

The Early Bronze Age of Iran as Seen from Tepe Yahya

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The last centuries before 3000 B.C. were of capital importance in Iran and Mesopotamia—for in both there arose contemporary and essentially distinctive civilizations: the proto-Elamite and the Sumerian. To date we are unable to establish a chronological priority of one over the other; nor can we fully assess the nature, extent, and processes of their parallel development and interrelations.

Excavations at a number of sites throughout southern Iran, undertaken since World War II, have appreciably increased our understanding. The American-led excavations of D. McCown (Oriental Institute, University of Chicago) at Tal-i Ghazir in 1948; R. H. Dyson, Jr. (Peabody Museum, Harvard University) at Susa in 1954; J. R. Caldwell (Illinois State Museum) at Tal-i Iblis in 1966; and the authors' (Peabody Museum, Harvard University) excavations at Tepe Yahya throughout the summers of 1967-71 in conjunction with the British-led excavations of B. deCardi at Bampur (1966), the Italian Mission under M. Tosi at Shahr-i Sokhta (1966-67), and the Iranian-led expedition of Engineer A. Hakemi to Shah Dad (1969-70) have written a new chapter on the archaeology of southern Iran throughout the Uruk-Jemdet Nasr and later third millennium horizons. The important continuing excavations at Tchoga Mish directed by H. Kantor (Oriental Institute, University of Chicago) and P. Delougaz (University of California at Los Angeles) as well as the recently undertaken surveys and sondages of H. Wright (University of Michigan) and H. Weiss (University Museum, University of Pennsylvania) throughout Khuzistan await publication. The proposed excavations at Tepe Malyun by W. Sumner (American Institute of Persian Studies, Tehran and the University Museum, University of Pennsylvania) will increase our understanding of the relatively unknown third and second millennium occupation in the Marv Dasht plain of Fars.

Since World War II American archaeologists have not directed their attention to the excavation of a comparable number of Early Bronze Age sites on the Iranian Plateau and northern Iran, where American interests have profitably focused on Neolithic and later first and second millennium sites. The important Bronze Age sites of Yarim Tepe, Yanik Tepe, Geoy Tepe, Tal-i Nokhodi (British), Godin Tepe (Canadian), and Tureng Tepe (French) involve problems distinctive from those of southern Iran and appear to belong to different cultural zones largely unrelated to the Early Bronze Age proto-Elamite culture of southern Iran.



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PHILIP L. KOHL has been a member of the Harvard-Iran expedition at Tepe Yahya for all four seasons of excavation. He is now a graduate student in anthropology at Harvard University, having done his undergraduate work at Columbia. The subject of his Ph.D. dissertation, on which he is presently working, is the steatite material from Tepe Yahya.

Recent excavations at Tepe Yahya, in Kerman province, have been of considerable interest not only for documenting the development of the Early Bronze Age in southeastern Iran, but also for indicating a pattern of communication and trade connecting this area with Mesopotamia, the Persian Gulf, and Baluchistan, while suggesting only minimal relations to sites on the Iranian plateau. We may profitably discuss the Early Bronze Age from the focal point of Tepe Yahya in relation (1) to southern Iran; (2) with the West; and (3) with the East.

Southern Iran

Tepe Yahya provides us with the longest prehistoric sequence of occupation in southeastern Iran. Based on radiocarbon dates the cultural sequence begins c. 4500 B.C. and continues without a major hiatus until the middle of the third millennium. Following a gap of indeterminate duration the site is reoccupied throughout the first millennium until c. A.D. 500. Of special interest to us here are Periods V (3800-3400 B.C.), IVC (3400-3100 B.C.), and IVB (3100-2700 B.C.).

