SOUNDINGS AT EARLY BRONZE AGE HACILARTEPE IN THE IZNIK REGION (NW ANATOLIA)

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Introduction

Hacılartepe is situated in the western alluvial plain of the Iznik-lake, two kilometres South of the modern town of Orhangazi (fig. 1A). Soundings were undertaken at this site in the years 1992, 1994 and 1995 as part of the excavation project at the nearby site of Ilipinar Höyük under direction of J. Roodenberg.² At the centre of the mound a test pit of 7 x 9 m was dug down to the virgin soil (fig. 1B) in order to investigate the stratigraphy, architectural features, pottery styles and absolute chronology (radiocarbon dates). It was hoped that the occupational debris would fill, at least in part, the hiatus between the Late Chalcolithic burials of Ilipinar's Phase IV (Roodenberg 2001, 351) and the Early Bronze Age cemetery of Ilipinar's Phase III (Roodenberg 2003, 297). It turned out however, that Hacılartepe was inhabited only during the first half of the 3rd millennium BC, contemporary with the EBA burial ground at Ilipinar. It is plausible to assume that the occupants of Hacılartepe buried their dead 300 m to the North, on the mound of Ilipinar. This article presents a review of the stratigraphy, the pottery tradition and radiocarbon dates.

Sounding and Stratigraphy³

The mound measures 120 metres in diameter and has an accumulation of debris of 4,2 metres at the centre. The sounding of 7 x 9 m was deepened by leveling the surface 5 cm at a time; the area was cleaned and the occupation features documented. Seven occupation layers were determined by the occurrence of building floors. When several successive floors are taken into account, four main building phases can be distinguished (Phases IV-I; oldest to youngest phase). The complete excavation area for Phases I-III (Layer 1 to 5) could be levelled. Due to time constraints, from Phase IV (Layer 6 and 7)

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² Permission for the soundings at Hacılartepe was given by the Service of Antiquities and Museums in Ankara.

³ The architectural features were worked out by R. Torremans in an internal report (2001). The author in general follows the conclusions of this report and wishes to thank Torremans for his contribution to the subject. Any mistakes remain of course entirely the authors' own.

⁴ D. French estimated its diameter at 150 metres and its elevation at 4 metres when visiting the mound in 1965 (French 1967, 52).

only the western half of the test pit, measuring 3,5 x 4,5 m, was excavated down to virgin soil while leaving the eastern half untouched at the top level of Layer 6.

Architectural Features of Phase IV

At the basal level of Phase IV (Layer 7), the oldest features of the settlement are refuse pits (features RG-RJ) dug in the virgin soil and narrow oblong features with a greyish clay filling, likely to be drains (fig. 3). At the top of this layer another drain-like feature together with a concentration of pottery sherds, two spindle-whorls and animal bones were uncovered. The concentration of debris may hint at the use of this surface as an activity area. A semi-circular fireplace was found in the southwestern part of the square. The overall picture of Layer 7 compared to the younger layers is that of a decrease in occupation features and debris, which suggests that the occupation grew gradually in density through time.

The lower part of Layer 6 revealed a drain, lines of postholes with varied depth (20-45 cm) and a refuse pit. Some postholes enclosed a surface of yellowish clay with burnt daub fragments. At a higher level a grey mud floor surface with burnt spots was uncovered (fig. 3). Some fragments of burnt mud-bricks⁵ were lying on the floor surface. A pit dug through the floor (feature RE) was lined with large pottery sherds. A shallow basin (feature YF), sunk in the floor, contained carbonised grains and charcoal. Two ¹⁴C samples were taken from the charcoal and the grains respectively (QC 233 and SJ 234). At its south side the floor surface was partly enclosed by a row of small postholes (diameter approx. 5 cm).

Above the floor level a concentration of broken but almost complete pots was found in the southern half of the square. Noteworthy among them is a 'burial jar' in this jar, there were the remains of an infant and some skeleton parts of a young child. The practice of burying young children and juveniles among household debris is a widespread phenomenon throughout prehistoric and historic times (Bailey 2000, 245; Alpaslan-Roodenberg 2002, 94, 96). Evidenced by the EBA cemetery at Ilipinar, juveniles and young children were in some cases given an extramural burial treatment (cf. Wheeler 1974, 416; Roodenberg 2003, 303).

Architectural Features of Phase III (Layers 5 and 4)

Different floor surfaces occurred slightly above each other within Phase III in the western square. These floors most likely represent two or three successive structures. In the lower part of Layer 5 three floor surfaces were uncovered. These floors are in fact remakes and belong to the same structure. The uppermost surface was best preserved, made of a layer of hard mud. The area was enclosed by sidewalls consisting of mudbricks without a standardised size (fig. 3). Wooden parts were uncovered against the

⁵ These bricks are of different sizes. The mud-bricks probably filled up a wooden frame in the same way that can still be seen in the more traditional villages around the Iznik-lake.

sidewalls that could be the remnants of a wooden framework.⁶ Two partly overlapping plastered platforms were recognized (features YC and YD) on the floor. East of the building, pottery was trampled into the ground, thereby marking a walking surface. The two fragmentary floor surfaces slightly beneath this well-preserved floor consisted of a hard lime plaster and a layer of greenish clay.

At the top of Layer 5 and the bottom of Layer 4, in the eastern half of the square, a row of postholes was detected (fig. 2: diameter between 5-15 cm; varied depth from 15 to 60 cm). The posthole structure appeared to be somewhat older than the upper floor surface in the western half of the square. This floor consisted of wooden boards (fig. 2, Layer 4) underneath which a soft layer of clay with straw impressions and a hard layer of clay with traces of burning came to light (Layer 5). Covering the mud floors with wooden boards is a novelty in the history of this settlement but not new in this area⁷.

