The infancy of the alphabet

Article *in* World Archaeology · February 1986

DOI: 10.1080/00438243.1986.9979978

CITATIONS
18

READS
785

1 author:

Alan Millard
University of Liverpool
60 PUBLICATIONS **489** CITATIONS

Woodhouse, C. J. 1970. The cuneiform signs of Ugarit. *Journal of Near Eastern Studies* 29: 48–51.

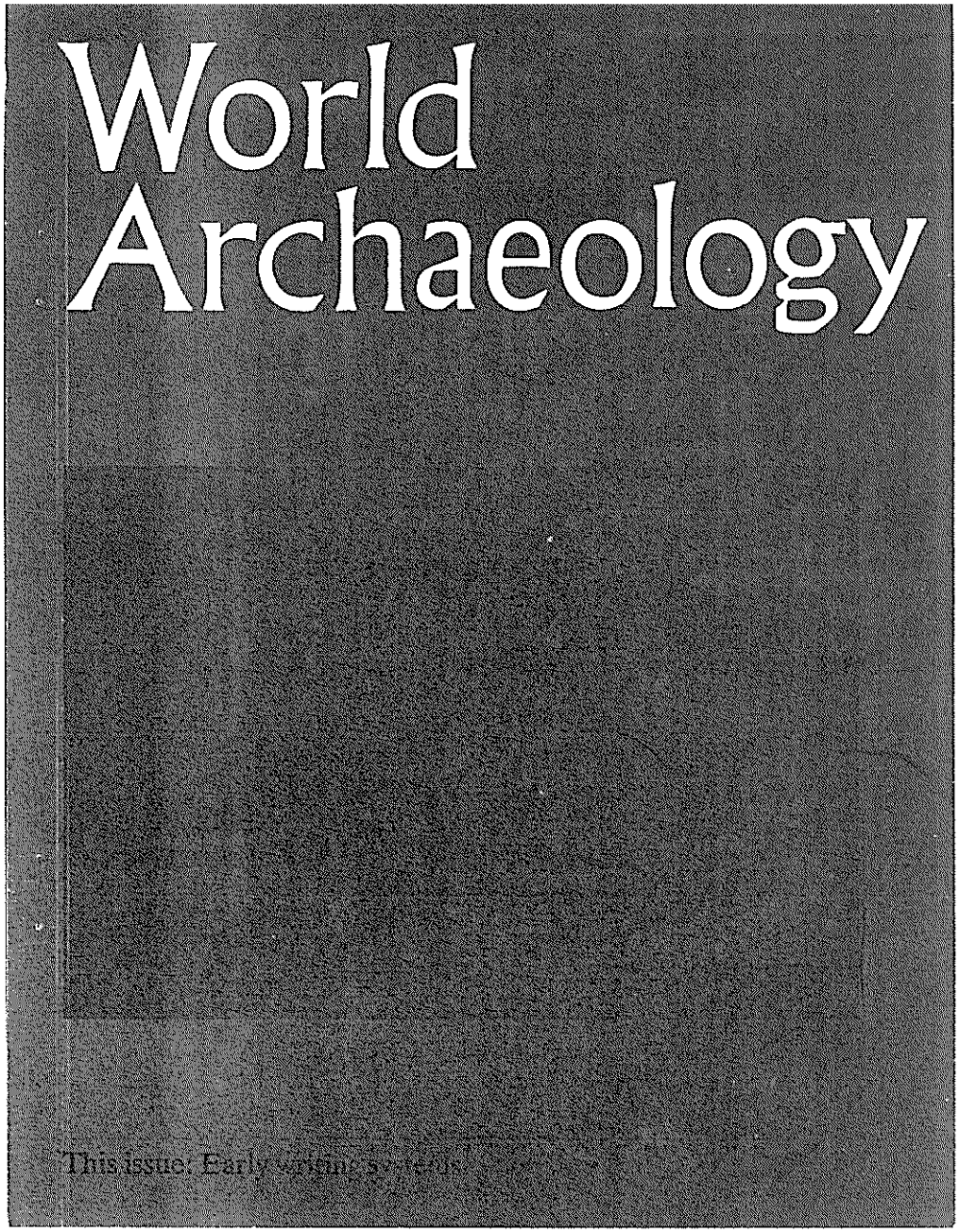
Young, R. S. 1969. Old Phrygian inscriptions from Gordion: toward a history of the Phrygian alphabet. *Hesperia* 38: 282–96.

