MITTEILUNGEN

PROTO-ELAMITE ACCOUNT TABLETS FROM TEPE YAHYA, SOUTHEASTERN IRAN

The site of Tepe Yahya is located approximately 250 km. south of Kerman and 30 km. from the present village of Dolatabad in southeastern Iran. The mound was discovered by the author on an archaeological survey in 1967. To date we have completed three field seasons of excavation, sponsored by the Peabody Museum, Harvard University and the Archaeological Service of Iran. (Support has been principally derived from the National Science Foundation and the Ford Foundation.) Tepe Yahya represents the largest known pre-Islamic mound in southeastern Iran. Standing to a height of 19.8 meters with its diameter some 187 meters, sherds are scattered for almost 2 kilometers in each direction from the mound. To date we have uncovered the following sequence of occupation:

Period I	Partho-Sasanian	pre 400 A.D.
Period II	Achaemenian	300—500 B.C.
Period III	Iron Age	500—1000 B.C.
GAP		
Period IV A	Elamite?	2300—2500 B.C.
IV B	Proto-Elamite	2500—3100 B.C.
IV C	Proto-Elamite	3100—3400 B.C.
Period V	'Yahya Culture'	3400—3800 B.C.
Period VI	Coarse Ware Neolithic	3800—4500 B.C.

The results of the excavations have recently been published by the Peabody Museum, Harvard University (Excavations at Tepe Yahya 1967—1969: Progress Report I). Here we briefly summarize the recovery of the Proto-Elamite settlement: Period IV C and IV B. A more complete presentation, fully illustrated, has been published in Iran 9, 1971 ("The Proto-Elamite Settlement at Tepe Yahya").

The Proto-Elamite settlement at Yahya shows evidence of direct cultural continuity from an earlier underlying Period V settlement. Pottery and additional finds strongly support the impression of an uninterrupted settlement and of the indigenous nature of Periods IV and V. Thus we argue, from archaeological evidence, for a continuous occupation of indigenous nature throughout the later fourth and early third millennium. The archaeological evidence does not indicate the arrival of a foreign element at the time of our Proto-Elamite settlement. It is to this settlement that we turn.

