



*A Monthly Journal of Oriental Research in*

ARCHÆOLOGY, ETHNOLOGY, LITERATURE, RELIGION, HISTORY,  
EPIGRAPHY, GEOGRAPHY, LANGUAGES, ETC.

VOL. XVI.      MERIDEN, CONN., DECEMBER, 1903.

No. 9.

---

## **Pre-Phœnician Writing in Crete, and its Bearings on the History of the Alphabet.**

An Abstract of three Lectures by Arthur J. Evans, LL.D., Litt.D., F.R.S.,  
Keeper of the Ashmolean Museum, Oxford.

### I.—PRIMITIVE PICTURE-WRITING AND THE CRETAN PICTOGRAPHIC SCRIPT.

Articulate language is a somewhat late development with the human race. Everything tends to show that geologically speaking the appearance of man on the American continent is comparatively recent. A widespread ethnic similarity is there visible among the aborigines. But what common stock of language did the immigrants bring with them? It has been observed that the number of known stocks or families of Indian languages within the United States alone amounts to sixty-five, and these differ among themselves as radically as each differs from Hebrew, Chinese, or English (G. Mallery, *Annual Report of the Bureau of Ethnology*, 1879-80, p. 312). But if we take the same area, and examine the character of the two earlier vehicles of human intercourse—*gesture-language* and *picture-writing* which was largely influenced by it—we find many

common elements extending from one end of the continent to the other.

Man drew before he talked. The very dearth of oral tradition gave a greater value to pictorial records. Already, in the Reindeer Period, we see the rude hunter, mother-naked, whose equipment of articulate speech was probably only of the most rudimentary kind, leaving excellent designs, in relief or in outline, on bone and stone, of the wild horses, deer, and other animals that he stalked or trapped. Among savage races at the present day, more or less developed systems of pictographic record are universal. The very ancient gesture-language and sign-communication blends with these, and may even be said to supply at times, to the pictorial figures the moods and tenses of grammatical expression. Illustrations of the blending of gesture-language and picture-writing, and also of the tendency of picture-writing to become abbreviated into a linear shorthand, are supplied by the representations of gesticulating men in the California rock paintings of Tule River and Santa Barbara county.

Evidences of similar pictography in primitive Europe are supplied by the troll-drums of Lapland; in Scandinavia by the rock paintings, such as those of Bohuslän, or the Kivik tombstone; in Ireland by the incised stones of New Grange; in Brittany by the dolmen of Locmariaker; in Spain by the representations at Fuencaliente in Andalusia; in the Maritime Alps by those of the Maraviglie and Val Fontanalba (subscribed by Mr. C. Bicknell); in the Adriatic by some observed by the lecturer in the Bocche de Cattaro, and by similar representations in North Africa.

Reference has already been made to the tendency of picture-writing to concentrate its pictures into symbols, and to substitute a part for the whole. Eventually systematic selection of pictography to represent words, and even syllables, led to the growth of conventional systems of writing. Examples of this process are the picture-writings of Central America and China.

In the Nearer East the process was the same. In Egypt the discoveries of Petrie and others have revealed in pre-dynastic

and proto-dynastic times, the less formalized beginnings of the later conventional "hieroglyphics." In Babylonia, early monuments like those in Tello disclose many pictorial originals of what afterwards became "cuneiform" symbols. And in the so-called "Hittite" script of North Syria and Asia Minor we have an instance of a pictographic script whose symbols—whatever their significance—retained at least a pictorial aspect throughout.

There was, therefore, an *à priori* probability that in Greece also an early picture-writing might be expected to have existed: the discoveries of Schliemann revealed so high a type of civilization in the prehistoric Ægean, that if writing had proved to be unknown it would have been its absence which would have called for explanation, and, in fact, it was not long before isolated specimens of script were actually discovered by Tsountas, scratched on vase handles from Mycenæ.