Abstract

Millard, A. R.

The infancy of the alphabet

Hieroglyphic and Egyptian writing systems dominated the Near East during the third and second millennia B.C. But during the latter many other scripts arose. Among them was the infant alphabet whose history can be reconstructed in outline with the aid of scattered and brief inscriptions from the Levant. Egyptian influence is seen as a stimulus in its conception and as a factor in the materials and direction of writing. By 1000 B.C. this simple and flexible system was established, supplanting its local rivals and ready for its expansion eastwards through Aramaic and for its adoption by the Greeks in the west where it came to its maturity.



The infancy of the alphabet

A. R. Millard

Excavating at Byblos on the coast of Lebanon in 1923, the French scholar Pierre Montet cleared a tomb-chamber containing a large stone sarcophagus. An inscription engraved on the edge of the lid announces that this is the coffin of Ahiram, king of Byblos. The text was not difficult to read because the letters were recognizably an early form of the Phoenician alphabet, and the language a Phoenician dialect (Dussaud 1924). At first both the coffin and the inscription were given a date in the thirteenth century B.C., but now there is almost universal agreement that both were made about 1000 B.C. (Dunand 1945: Post-scriptum; Gibson 1982: 12 f; Röllig 1982; Porada 1973). Ahiram's inscription is the earliest intelligible text of more than two or three words written with the Phoenician alphabet known today. By its time the letters were in a more or less conventional form and showed some cursive traits. The handful of dedications incised on stone at Byblos later in the tenth century makes these points clear (Gibson 1982: 17–24). From then the history of the alphabet can be traced to the present day; a few major questions remain open – the exact time and manner of the Greek borrowing, the rise of the various Indian systems – and new discoveries can bring surprises, as the ninth century B.C. statue from Tell Fekherye in Syria has done for Aramaic (Abou Assaf, Bordreuil, Millard 1982) or the graffiti from Gordion in Phrygia have done for early Greek (Young 1969). The earlier stages of the alphabet's history are less certainly defined, and it is the purpose of this essay to explore them in the context of the scripts of the ancient Near East.

Writing in the Near East in the third and second millennia B.C.

By the end of the fourth millennium B.C. the distinctive scripts of Babylonia and Egypt, the cuneiform and the hieroglyphic, appear to have become well-established. The evidence indicates that they continued for a thousand years without any serious rival. From Babylonia the cuneiform spread in several directions, notably up the Euphrates westwards and on along the trade routes to the Mediterranean. Since 1975, the Italian excavations at Tell Mardikh, ancient Ebla, south of Aleppo, have revealed far more extensive Babylonian influences in northern Syria during the Early Bronze Age than had

World Archaeology Volume 17 No. 3 Early writing systems
 0043–8243/86/1703/390 $2/1

been suspected. Although the eight or nine thousand cuneiform tablets found in the palace archives deal predominantly with local administration, they imply that Ebla was not the only centre in that area where Babylonian scribal traditions reigned (in general see Matthiae 1977, but note that the textual evidence has been considerably re-interpreted). Yet cuneiform was not the sole script known at Ebla about 2250 B.C.; two specimens of Egyptian writing survived the fire that baked the tablets and destroyed much else. These pieces of stone vessels bear the names of pharaohs Chephren (*c.* 2565–40 B.C.) and Pepi I (*c.* 2332–2283 B.C.) respectively (Matthiae 1979). They are isolated finds for the region, but they stand with numerous Egyptian inscriptions on stone vessels of similar date found at Byblos (Saghieh 1983). All these things could have reached the Levant as exotic imports, the Ebla vessels having passed through several hands, their inscriptions being mere curiosities. Given the close links between Byblos and Egypt, links founded on Egyptian desires for cedar and other timber, which needed regular official contact, it is reasonable to surmise that scribes in Byblos received and read documents in Egyptian, then replied in the same language and script. Although Ebla lies further from direct contact with Egypt, with its position on the route from the Euphrates to the coastal entrepôt of Ugarit the same situation could be envisaged, but certainty is impossible. Whereas the burning of the Ebla palace improved the durability of the clay tablets, it will have totally destroyed any documents written on the usual Egyptian material, papyrus. Indeed, even without fire, papyrus rarely survives unless its surroundings are extremely dry, as in parts of Egypt away from the Nile, or in peculiar regions like the borders of the Dead Sea. The perishability of papyrus is a significant drawback to the present inquiry, one which should be constantly kept in mind.

