the wedges' function is unknown), there is a colophon identifying the scribe and the month in which he wrote the tablet.***

It is not easy to see at a glance what is Sumerian and what is Akkadian (*figure 6*). To remedy this, two basic devices were developed: The Sumerian line and its Akkadian translation could be paired between horizontal rulings (*figures 9 and 10a*), or the Akkadian line could be indented beneath the Sumerian (*figure 12*); some tablets do both (*figure 10b*). When a Sumerian line was particularly short, the scribes often saved space by putting the Akkadian translation on the same line as the Sumerian. In such cases, the Akkadian translation could follow the entire Sumerian line (*figures 10a-b, figure 12 lines 65f.*), or it could be inserted between two halves of the Sumerian line, often set one half line lower than the Sumerian (*figure 12, lines 15, 18, 19*). Either way, the Akkadian was usually, but not always (e.g., *figure 12, line 18*) set off from the Sumerian by double wedges.

In the first half of the second millennium, Akkadian became a *lingua franca* throughout the Near East, and was studied and used for business, administration and diplomatic purposes far beyond the Akkadian speech area. Because learning Akkadian meant learning cuneiform, Sumerian was an integral part of the scribal curriculum, and thus there are Sumero-Akkadian bilinguals from extra-Mesopotamian centers such as the Hittite capital Hattusas (Boghazköi), Ugarit on the Levantine coast (*figure 8*), and Emar (*figure 9*) on the great bend of the Euphrates in Syria.<sup>13</sup> In Mesopotamia, the Sumerian of most bilinguals is written with normal orthography, but sometimes the Sumerian text is partly or entirely “phonetic,” that is, written with basic phonetic signs similar to those used in the pronunciation glosses of the lexical lists discussed above. Some bilinguals from these western centers of the late first millennium include *both* normal and phonetic Sumerian texts together with an Akkadian translation. Rarely, at Hattusas, a Hittite translation was added as well, resulting in a trilingual tablet arranged in four parallel columns: Sumerian—phonetic Sumerian—Akkadian—Hittite (*figure 8*).

Surprisingly few monumental Sumero-Akkadian bilingual inscriptions have been found, although we know from later copies on clay tablets that kings of Akkade in the late third millennium had stelae and statues inscribed with bilingual texts, and we have originals and copies of bilingual royal inscriptions from Hammurabi of Babylon and his successors (ca. 1800-1600 BC). Scattered bilingual