The wooden floor was made of at least twenty North-South oriented wooden boards. The boards were supported by three East-West oriented cross-beams. The floor was partly disturbed by a refuse pit (RC) dug from the same level. The area between the western floor and eastern posthole structure revealed complete pottery vessels, concentrations of stones, trampled pottery fragments and other waste material (e.g. a fragment of an antler). It seems this space was in use as a courtyard and activity area of the structures. In the southeast corner of the square, the bottom of refuse pit RA was recognized (fig. 2).

Architecture of Phase II (Layers 3 and 2)

The floor surfaces were now located in the northeastern part of the square from Layer 3 onwards. The top of Layer 4 and the bottom of Layer 3 were separated by a clay deposit without clear features. Two structures were present in Layer 3, one in the North and one in the South. The southern structure consisted of a floor surface with some fragments of wooden boards and a sidewall lined by a row of postholes. Directly above this structure, burnt clay spots and more wood remains were found. The northern structure, representing a floor surface laid with wooden boards, came to light at this slightly higher level (fig. 2). The remains of this construction consisted of eight North-South oriented boards laid on top of two East-West oriented cross-beams. The boards are larger than the ones from Layer 4. A row of small postholes running North-South along one of the boards is difficult to connect to the floor. Spindle whorls, an antler, a concentration of stones and other debris were found all over the surface.

Architectural of Phase I (Layer 1)

A deposit of clay and waste material – pottery, wooden board remains and burnt clay spots – with a thickness of ca. 20 cm is attributed to Phase I (Layer 2). Marking

⁶ At Demirci Höyük wooden frameworks in relation to collapsed sidewalls were also noticed (Korfmann 1983, 101, Abb. 169).

⁷ See Phases VII-IX of Ilipinar (Roodenberg 1995)

Layer 2, in the northeastern part of the excavated area a floor surface of partially burnt wooden boards came to light. The wooden boards were laid in an East-Western direction and three North-South oriented wooden beams supported the floor.

Representing Layer 1, a successive and better-preserved structure in the same northeastern area was revealed consisting of a plastered surface bordered by a sidewall and the remains of more boards (fig. 2). A semicircular platform situated on this floor surface may in reality have been a fireplace. The sidewall became visible as a compact line of loam. Wooden fragments may have been the remains of this wall's framework. Alongside fragments of lime plaster and small stones probably originate from the wall plaster. South of the wall, pottery, spindle whorls and a copper or bronze needle were collected. The uppermost level of Layer 1 was disturbed due to erosion and recent farming activities. In and just below the topsoil, concentrations of pottery were found which probably originated from an eroded occupation layer to which refuse pit QA had belonged. Most of this pottery is wheel-turned and of the Inegöl Grey type, in contrast to the handmade pottery from the underlying occupation.

During the filling of the trench after the sounding was finished, the top of a circular stone wall running half way the mound slope came to light. This structure, which had a diameter of about 80 m, recalls contemporary Early Bronze Age radial plans known from Demirci Höyük, Troy I, Beşik Yassıtepe and Thermi I.⁸

As a conclusion, changes in construction during the occupation are indicated by the use of different floor surfaces – from a plastered surface to wooden floorboards – and by shifts in the location of the buildings through time. It seems reasonable to assume, in light of the unearthed constructions and accumulation of waste material, that the occupation of Hacılartepe did not last longer than 150 to 200 years. The hamlet was the habitat of a few extended families that during the life span of four or five generations who farmed in the marshy plains west of Iznik-lake.

Pottery⁹

As a source of clay, the local deposits containing mixed sand were exploited. No organic material, such as chaff or dung, was added to the clay as a temper. In a few instances the clay seems to be selected on a fine or rough grain size. When needed, possibly larger sand particles were added to the clay. The pottery is handmade and built up by techniques of coiling, pinching and in some cases prepared in a mould. Most likely a mould was used with concern of the bowl types and lower parts of jugs and storage jars. Typical is the special attachment of handles, especially on jugs, by the so-called 'dowelled-joint technique' (fig. 7:4-5: Van As et al. 1993/4, 55-73). The surface of the pot was smoothed, usually burnished and rarely decorated (less than 1%). The different

⁸ See the *Anatolisches Siedlungsschema* (after Korfmann 1983, 222-241). The scheme of 'row houses' surrounding an inner court is not restricted to the Early Bronze Age. The 'burnt village' of Ilipinar Chalcolithic Phase VI gives a good example of such a radial settlement plan.

 $^{^{9}}$ Technological study: N = 1100 (Van As et al. 1993/4, 55). Typological study: N = 13866, representing 20% of the diagnostic collected pottery.

¹⁰ Also referred as 'handles of the thrust type' (after Blegen et al. 1950, 65).

decoration types consist of geometric patterns, grooves, little holes and the application of plastic decorations. Geometric patterns are made by incisions, sometimes filled with a white paste, or only a pattern of white paste on the body of the pot. The white paste has often flaked off through time leaving dull places. Geometric patterns of white paste are usually applied on dark surfaced pottery, thereby giving a contrast to the dark colour of the pot. Plastic decorations consist of knobs, 'shallow fluting' and crescent shaped ornaments. As variations of the normal handle the 'imitation twisted handle', the 'lughandle' and the 'crescent shaped grip' is used in the assemblage. The figures 4 to 9 give an impression of the different pottery types and characteristics.

More than three-fourths of the pottery sherds showed burnish strokes made by a pebble or spatula. Storage jars as well as platter types have an irregular burnished surface. The pottery is generally not finished with a very high burnish or polish. Most pots have a heterogeneous colour — 'mottled ware' — as a result of the use of an open bonfire usually resulting in grey to brown tones. Bowl and jug types display a more or less uniform black to grey colour, which points to control over the firing.¹¹

On cups with a pouring function in some cases an extra pouring spout is added on the upper body (fig. 6:7). The jug types ('Schnabelkanne') can be classified into a small type of about 10 to 15 cm and a large type of about 30 to 40 cm (fig. 7). The jugs have a more or less raised rim and a 'loop handle' attached on or just below the rim. ¹² The large storage jars either have a closed profile or a clear neck ('Halspithos'). Closed pot types have an inward bent (85%: fig. 8:1-3) to S-shaped profile (15%: fig. 6:4; fig. 9:4). Lid types in some cases bear a geometric pattern. The bottoms of the pots are ususally more of less rounded and in a few instances fragments of feet were found probably as part of a tripod (fig. 9:1-3). The find of quite a large footed bowl (windowed pedestal) and a 'Tiergefäß' or 'bird-vase' complete the spectrum of shapes (fig. 6:1-2).