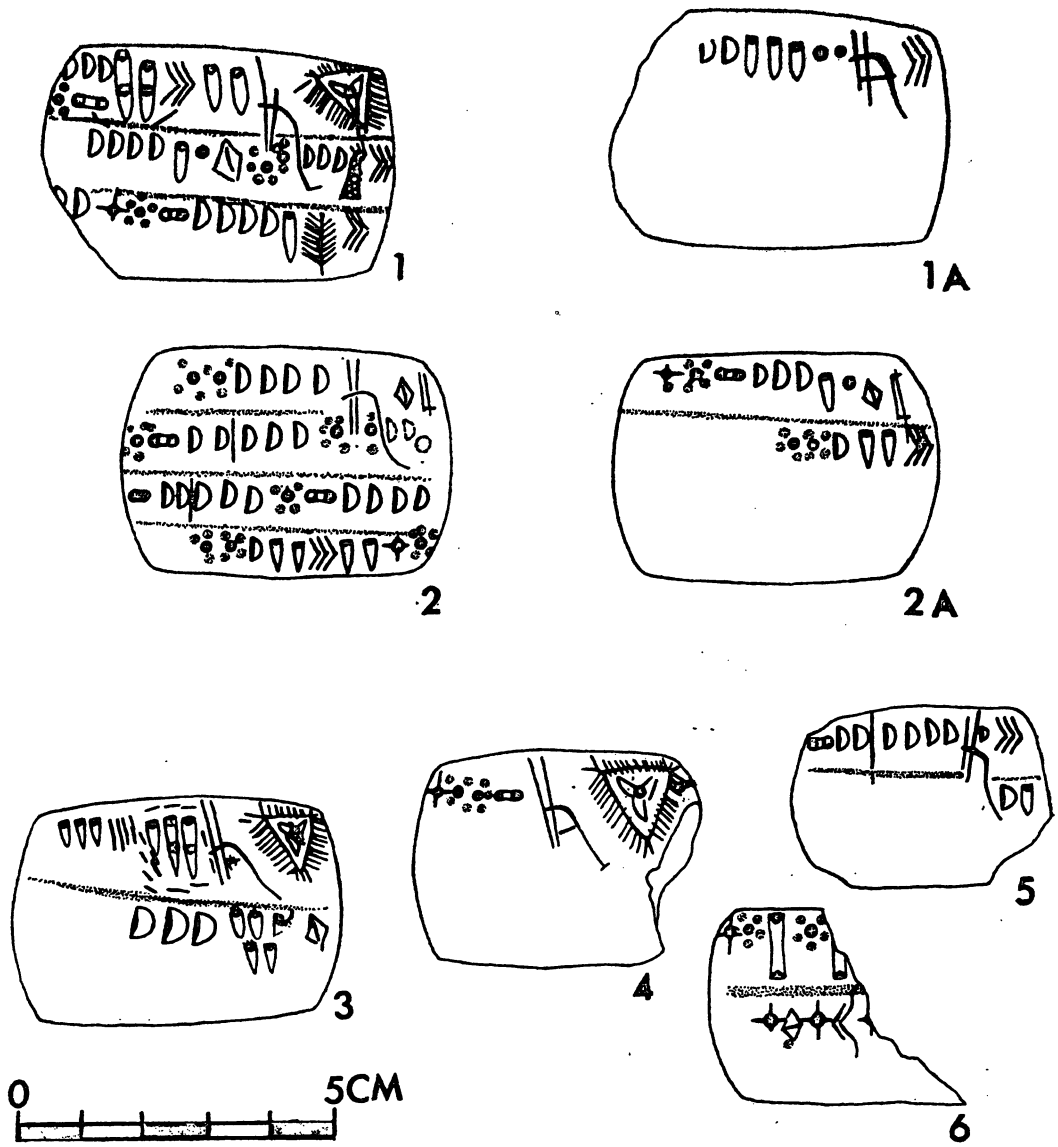

Fig. 1 — Proto-Elamite tablets from Tepe Yahya

Period IV C:

In an incompletely exposed large architectural complex we have recovered from a single room six Proto-Elamite tablets (Fig. 1), over twenty-four cylinder sealings similar in type to those from Susa C, Uruk bevelled-rim bowls, and painted pottery more readily paralleled on recently excavated sites of southeastern Iran (Bampur, Tal-i-Iblis, Shah-Dad, Shahr-i-Sokhta) than on sites of the Iranian Plateau, i. e. Sialk and Giyan. Of particular interest is the recovery of eighty-four tablet blanks, stacked in a pile in a corner of the room. These tablet blanks are identical in their size and convex shape with the inscribed

tablets. The presence of these blanks strongly supports the contention that the tablets were being written at Yahya. The tablets were inscribed from right to left. Two (Fig. 1, Nos. 1, 2) carry writing on both sides, being turned over on a horizontal axis. With the exposure of more rooms of this complex there is every indication that more tablets will be recovered (3280 ± 170 B.C.).

Period IV B:

Resting *directly* above this complex we uncovered a large room which has been radiocarbon dated to 3280 ± 170 B.C. This room contained numerous cylinder and stamp seals which, being without parallel, must be assigned to a local Proto-Elamite style. A single stamp seal is of 'Persian Gulf' type and indicates contact with this area. Pottery parallels are again to the sites mentioned above in southeastern Iran and not to sites of the Iranian Plateau. From this period we have also recovered a rich corpus of steatite bowls which in their shapes and design motifs are readily paralleled at Ur, Tell Asmar, Mari, Khafajeh, and Ubaid, to name but a few sites in Mesopotamia, and at Mohenjodaro in the Indus Valley. At Tepe Yahya we have recovered every known motif on steatite bowls, and ample evidence for their actual manufacture on the site; while some 25 km. from Yahya we have located a large steatite mine with evidence of strip-mining. There can be little doubt that this material was of local origin and production, and that from here this widely distributed type of Proto-Elamite art was exported to both the east and the west.

Certain it is that the excavation of this Proto-Elamite settlement challenges earlier views on the distribution and origin of this major proto-literate culture, raises fundamental questions of chronology, and points to an important rôle played by the Proto-Elamites in international trade of the early third millennium. Future seasons of excavation will concentrate on this most productive series of settlements at Yahya throughout the fourth and third millennium.

C. C Lamberg-Karlovsky

THE FIFTH EDINBURGH SYMPOSIUM ON MINOAN — MYCENAEAN WRITING

This was held in the University of Edinburgh on November 5—7, 1970, the programme consisting in the main of four lectures and two sessions of open discussion. In the first discussion, on "The Coming of the Greeks", at which Professor Stuart Piggott presided, much interest

was shown in the question whether the arrival should be considered as one or more short irruptions at one period or another, or as a prolonged series of invasions and infiltrations. At the second discussion Dr. Was and Mr. Brice answered questions on the Linear Script A, principally with regard to the economic and other possible purposes of the documents.