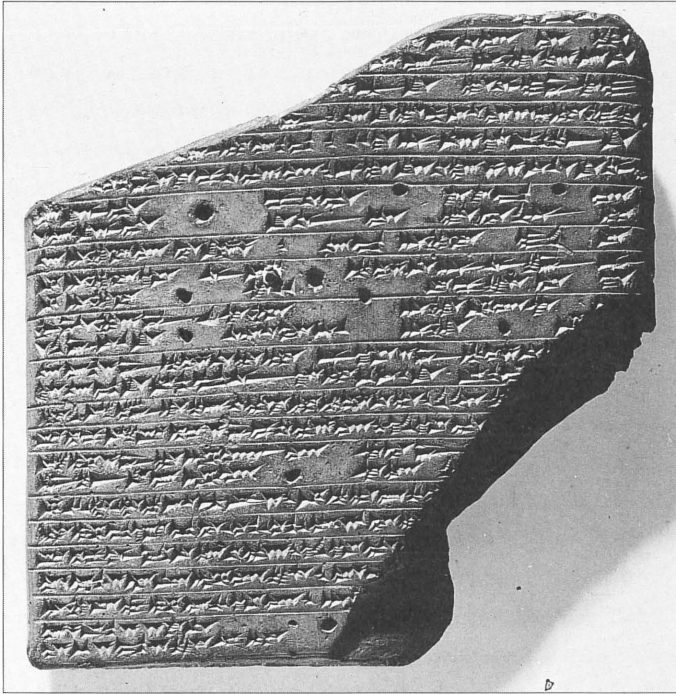


figure 10a

**Figure 10 (a and b) Fragments of a hymnic-mythic text from Assyria of the 11th (a) and 7th (b) centuries BC. Both tablets pair the Sumerian text with an interlinear Akkadian translation between horizontal rulings, and (b) indents each Akkadian line slightly. For short lines, the Akkadian translation appears after the Sumerian on the same line, set off by a double wedge. The colophon following the double horizontal ruling in (b) labels it as the fourth and last tablet of the composition *angim dimma* (“Created like the God of Heaven”), and identifies it as part of the palace library of king Ashurbanipal of Assyria, who ruled from Nineveh, 668-627 BC.**

royal inscriptions from later times are known from a few originals and from copies on clay tablets.<sup>14</sup> The Assyrian and Babylonian kings who dominated Western Asia in the first half of the first millennium left inscribed monuments in conquered territories which were written in cuneiform Akkadian, even though Akkadian was not understood by the conquered peoples. A new technology, linear alphabetic

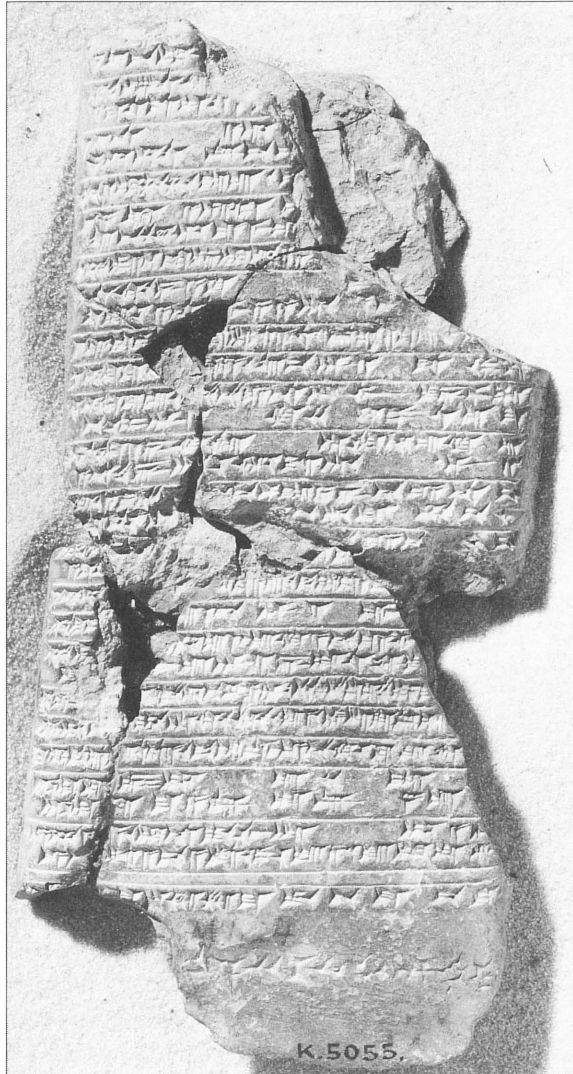


figure 10b

writing, had supplanted cuneiform in the west, and was used to write various Northwest Semitic languages. One of these, Aramaic, was emerging as the new *lingua franca* of the Near East, penetrating even Assyria and Babylonia.

When, ca. 830 BC, an Assyrian vassal, the ruler of Guzana in northern Syria, dedicated a life-sized statue of himself in the temple of the storm god at nearby Sikani, he inscribed it in both alphabetic Aramaic and cuneiform Akkadian (*figure 13*). In the Aramaic version, the lan-