The pottery assemblage shows an emphasis on a pouring function and thus the holding of liquids. A homogeneous assemblage is shown through the Phases III-I, while during Phase IV some changes occur. These characteristics are discussed below.

Pottery Styles

At Hacılartepe three different pottery styles can be distinguished. The first and main pottery style corresponds to the occupation Phases III-I and Layer 6 of Phase IV. A second and somewhat different pottery style is related to the oldest occupation of the settlement, Layer 7 of Phase IV (fig. 5). A third pottery style is identified in the topsoil of the mound and refuse pits dug from above Layer 1 representing a definite younger pottery tradition than the investigated occupation (fig. 9:12). In the following paragraph the two pottery styles that occur during occupation are reviewed.

The bulk of the material within the first and second pottery styles consists of open bowl types and closed pot types. Open bowl types are more frequently found among the waste material and remnants of the settlement than closed pot types (20% in favour of

¹¹ Cf. Rye 1981, 95-96, 105.

¹² A 'cutaway spout' or 'cutaway neck' was not attested in the material.

open bowl types) within Phases III-I. The bowl types either have plain open profiles (approx. 80%) or, to a lesser extent, profiles with an inward bent rim referring to the so-called 'anti-splash bowls' (approx. 20%). A third type of rim-bowl with a thickened rim, the 'rolled rim bowl', is rare and found only a few times. Representing the second pottery style, characteristic for Layer 7 of Phase IV, the distribution of pot and bowl types is different. In this oldest layer there is a preference for closed forms over open forms (one-third open bowl forms and two-third closed pot forms). The rim-bowls now have S-shaped to longer inward-bent rims compared to the short coils added as rims on the 'anti-splash bowls'. In Layer 7, the 'rolled rim bowls' are rare, but seem to be more often used than in the other phases (fig. 5:8).

The two pottery styles furthermore differ from each other through the use of decoration. During Phases III-I decorations with a geometric pattern are applied on jugs and lids (fig. 8). The picture is rather different within Layer 7 of Phase IV and especially bowl-types bear geometric patterns, in particular the inward-bent to S-shaped rim-bowls. Round incisions on the bowl types also only occur in Layer 7.

It is not possible to make a subdivision of different styles within the other pot types. The closed cups, jugs, platters and storage jars give the impression of a continuation in pottery styles without any changes through the four phases. The appearance of large loop handles in Layer 7 may be characteristic of pottery style 2.

Relative Dating of the Pottery

In the following paragraph comparisons to other EBA sites are made, especially to the well-known sites of Demirci Höyük in the region of Eskişehir and Troy I in the Troad. Hacılartepe can be given a relative age through the review of some supra-regional characteristics.

As noted above, two bowl-types can be distinguished: the plain convex 'Demirci-like bowl', known from the excavations of the early and middle phases at Demirci Höyük, and the typical Troy I-Iznik 'anti-splash bowl' classified by D. French (1965 and 1967). The attachment of the 'band-handle' on the bowl, typical of the 'Demirci-bowl', is not well-represented at Hacılartepe and may show a functional difference between the Demirci and the Hacılartepe bowls. This is further emphasized by the lack of the Troy I-Iznik type at Demirci in the early and middle phases, although that type is not as characteristic at Hacılartepe as the name suggests for the region.

During the late phase of Demirci Höyük (Phase L), the plain convex bowl develops into a shallow bowl with a S-shaped profile that fits the pottery style of Troy I-late (Efe and Ay 2000, 36, fig. 19). The lack of such a development in bowl profile within the assemblage of Hacılartepe assemblage compared to the long evolving traditions of Demirci and Troy I provides a *terminus ante quem*.

The small jug types collected at Hacılartepe can be compared to those present in the middle phase of Demirci (Phase H; Seeher 1987, 167-169). During this middle-phase geometric patterns and other ornaments are frequently placed on dark burnished jugs as is observed in Phases III-I of Hacılartepe. The geometric decorations on jugs and lids can be

further viewed in the light of the funerary pottery known from the 'Yortan cemeteries' (Kâmil 1982, fig. 33-34).

As a possibly better chronological indication the fragments of 'imitation twisted handles' and the presence of the typical 'Halspithos' synchronize the occupation of Phase III-I to the middle-phase at Demirci. This synchronization is confirmed by the relative chronology of the site of Küllüoba, situated South of Demirci, especially the Küllüoba Phases 2 and 1. For the relative dating of Küllüoba the presence of the 'imitation twisted handles' together with 'cog wheels' – not found at Hacılartepe – is synchronized to the Demirci Phases F3-G (Efe and Ay 2000, 24).

Other pottery characteristics do not provide a further chronological insight more than the existence of a general correspondence to EBA I-II traditions. Forms of grips such as crescent shaped grips and lug-handles are present through all phases of Demirci and do not give a chronological indication for the region of Eskişehir. T. Efe (1988, 90) compares the use of lugs at Demirci with Trojan and Yortan traditions. The lug-handle at Hacılartepe also resembles Troy I-types placed on rim-bowls (cf. Blegen et al. 1950ii, 261). Similar lug-handles were collected from the field survey of D. French at the site of Pazareyeri I, situated between the regions of Inegöl and Eskişehir (French 1967, 80, fig. 17, nr. 18-21). Other general features of the Northwestern Anatolian EBA I-II are adjustments of pouring spouts, the use of the 'dowelled-joint technique', broken fragments of feet – as part of tripods (e.g. cooking pots) – decoration techniques such as 'shallow fluting' and the application of knobs. Decoration by shallow fluting is known from the survey material collected by French in the region of Yenişehir from the sites of Cardak and Köprühisar (French 1967, fig. 6, nr. 42,44; fig. 15, nr. 2,3).

