A PRELIMINARY REPORT OF THE 1969 EXCAVATIONS AT ERBABA, A NEOLITHIC SITE NEAR BEYŞEHİR, TURKEY

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After the excavation of Suberde (Bordaz, 1966, 1970; Perkins and Daly, 1968), a Neolithic aceramic site of the first half of the 7th millennium located 13 kilometers southeast of Seydişehir, the site of Erbaba near Lake Beyşehir was selected for excavation on the basis of a survey conducted around the lake during the summers of 1965-66. The surface of Erbaba had yielded a neolithic pottery and so it was hoped that the site might overlap in time with aceramic Suberde and thus help to construct the chronological framework necessary to further archaeological research on the Neolithic in this region.

Erbaba tepe, approximately 80 meters in diameter, crowns a small natural hill some 10 kilometers north by west of Beyşehir. It lies immediately east of the road from Beyşehir to Isparta, 2.5 kilometers northeast of Gölkaşi (Kistifan). This site was first reported along with other Neolithic settlements by R. Solecki (1965) after his 1963 survey in the Beyşehir-Suğla Lake region. It is referred to as "Unnamed north Beyşehir. Site no. 9. 37 degrees 45. 9 minutes latitude North and 31 degrees 41 minutes longitude East".

After Professor Solecki's visit, some farmers had dug a trench 40 meters long, 4 meters wide, and as deep as 2.5 meters in the central part of the site (see figure 1). An examination of the sides of this trench by the author in 1966 showed remains of earthen and plaster floors. It was then reported that large numbers of stones had been removed from the trench for construction purposes. In 1968, a few additional small pits were dug by farmers on the eastern and southern edges of the tepe and the stones encountered by them were piled on the eastern edge of the mound (see figure 2). Although no stones were visible on the surface of the tepe, it was immediately established during the excavations which began on June 21, 1969 that these stones had been part of the remains of an extensive complex of Neolithic houses and associated rubble covering about 5,000 square meters, only 20 to 40 centimeters below the surface of the mound.

The archaeological work conducted during the first season which ended on August 16, 1970 was essentially a sampling operation which had three purposes:

First, to approximate the limits of the occupied area and define the rough characteristics of the settlement plan and architecture. Second, to examine the state of preservation of the structures and of the botanical and zoological remains necessary to reconstruct the ways of life of its inhabitants. And, third, to date roughly the site, especially in relation to other Anatolian Neolithic settlements such as Hacılar (Mellaart, 1961), Çatal Hüyük (Mellaart, 1967) and Suberde.

Three types of field methods were used to attain these goals: shallow pits and clearings, detailed area excavation, and deep test pits (see figure 1).

Initially, a series of rectangles 2 × 1 meters were excavated over the entire surface of the tepe. The largest number, dug down to the first stones encountered

- usually at a depth of 20 centimeters - were used to delimit the area of the stone architecture and rubble layer. This area seems to extend over 5,000 square meters (1 1/4 acres). A few of these shallow pits were extended into relatively large areas (areas A to E) where each stone was exposed individually. This made it possible to pick up the top of many walls and to obtain quickly some indication of the plan of the last settlement. The houses exposed were rectangular and apparently closely constructed together in rows with a common orientation or 20 degrees east of North.

Subsequently, one of the seemingly better preserved structures revealed by exposing the rubble layer was selected for a detailed area excavation. All features of construction and occupation were examined as far as possible in this operation. This structure in area D (see figure 3) was rectangular and measured approximately 4 × 3.7 meters (inside measurement). The walls, preserved in one place to a height of 1.33 meters, were made of rough limestone blocks secured by an earth mortar. Limestone outcrops occur approximately 500 meters southwest of the site. The foundations of the walls generally consisted of large blocks (30-50 × 20 × 20 centimeters) over which superposed courses of usually three rows of flatter stones (25-60 × 10-30 × 5-7 centimeters) were laid. The two exterior rows were usually more carefully placed, while the stones in the middle were often only piled in with a large amount of earth fill. During the excavation of this structure, ten successive and distinct occupations were established, characterized by layers of compact earth or by a poor quality of grey plaster floor. At one time the structure was divided by a large east-west wall visible on figure 3.

