

An awareness of belt-wrestling is necessary for perceiving the imagery in certain passages. E.g., Isa. 11:5 describes the Davidic king in the golden age thus:

Righteousness shall be the belt [רִמָּוֶן;
RSV "girdle"] of his waist,
and faithfulness the belt [רִמָּוֶן; RSV "girdle"]
of his loins.

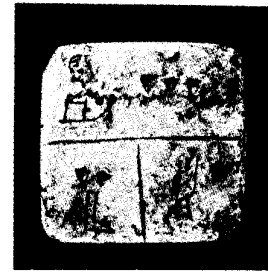
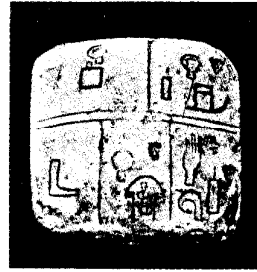
The undertones might be paraphrased as follows: The Messiah will be a hero, not of physical violence, but of virtue. Indeed, in the Hebrew expression "gird your loins" (in the sense of "get ready for action," which has become part of the English language also), an echo of ancient belt-wrestling continues to reverberate.

Bibliography. C. H. Gordon, "Belt-wrestling in the Bible World," *HUCA*, XXIII (1950-51), 131-36, pls. I-V.
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WRITING AND WRITING MATERIALS. Writing was known and practiced in the ancient Near East long before the Hebrews took possession of Palestine. As we shall see, the early claims that writing was unknown in Palestine in patriarchal times are quite unfounded. We shall first discuss the development of the writing systems indigenous to the various areas of the Mediterranean world, then describe the materials employed, and finally trace the evolution of the book from scroll to codex.

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A. DEVELOPMENT OF WRITING. 1. Mesopotamia. The first system of writing for which we have evidence is probably that invented in Mesopotamia sometime after the middle of the fourth millennium B.C. This was most likely the creation of the Sumerians (see SUMER) to meet their administrative and economic needs. It developed, as did all the earliest scripts, from a pictographic stage—i.e., the use of pictures to tell a story.* These pictures were then employed to designate both the objects depicted and the ideas associated with them. Thus a picture of the sun represented, not only the sun itself, but also the concepts "day," "bright," etc.; that of a foot



From Driver, *Semitic Writing* (The British Academy, Schweich Lectures, 1944)
28. Archaic pictographic tablet, from Kish

meant also "stand," "walk," or "carry." This stage may be called the logographic, in which logograms—also called ideograms—or "word signs" are employed. Fig. WRI 28.

The limitations of such a system are apparent when it becomes necessary to record an abstract concept or a proper name. An ingenious solution was devised on the "rebus" principle, whereby the logogram for an object might be used to represent a homophone—i.e., another word having the same sound; cf. our use in children's books of the picture of an eye to represent the pronoun "I," or the drawing of a tin can to express the verb "to be able." At this stage the system becomes phonetic, and since Sumerian—an agglutinative language—is composed of elements which are usually of one syllable (rarely two), the phonetic value of the signs tends to be syllabic.

It now becomes possible to indicate grammatical elements by the use of signs with such syllabic values—e.g., *gar*, "make"; *e-gar*, "he made"; *e-gar-re-éš*, "they made"; *é*, "house"; *é-la*, "from the house." Moreover, the various possible readings of a logogram may be distinguished by the use of "phonetic complements," which indicate the final syllable of the word. Finally, certain signs known as "determinatives" were used as classifiers, to indicate the range of meaning of certain words written by means of logograms, such as objects of wood or stone, proper names, fish, etc. Such means of reducing ambiguity were offset, however, by the system's inherent polyphony, for many signs representing homophones had the same sound, and one sign might likewise possess more than one phonetic value.

These signs were incised on tablets of soft clay with a stylus (see §§ B1c, 2a, below). At first they were written in vertical columns like Chinese, beginning at the upper right-hand corner of the tablet. Later, the manner of holding the tablet was altered, so that the signs were turned ninety degrees, resulting in horizontal lines of writing running from left to right. Since the use of clay as a writing material favored straight lines rather than curved, the pictures gradually became stylized and simplified, and use of the stylus led to the wedge-shaped lines from which comes the name CUNEIFORM. Fig. WRI 29.