Early Bronze Age city life in Syria and Palestine came to an end before the close of the third millennium B.C., and Egypt endured her First Intermediate Period (*c.* 2180–2040 B.C.). The new millennium saw the rebuilding of old cities and the founding of new ones. To challenge the fluctuating political powers of Egypt, Babylonia, and Assyria, there arose kingdoms of Amorites and other groups speaking West Semitic languages closer to the Hebrew of the Old Testament than to the East Semitic Akkadian dialects of Babylonia and Assyria. There were also Hurrians, whose agglutinative tongue was unique in the ancient Near East, and Hittites in Anatolia using their Indo-European Luwian and other languages. Cuneiform was an adaptable script, and was applied for writing these languages syllabically as each culture found need for written records. In contrast, Egyptian writing does not seem to have been used regularly to record other languages, partly, it may be thought, owing to the trouble and cost of importing papyrus to inland areas of Anatolia and Mesopotamia and partly because the system was more strongly bound to word signs and so to the Egyptian language than was cuneiform to Babylonian (for the latter seems to have been invented for writing the quite different Sumerian language). However, knowledge of Egyptian hieroglyphs probably stimulated the invention of the Minoan 'hieroglyphs' and the Hittite ones between 2000 and 1500 B.C. By the beginning of the Late Bronze Age of the Levant (*c.* 1550 B.C.), the Linear A and Linear B scripts had arisen in Crete, through a process yet unclear, and related scripts were current in Cyprus. There were other forms of writing, too, known in single examples of very small numbers, such as the Phaistos Disk and the 'Pseudo-Hieroglyphic' texts of Byblos. Although no one has yet presented a satisfactory

decipherment of the last two systems, it seems that they are syllabic. In this they are like the others mentioned, cuneiform, Egyptian, Hittite, Cretan. Cypriot, yet each of those, except perhaps the last, mixes word signs with the syllabic signs. That is to say, common words or generic terms can be represented by pictures, which may have accompanying syllables to clarify their readings, while other words may be written syllable by syllable. Each system could be used for syllabic writing alone, but this was rarely done (it is less common in Egyptian than in the other scripts). The limited number of signs used on the Phaistos Disk and in the Byblian texts – 45 and 114 respectively (see Olivier 1975; Dunand 1945: 71–138) – point to their being simple syllabic scripts, but this is something only conclusive decipherment can prove. Another demonstration of the experiments of scribes in this era is seen in the three small clay tablets excavated in a Late Bronze Age level at Tell Deir Alla in the Jordan valley. They bear signs scratched in the clay which do not relate directly to any other known script. Associations have been sought in Linear B and in the Canaanite script to be described shortly, without real conviction (Cazelles 1975).

The great Syrian city of Ugarit epitomizes the clerkly activity of the Late Bronze Age throughout the Levant. Administrative and legal documents, letters, and works of literature inscribed on clay tablets in Babylonian script and language are found there in abundance, with examples of Hittite hieroglyphs engraved on seals, writings in Cypriot style, and some Egyptian inscriptions. Beside those there are hundreds of clay tablets impressed with the signs of a cuneiform alphabet, a most important phenomenon for the history of the alphabet (see below, 'An early imitation').

Traces of the earliest stages of the alphabet

Amongst this medley of scripts are meagre relics of one more, one which, with little doubt, reveals an early stage in the history of that which was to outlast all the rest, the alphabet.