The early evidence of copper smelting recovered at Tal-i Iblis II is not paralleled at Yahya, although metal implements of the contemporary Period V have been shown on analysis to be the result of smelted copper ores containing a high percentage of arsenic inclusions (Fig. 1: A, B). In Period IVB we have recovered a copper-bronze

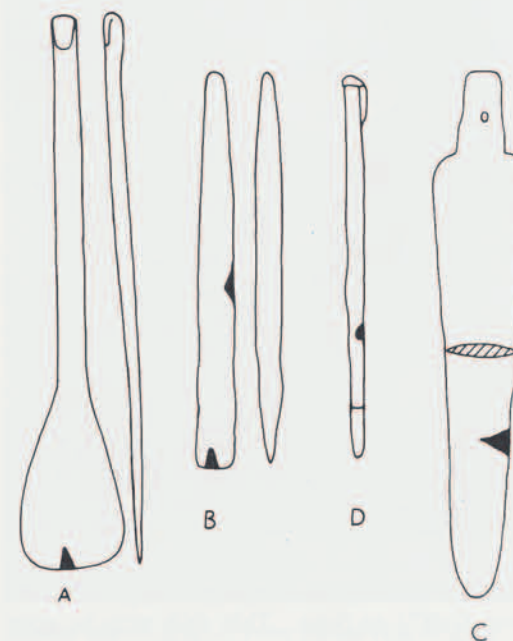


Fig. 1. Copper/bronze objects from Tepe Yahya, periods V (A, B, D) and IVB (C).

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dagger which contained 3.0% tin (Fig. 1: C). Professor R.F. Tylecote's analysis proves it to be an alloy, representing remarkably early evidence for copper-tin alloying in southwestern Asia. If Tal-i Iblis and Yahya indicate the unsuspected importance of this area in the development of a metallurgical technology, the importance of Tepe Yahya as an emporium of stone resources is equally unexpected. Throughout Period V we have recovered objects of marble, alabaster, turquoise, ivory, carnelian, onyx, mother-of-pearl, obsidian, and steatite. Evidence for the use of these resources in Period V foreshadows Yahya's subsequent role throughout Period IVC,B as a redistributive center of these materials, most particularly steatite. Clearly not all of these resources are local; many of them had to be imported considerable distances, indicating the existence of exchange mechanisms which flourished throughout Periods IVC,B. With the discovery of a nearby mine, steatite is known to be indigenous, and its abundance, over a thousand pieces in Period IVB—including objects of unfinished workmanship—strongly supports our contention that steatite was locally manufactured. Carved steatite bowls of Early Dynastic II/III in Mesopotamia are exactly paralleled in shape and design motifs at Yahya IVB (Fig. 2: A,C,D,F,H,K; B seems to be a unique spacer bead with an incised animal head.). Our radiocarbon dates for IVB place these steatite vessels some four hundred years earlier than their Mesopotamian counterparts, suggesting their earlier presence at Yahya and/or their earlier than E.D. II date in Mesopotamia. Clearly, this chronological discrepancy must be resolved. The distinctive steatite vessels have an extraordinarily wide distribution linking Susa C, Shah Dad, Yahya IVB, Bampur IV, and Shahr-i Sokhta to Mesopotamia on the one hand, and to the Indus, where they have been found in the lower levels at Mohenjodaro on the other. Carved steatite bowls with similar motifs have recently been reported from the island of Tarut, Saudi Arabia, and their ceramic copies have been recovered from the excavated cairns of Umm-an-Nar in the Persian Gulf. Animal motifs, particularly lions and snakes (Fig. 2: A), and eagles, recur frequently on objects from these widely dispersed areas; to date we have recovered two eagles incised on steatite objects both of contemporary date but of different style (Fig. 2: H, a shaft-hole axe; and the square steatite vessel shown here).

A widely distributed steatite form (Azerbaijan, Palmyra, Sialk, Ur) resembling a padlock, interpreted as "a ritual slab handle" and dated to the beginning of the third millennium, is paralleled in the Soghan Valley. It was discovered in use on a modern village shrine together with other antiquities. A similar object identical in form and decorated with opposed snake heads, a com-



Modern shrine with third millennium steatite objects reused over the tomb.

mon motif on steatite, was recently discovered in Soch (Fergana), Soviet Uzbekistan. A possible use for these perplexing objects as weights is presently being investigated.