The intact footed bowl with a windowed pedestal base falls within a tradition known from the beginning of the EBA. In general the footed bowl is comparable to the Troy I-type Blegen A13 (Blegen et al. 1950ii, 262, nr. 27). Since the beginning of the EBA, the use of footed bowls is known within a wide area of Northwestern Anatolia (e.g. Poliochni Nero, Küllüoba and Kaklık Mevkii; Efe and Ay 2000, 31). The footed bowl as well as the 'Tiergefäß' or 'bird vase' may be seen in connection with a drinking-bout held during special occasions. Examples of both types of drinking and pouring vessels are known from settlement as well as cemetery contexts.¹³

The terracotta figurines and decorated spindle-whorls from Hacılartepe resemble the EBA I-II traditions (fig. 9:6-11). The find of an animal figurine (representing an ox?) and the stylistic expression of the eyes on the head (broken off) of a human figurine fit within the spectrum of figurines excavated at Demirci (Obladen-Kauder and Baykal-Seeher 1996, T. 129, 133). The types of decoration applied on the spindle-whorls refer to the general EBA decorations. ¹⁴ Instead of frequently found double-conical whorls, the Hacılartepe ones are merely conical in shape and do not show a central depression. This

¹³ E.g. Emporio Phase IV: Hood 1981, fig. 177; Poliochni Azzurro: Bernabò-Brea 1964, T. XLIII; Demirci Phase F3G: Seeher 1987, T. 55, nr. 15; Yortan: Kâmil 1982, fig. 72-73).

¹⁴ Demirci: Obladen-Kauder/Baykal-Seeher 1996, 229, Abb. 159. Sarıket: Seeher 2000, Abb. 19, Grab 57. Küçükhöyük: Gürkan/Seeher 1991, Abb. 24,25.

may be an indication for an earlier date during the EBA II-period, ¹⁵ but a greater collection would be needed to establish a relative chronology through the typology of terracotta objects.

In Phase IV bowl rims resembling a 'rolled rim' can be compared to Kumtepe B and later dated ceramics of Troy I-early (Sperling 1976; Korfmann et al. 1995; Blegen et al. 1950i, 254). The inward-bent bowl rims to more S-shaped bowl rims of Phase IV somewhat resemble bowl rims from the transition period of the Late Chalcolithic to the EBA I. The geometric patterns on bowl-types are comparable with bowl rims from the survey material of D. French collected at the site of Çardak in the Yenişehir plain (French 1967, fig. 69). Some pottery fragments with (broken) handles having a large loop may also refer to a tradition starting with the EBA I (known from Poliochni Nero, Küllüoba and Kaklık Mevkii).

Pottery style 2, which is present in the lowermost Layer 7, may be placed within the EBA I tradition, while the pottery from later phases can be synchronized with the EBA II period of Northwest Anatolia.

Later EBA III Material

The disturbed topsoil and some refuse pits dug from above Layer 1 yielded wheel-turned pottery of the Inegöl-Grey type. The best example is a wheel-turned bottle with a perforated outflaring rim and two lug-handles on the belly (fig. 9:12). This 'wing-handled cup' can be compared with EBA III contexts (e.g. parallel to the Yortan Class C pottery: Kâmil 1982, fig. 79, nr. 270). Its somewhat archaic shape resembles handmade bottles from the Demirci Phases L-M (Efe 1988, T. 35, nr. 3) and from the cemeteries at Sarıket, Yortan and Ilipinar (Seeher 2000, Abb. 18, Grab 18; Kâmil 1982, fig. 25-26).

The material from the refuse pits is contemporary with the EBA III refuse pits discovered in the Chalcolithic deposits at Ilipinar, which were filled with stones, animal bones and ceramic sherds (Thissen 1995, 93, 107). These refuse pits can be dated to the second half of the EBA III-period corresponding to the last quarter of the 3rd millennium BC with help of the Inegöl-Grey pottery sherds.

French also collected some sherds of 'Yenişehir Black Topped and Burnished Ware' from the topsoil of Hacılartepe (French 1967, 59). The investigated material from the refuse pits was too fragmented to allow recognition of this ware type. Black Topped Ware was also found in similar refuse pits at Ilıpınar and refers to activities on this mound that took place in the early years of the EBA III-period. Other pottery fragments picked up out of context, like two bowl rims with a pattern-burnished or painted cross-band motive, a twisted handle and a body fragment with an embossed decoration, may also belong to that later time period.

¹⁵ According to the dating of the cemetery of Sarıket by Seeher (1991, 114/2000, 60).

¹⁶ Some resemblance is seen with the 'Kehlrandschalen' of Beycesultan LC 4 and Demirci Ware F (Lloyd and Mellaart 1962, fig. P. 10; Seeher 1987, T. 25).

Table 1: Relative chronology of Hacılartepe

Pottery style III	Topsoil and refuse pits	EBA III	Inegöl-Grey Wares
Pottery style I	Layer 6-1 (Phase III-I pottery)	EBA II	Demirci Middle-Phase (G, H)
Pottery style II	Layer 7	EBA I	Early Troy I/EBA I settlements

Relation to the EBA Cemetery at Ilipinar

The EBA cemetery of Ilipinar is of some importance, because the people of that hamlet were most likely the users of the cemetery ground. In the Ilipinar-campaigns of 1996 and 1998 at the western slope 14 graves and 19 individuals were investigated. These investigations are discussed by J. Roodenberg (2003, 351 ff.) and S. Alpaslan-Roodenberg (2002). The final and 15th campaign of 2002 yielded another 9 graves directly South of the already excavated section of the cemetery. Most graves consisted of a large pithos with its opening to the South which was closed with stone slabs. The deceased were buried in Hocker-position inside the pithos with their head near the opening. Sometime bodies of juveniles had been buried on pithos-sherds. Next to three graves of juveniles the skeleton of a dog (or only the head) was buried, probably as part of the funerary rites (Roodenberg 2003, 300).