The most famous examples were found when Sir Flinders Petrie was exploring ancient turquoise mines at Serabit el-Khadem on the west side of the Sinai peninsula. He recorded many Egyptian inscriptions there and also, scratched on rocks and on portable objects, groups of signs which were different from the Egyptian hieroglyphs. Ten years after Petrie's initial publication, which hinted at the alphabetic character of the signs (Petrie 1906: 130 f), the eminent Egyptologist Sir Alan Gardiner presented his fundamental perception that they are ancestral to the Phoenician alphabet (Gardiner 1916). Although the graffiti offer no lengthy texts, there was sufficient repetition of signs in numerous patterns to assure him that the majority of those in use was present. As they were only about thirty, he concluded that the script was not a syllabary like others in the Near East, but an alphabet. Egyptian documents showed that people from the Levant worked in the mines, so Gardiner assumed that these might be their scratchings, conveying messages in a Semitic language. Working backwards from the widely held assumption that the names of the letters of the alphabet preserved in Hebrew, Greek and other languages indicated the original pictorial values of the signs, he proposed values for fifteen of the characters in the texts which seemed to him to depict the appropriate

subjects. With these values he committed himself to the interpretation of a single group of four signs which occurred five times. He read them as *b ' l t*, the Semitic *ba'alat*, 'lady', and, since the Egyptian inscriptions from the site frequently speak of the goddess Hathor as 'the lady of turquoise', that seemed, and still seems, very plausible. Once accepted, this decipherment alone is sufficient to show the existence of an alphabet employed by Semitic turquoise miners in Sinai during the fifteenth century B.C.

Gardiner's reasoning produced an attractive conclusion. However, the possibility of a coincidence between these signs and the names of the letters of the alphabet known in later times, even if small, existed. In the seventy years since Gardiner wrote, progress in decipherment and more discoveries have almost removed that possibility. Renewed exploration at Serabit el-Khadem, especially between 1927 and 1935, and during the recent Israeli occupation of Sinai, has increased the number of texts to about three dozen, and has brought improved readings and reproductions. Numerous scholars have tried to carry Gardiner's work forward, and a few have turned in other directions (Sznycer 1972 gives a documented summary). Most influential and ambitious of all was the talented American, W. F. Albright. After visiting the mines in 1948, he issued a preliminary study adding a few identifications to those of Gardiner and his followers; then, in 1966, he published a complete decipherment of the texts, based on an alphabet of twenty-seven letters (Albright 1966). Although pupils of Albright maintain his scheme vigorously, adding to his readings or altering them in minor ways (e.g. Cross 1967; Rainey 1975), it can hardly be judged plausible in the face of the brevity of the documents and the many uncertain readings. Furthermore, knowledge of the Semitic dialects of Canaan during the Late Bronze Age is very limited. Rejecting Albright's bold attempt to establish the grammar, lexicon and translations of the texts does not imply rejection of everything that he incorporated from others or proposed himself. At least two thirds of the signs are satisfactorily identified, and isolated words can be added to Gardiner's 'lady'.

Once the alphabetic nature of these Proto-Sinaitic texts is agreed, two questions become more urgent than the exact sense of the writings: Where does the script stand in the history of the alphabet, for four or five hundred years separate it from the inscription of Ahiram, and How did the alphabet begin. The gap between the Proto-Sinaitic texts and Ahiram's may be partly bridged by a handful of objects from Late Bronze Age sites in the Levant which carry groups of related marks termed the Canaanite, or Canaanite Linear, alphabet. They are few, scattered and short, yet they are important because some can be dated by external criteria and so allow a sequence to be erected. The principal specimens are a potsherd from Gezer (with three signs), one from Tell Nagila (five signs), a stone plaque from Shechem (eight), and a bronze dagger from Lachish (four). All these may be a little older than the Sinai texts. A jug and a bowl from Lachish of the thirteenth century B.C. (thirteen plus, and six signs), and potsherds and bronze arrowheads from the next two centuries show the development of the characters until they are almost identical with those of Ahiram. A potsherd from an early Iron Age house at Isbet Sarta in Israel (twelfth century B.C.) is noteworthy as it appears to contain the letters in the traditional order, although roughly written, probably as a school exercise (Demsky 1977). The number of examples is constantly increasing through excavation and chance discoveries, and each new piece does fit into the overall picture, divergences

in letter forms and directions of writing being explained as local or individual quirks and the consequences of incising on hard surfaces signs normally written with ink. There is no doubt that the same basic script could be found throughout the region in the Late Bronze Age. [For a list of examples up to 1975 see Millard 1976; note that the Lachish Prism is to be removed (Hestrin, Sass, Ophel 1982) and the Abba Seal is to be dated *c.* 900 B.C. (Sass 1983). For the arrowheads see Bordreuil 1982.]

