

The Euphrates Valley Expedition

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The expedition's new archeological salvage project at Korucu Tepe in the future reservoir of the Turkish Euphrates Dam was started in the fall of 1968 in conjunction with the University of California, Los Angeles, represented by Dr. Giorgio Buccellati. The National Science Foundation and the Ford Foundation provided generous support.

Because of the historical and linguistic interest attaching to the hieroglyphic Hittite inscriptions and on account of the importance

of this salvage project in the framework of Turkish-American cultural relations, the expedition is fortunate to have Professor Güterbock as its director for the seasons which remain before the area is flooded in 1971.

Korucu Tepe is a flat-topped mound situated 20 miles east of Elâzığ, Turkey, in the wide Altinova valley; it measures 500 feet in diameter and 50 feet in height. At its northern foot there is now a well, but as we have evidence that the level of the surrounding plain has risen some six feet since about 1500 B.C., there is every reason to believe that this well was a spring when the settlement was founded sometime before or during the fourth millennium B.C.

By the end of the first season's work, it had become clear how and in which periods the mound acquired its present shape. In a cut made into the foot of the northern slope, about six feet of deposit dating to the fourth millennium B.C. are visible. These six feet yielded hand-turned, chaff-tempered, light-brown burnished ware and leaf-shaped obsidian arrowheads. The repeatedly rebuilt house remains of mud brick were capped by a heavily burned level, in which several two-room structures filled with charred debris were clearly recognizable. The charred debris also yielded six-rowed barley, emmer wheat, and flax seeds. Carbon samples taken from this level and analyzed at the University of Groningen, Netherlands, have yielded dates between 3442 and 3322 B.C. The houses in fourth-millennium levels found at other sites in the area already had elaborate household appointments including hearths, the rims of which were plastically treated in such a way as to resemble a simplified human figure.

Both the pottery and the hearths of the fourth millennium are significant for the question of the origin of the very distinctive Early Bronze Age culture which flourished in eastern Anatolia throughout the third millennium B.C. On the basis of surface finds alone, Dr. Robert Whallon, of the University of Michigan, estimates that the population of the area under investigation multiplied by seven and a half during the first half of the third millennium B.C. The East Anatolian Early Bronze Age culture is characterized by hand-turned, chaff-tempered, black burnished pottery, of which the beautiful shiny black finish, obtained by firing in a reducing atmosphere and, possibly, rubbing with grease, was obviously intentional. Another characteristic feature of the Early Bronze Age culture was the portable hearth rim, which was horseshoe-shaped in plan and rose at the two front ends and in the center of the back curve to form pot supports

decorated with simplified human faces. Pottery and hearths characteristic of the East Anatolian Early Bronze Age culture have been found over a wide area, including parts of Palestine, Syria, Soviet Armenia, and Iran. In these areas an obviously intrusive population element settled by preference at valley and lake-side sites between 2600 and 2400 B.C. (the "Khirbat Karak" culture).

A trench 24 feet deep through the upper part of the north slope of Korucu Tepe revealed repeatedly destroyed habitation levels of the period between about 2600 and 2200 B.C. The three upper burned levels were excavated horizontally over an area of 27 x 27 feet. Of these, the second level was best preserved and yielded a small house with large rectangular hearth raised above the floor in one corner. The structure was built of mud brick; walls, floors, and hearth surfaces were lined with mud plaster. The raised doorway had been walled up with mud brick after the first fire. Subsequently, a second fire had destroyed the structure. An adjoining larger room or court contained a horseshoe-shaped hearth.

In all Early Bronze levels large quantities of black burnished pottery were found. The chaff temper in the black burnished ware was analyzed by paleobotanist Dr. Robert Stewart, who decided the local potters probably used animal dung, as they still do today. Occasionally the vessels were decorated in relief with very simplified horned animals' heads.

Alongside the hand-turned, black burnished pottery a completely different wheel-turned, very high-fired, gray to orange ware was found in the three upper burned levels in the form of jarlets and goblets, obviously imported from northern Mesopotamia or northeast Syria, where it was particularly common shortly before and during the Akkad period (about 2300–2150 B.C.). It shows that the local village culture was in contact with, although hardly influenced by, the technologically more advanced urban civilization south of the Taurus mountains.