It is interesting to note that at Bampur only three pieces of carved steatite and sixty-two pieces of imitation ceramic gray ware (which copy the shapes and motifs of steatite bowls) were recovered, while at Yahya only two ceramic imitations and over a thousand steatite fragments were found. Similarly, the site of Shahr-i Sokhta has but three pieces of steatite but great quantities of lapis lazuli, whereas not a single piece of lapis has been found at Yahya in unequivocal Period IVB context. Tal-i Iblis has little steatite and no lapis, but possesses an impressive and early metallurgical industry. We suggest that these sites of southeastern Iran were specialized in the provision of specific resources; these they either controlled for the manufacture of finished products for export (steatite at Yahya) or transshipped (lapis at Shahr-i Sokhta) to Mesopotamia, the resource-poor demand center. A northern overland trade route connecting Hissar IB, Sialk III 4, 5, Giyan Vc to Gawra XIII-XI and northern Mesopotamia has been documented by Georgina Hermann. In her analysis of the lapis lazuli trade she argues that this route shifted to the south following Jemdet Nasr times. This is borne out by the recent excavations in southeastern Iran. In the late fourth millennium a shift occurred, which redirected the lapis trade through Shahr-i

Steatite padlock-shaped object (about 2700 B.C.) reused in modern shrine. Originally a weight? Height, ca. 30 cm.



Sokhta and Shah Dad south (possibly along the Persian Gulf?) to Susa. This shift may be seen as causally related to the consolidation of the proto-Elamite hegemony in southeastern Iran.

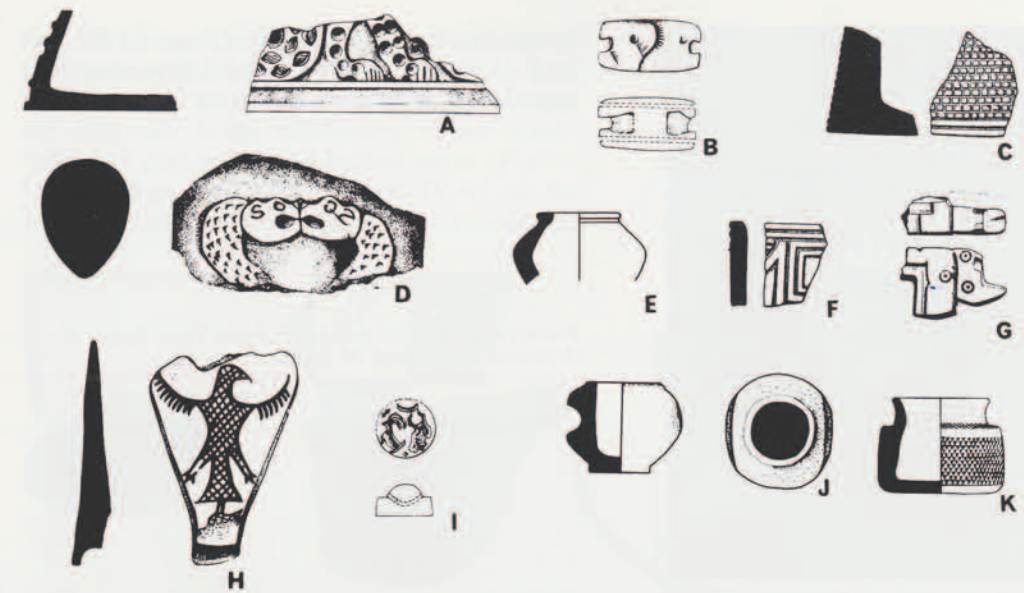


Fig. 2



Steatite objects (Fig. 2) from period IVB at Tepe Yahya and (below) a steatite vessel, 16 cm. square, from Tepe Yahya.



(top) Three Proto-Elamite clay tablets from Tepe Yahya IVB.

(bottom) Proto-Elamite tablet from Susa. University Museum Collection.

Yahya and Relations West

The evidence for cultural relations to the West in Period IVB was first apparent through the carved steatite vessels and Susa C cylinder sealings found in IVC. From the unequivocal context of the floor of a single room of Period IVC we have recovered six proto-Elamite tablets and eighty-four tablet blanks (an indication of their being written at Yahya) identical in both shape and signs to the proto-Elamite tablets ascribed to Susa Cb and Sialk IV. Associated with the tablets and cylinder sealings were found typical Mesopotamian beveled-rim bowls of a type familiar in Iran at Susa C, Iblis 5, Sialk, Giyan, Tchoga Mish, and Tepe Malyun. Earlier and prototypical beveled-rim bowls have been re-

covered in Yahya VA, Tell-i Ghazir 11-15, and by R.H. Dyson, Jr. at Susa. In all three cases they appear stratigraphically before the appearance of

Prototypical beveled rim bowls from Tepe Yahya V (left) and Susa Level 25 (right).