Lacking more extensive texts, which we assume were written on papyrus, any proposal to trace a line from Ahiram back to the Proto-Sinaitic and earliest Canaanite scripts has to be tentative. For certain letters, however, the similarities are strong enough to support such an attempt, if the acrophonic principle is accepted. Thus the 'ox' sign, *'aleph*, can be followed from the picture at Serabit el-Khadem to Byblos, and ultimately through Greek *alpha* to roman A, the water sign, *mem*, through to M, and the 'eye', *'ayin*, losing its pupil to become O. Others can be traced in the same way. In each case the texts from Late Bronze Age Canaan display signs which fit happily into the sequence, some awkward or anomalous forms warning against the adoption of over simple schemes. (A few sherds from Kamid el-Loz in southern Lebanon may indicate an offshoot, see Mansfeld 1970.) It does seem feasible, therefore, to argue for a line back from Ahiram to the Proto-Sinaitic and earliest Canaanite examples. These point to the invention taking place a little earlier still, possibly in Canaan or Byblos, in the second quarter of the second millennium B.C. (compare Cross 1979).

The invention of the alphabet, and its early growth, took place in an era of experiment in writing. How the invention came about may be imagined. Picture a Canaanite scribe in a mercantile centre, trained to write Egyptian with pen and ink on papyrus, aware of cuneiform and, maybe, other scripts. None of them really suit his native language; all are quite complicated to write. All have signs for syllables, some having many more than a single range for consonant+vowel. An adequate simple syllabary of consonant+vowel signs for a Semitic language would need towards one hundred signs. Now the Egyptian signs used phonetically as syllables leave the vowels unspecified. Other devices in the script guide the reader, and, although they are essential, the vowel signs serve normally to modify the basic sense of consonantal roots. The scribe, having observed how series of syllables are expressed in Egyptian, and perhaps in some other scripts, too, decides to create a set of syllabic signs for his own tongue. Some of the Egyptian signs owe their syllabic value to the initial phoneme of the name of the object they depict, some to the strongest phoneme in the name. The scribe does not adopt the Egyptian signs, but instead creates his own, drawing on names of objects for their initial phonemes only. Thus a simple picture of water, *mayim* or a very similar form, represents m+any vowel, a head, *resh*, r+any vowel, and so forth. Eventually he has one sign for each consonantal sound in his language. Whether he creates more initially and hones them down to produce a single sign for each sound is beyond telling. Whatever his process, it is a not unsophisticated exercise, requiring thorough analysis of the phonemic stock of his language, an analysis perhaps facilitated by the common practice of listing words as part of scribal schooling. Once complete, the scribe can put his list of signs to use.

Four corollaries of this scene deserve to be noted:

1 The acrophonic basis allows the generation of the consonantal signs of the *'mayim* is for m' principle, but if applied consistently, as supposed here, cannot yield signs for vowels because words in West Semitic languages do not begin with vowels.
2 The script is not, therefore, an alphabet in the strictest sense of the term; it is a very economical syllabary (as I. J. Gelb insists, Gelb 1963: 122–53), but for its purpose it is as close as it could be to an alphabet.
3 Clearly the signs are shaped for writing with pen and ink, not for impressing as cuneiform signs were by this date. This points to the Egyptian training of the inventor, for it was the Egyptian script above all others which was written by this means (although Hittite hieroglyphs may have been also).
4 Egyptian training also accounts for the direction of the script which, while varying widely, is mainly from right to left, after the normal style of Egyptian hieratic, the script of ordinary documents of daily life.

All this is, admittedly, hypothetical; nevertheless, it is constrained by the evidence of the few documents that do survive and by the circumstances of the other scripts. One other source adds a supportive contribution.