As gifts funerary pots were frequently found in the pithos graves, and to a lesser extent copper or bronze needles, one bone needle, a stone bead, a stone axe and a stone mace-head (fig. 10). The needles are comparable to the different types of needles as found at the cemeteries of Sarıket and Küçükhöyük (Seeher 2000, 58; Gürkan and Seeher 1991, Abb. 22). From the 23 investigated graves, 16 contained one or more pots, mostly jugs. The jugs are quite similar to the ones at Hacılartepe with some modifications such as a cutaway-spout and a more backward-leaning neck, known from the 2002 campaign. The most eye-catching pottery gift is a small bottle with a geometric pattern originally whitefilled, which had two lug-handles on the belly and a (broken) out-flaring rim (fig. 10:8). A larger version of this bottle, a nicely decorated pot with a tripod and two lug-handles on the upper part of the belly, was found during the last campaign of 2002 (fig. 10:9). These bottles and jugs recall the funerary gifts from the cemeteries of Yortan (Balıkesir region). Sarıket and Küçükhöyük (Eskişehir region). They do not differ from the usual assemblage of funerary gifts known from western Anatolia (Roodenberg 2003, 303 ff.). The pot with a tripod is very similar to funerary pots known from the Balıkesir region ('Yortan tradition': Kâmil 1982, fig. 25-26). Similar pot types (but without the tripod) were present in the middle phase at Demirci Höyük (e.g. Efe 1988, T. 25; Phase K).

The chronological position of the cemetery at Ilipinar can be related on typological grounds to the end of EBA I and the beginning of EBA II. The jug type with a cutaway spout can be linked to Demirci Phase F2F3 and more specifically Phase K

¹⁷ Already a millennium or somewhat earlier the slope of the hüyük was used as an extramural graveyard. In later periods (MBA and the Byzantine era) funerary practices were also carried out at Ilipinar (Roodenberg 2001).

(Gürkan and Seeher 1991, 84). The shape of the burial-pithoi (Halspithoi) refers to the Middle and possibly Late Phase of Demirci.

In the closing campaign of Ilipinar (2002) some jugs with more backward-leaning necks were picked up from the burials. This eventually that the cemetery had been suggests (re)used at a slightly later period of time.

Radiocarbon Dates

Ten radiocarbon dates are available, which were taken from the four different building phases (fig. 11). All of the dates, except for the one from carbonized seeds, are taken from charcoal samples. The dates mainly fall in the range of 4265 ± 35 to 4115 ± 35 BP. An older date of 4490 ± 50 BP comes from a charcoal sample of the basal occupation of Layer 7 (Phase IV). Another sample (4250 ± 70 BP) taken from the same layer is consistent with the range of dates. Hence the older date may be the outcome of dating 'old wood'. All samples range between 2900 and 2575 cal. BC on the 1-sigma scale with exclusion of the 'old wood' one. ¹⁸ The short-lived sample from carbonized seeds (Layer 6, Phase IV) provides a date range between 2866 and 2620 cal BC (1-sigma). This date range is comparable to the calibrated dates of Demirci Höyük (Weninger 1987) and Troy I (Korfmann and Kromer 1993).

Concluding Remarks

The sounding at Hacılartepe gives a first impression of a small hamlet consisting of rather light mud-and-wood constructions. Yet, it may be that more solid and voluminous buildings were located near the surrounding wall. The investigated building-phases probably did not last longer than 20 or 30 years each. The period of occupation, which may have lasted 150-200 years, shows a uniform pottery style with regard to Phases III-I and Layer 6 of Phase IV, while a slightly different style marks Layer 7, the basal occupation level.

When the architectural features, pottery characteristics, and the cemetery of Ilipinar are taken into account, one can only conclude that the occupation ended before the late phases of Demirci and before the late phase of Troy I, this means before approx. 2600 cal. BC. Hacılartepe therefore was probably inhabited from 2800/2750 to 2650/2600 cal. BC, which corresponds with the end of EBA I and the beginning of EBA II.

¹⁸ On the 2-sigma scale between 2925 and 2500 cal. BC.