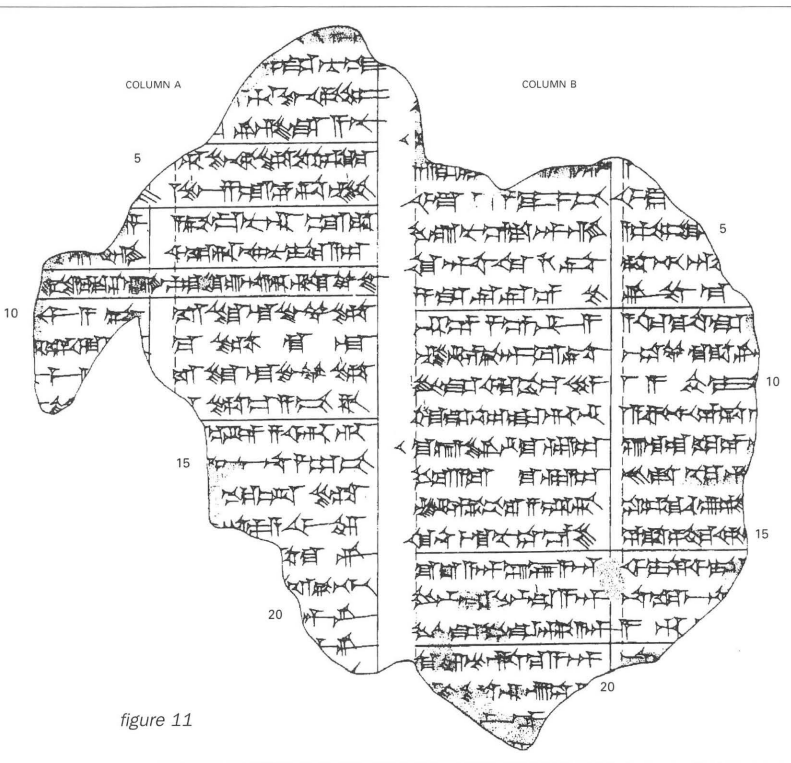
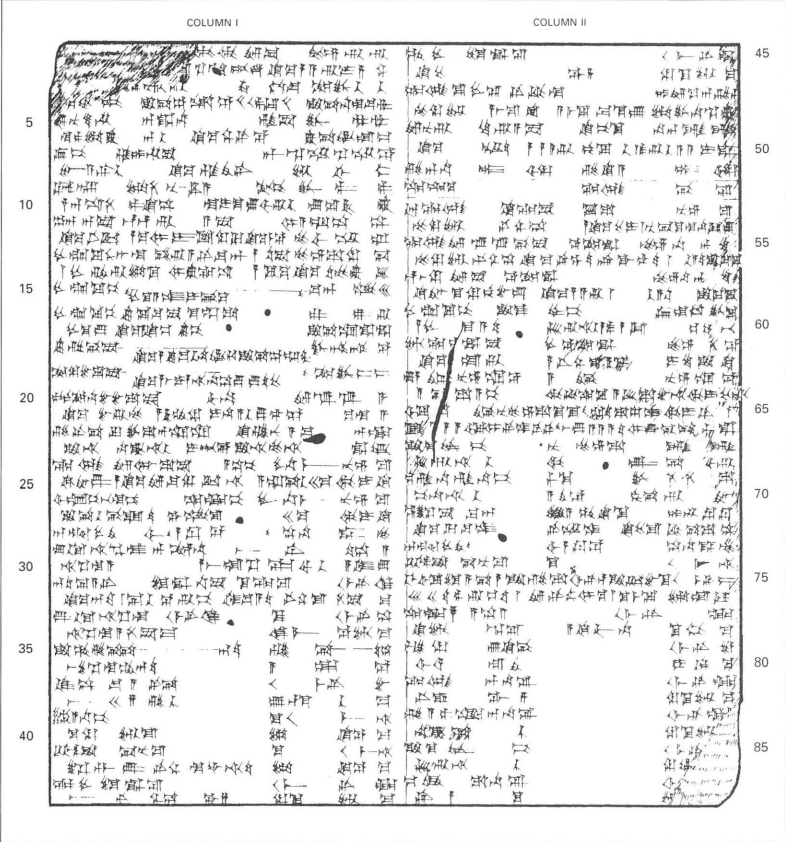