At a later date, a doorway was eventually built into the north wall leading to an area yet unexcavated. Entrance to this room was apparently obtained through the roof, perhaps by means of the stones found piled in the southeast corner. No traces of a roof were found, and aside from a large refuse pit eventually dug into the floor no other features such as hearth, benches etc. were found in this construction. The corner of a foundation of an earlier similarly oriented building at least 2.5 × 5.6 meters was found under the first floor of the structure just described. It is also possible that some of the walls of the site were later used as foundations for wattle and daub structures of which no traces have yet been found.

The third method of digging consisted of sinking 13 deep pits, generally 2 × 1 meters, over the entire area of the site down to sterile soil which was reached at a depth varying between 2.1 and 3.2 meters below the surface of the tepe. These test pits, dug in 20 centimeter levels maximum, were adapted progressively to the features of stratigraphy as the excavation advanced. On the basis of these test pits the stratigraphy of Erbaba can preliminarily be divided into four parts:

Layer I is a grey, sandy loam, loose in texture and approximately 60-100 centimeters thick. Layer II is a grey sandy loam, compact and 80 centimeters thick on an average. Layer III is a brown sandy loam with many black (organic) lenses and burnt areas; it is 1-1.5 meters thick. A certain number of large limestone block walls were found in layer III (see figure 4), but the upper layers seem generally richer in architecture - especially layer I. Traces of occupation including a floor (figure 5) are relatively well preserved in layer III. In one pit, large amounts of carbonized seeds including cereals not yet identified have been recovered from this layer. Some botanical material was also retrieved by flotation of ashes and black organic lenses, also from layer III. The faunal collection is especially rich in layer III and includes a little more than 10,000 identifiable specimens most of them cattle and sheep.

A preliminary study of the morphological features and the age classes of the animals represented indicated domestic varieties. Very few specimens of hunted animals were found. No human burials appeared *in situ* but a few scattered human bones were recovered from time to time. Layer IV refers to the undisturbed soil, a red or yellow sandy loam with calcitic inclusions and less clay than in layers I, II, or III. At about 6 meters below the highest point of the tepe, a layer of shells was found on the edge of the mound suggesting an ancient lake bed or beach.

The chipped stone industry from Erbaba is less important than at Suberde both in absolute and relative terms, since only about 400 tools and fragments of tools and 1400 blades, flakes, and waste pieces showing little or no retouch were found. The industry differs also in the relative proportion of tools. Only a few projectile points were found at Erbaba, for instance, but sickle blades, notched and denticulated tools are more important than at Suberde. Other kinds of tools include end scrapers, circular scrapers, backed blades and piercers. Alternate retouch is common. The tools and fragments of tools are about equally divided between flint and obsidian but approximately 3/4 of the largely unretouched blades, flakes and waste are in obsidian. Flint is generally used for the larger and heavier tools such as scrapers. The source of obsidian is most likely to have been in the mountains to the east of the Konya plain, while flint deposits are said to exist in the mountains to the west of Lake Beyşehir.

The worked bone and antler industry includes more than 150 pieces, especially awls, needles, spatulae, and spoons. Handles of antler and one eye section of a bone hook and eye belt buckle were also found.

Approximately 150 specimens of ground stone artifacts were collected. The most common kind of grinding stone is relatively small (20-30 centimeters in length) and oval in shape with a rounded base. Other kinds of ground stone artifacts include handstones, pestles, polishers and small balls.

The polished stone industry includes a small number of green stone celts and beads of variously colored stone.

A relatively small amount of shell and fragments of shells including a few marine specimens also appeared in the course of excavation.

The potsherd collection which exceeds 11,000 pieces includes essentially two types of wares which seem to contrast in their distribution. The pottery from the upper layers of the site is usually a well-polished monochromatic ware in red, brown and yellowish-grey. The paste is coarse, containing large amounts of small gastropods, the most common forms being hole-mouthed jars usually with direct rims, flat bases, and crescentic ledges or lugs. The pottery in the lower layer is usually dull black or brown and of coarse paste with a sand temper containing muscovite. The shapes appear to be similar to the pottery described above except that the walls are often thinner. Handles are crescentic or circular ledges usually vertically perforated. Potsherds are generally less numerous in layer III. A preliminary study of the pottery attributes, mainly the forms of lugs and ledges, suggests relationships both to Çatal Hüyük East and to Hacılar VI-IX, that is to the sites illustrating respectively the early and late Neolithic of the Pisidian Lakes and Konya region as defined preliminarily by J. Mellaart.