During the first half of the third millennium the system was adopted by the Akkadians (see ASSYRIA AND BABYLONIA) to write their Semitic tongue. Logograms, phonetic complements, determinatives, and syllabic signs were all employed, and many addi-

	A	B	C	D	E
	Original pictograph	Pictograph in position of later cuneiform	Early Babylonian	Assyrian	Original or derived meaning
1					bird
2					fish
3					donkey
4					ox
5					sun day
6					grain
7					orchard
8					to plow to till
9					boomerang to throw to throw down
10					to stand to go

From Henri Frankfort, *The Birth of Civilization in the Near East* (Indiana University Press)

29. Table showing the development of cuneiform signs

tional values were given to signs to express the sounds peculiar to Semitic speech, so that the system became a very cumbersome one, requiring in its classical form some six hundred signs. So effective was it, however, that it was very soon appropriated by the Elamites (see ELAM), in a simplified form, to replace their earlier pictographic script. In the second millennium it was adopted by the Hurrians (see HORITES) and HITTITES, and finally by the Urartians of Armenia in the first half of the first millennium. Thus the system was eventually employed to write at least six unrelated languages. It also influenced the development of two other cuneiform scripts: the alphabetic script of Ugarit (see § A4 below) and the syllabic system of Old Persian, composed of fifty-one signs.

The Aramaic language, written in a cursive alphabetic script (see § A4 below), was also used in Mesopotamia during the Neo-Assyrian period, as is attested by Aramaic notations on some cuneiform tablets. Since papyrus or leather would be the usual writing materials in this case, they have long since perished in the damp Mesopotamian soil. However, Assyrian reliefs of the eighth and seventh centuries B.C. portray scribes writing on a flexible material with pens beside other scribes who use a stylus to incise cuneiform signs on clay tablets.

2. **Egypt.** Archaeological evidence from Egypt points clearly to a period of fertile Mesopotamian influence at the end of the fourth millennium. Since the hieroglyphic system of writing makes its appearance at this point, and springs forth full-blown with no indications of development such as are present in Mesopotamia, it may be assumed that Asiatic influ-

ence was at work here too. This is not to say that the Egyptians took over the Sumerian writing system, but rather that they adopted its principles, including such features as logograms, phonetic complements, and determinatives. See § A1 above.

With this initial impetus, the Egyptians soon developed along independent lines. The forms of the individual hieroglyphs changed but little during their long history,* and were at all times clearly recognizable, unlike the highly stylized cuneiform signs. This was because they were carved in stone, and regarded as a form of art complementary to the finely carved reliefs. A second major difference was the fact that the phonetic symbols were not syllabic, as in cuneiform, but consonantal only. Thus the plan of a house, for which the Egyptian word was *pāru, could be used for any word which required the consonants *pr* in that order, such as *pīre, "to go out." Similarly, the representation of a mouth, Egyptian *ra, could be employed to render the consonant *r*. The picture of a rib, the word for which contained the consonants *spr*, provided a means of writing the word *sāpēr, "to approach." The total disregard of vowels in the hieroglyphic script, a feature of most Semitic alphabetic scripts also, means that we are ignorant of the pronunciation of ancient Egyptian, except insofar as we can reconstruct its vowels from contemporary transcriptions of Egyptian words into syllabic cuneiform or from Coptic, the latest stage of Egyptian, which was written with Greek letters. Fig. WRI 30.

Hieroglyphic					Hieroglyphic Bookhand	Hieratic			Demotic

From *When Egypt Ruled the East* (The University of Chicago Press)

30. Egyptian hieroglyphs and their cursive equivalents

These logograms which became phonetic signs contain from one to three consonants. The fact that there were sufficient uniconsonantal signs to express all twenty-four of the consonantal phonemes in the Egyptian language made it possible for hieroglyphic to become an alphabetic system. This revolutionary step was never taken, however, and it remained for the Semites in Syria-Palestine to devise such an alphabet. See § A4 below.

Although hieroglyphic was normally reserved for stone inscriptions, it was occasionally written with a pen in a somewhat cursive fashion. For more rapid writing with pen and ink on papyrus, however, a still more cursive form was developed at the very beginning, known to us as hieratic. In this form of script

the signs were much simplified, and ligatures were frequent. At the end of the eighth century B.C. a still more abbreviated form of the script was introduced for letters and business documents, which we call demotic. By this time the original forms of the signs were but rarely recognizable. All three methods of writing were employed side by side for some centuries: hieratic until the third century A.D.; demotic until the end of the fifth century A.D.; and hieroglyphic, in a debased form, till as late as the fourth or fifth century A.D. Finally, *ca.* the third century A.D., the Greek alphabet was adopted for the writing of the Egyptian language. This phase, which is known as Coptic, lasted as a living language until the sixteenth century. Egyptian is thus unique in affording us written evidence of a single language over a period of some four and a half millenniums.

Hieroglyphic was written normally from right to left, but occasionally from left to right, and though at first only in vertical columns, later also in horizontal lines. Hieratic was written only from right to left, until the nineteenth century B.C. in vertical columns, and thereafter in horizontal lines. Demotic is found only in horizontal lines, from right to left.