figure 11

**Fragment of two-column tablet of proverbs from Babylonia, 6th-4th centuries BC. A broad vertical double ruling separates the columns, and narrower double rulings divide each column into sub-columns (Sumerian on the left, Akkadian on the right). Horizontal rulings set off the individual proverbs from one another. The two wedges between the central column rulings tick off every ten lines (beginning at the now lost top of the tablet).**

guage of Guzana and Sikani, he called himself “king of Guzana,” whereas in the Akkadian version, keeping his Assyrian overlords in mind, he called himself “governor of Guzana.” The two scripts are very different in appearance, and it was not necessary to use format to distinguish one language from the other, as it was on the Sumero-Akkadian bilinguals which used the same script for both languages. Nevertheless, certain devices *were* used to reinforce the distinctiveness of each script. The Akkadian was



**Two-column tablet of incantations against headache from Uruk, late 4th century BC. Interlinear indented Akkadian translation. The translation of short lines is either set between the two halves of the Sumerian line, and lowered one-half line, set off (I.15) or not (I.18) by double wedges, or given on the same line after the Sumerian text, separated from it by a double wedge, as in 65f.**

figure 12



figure 13

***Rear of statue of a 9th century BC Assyrian vassal from Tell Fekherye (ancient Sikani) in northern Syria. The alphabetic Aramaic inscription is inscribed horizontally on the skirt, read from right to left. The cuneiform Akkadian equivalent is inscribed perpendicular to it. Whereas the individual lines of the Aramaic inscription are not ruled, the Akkadian lines are and appear as vertical columns. The two versions meet two-thirds of the way across the skirt, toward the right in this photo.***

positioned on the front of the skirt, and the Aramaic on the rear; the photo shows the two meeting on the rear, where the Akkadian ends and the Aramaic begins. The Akkadian has been inscribed vertically, a style deriving from the archaic orientation of the cuneiform that persisted on stone monuments; the vertical columns here are ruled. The Aramaic is inscribed from right to left in unruled horizontal lines; each line begins at the vertical ruling that marks the last column of Akkadian cuneiform, and continues across the back and around the side as far as the vertical ruling that marks the beginning of the Akkadian (not visible in the photo). There is a particular poignancy here: The alphabetic script and the Aramaic language of the vassal would, over the course of the next several centuries, make great inroads at the expense of the cuneiform script and Akkadian language of the sovereign. Although Akkadian cuneiform would persist as a prestige language for certain purposes right down to the beginning of our era, Mesopotamia would, by the middle of the first millennium BC, become a major center of Aramaic language use.<sup>15</sup>

If cuneiform had been replaced by alphabetic writing in the west in the early first millennium, it was still used to the north and east of Mesopotamia. Elam, an important culture area bordering on Mesopotamia in southwestern Iran, had borrowed cuneiform quite early, after experimenting with its own indigenous writing systems, and used cuneiform to write texts both in Akkadian and in the Elamite language.<sup>16</sup> When Cyrus the Persian conquered first the Elamite capital of Susa and then, in 539 BC, Babylon, cuneiform Elamite and Akkadian were retained for administrative use in the eastern Achaemenid Persian empire; as the Persians moved rapidly westward toward Egypt, Aramaic was adopted as the administrative language of the western empire. Desiring a script for their own Old Persian language, the Achaemenids developed a syllabary of thirty-six cuneiform signs (different from and