Other ceramic finds are rare and include mainly three fragmentary human figurines. The most complete is a diminutive female figurine only 2 centimeters high without the missing head.

The results of the 1969 sampling excavation of Erbaba indicate that the site will probably be an excellent source of information for the Anatolian Neolithic. As we have seen above, the site apparently relates both to the early and late Neolithic Çatal Hüyük and Hacılar and might thus provide from a geographically intermediate area useful

data for chronological and cultural comparisons between these two important sites of Anatolian prehistory. The suggested chronological overlap of Erbaba with Çatal Hüyük and Hacılar would indicate a date in the middle or late 6th millennium. Radiocarbon dates are being processed.

One other advantage of the site is that it has apparently not been much disturbed in post-Neolithic times. The only definite later material (glass, nails, later pottery sherds) number less than a dozen specimens. Since, in addition, the faunal and botanical remains seem well preserved, especially in the third and thickest layer, it would seem that the opportunities for a functional reconstruction of the ways of life of this community and of its economic subsistence are promising.

The results of the 1969 season will be studied during the summer of 1970 in the Konya Museum where the collections are stored. It is planned that an excavation program, guided by the results of the 1969 sampling season and the 1970 study program will be initiated in 1971 and continued over a period of years in order to increase our knowledge of these early communities of agriculturalists and herders of the Anatolian Neolithic.

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BIBLIOGRAPHY

Bordaz, Jacques
1966 Suberde Excavations, 1965. *Anatolian Studies* Vol. 15, pp. 32-33.
1968 The Suberde Excavations, Southwestern Turkey, an Interim Report. In press. *Türk Arkeoloji Dergisi*, vol. 17, part 2, pp. 43-71.

Mellaart, James
1961 Excavations at Hacılar, fourth Preliminary Report, 1960. *Anatolian Studies*, Vol. 11, pp. 39-75.
1967 Çatal Hüyük, A Neolithic Town in Anatolia. Thames and Hudson. 232 pages.

Perkins, Dexter, Jr. and Patricia Daly
1968 A Hunter's Villiage in Neolithic Turkey. *Scientific American*, Vol. 219, no. 5, pp. 96-106.

Solecki, Ralph:
1965 An Archaeological Reconnaissance in the Beyşehir – Suğla Gölü Area of Southwestern Turkey. *Türk Arkeoloji Dergisi*, Vol 13, part 1, pp. 129-148.