An early imitation

The 'cuneiform alphabet' of Ugarit was mentioned earlier. With the Babylonian tablets recovered at Ugarit there are over one thousand bearing cuneiform signs which are not Babylonian, and which number only thirty discrete characters. They are alphabetic in the same way as the Canaanite-Phoenician signs. About a dozen small tablets carry the signs set out in an order which is not a series of words but simply a list of the signs, and that order is virtually identical with the traditional order of Phoenician, Hebrew, Aramaic and Arabic. Nothing suggests this Ugaritic alphabet had a long history of development. Its signs are best explained as relatively simple arrangements of wedges to give the requisite number of signs (Windfuhr 1970). Attempts to relate them directly to signs in other scripts have been unsuccessful so far. This alphabet is to be understood as an imitation of the Canaanite one, an adoption of its principle to the cuneiform manner of scribes trained in the Babylonian tradition on clay, and from left to right. Those scribes were forced to go one step further. Ugarit's cosmopolitan citizenry included Hurrians whose language also had to be recorded. Three signs were accordingly added at the end of the cuneiform alphabet to accommodate certain sounds of Hurrian. One was a sibilant, the other two were vowels, necessary because Hurrian words could begin with vowels, and they would need to be expressed. Thus the weak consonant *'aleph* was used for /a/, the additional signs for /i/ and /u/. These two then served in Semitic words to express *'aleph*+i or *'aleph*+u as well. The Ugaritic alphabet was invented, apparently, in the fourteenth century B.C., and so is a testimony to the impact of the Canaanite alphabet by that time (Millard 1979). Recovery of a few texts written in variant forms of the cuneiform alphabet at sites south of Ugarit, in Syria and in Palestine, sometimes written from right to left, points to further contact.

The alphabet versus other scripts

The alphabet's advantages of simplicity and versatility brought it to supremacy over all other writing systems in the Levant from the beginning of the Iron Age. The new states of the Ammonites, Arameans, Edomites, Israelites, Moabites and Phoenicians all used the developed Canaanite alphabet. Babylonian and Egyptian traditions no longer held sway there; their scripts were only seen when conquering kings erected monuments or set up governors, or in the course of diplomacy or trade. Through Aramaic, the alphabet eventually displaced cuneiform, although some Babylonian scribes, unable to divorce their culture from its script, tenaciously maintained their customs into the first century A.D. Thence from Aramaic rose the Palmyrene, Hatrene and Syriac scripts, the Nabatean alphabet and its offspring, the Arabic, while some of the scripts of India also owe their origins to branches of the Aramaic (Naveh 1982).

Free with Phoenician goods, the alphabet came to the Greeks. They took it on its last step to maturity. It could not represent their language satisfactorily without vowel signs, for they are indispensible for the writing of intelligible Greek. Whoever adopted the Phoenician script for Greek apparently saw the problem and made the changes in a single move, for every one of the oldest specimens of Greek writing, scattered from Sicily to Rhodes, employs the classic vowels, except *ōmega*. Signs for sounds alien to Greek were not discarded but given new values, which may have had some relation to the use of the signs, or to their names, in Phoenician, but which now became vowels purely (e.g. *'ayin* became *omicron*, *hē*). Slight modifications were made to some of the consonantal values and a few signs added to cover phonemes absent from Phoenician (notably the last letters of the Greek alphabet). Now a true alphabet had been created; each sign stood for a discrete sound. (For more detail than this brief account can give, see Jeffery 1982.)

From the earliest pictorial signs found in Canaan and Sinai which belong to this story, the steps in the growth of the alphabet seem fairly clear, even if there are some gaps between them, and the prints are not all equally plain. It is likely that the infant alphabet, once formed, experienced an ever growing currency, coming to maturity once the Levant was freed from the domination of the long established Babylonian and Egyptian scripts and their traditions. With the alphabet came an easier opportunity for literacy; the scribal monopoly was broken, although it should not be supposed that everyone immediately began to read and write!

28.vi.1985 *School of Archaeology and Oriental Studies, University of Liverpool*

References

Abou Assaf, A., Bordreuil, P., Millard, A. R. 1981. *La Statue de Tell Fekherye et son inscription bilingue assyro-araméenne*. Paris: Editions Recherche sur les civilisations, A.D.P.F.

Albright, W. F. 1966. *The Proto-Sinaitic Inscriptions and their Decipherment*. Harvard Theological Studies 22. Cambridge, Mass.: Harvard University Press.

Bordreuil, P. 1982. Epigraphes phéniciennes sur bronze, sur pierre et sur céramique. In *Archéologie au Levant. Recueil R. Saidah*. Lyons: Maison de l'Orient, pp. 187–90.