Nevertheless, in 1894, M. Perrot felt justified in summing up as follows (*Histoire de l'Art dans l'Antiquité*, vi. (Eng. Tr.)):  
 "The first characteristic which attracts the historian's notice when he tries to define pre-Homeric civilization, is that it is a stranger to the use of writing. It knows neither the ideographic signs possessed by Egypt and Chaldæa, nor the alphabet, properly so called, which Greece was afterwards to borrow from Phœnicia." He admitted, indeed, that some of the marks recently noted on the vase handles bore resemblance to letters, but observes that they do not seem to form words, and that they are perhaps nothing more than the marks of the potter or of the owner; or ignorant copies of Phœnician or Asianic characters. "As at present advised," he concludes, "we can continue to affirm that for the whole of this period neither in Peloponnese nor in Greece proper—no more on the buildings than on the thousand and one objects of luxury or domestic use that have come out of the tombs—has anything been discovered which resembles any kind of writing."

To the lecturer himself, on the other hand, it seemed incredible that a civilization which laid both Egypt and Babylon under such heavy contribution, and gave so much in return, as

an equal rather than as a dependent, could in the department of writing, have been below the stage attained by Red Indians. If analogy were any guide, the commoner vehicles of writing in the Ægean would be as perishable materials as elsewhere; and tradition pointed here, too, to the early use of palm-leaves, lime bark, and similar vegetable surfaces, as substitutes for the papyrus of Egypt. Considerations of this kind, however, provided negative evidence only; the problem was, what data could be discovered to establish a positive conclusion.

Such data seemed to be provided by a four-sided seal-stone brought back from Greece by Greville Chester and acquired by the Ashmolean Museum, which, though at the time attributed to Sparta, has since been traced back to a Cretan origin. The symbols with which this stone was engraved were so grouped as to suggest a pictographic script analogous to the "Hittite" system of writing; and the discovery of similar stones in Crete in 1893 confirmed the suspicion that the designs on this class of seals were symbolic, and their grouping intentional. In a series of journeys through Crete in 1894 and subsequent years, Mr. Evans discovered a large number of similar seal-stones, which he described in the *Journal of Hellenic Studies*. It became clear from the first that two forms of writing were in use in Crete collaterally, the one "pictorial," the other "linear"; all uncertainty as to the significance of the latter class of signs being dispelled by the occurrence of a regular inscription on a table of offerings found in the Dictæan cave in 1896. These pictographic seal-stones show a definite method in the grouping of their symbols. They follow a regular system of arrangement, which is sometimes *boustrophedon* as in many of the earliest Greek inscriptions. Further, the pictorial signs are not mere ornaments chosen at haphazard, but are selected from a limited cycle of symbols; and some of them represent, in graphic form, abbreviations of a gesture-language.

By the year 1895, in fact, it was possible to conclude not only that the engraving of the Cretan seal-stones shows all the characteristics of a system of writing, but even that the script

was of the nature of a syllabary. The suggestion that the seal-stones were simply talismans, with religious symbols, did not seem adequate to explain the data; and all doubts were finally dispelled in 1900 by the discovery—in the course of excavation on the very site at Knossos where Stillman had noted incised symbols on prehistoric masonry—of whole hoards of documents, some of considerable length, inscribed on clay tablets, both in the linear and the pictographic style.

A preliminary survey of the large mass of data now available establishes the independent and indigenous character of the Cretan script. An early class of the seal-stones shows more purely pictorial forms than the later examples, and shows also indications of contact with the art of the XIIth Dynasty of Egypt. A still earlier class shows a ruder style of engraving with greater resemblance to primitive drawings such as those of a child on a slate; and also a characteristic prismatic form—three sided, with the edges somewhat rounded—which recalls that of the Karnak prism, and fits on to that of the cylinder-seals of the early dynasties of Egypt. Another class, of button-shaped seals, with perforated shank, seems also to have originated from an early Nilotic—possibly a Libyan-type. The Cretan script also presents close analogies, in some ways, with the "Hittite" system. These evidences of contact with analogous modes of writing in adjacent areas do not, however, seem to invalidate the conclusion that the Cretan system is essentially of independent local origin; earlier examples of its use go back to the third, and probably to the fourth millennium, B. C.