References

- Alpaslan-Roodenberg, S., 2002 Preliminary Report on the Human Remains from the Early Bronze Age Cemetery at Ilipinar-Hacilartepe, *Anatolica* XXVIII, 91-107.
- Bailey, D.W., 2000 Balkan Prehistory, Exclusion, Incorporation and Identity, London and New York.
- Blegen, C.W., Caskey, J.L., Rawson, M., Sperling, J., 1950 Troy. General Introduction. The First and Second Settlements, Volume 1, Part 1 (i) and 2 (ii): Texts and Plates, Princeton Univ. Press.
- Efe, T., 1988 Demircihüyük III,2. Die Keramik C. Die Frühbronzezeitliche Keramik der Jüngeren Phasen (ab Phase H), Mainz.
- Efe, T., Ay, D.Ş.M., 2000 Early Bronze Age I Pottery from Küllüoba near Seyitgazi, Eskişehir, *Anatolia Antiqua* VIII, 1-87.
- French, D.H., 1965 Early Pottery Sites from Western Anatolia, *Bulletin of the Institute of Archaeology* 5, 15-24, London University.
- French, D.H., 1967 Prehistoric Sites in Northwestern Anatolia I. The Iznik Area, *Anatolian Studies* 17, 49-101.
- Gates, M.H., 1997 Archaeology in Turkey, American Journal of Archaeology 101, 263.
- Gürkan, G., Seeher J., 1991 Die Frühbronzezeitliche Nekropole von Küçükhöyük bei
- Bozüyük, Istanbuler Mitteilungen 41, 39-96.
- Kâmil, T., 1982 Yortan Cemetary in the Early Bronze Age of Western Anatolia, BAR series 145, London. Korfmann, M., 1983 Demircihüyük: Die Ergebnisse der Ausgrabungen 1975-1978. I. Architektur, Stratigraphie und Befunde, Mainz-am-Rhein.
- Korfmann, M. (ed.), 1987 Demircihüyük: Die Ergebnisse der Ausgrabungen 1975-1978. II. Naturwissenschaftliche Untersuchungen (calibration by B. Weninger), Mainz-am-Rhein.
- Korfmann, M., Kromer, B., 1993 Demircihuyuk, Beşik-Tepe, Troia Eine Zwischenbilanz zur Chronologie Dreier Orte in Westanatolien, *Studia Troica* 3, 135-171.
- Korfmann, M., Girgin, Ç., Morçöl, Ç., Kiliç, S., 1995 Rettungsgrabung am Kumtepe 1993. 4. Keramikfunde, *Studia Troica* 5, 251-287.
- Lloyd, S., Mellaart, J., 1962 Beycesultan I, London.
- Mellink, M.J., 1996 Archaeology in Turkey, American Journal of Archaeology 100, 301.
- Obladen-Kauder, J., Baykal-Seeher, A., 1996 Demirci IV, die Kleinfunde B. Die Kleinfunde aus Ton, Knochen und Metall.
- Roodenberg, J., 2001 A Late Chalcolithic Cemetery at Ilipinar in Northwestern Anatolia, in: M. Boehmer and J. Maran (eds.), Lux Orientis, Archäologie zwischen Asien und Europa. Festschrift für Harald Hauptmann zum 65. Geburtstag, 351-355, Rahden/Westfalen.
- Roodenberg, J., 2003 Note on the Early Bronze Age Pithos Burials from Ilipinar-Hacılartepe, in: Festschrift für Ufuk Esin, Istanbul.
- Rye, O., 1981 Pottery technology. Principles and reconstruction, Washington.
- Seeher, J., 1987 Demirci hüyük III,1, Die Frühbronzezeitlichte Keramik der Alteren Phasen (bis Phase G), Mainz.
- Seeher, J., 1991 Die Nekropole von Demircihüyük-Sariket, Grabungscampagne 1990, *Istanbuler Mitteilungen* 41, 97-123.
- Seeher, J., 2000 Die Bronzezeitliche Nekropole Von Demircihüyük-Sariket; Ausgrabungen des Deutschen Archäologischen Instituts in Zusammenarbeit mit dem Museum Bursa 1990-1991.
- Sperling, J.W., 1976 Kum Tepe in the Troad: Trial Excavations 1934, Hesperia 45, 305-364.
- Thissen, L., 1995 The Ilipinar Excavations I. Part II. The Pottery of Ilipinar. A preliminary assessment, in: Roodenberg, J., Thissen, L., Buitenhuis, H. (ed.), The Ilipinar Excavations I. Five Seasons of Fieldwork in NW Anatolia, 1987-1991, PIHANS LXXII, 80-111, Leiden/Istanbul.
- Torremans, R., 2001 Internal report: The Architectural Remains of Hacılartepe.
- Van As, A., Jacobs, L., Wijnen, M.-H., 1993/4 Early Bronze Age Pottery from Hacılartepe in Northwestern Anatolia, *Newsletter*, Department of Pottery Technology Leiden University, 11/12, 54-73.
- Wheeler, T.S., 1974 Early Bronze Age Burial Custom in Western Anatolia, American Journal of Archaeology 78, 415-425.

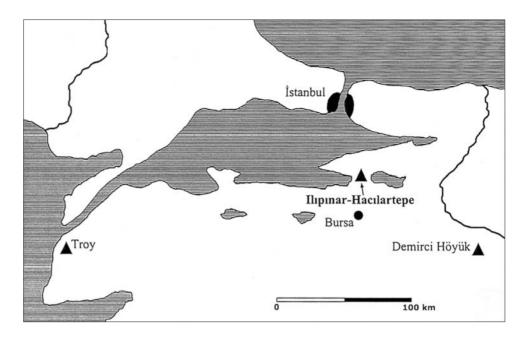


Fig. 1A. Regional Map

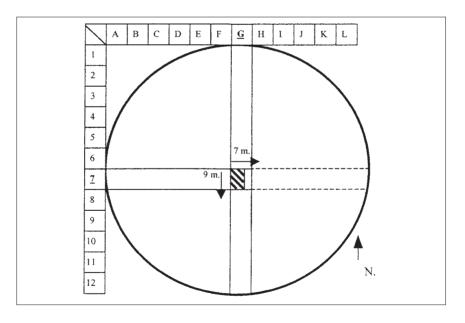


Fig. 1B. Hacılartepe with position of trench G7.

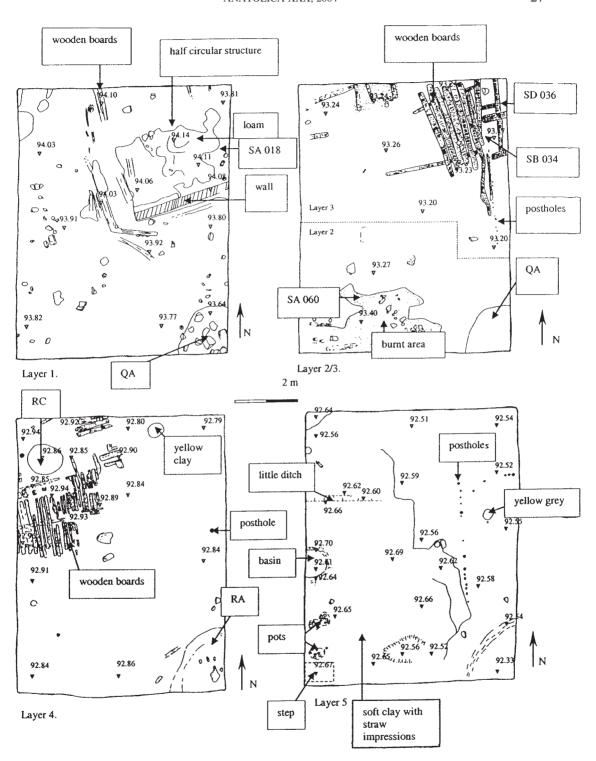


Fig. 2. Architectural layers 1-5. Trench G7.