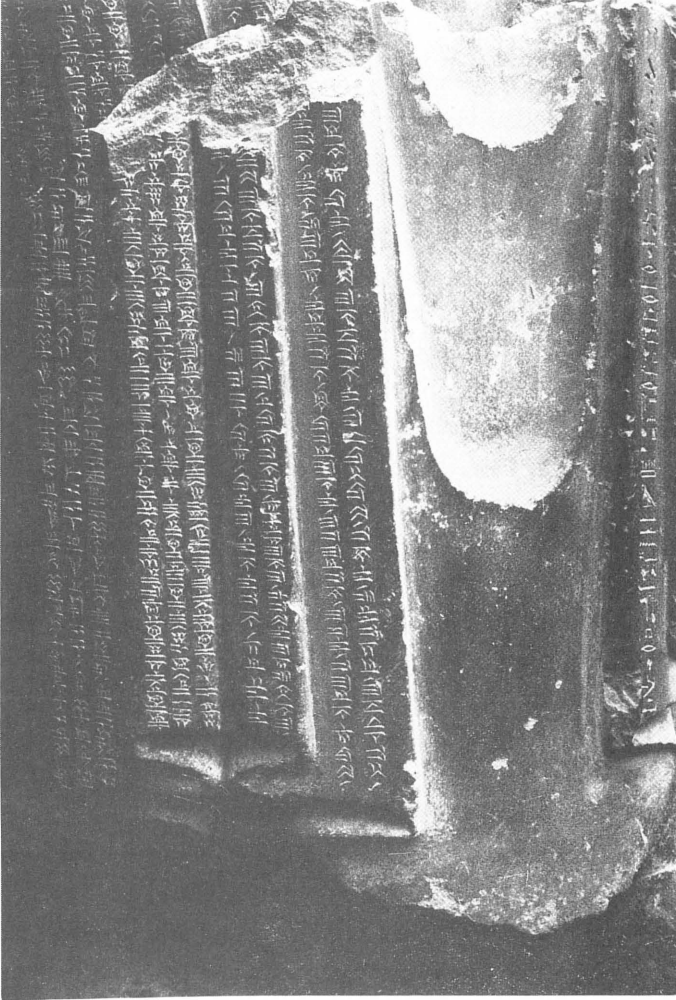


figure 14

**Detail of statue of Darius found at Susa in Iran, early 5th century BC. The folds to the left contain a trilingual inscription. The first four lines (turning the photo ninety degrees counterclockwise) are in the Old Persian cuneiform syllabary, the next three lines are Elamite (the language of Susa, written with Akkadian cuneiform signs) and the last three, in the shadows, are Akkadian. The folds on the right, only partly visible, contain a different inscription, written in Egyptian hieroglyphs.**

generally simpler than Akkadian signs) supplemented by five logograms.<sup>17</sup> This script was used for commemorative purposes in Iran, and often royal inscriptions would appear as trilingual cuneiform texts, in Old Persian, Elamite and Akkadian.

A large statue of the Persian king Darius I (521-486 BC) was unearthed in 1973 by French archaeologists at the old Elamite capital and later Achaemenid center of Susa (*figure 14*).<sup>18</sup> According to its inscriptions it was made in Egypt and was intended to be erected there; its Egyptian origin is confirmed by an analysis of the stone. A trilingual cuneiform inscription (Old Persian-Elamite-Akkadian) is arranged in the archaic vertical orientation on the folds of the robe on the left side of the photo. The folds on the right side of the figure contain one of several Egyptian inscriptions on the statue. Whereas the virtually identical cuneiform inscriptions proclaim that the Persian king erected the statue so that all would know that “*the Persian possessed Egypt*,” the Egyptian inscriptions portrayed Darius as a traditional Egyptian Pharaoh, much as later Greek and Roman rulers would be portrayed on their Egyptian monuments.

The Seleucid Greeks who succeeded the Persians as rulers of Babylonia could also cloak themselves in the rhetoric of traditional Mesopotamian monarchs, as the Akkadian inscription of Antiochus Soter (280-262 BC) attests.<sup>19</sup> In fact, judging from the surviving cuneiform tablets of the period, ancient Babylonian culture and forms, including the copying of Sumero-Akkadian bilingual texts, experienced a minor revival under the Seleucids.<sup>20</sup> But, curiously, although there are tablets that on the reverse carry transliterations in Greek letters of the cuneiform text on the obverse, there are no Greco-Akkadian bilinguals.<sup>21</sup> No Rosetta Stone would allow scholars to decode Mesopotamian cuneiform as they did Egyptian hieroglyphs, on the basis of a version in Greek. It was rather the Achaemenid Persian trilingual inscriptions