#### II.—THE LINEAR SCRIPT OF MINOAN KNOSSOS.

The traditional centre of Crete was Knossos, the seat of Minos and capital of his sea-empire, the scene of the famous Labyrinth and of the works of Dædalos. Here were likely to be the fullest records of the early Cretan system of writing, and already in 1894 Mr. Evans acquired a site there where some ancient ruins were visible. The result of his excavations from 1900 onwards has been to bring to light a vast pre-historic palace the structure and contents of which revealed the exist-

ence of a high civilization going back some 2,000 years before the earliest records of archaic Greece. The legendary "works of Dædalos" substantiated themselves in the shape of sculptures, moulded reliefs, and wall paintings showing extraordinary artistic skill; but the crowning discovery was the existence of whole archives of clay documents written in an advanced linear script. These had been contained in chests secured by seals, countermarked and countersigned, showing an elaborate bureaucratic organization. The subject of the clay tablets was often shown by illustrative pictorial figures added to the inscription. Many were palace accounts and inventories relating to vases of precious metals, ingots, chariots and horses, cuirasses, swords and other arms and implements, corn and other agricultural produce, flocks and herds, and persons—perhaps at times slaves—of both sexes. Many contained accounts, the numbers of which it was possible to decipher, and some tablets referred to percentages. Other inscriptions may eventually prove to be deeds, correspondence, or even official edicts, some perhaps containing formulas of the laws of Minos. There were also seals belonging to documents on perishable materials, and some vases with ink-written inscriptions within them give an idea of this class of Minôan literature.

The writing showed very modern characteristics and punctuation, and certain signs of value and quantity were varied according to an artificial method evidently devised by grammarians. About eighty signs were in common use, and in some cases, though linearised, they showed traces of pictorial originals. The characters seem to have had a syllabic value.

Specially important for the analysis of the script were long lists of personal names often showing a compound character with suffixes changing in different positions. The non-Semitic character of the language was clear, and its type seemed to answer to that of the Indo-European group.

The linear characters came in with the later palace, about 1800 B. C., and though ultimately derived from pictorial prototypes were, on the whole, independent of the Cretan pictographic script. The result of the discovery of these clay

archives was to show that a highly developed linear system of writing existed in Crete nearly 1,000 years earlier than the first known examples of Phœnician script. Neither series was of Egyptian origin, though the quickening influence due to early Egyptian contact might be admitted.

### III.—CRETAN SCRIPTS AND "SIGNARIES," AND THE PHŒNICIAN ALPHABET.

Besides the two definite systems of Cretan writings—the pictographic and the linear—we meet with a variety of isolated signs or marks on pottery and other materials. Similar marks are found in Egypt, distinct from the hieroglyphics, and going back to prehistoric times. These signs are of geometrical formation, anticipating alphabetic shapes, but did not necessarily always originate in artificial linear combinations. Some were certainly pictorial in origin, from rude line drawings such as a child draws on a slate. Such forms stood really nearer the origin of letters than the elaborately carved hieroglyphs of a more civilized age. They survived, in fact, to supply a formative influence, and models for a simpler script. In Egypt such marks were used for various purposes by guilds, like those of inlayers; and a remarkable series, partly, perhaps, actually borrowed from the Egyptian guild repertory, appear on ivory, bone, and porcelain inlays of native Cretan fabrics. A set of bone "fish" for inlaying, from the Palace, shows twenty-one varieties, ten of which are practically identical with forms of the later Greek alphabet. The signs found on the Palace blocks, though also geometrical, betray a pictorial origin more clearly. In this case several seem to be religious symbols.

The Cretan evidence supplies a new standpoint for examining the vexed question of the origin of the Phœnician alphabet. The earliest Phœnician monuments, like the Moabite Stone, go back to about 900 B. C. The earliest traces of the use of Phœnician letters by the Greeks may date from the eighth century. On the other hand, the recent discoveries of Sabæan and Minæan inscriptions in South Arabia tend to throw back the date of the origin of the Phœnician alphabet. The South Semitic forms were derived from types similar to the Phœnician, and the

evidence tends to show that the Minæan inscriptions go back, at any rate, beyond the ninth century B. C. As in their earliest known form they show considerable divergence from the North Semitic prototypes, these must have been in existence some time before the first appearance of the South Arabian forms. We may suppose, then, that the Phœnician system was already in existence by about 1200 B. C. But a *terminus a quo* on the other side is supplied by the Tell-el-Amarna tablets, which show that the cuneiform script was still exclusively employed in Syria and Canaan about 1400 B. C.