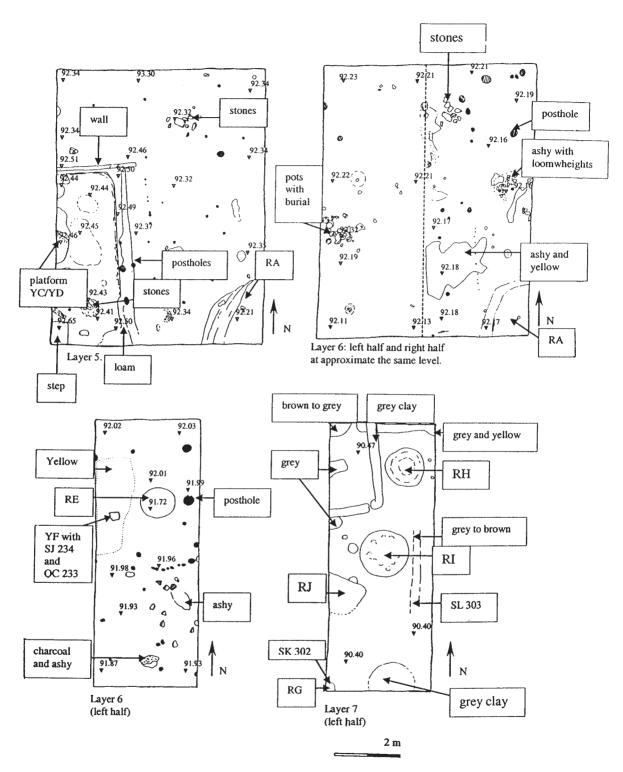


Fig. 3. Architectural layers 5-7. Trench G7.

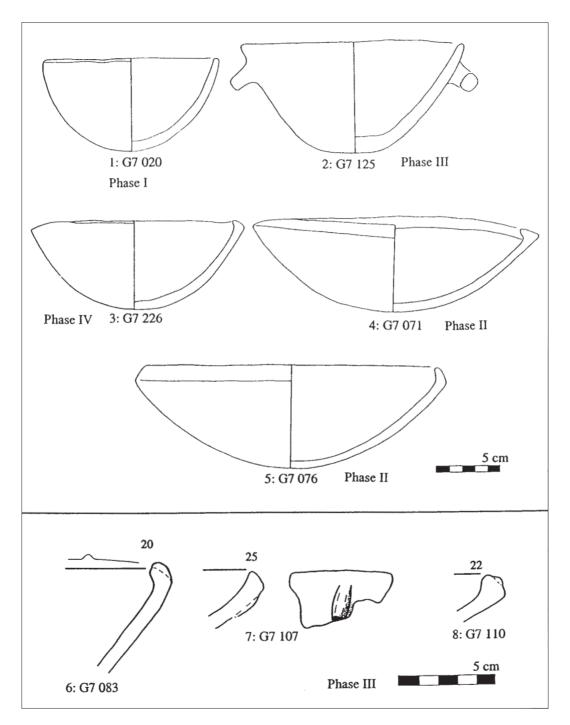


Fig. 4. Bowl-types.

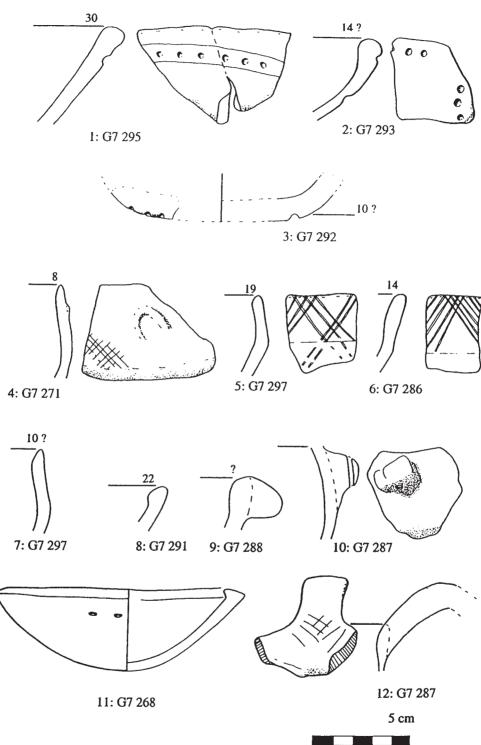


Fig. 5. Pottery of phase IV.

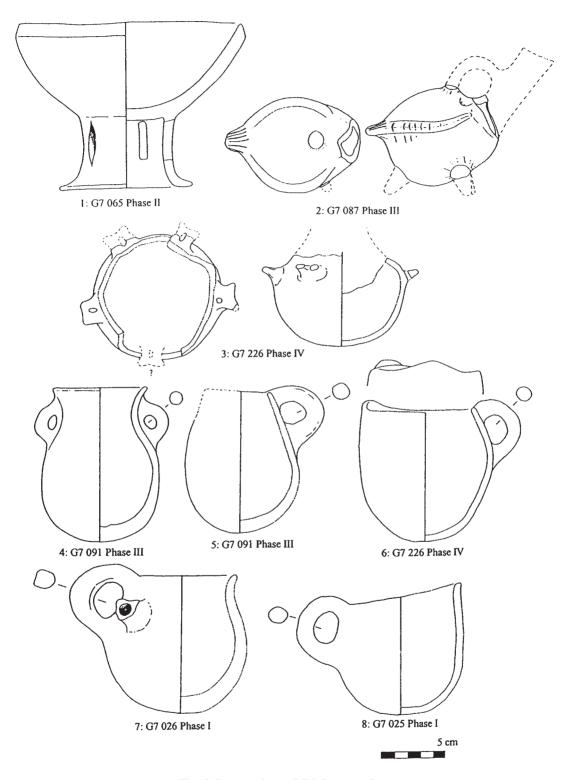


Fig. 6. Pottery phases I-IV (Layer 1-6).