The tool and weapon industry confirms this view. Copper was found only in the form of pin shafts. Chipped obsidian was the common material for tools and weapons, among which the beautifully retouched barbed and tanged arrowheads are the most remarkable. Ground and polished greenstone was used for axes and chisel bits.

Close to 100 charred seed groups recovered show that common bread wheat was grown locally by the third millennium B.C. The barley variety now preferred was two-rowed (not six-rowed as in

Double stone foundation at the south foot of Korucu Tepe, Turkey. Presumably the substructure of a mud-brick fortification wall, about 1650–1400 B.C.



the fourth millennium), probably on account of its larger grain size.

A study of the faunal remains indicates heavy dependence on cattle grazing, and observation of geographical features now leads us to believe that mastery of the drainage problems in water-logged valleys and lake basins was a prime factor in the spread of this prehistoric population group to similar ecological niches in adjoining countries.

Almost no population spread in the prehistory of the Near East can be demonstrated so convincingly as that of the Bronze Age East Anatolians or “Khirbat Karak” people. Last year’s work has cleared

Hieroglyphic Hittite stamp seal impression on unbaked clay piece which once secured property or a document. From Korucu Tepe, Turkey, about 1400–1200 B.C.



away part of the later overburden so that a concerted attack can now be made on the area and levels most crucial to this central problem. Excavation of the Early Bronze Age settlement over several 27 x 27 foot squares is planned in the coming season. The level now exposed should date to about 2400 B.C., and one or two preceding levels should here be reached, contemporary with the greatest expansion of the “Khirbat Karak” culture.

At a lower level along the slope of the mound, another area has been cleared which, to judge by finds there, should yield material of the fourth millennium B.C. Excavation of two or more squares at this low level should give an insight into the cultural phase preceding the great Early Bronze Age expansion and will (so we hope) yield more clues to its origin.

The south side of Korucu proves to have built up to its present height over the second millennium B.C. In a layer just above ground water some black ware was found of the type still current around 2000 B.C. Subsequently, in a time when this ware had been ousted by strongly wheel-marked gray pottery, a fortification wall was built on a double dry stone foundation packed with mountain clay, 18 feet wide (see illustration). Above and inside the city wall there was a long succession of often rebuilt mud-brick houses incorporating wooden beams on dry stone foundations and containing Old Hittite vessel types (about 1650–1400 B.C.) along with local cooking ware. This relatively prosperous occupation ended in violent destruction of at least part of the settlement, perhaps to be equated with the historically documented conquest of Ishuwa. The latter had been an independent buffer state across the Euphrates and was incorporated into the Hittite Empire in the early fourteenth century B.C.

The succeeding impoverished habitation levels contained coarse red ware including many "platters," well known from other Hittite Empire sites (about 1400–1200 B.C.). The appearance among hearth sweepings of twelve hieroglyphic Hittite seal impressions (see illustration) confirms the close relations existing with the Hittite capital in this period. Among other artifacts found, two pieces of iron, one an axe or chisel bit and the other an armor scale, are perhaps the most significant.

The vegetal remains uncovered from the second-millennium levels include grapes, peas, lentils, and borago (a condiment), as well as common bread wheat and two-rowed barley. Besides cattle and sheep and/or goats, pigs were now also kept. Relatively extensive use was made of deer antlers for various implements and/or ornaments. *

Over the top of the abandoned Hittite Empire settlement a layer 3 feet thick, devoid of architecture but containing much red burnished and chaff-tempered buff burnished ware, all turned on the slow wheel, testifies to a hitherto unknown and remarkably regressive cultural stage. It can now be dated by an iron fibula and faience and greenstone seal beads and pendants to the time about 1000–800 B.C. This layer in turn is capped by Medieval architecture, dated by coins to the thirteenth and fourteenth centuries after Christ.

Areas along the east, south and west slopes, cleared in 1968, should now also permit further investigation into the cultural phases of the historic period:

1. the occupation characterized by very substantial buildings dating to the middle of the second millennium B.C. and possibly to be connected with the existence of an independent buffer state here at the time;

2. the less prosperous occupation which yielded the hieroglyphic seal impressions, indicating Hittite control in the later part of the second millennium B.C.;

3. the occupation whose architectural remains have eluded us so far, dating to the early first millennium B.C. No clue, either archeological or historical, has been found about such an occupation in eastern Anatolia until our excavation last year.