that provided the key to the decipherment of cuneiform in the first half of the last century, but only after the cuneiform Old Persian version had been cracked after decades of painstaking attempts by many researchers.<sup>22</sup> If the monument of the ruler of Guzana (*figure 13*) foreshadows the eventual extinction of cuneiform and the ascendance of the alphabet, then the statue of Darius (*figure 14*) is a harbinger of the ultimate rediscovery of cuneiform civilization, one of the greatest triumphs of modern philology.

### Notes

<sup>1</sup> The map shows the conventional divisions of ancient Mesopotamia: Assyria in the north, and Babylonia in the south, which is subdivided into Sumer (southern Babylonia) and Akkad (northern Babylonia).

<sup>2</sup> Cooper, J. S. 1983. *The Curse of Agade*. Baltimore: Johns Hopkins University Press, 30-33.

<sup>3</sup> On the cuneiform writing system, see Powell, Marvin (ed.), 1981. *Aspects of Cuneiform Writing*. *Visible Language* 15:4; Cooper, J. S. 1989. Cuneiform. *International Encyclopedia of Communications* 1: 438-443; Walker, C. B. F. 1990. Cuneiform. Chap. 1 in J. T. Hooker (ed.), *Reading the Past*. London: The British Museum; and the pertinent chapters in Bottéro, Jean. 1992. *Mesopotamia. Writing, Reasoning and the Gods*. Chicago: University of Chicago Press; Nissen, Hans. 1988. *The Early History of the Ancient Near East*. Chicago: University of Chicago Press; Postgate, J. N. 1992. *Early Mesopotamia. Society and Economy at the Dawn of History*. London: Routledge.

<sup>4</sup> For the ethno-linguistic makeup of early Babylonia, see the relevant sections of Bottéro, *Mesopotamia*; Postgate, *Early Mesopotamia*; Diakonoff, I. M. (ed.) 1991. *Early Antiquity*. Chicago: University of Chicago Press.

<sup>5</sup> For the language and texts from Ebla, see Gelb, I. J. 1987. The Language of Ebla. L. Cagni (ed.), *Ebla 1975-1985*. Naples: Istituto Universitario Orientale, 49-74; Michalowski, Piotr. 1987. Language, Literature and Writing at Ebla. Cagni, *Ebla*, 165-175; and Archi, Alfonso. 1987. Ebla and Eblaite. C. H. Gordon et al. (eds.), *Eblaitea: Essays on the Ebla Archive and Eblaite Language*, vol. 1. Winona Lake, Indiana: Eisenbrauns, 7-17. On the earliest lexical lists, see Nissen, H. J. 1986. The Archaic Texts from Uruk. *World Archaeology*, 17:3, 326-329.