From what source, then, did the Phœnician alphabet originate at some time about this approximate period? The great principle of akrophony, by which, instead of a sign being taken as a word or syllable, it stood for the initial letter, is made the sole basis of the Phœnician alphabet. This great step in the evolution of writing was already partly anticipated in the Egyptian hieroglyphic series, where some "alphabetic" signs occur. Hence De Rougé's attempt to derive the Phœnician letters from the Egyptian prototypes. By an eclectic process he sought these in certain hieratic forms of a much earlier period, making the Phœnicians re-name their letters according to a fancy system. This theory was popularized in England by Dr. Isaac Taylor, and still may be said to hold the field there, though the objections to it seem to be unsurmountable.

Even less happy has been the attempt of Peiser and others to derive the alphabet from cuneiform characters. In the names and order of the letters a Babylonian element may be admitted, and had the pictorial origins of Babylonian characters survived down to the period when the Phœnician alphabet arose, possible elements for its derivation might have been supplied from this quarter. But these early quasi-pictorial characters of old Chaldea had vanished some 3,000 years before.

The old simple theory of Gesenius and his followers, that the Phœnician letters were derived from the pictorial objects suggested by their names, seems on the face of it more natural



than the artificial theory of De Rougé. A table prepared thirty years ago by Sir John Evans for the Royal Institution showed how easily the derivation from these pictorial originals might be effected. It was therefore highly interesting to find among the Cretan characters a whole series of pictographic forms answering to the prototypes of the Phœnician letters as conjecturally drawn, in accordance with the meaning of their names so far as can be interpreted, and in some cases accompanied by similar linear simplifications. A table of comparisons makes this abundantly clear. It is impossible to imagine that on one side of the same sea identical forms were arrived at by this natural process, while on the other they were artificially derived from an already antiquated Egyptian source. From the purely comparative point of view the Cretan evidence must be regarded as decisive as to the pictorial origin of the alphabet.

A still more interesting question arises—does the Cretan evidence supply something more than a parallel example? There was an agency at work which brought Crete, and the Ægean world that it dominated, into a direct relation with Canaan during the very period of alphabetical incubation. The biblical and Egyptian records both agree in bringing the Philistine tribes from the "Isles of the Sea." The southern tribe of Philistines, the Hebrew Cherethim, are translated "Cretans" in the Septuagint, and their chief city Gaza preserved the Minōan name and the cult of the Cretan Zeus to classical times. New Egyptian evidence makes it almost certain that the mysterious Kapptor is really Crete, the Egyptian Keftô, and the Kefts, the highly civilized people who bore offerings to the Egyptian kings, have now reappeared in the wall paintings of the palace of Knossos. The most familiar Philistine name, that of Achish, moreover, is already found in the Ægean home of the race (witness an Egyptian record) long before we hear of it in Gath.

The occupation of a large part of the coast lands of Canaan by Cretan and other Ægean elements about the thirteenth century B. C. seems to have been the effect of disturbances

about that date in the *Ægean* area. The Philistines derived from this side must be looked on as representatives of what was in many respects a higher intrusive culture from the West; and the Cretan evidence shows that they would have brought with them a highly developed system of writing. The Cretan characters, linear as well as pictographic, seems still to have retained a double use, either as word signs or as syllables. Thus when, as very soon happened, the language of the intrusive *Ægean* element was Semitised by contact with the surrounding populations, these signs may have received translated values. At the same time the impossibility of explaining several of the Phœnician letter names from any Semitic source may point in some cases to actual adoption from the Cretan syllabary. That there were several local variants of the Cretan script appears from the evidence of finds in different parts of the island. It is not necessary to suppose that the characters introduced by the *Ægean* occupants of the coast of Canaan were in all respects identical with the Knossian forms. Much must still remain hypothetical, but in the absence of any other satisfactory source for the elements from which the Phœnician letters were selected, the identification of the Philistines with a highly-civilized *Ægean* race, far advanced in the art of writing, becomes an extremely suggestive fact. Nor is it without significance that during the same period another parallel wave of colonists from the *Ægean* imported the "Mycenæan" culture into Cyprus and introduced there a syllabary showing points of conformity with the linear script of Knossos.