During the fourteenth century B.C., Akkadian was the international language, and consequently cuneiform writing on clay tablets was also employed by the Egyptian royal scribes in their correspondence with Western Asiatic states. A notable example is the letters discovered at TELL EL-AMARNA* (*see also* INSCRIPTIONS § 2). In the Persian period, Aramaic was in common use, and in a later period, Greek (*see* INSCRIPTIONS §§ 4-5). Figs. CLA 35; TEL 10.

3. Anatolia. At some time during the first half of the second millennium B.C., the inhabitants of E Asia Minor whom we know as the HITTITES adopted the cuneiform syllabary of Mesopotamia (*see* § A1 *above*) to write their Indo-European language on clay tablets. The script was ingeniously adapted to express such characteristics of the language as consonantal clusters unknown to Sumerian or Akkadian. An interesting feature of Hittite cuneiform is "allography"—*i.e.*, the use of Sumerian logograms or syllabically spelled Akkadian words intended to be read with their Hittite equivalents. A few texts contain passages in another language closely related to Hittite, known as Luwian, and written in the same script.

Between 1500 and 700 B.C. another script, indigenous to Anatolia, was in use for inscriptions on stone found at various sites throughout S Anatolia and N Syria. This is a hieroglyphic system, unrelated to that of Egypt, although perhaps stimulated by it. It appears to have been especially in vogue for royal inscriptions of the Neo-Hittite petty kingdoms at such places as Carchemish, Zenjirli, and Hamath. It is the rulers of these states who are described in the OT as the "kings of the Hittites" (II Kings 7:6; II Chr. 1:17).

The hieroglyphic signs, unlike those of Egypt, express syllabic values. They are composed of consonant plus vowel only, unlike the cuneiform system, which also has signs for vowel plus consonant and for consonant plus vowel plus consonant. The texts are written boustrophedon—*i.e.*, in horizontal lines reading from right to left and left to right

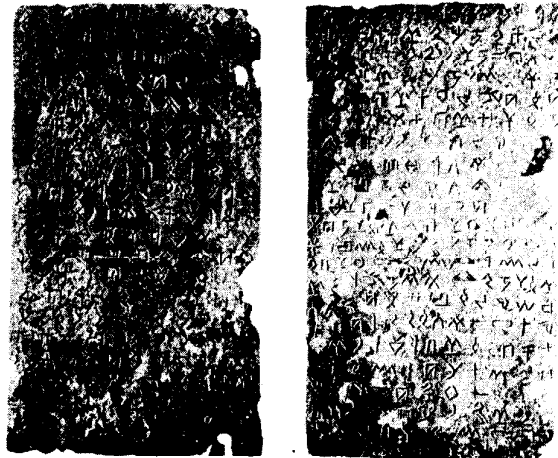
alternately. The language of these inscriptions, but recently deciphered, is called, for want of a better name, Hieroglyphic Hittite. Although related to cuneiform Hittite and Luwian, it is not the same. The great bilingual inscription from Karatepe (*see* INSCRIPTIONS § 3), containing versions in Phoenician and Hieroglyphic Hittite, confirms in a remarkable fashion the pioneer efforts to read and understand the language. It is likely that the hieroglyphic script was also written on wood or other perishable materials, but these have long since disappeared.

The Akkadian language was also well known in Anatolia. At Kültepe in E Asia Minor, a colony of Assyrian merchants of *ca.* 1900 B.C. has left a great horde of clay tablets written in Old Assyrian. Some five centuries later, Akkadian was the language of international trade and diplomacy throughout the ancient Near East, and was employed by the Hittite rulers for their treaties with Egypt and their correspondence with the Egyptian pharaoh. Excavations at Hittite sites have also yielded some cuneiform texts in Hurrian, the language of the HURITES.

4. Syria-Palestine. The unique position of this area as a bridge between Egypt and Western Asia, subject to the cross-currents flowing from these culturally productive centers, produced a remarkably complicated development in the history of writing. As a result, many experiments were made, and it was here that the revolutionary step was taken of creating the first true alphabet.

As might be expected, the writing systems of the neighboring empires are to be found in use in Syria-Palestine. Egyptian hieroglyphic inscriptions on a multitude of scarabs* and many stelae and statues (*see* INSCRIPTIONS § 1) testify to Egyptian influence from early times. This should occasion no surprise, as the region formed part of the Egyptian Empire during the Eighteenth to Twentieth Dynasties, and long before this time was in close contact through trade relations. Fig. SEA 35.

The same situation holds true for Akkadian cuneiform. Although the use of clay as a writing material was not native to Palestine, about a score of tablets in the form of letters, business documents, and lists have been found at Taanach, Tell el-Hesi, Gezer, Jericho, Megiddo, and Shechem. As elsewhere dur-



From Driver, *Semitic Writing* (The British Academy, Schweich Lectures, 1944)

31. A pseudo-hieroglyphic inscription, from Gebal