Mr. W. C. Brice, speaking on "The content and purpose of the Linear A inscriptions", pointed out that, in the case of some of the lists with whole numbers, subdivision may be possible into groups of items whose numerals, when added together, form round ratios of the main total. This feature of the accounts, considered along with others, may mean that there was some preliminary arrangement of the items, and some significance in the order in which they appear.

Dr. D. A. Was, in a lecture on "Numerical fractions in the Linear A Script and consequential data on the Minoan economic system," suggested that the archives of Hagia Triada dealt with the payment in kind of a labour force which was distinguished into many classes whose rations differed both in quantity and quality. The hieroglyphic texts employed a system of dry measure somewhat different from that of Hagia Triada, and it seems possible that both the linear and the hieroglyphic systems were used concurrently in Mallia.

Mr. J. T. Hooker, in considering the question "Why was the Linear B Script created?" mentioned several objections to the current account of the origin of Linear B. Greek features in the Linear B texts are isolated, disconnected, and apparently embedded in a matrix of non-Greek languages. The postulated invention of a new script by Mycenaean invaders of Knossos is not consistent with their alleged illiteracy; nor can the inadequacy of the Linear Script B for rendering the Greek language be reconciled with the view that it was evolved specifically for this very purpose. Moreover, excavations at Knossos have so far revealed nothing which would suggest a Mycenaean domination during the 15th century B. C. and, on the contrary, much that points to a continuation of the native Minoan culture. His own view was that the Linear Script A was taken to the mainland by Minoan scribes in the sixteenth century and there, during subsequent modification for a scribal purpose which led to the 'Linear B' style, incorporated some Greek words.

Professor A. J. Beattie considered the problem of "Sign 70 in the Linear B texts". It is often a manifest ideogram. In the G series at Mycenae, for example, it occurs alone or as a prefix to ideogram *123* or as an infix in *123*; and in these contexts it can be supplemented to make the 'word' *70—53—57—1—6*. In the same series of texts it is also accompanied by the 'hand' sign, *52*, standing before or after it; and this pair may have *28* placed between them. Again, the formulae in which the group *70—52* et al. occur show other sign-groups containing *70* and also its congener in the Ventris system, *77*. Finally, the initial sign-groups preceding such formulae show an unusually high incidence of *70*'s other

congener, *44*. Other kinds of texts, notably in the A, C, E and J series at Pylos, confirm the relationship between *70*, *44* and *77*. Phenomena of this sort are not likely to be explained by a simple equation of *70* etc. with a particular syllable or phoneme everywhere. Given the ideographic nature of some instances of *70* in the G series and of *44* and *77* elsewhere, it is quite possible that, in many or all of the sign-groups usually taken to be words, *70* has an ideographic value.

A report on the Symposium has been prepared, and copies are obtainable from the Department of Greek of the University of Edinburgh, The David Hume Tower, George Square, Edinburgh, EH8 9JX.

ARTHUR J. BEATTIE

INDICES TO THE KNOSSOS TABLETS

Dr. Heinz Geiss as editor and the Deutsche Akademie as publisher are to be congratulated on the appearance of the Indices to Abbreviations and Adjuncts in the Knossos Tablets (Deutsche Akademie der Wissenschaften zu Berlin, Schriften der Sektion für Altertumswissenschaft 56: Akademie-Verlag, Berlin — Adolf M. Hakkert, Amsterdam, 1970). These Knossos indices, apparently intended to be the first of a series, are presented as loose leaves in a folder, and printed in a system of voucher filing on a punch card basis. Two code cards act as keys to the columns. The fifteen different indices enable the student to trace, from various directions, the contexts of the abbreviations and adjuncts: with which other signs of this nature they are associated, in what relative position on the tablets, and whether in ligature or not; and likewise with regard to associated ideograms, sign-groups and indications of measure. The readings and identifications are based entirely on the Third Edition of the Transliteration of the Knossos Tablets (KT III) by John Chadwick and J. T. Killen (London, Institute of Classical Studies, 1964). Students of Linear B will feel much gratitude to Dr. Geiss for this guide, clearly the product of protracted effort and patience, which makes no attempt at interpretation and therefore will be of equal value to all, whatever their approach to and understanding of the texts.