Tablet blanks and inscribed tablets in situ at Tepe Yahya.

the well-known Uruk type. The relationship of these prototypical beveled-rim bowls to their later Mesopotamian counterparts (Warka XII-IV) is not clear, nor is the relationship of the streak-burnished gray wares and incised wares (Fig. 3: J) of Yahya IVC and Bampur IV-VI to the Uruk gray and incised wares. The red-slipped

pedestal vessels (Fig. 3: M) are paralleled in shape at Hissar IC while the contemporary dish or jar stands (Fig. 3: K) of Period IVC are without parallel on the Iranian Plateau but bear generalized similarities, as do the painted spouted vessels and polychrome sherds (Fig. 3: H), to Jemdet Nasr types; while the goblets (Fig. 3: L)

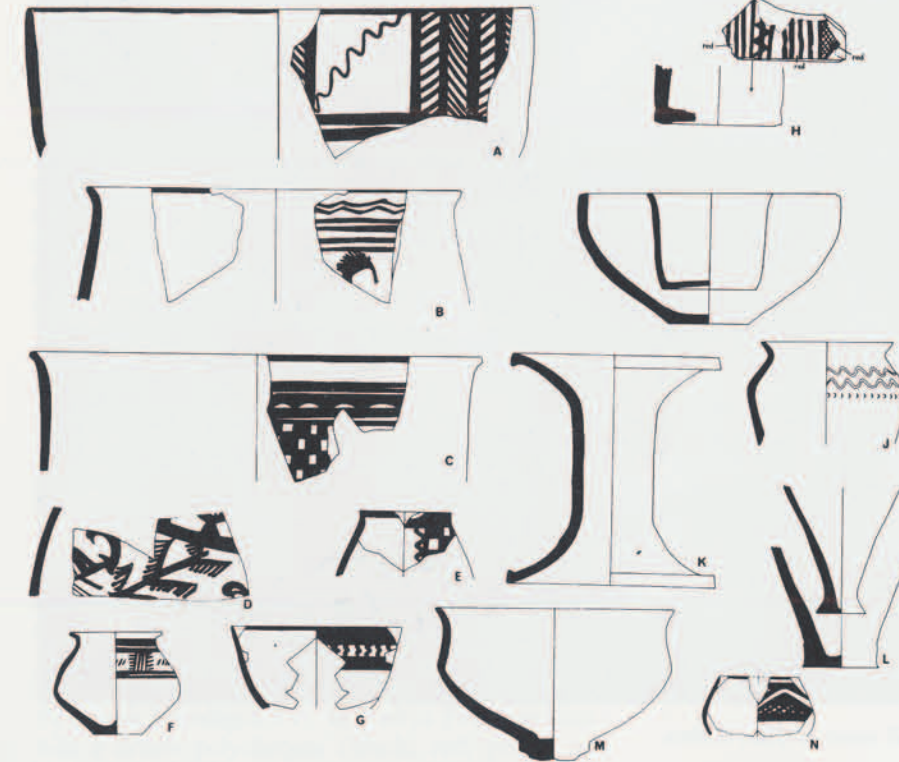


Fig. 3. Plain and painted ceramics from Period IVC and IVB at Tepe Yahya.



Spouted pottery vessel decorated with painted geometric designs from Tepe Yahya IVC.



Pottery vessels from a period IVB room at Tepe Yahya.

common to IVB are identical to their Early Dynastic I counterparts, which recently also have been reported from the Barbar I temple at Bahrein.