- <sup>6</sup> For the bilingual lists from Ebla, see Pettinato, Giovanni. 1982. *Testi lessicali bilingui*. Materiali epigrafici di Ebla vol. 4. Naples: Istituto Universitario Orientale.
- <sup>7</sup> Cooper, J. S. 1973. Sumerian and Akkadian in Sumer and Akkad. *Orientalia*, 42: 239-246.
- <sup>8</sup> The relationships between Old Akkadian of the Sargonic dynasty and the Semitic dialects spoken and written (rarely) earlier in Babylonia and at Mari and Ebla remain a matter of controversy, as do the relationships between all of these and later Assyrian dialects. See Michalowski, Language, and Parpola, Simo. 1988. Proto-Assyrian. H. Waetzoldt and H. Hauptman (eds.). *Wirtschaft und Gesellschaft von Ebla*. Heidelberg: Studien zum alten Orient vol. 2. Heidelberg: Heidelberg Orientverlag, 293-298.
- <sup>9</sup> For the Babylonian lexical tradition, see Oppenheim, A. Leo. 1977. *Ancient Mesopotamia*. Chicago: University of Chicago Press, 243-249; Civil, Miguel. 1976. Lexicography. S. J. Lieberman (ed.), *Sumerological Studies in Honor of Thorkild Jacobsen*. Assyriological Studies 20. Chicago: University of Chicago Press, 123-157.
- <sup>10</sup> The term "full translation" is used for the translation of entire Sumerian texts, not just selected elements. But even "full" translations often leave proper names, well known formulas and repeated phrases and even lines, untranslated.
- <sup>11</sup> See Krecher, J. 1957-71. Glossen. *Reallexikon der Assyriologie*, 3: 431-440. In the Old Babylonian period (2000-1600 BC), occasionally glossed texts and full translations offered competing solutions to the same problem. There seems to have been no evolution from glosses to full translations; on the contrary, the earliest full translation is older than the earliest surviving glossed text. Some blurring of these generally distinct types can be found, i.e., nearly full translations of Sumerian texts written in small, gloss-like signs. After the Old Babylonian period, full translations became the rule, and the occasionally glossed text is quite rare.
- <sup>12</sup> For the following discussion of the development of a bilingual text corpus and tablet formats, see Krecher, J. 1976-80. Interlinearbilinguen. *Reallexikon der Assyriologie*, 5: 124-128; Cooper, J. S. 1971. Bilinguals from Boghazköi. I *Zeitschrift der Assyriologie*, 61: 1-22.
- <sup>13</sup> Cooper, Bilinguals. See there also for Akkado-Hittite and other types of bilinguals from Boghazköi (Hattusas).
- <sup>14</sup> For the Old Akkadian bilingual inscriptions, see Gelb, I. J. and Kienast, B. 1990. *Die altakkadischen Königsinschriften des dritten Jahrtausends v. Chr.*

Frieburger altorientalische Studien 7. Stuttgart: F. Steiner Verlag. For the inscriptions of the first dynasty of Babylon, see Frayne, D. 1990. *Old Babylonian Period*. The Royal Inscriptions of Mesopotamia. Early Periods 4. Toronto: University of Toronto Press. For later royal bilinguals, see Krecher, *Interlinearbilinguen*, 126.

<sup>15</sup> See, for example, the contributions of H. Tadmor and J. Greenfield in Nissen, H. J. and Renger, J. (eds.). 1982. *Mesopotamien und seine Nachbarn*. Berliner Beiträge zum Vorderen Orient 1/2. Berlin: D. Reimer Verlag. Significantly, no Assyrian or Babylonian king has left any inscription in Aramaic. There are Akkadian-Aramaic bilingual documents from Assyria and Babylonia, mainly legal and administrative texts in cuneiform with identifying labels inked or incised on them in Aramaic. Some, however, have complete Aramaic translations of the Akkadian text. See Fales, F. M. 1986. *Aramaic Epigraphs on Clay Tablets*. Studi Semitici NS 2. Rome: Università degli Studi, La Sapienza.

<sup>16</sup> Carter, E. and Stolper, M. 1984. *Elam. Surveys of Political History and Archaeology*. University of California Publications in Near Eastern Studies 25. Berkeley: University of California Press. See pp. 7f. for bilingual Elamite-Akkadian royal inscriptions dating to ca. 2200 BC.

<sup>17</sup> For the controversy surrounding the date of the invention of the Old Persian syllabary, see Stronach, D. 1990. On the Genesis of the Old Persian Script. *Contribution à l'histoire de l'Iran*, ed. F. Vallat. Paris: Editions Recherche, 195-203.

<sup>18</sup> *Cahiers de la Délégation Archéologique Française en Iran* 4 (1974).

<sup>19</sup> Translated in Pritchard, James. 1969. *Ancient Near Eastern Texts*. 3rd ed. Princeton, New Jersey: Princeton University Press, 317f.

<sup>20</sup> McEwan, Gilbert. 1981. *Priest and Temple in Hellenistic Babylonia*. Frieburger altorientalische Studien 4. Wiesbaden: F. Steiner Verlag, chap. 5.