Cazelles, H. 1975. Les textes de Deir Alla. In *Le déchiffrement des écritures et des langues* (ed. J. Leclant). Paris: L'Asiathèque, pp. 95–9.

Cross F. M. 1967. The origin and early evolution of the alphabet. *Eretz Israel* 8: 8–24.

Cross F. M. 1979. Early alphabetic scripts. *Symposia celebrating the Seventy-fifth Anniversary of the American Schools of Oriental Research*. (ed. F. M. Cross) Cambridge, Mass. American Schools of Oriental Research, pp. 97–123.

Demsky, A. 1977. A Proto-Canaanite abecedary dating from the period of the Judges and its implications for the history of the alphabet. *Tel Aviv* 7: 14–27.

Dunand, M. 1945. *Byblia Grammata*. Beyrouth: Direction des Antiquités.

Dussaud, R. 1924. Les inscriptions phéniciennes du tombeau d'Ahiram, roi de Byblos. *Syria* 5: 135–57.

Gardiner, Alan H. 1916. The Egyptian origin of the Semitic alphabet. *Journal of Egyptian Archaeology* 3: 1–16.

Gelb, I. J. 1963. *A Study of Writing*. 2nd ed. Chicago: University Press.

Gibson, J. C. L. 1982. *Textbook of Syrian Semitic Inscriptions* III, *Phoenician Inscriptions*. Oxford: Clarendon Press.

Hestrin, R., Sass, B., Ophel, A. 1982. The Lachish prism inscription – Proto-Canaanite or Egyptian? *Israel Exploration Journal* 32: 103–06.

Jeffery, L. H. 1982. Greek alphabetic writing. *The Cambridge Ancient History*, vol. 3, part i (ed. J. Boardman *et al.*). Cambridge University Press, pp. 819–33.

Mansfeld, G. 1970. Scherben mit altkanaanäischer Schrift. In *Schriftdokumente aus Kamid el-Loz, Saarbrücker Beiträge zur Altertumskunde* 4 (ed. D. O. Edzard *et al.*). Bonn: R. Habelt, pp. 24–41.

Matthiae, G. S. 1979. Vasi iscritti di Chephren e di Pepi I nel palazzo reale G di Ebla. *Studi Eblaiti* 1: 33–43.

Matthiae, P. 1977. *Ebla. An Empire Rediscovered*. London: Hodder and Stoughton.

Millard, A. R. 1976. The Canaanite linear alphabet and its passage to the Greeks. *Kadmos* 15: 130–44.

Millard, A. R. 1979. The Ugaritic and Canaanite alphabets – some notes. *Ugarit-Forschungen* 11. 613–16.

Naveh, J. 1982. *Early History of the Alphabet*. Jerusalem: Magnes Press; Leiden: E. J. Brill.

Olivier, J.-P. 1975. Le disque de Phaistos. *Bulletin de Correspondance Hellenique* 99: 6–34.

Petrie, W. M. F. 1906. *Researches in Sinai*. London: John Murray.

Porada, E. 1973. Notes on the Sarcophagus of Ahiram. *The Gaster Festschrift. The Journal of the Ancient Near Eastern Society of Columbia University* 5: 354–73.

Rainey, A. F. 1975. Notes on some Proto-Sinaitic inscriptions. *Israel Exploration Journal* 25: 106–16.

Röllig, W. 1982. Die Aḥīrōm-Inschrift. Bemerkungen eines Epigraphikers zu einem kontroversen Thema. *Praestant Interna. Festschrift für Ulrich Hausmann* (ed. B. von Freytag gen. Löringhoff, *et al.*). Tübingen: Ernst Wasmuth, pp. 367–73.

Saghieh, M. 1983. *Byblos in the Third Millennium B.C.: A Reconstruction of the Stratigraphy and a Study of the Cultural Connections*. Warminster: Aris and Phillips.

Sass, B. 1983. The Revadim Seal and its Archaic Phoenician inscription. *Anatolian Studies* 33: 169–75.

Sznycer, M. 1972. Protosinaïtiques (inscriptions). *Supplément au Dictionnaire de la Bible*. Paris: Letouzey et Ané, 8, cols 1384–95.