But if the proto-Elamite tablets, steatite bowls, cylinder seals, seal impressions, and beveled-rim bowls look to the West, the greater majority of the ceramics are not paralleled there. Identical types of Yahya IVC,B ceramics are found at Bampur (Fig. 3: C,D,E), Iblis (Fig. 3: N), Shahr-i Sokhta (Fig. 3: A,B), Shah Dad, and eastward to Baluchistan; e.g., Shahi Tump. Throughout Periods IVC,B, Tepe Yahya clearly establishes a close pattern of contact and economic exchange with sites to the West; nevertheless, this is indicated less through ceramics than steatite, seals, and tablets.

We do not believe that there is sufficient evidence to suggest site intrusion or cultural displacement; that is, the arrival of a new people, the proto-Elamites, in Period IVC,B or even the earlier V. There is at Tepe Yahya strong evidence to support direct cultural continuity from Period VI through Period IV. This continuity is manifest in ceramics and architecture as well as in the absence of a stratigraphic hiatus. However, there

can be little doubt that in southeastern Iran as in northwestern Iran (Godin V) there is marked evidence for contact with Mesopotamian-Uruk centers.

Relations during Period IVB with centers of the Persian Gulf are indicated through a Persian Gulf seal (Fig. 2: I) found in a IVB room from which we also recovered eight ceramic vessels. Additionally, the occurrence of Yahya IVB ceramic parallels to Hili, Abu Dhabi, including meandering snakes in relief on large circular jars, chain ridged ware and Early Dynastic I goblets identical to those recovered from the Barbar Temple I at Bahrein, as well as the presence of incised gray ware canisters at Umm-an Nar, precisely copying motifs familiar in the Yahya IVB steatite corpus, further supports links to centers in the Persian Gulf.

Yahya and Relations East

No mature Harappan pottery has been found at Tepe Yahya! This might indicate that Yahya was abandoned throughout the later third millennium or that Yahya had ceased to function as an overland trading center (trade perhaps shifting from the overland routes to traffic by sea, following the shores of the Persian Gulf) and/or that Yahya was not in direct contact with the Harappan Civilization. The importance of the contemporary and related sites of Yahya IVC,B, Shahr-i Sokhta III, Bampur V-VI, Iblis 5-6 may best be seen in relation to their role in the genesis of the Harappan Civilization. A model of stimulus diffusion between the highlands of southeastern Iran (c. 3000 B.C.) toward Baluchistan and the Indus is indicated in the wide distribution of certain ceramic types. All of the above-mentioned sites share most commonly a black-on-gray ware (Fig. 3: F,G), while more far-reaching ceramic parallels may be argued for linking Yahya IVB with Mundigak IV. In Yahya IVB less than half a dozen polychrome (black, red, yellow on buff) Nal sherds and a single Amri sherd (from the surface) have been recovered.

The presence of a late fourth and early third millennium proto-literate community at Yahya, and related sites of southeastern Iran and Baluchistan, some five hundred years prior to the mature Harappan suggests that this area may have played an important role in generating the stimuli which led toward the development and consolidation of the Harappan Civilization. The absence of a Kulli element at Yahya may indicate either its later date or lack of its influence and presence in this area.

If the excavations at Tepe Yahya have indicated new aspects of East-West relations involving the redistribution of natural resources, there are today adequate hints of a North-South link tying Yahya IVC,B to Shahr-i Sokhta III, IV where both M. Tosi and V. Sarianidy identify precise parallels in ceramics, seals, and figurines with Namazga Tepe V in Soviet Turkmenistan. Such a North-South route may have directed the materials of trade from the North toward the Persian Gulf, whence the materials moved by sea toward Bahrein and their final trans-shipment to Mesopotamia.

The excavations at Tepe Yahya, a joint project of the Peabody Museum, Harvard University and the Archaeological Service of Iran, have been most fortunate in adding appreciably to our understanding not only of southeastern Iran and the homogenous and distinctive culture which existed in this large area throughout the Early Bronze Age, but have also indicated its important relations with areas to the west (Mesopotamia), the east (Baluchistan), and the south (the Persian Gulf). At the same time, they demonstrate a rather distinctive character from that of the Early Bronze Age sites of the central Iranian Plateau. Much remains to be done in further clarifying the nature, control, mechanisms, and processes which led to and characterized this late fourth and early third millennium "internationalism" seen at Tepe Yahya and throughout the Elamite realm of southern Iran.