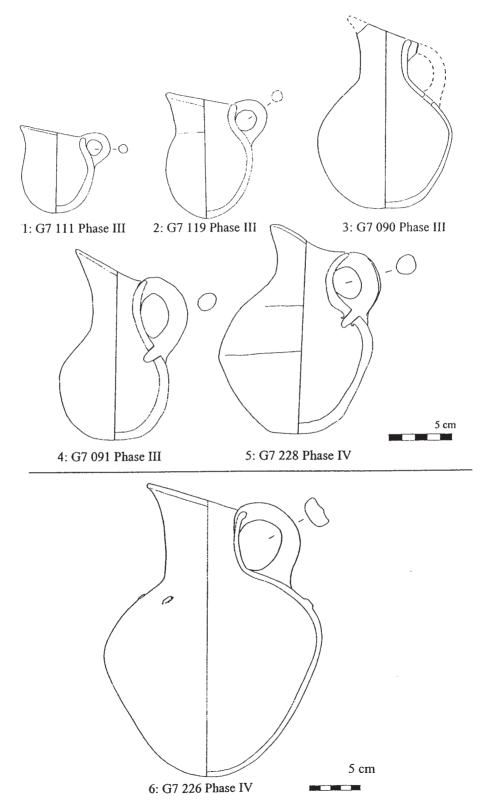


Fig. 7. Jugs. Phases III-IV.

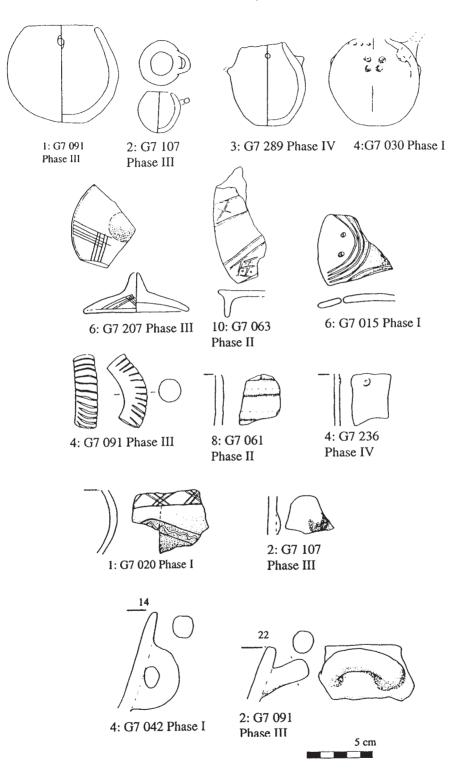


Fig. 8. Pottery phases I-IV.

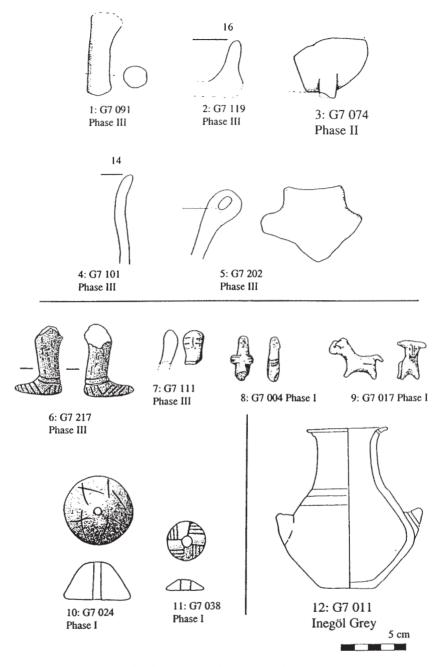


Fig. 9. Pottery and terracotta phases I-III.

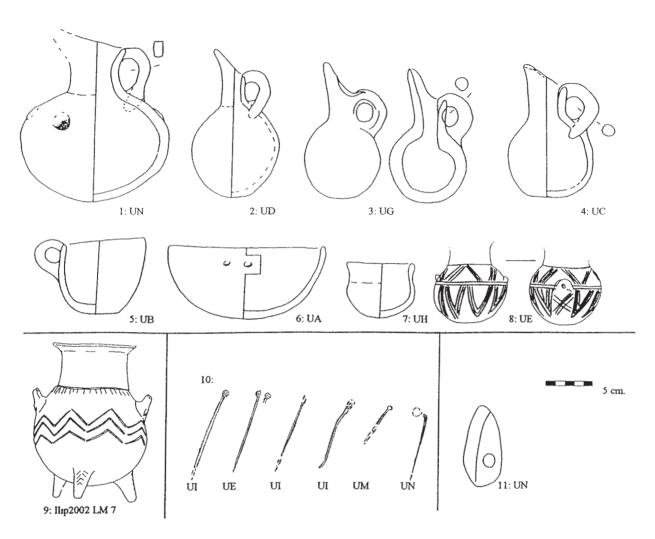


Fig. 10. Grave gifts from the EBA cemetery at Ilıpınar. UA-UN, burial codes. Ilıp $2002\ LM7$ from burial UF (campaigne 2002).

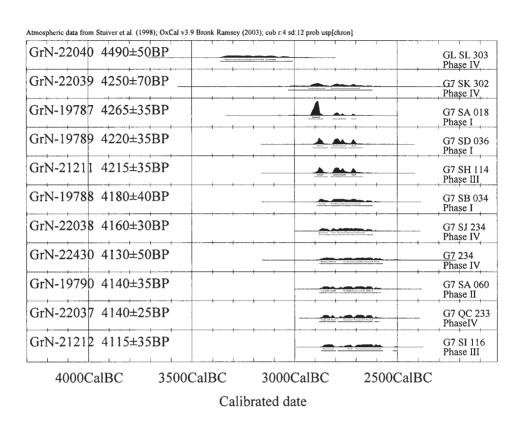


Fig. 11. Dates Cal. BC and BP Hacılartepe trench G7. Charred seed sample = GrN-22037: G7 QC 233, Phase IV