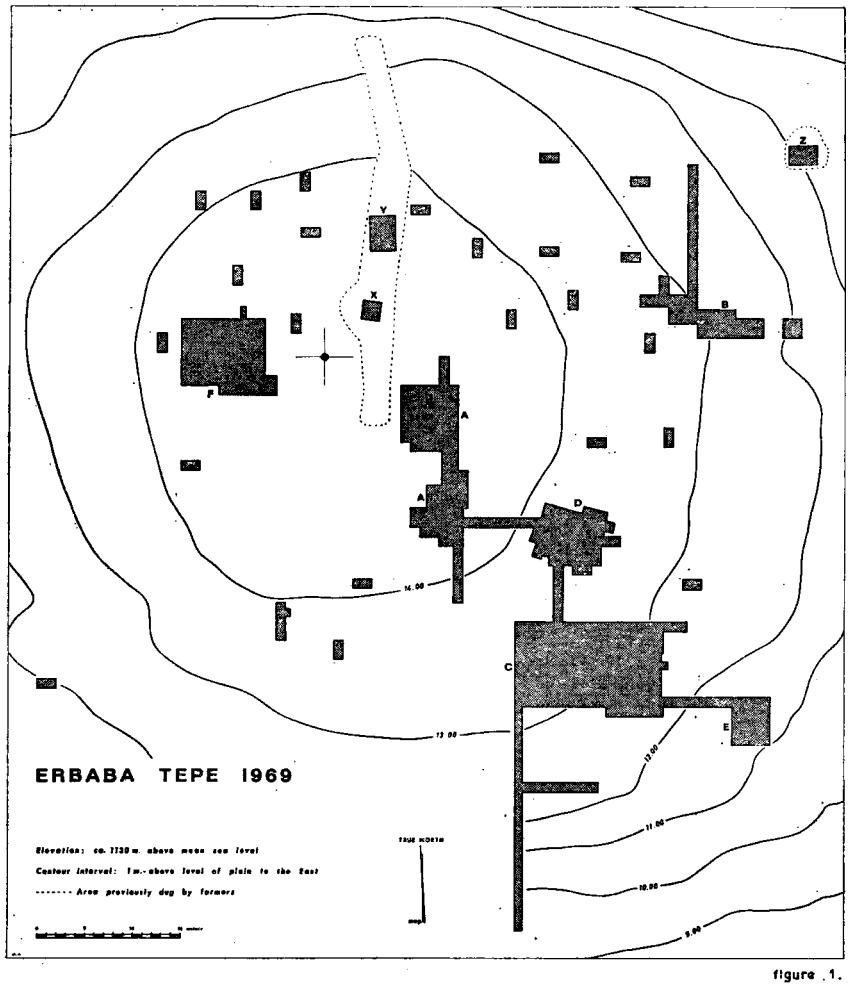

figure .1.

Fig. 1

Fig. 2

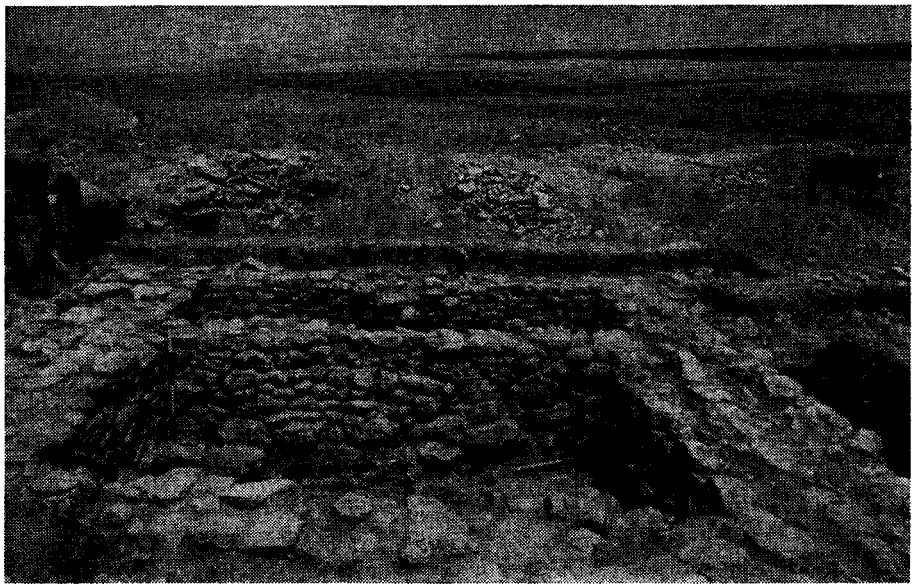

Fig. 3

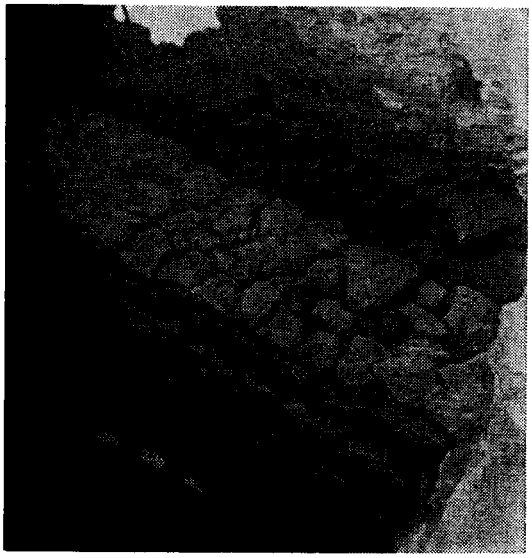

Fig. 4

Fig. 5