<sup>21</sup> Sollberger, Edmond. 1962. *Graeco-Babyloniaca*. *Iraq* 24: 63-72; Black, J. A. and Sherwin-White, S. M. 1984. A Clay Tablet with Greek Letters in the Ashmolean Museum and the 'Graeco-Babyloniaca' Texts. *Iraq* 46: 131-140.

<sup>22</sup> For the decipherment of cuneiform, see Bottéro, *Mesopotamia*, chap. 4.

## Figure notes

**Map of the Cuneiform World** [Figure 1, J. S. Cooper, Cuneiform. *International Encyclopedia of Communications*, ed. E. Barnouw et al. New York: Oxford University Press, 1989, vol. 1, 439. © 1989 by the Trustees of the University of Pennsylvania. Reprinted by permission of Oxford University Press.]

<sup>1</sup> [Figure 84, *Ebla to Damascus. Art and Archeology of Ancient Syria*. Washington, DC: Smithsonian Institution, 1985. Cf. pages 93-95 in G. Pettinato, *Testi Lessicali Bilingui*. Materiali Epigrafici di Ebla vol. 4. Naples, Italy: Istituto Universitario Orientale, 1982.]

<sup>2</sup> [No. 1, E. Chiera, *Sumerian Lexical Texts*. Oriental Institute Publications, vol. 11. Chicago, Illinois: University of Chicago Press, 1929.]

<sup>3</sup> [No. 152 (pl.123), Publications of the Babylonian Section, The University Museum, University of Pennsylvania, vol.5 (1914). Cf. *Materials for the Sumerian Lexicon*, 48-55.]

<sup>4</sup> [A. Goetze, The Vocabulary of the Princeton Theological Seminary. *Journal of the American Oriental Society*, 65 (1945), 223-237.]

<sup>5</sup> [No. 116, E. von Weiher, *Spätbabylonische Texte aus Uruk*, vol. 3. Ausgrabungen der deutschen Forschungsgemeinschaft in Uruk-Warka vol. 12. Berlin: Gebr. Mann, 1988.]

<sup>6</sup> [P. 212, G. Cros, *Nouvelles fouilles de Tello*. Paris, 1910.]

<sup>7</sup> [M. Civil and R. Biggs, Notes sur des textes sumériens archaïques, *Revue d'Assyriologie*, 60 (1966) 1-16.]

<sup>8</sup> [No. 169, J. Nougayrol, *Ugaritica*, vol. 5. Mission de Ras Shamra, vol. 16. Paris, 1968.]

<sup>9</sup> [P. 564, D. Arnaud, *Recherches au pays d'Astata. Emar*, vol. 6/2. Paris: Editions Recherche sur les Civilisations, 1985. Cf. *Ibid.* 6/4, no. 775.]

<sup>10</sup> [Published with the permission of the Staatlichen Museen zu Berlin and the Trustees of the British Museum. Cf. J.S. Cooper, *The Return of Ninurta to Nippur*. *Analecta Orientalia*, vol. 52. Rome: Pontifical Biblical Institute, 1978.]

<sup>11</sup> [Pl. 70, W. G. Lambert, *Babylonian Wisdom Literature*. London: Oxford University Press, 160. Cf. *Ibid.* 270f. Reprinted by permission of the Oxford University Press.]

<sup>12</sup> [No. 2, E. von Weiher, *Spätbabylonische Texte aus Uruk*, vol. 2. Ausgrabungen der deutschen Forschungsgemeinschaft in Uruk-Warka, vol. 10. Berlin: Gebr. Mann, 1983.]

<sup>13</sup> [Plate 2, A. Abou-Assaf et al., *La statue de Tell Fekberrye*. Paris: Editions Recherche, 1982.]

<sup>14</sup> [Plate 3, M. Kervran et al., Une statue de Darius découverte à Suse. *Journal Asiatique*, 260 (1970), 235-266.]