WILLIAM C. BRICE

UGARITICA VI

This international collection of thirty-eight contributions, published in Paris in 1969, constitutes a magnificent tribute to mark the thirtieth season of work at Ras Shamra under the direction of Claude F. A. Schaef-

fer. It includes a number of articles of importance for the study of early epigraphy in the Aegean and the Levant. Special mention may be made of the following: the publication by Henri Seyrig of a seal acquired in Vienna in 1913 which confirms the authenticity of a class of Syrian cylinders strongly influenced by Aegean style; a study by Johannes Friedrich of the value of the Semitic element in various bilingual inscriptions; an authoritative article by P. J. Riis on the nature of the early Greek settlements on the Phoenician coast, with special reference to the site of Sukas; and a definitive publication and analysis by Olivier Masson of the long tablet RS 1956 in the Ugaritic variety of the Cypro-Minoan Script.

WILLIAM C. BRICE

PHILISTINE MANUSCRIPTS FROM PALESTINE?*

The discovery of eight manuscripts several centuries older than the Dead Sea Scrolls was announced on December 1, 1970 by Mr. Yacoub Oweis, Director General of the Department of Antiquities of the Hashemite Kingdom of Jordan, jointly with Dr. William H. Brownlee of Claremont Graduate School and Dr. George E. Mendenhall of the University of Michigan.

The documents have yielded a previously unknown writing system in a language which is undeciphered and unidentified. All are written on parchment; five were written in ink and three were incised with a sharp instrument. The parchment is mostly crude. The writing system, which seems to be alphabetic, cannot be a Semitic language, despite the similarity of many of the signs to ancient Phoenician and Hebrew.

The relationships of the newly found documents, to judge from the writing system, point toward the poorly known languages of Southern Anatolia: Carian, Lycian, and Lydian, on the one hand; but there are also distinct similarities to inscriptions which have been found in Crete, Sicily, and Italy. The relation to the most archaic Etruscan is particularly striking, and therefore the writings are also closely related to the most archaic Greek.

The newly found documents were purchased for the Department of Antiquities of Jordan by Dr. Brownlee at Jerusalem on June 19, 1966, from a Jordanian entrepreneur who believed them to have come from an ancient site somewhere in the district of Hebron. The documents were tightly rolled and extremely dry, dirty, and brittle; it took four or

* On December 15, 1970 The Times published a short report from Jordan on the discovery of eight leather scrolls inscribed in a hitherto unknown script. Reprinted here, by courtesy of the joint authors, is a revised version of the original press release which was issued in Amman on December 1, 1970. This new text omits a phrase used in the first report, that the writing system "consists of over forty

five days of intensive humidification before Dr. Brownlee was able to unroll them and prepare them for infra-red photography.

The similarity of the writing to ancient Carian and Etruscan was first recognized by Dr. George E. Mendenhall, then director of the American School of Oriental Research in Jerusalem. Having been taken into partnership by Dr. Brownlee for their study, he has now nearly completed a computer tabulation of the distribution and context of each character of the alphabet as a first step toward the analysis of the language and eventual decipherment. The computer work has been carried out by Mr. Stanley Mendenhall.

In the absence of any knowledge of the archaeological context of the finds, any dating can only be tentative. However, on the basis of similarities of the writing system to inscriptions from other regions which seem definitely related, it is difficult to date them as late as the seventh century B. C., and they could well be as early as the ninth century. Since it is known that Carian mercenary soldiers from southern Anatolia were serving in various parts of the Eastern Mediterranean in the 7th century B. C., it is conceivable that the documents stem from this people. Yet there are contrasts to the Carian inscriptions from nearby Egypt. These suggest that we may have an indigenous writing system, recently borrowed from the Phoenician and adapted to a foreign language with a radically different phonetic structure.

The people which meets the requirements is the Philistines, and it is entirely possible that, after several generations of archaeological work, we finally have recovered some documents of the Philistine language. The similarity of the writing system to Eteocretan would suggest this identification, since the Old Testament prophet Amos (9:7) derived the Philistines from Caphtor, the ancient name for Crete. At present, nothing can be said about the content of the documents, though there is a strong probability that they are funerary inscriptions of some sort. The documents have a strong formulaic flavor, with a number of repetitions of the same sequences of signs. The report received in 1966 is that the manuscripts were found in a stone chest inside a tomb. One readily thinks of either a sarcophagus or an ossuary; but it may have been some other container which explains their remarkable preservation.

The first and most obvious importance of these manuscripts is for the history of the alphabet. The letter shapes stand in a mediating position between the most ancient Phoenician and archaic Greek. The fact that the documents contain only a single column of text and three of them are engraved introduces us also to a new kind of manuscript. Anciently,

---

signs", because, as Dr. Brownlee kindly informs me, in the light of further study it now seems probable that the number of letters should be less than thirty; though the exact number has yet to be determined.

EDITOR