

ILIPINAR, BARCIN HÖYÜK AND DEMIRCIHÜYÜK Some Remarks on the Late Chalcolithic Period in North-western Anatolia

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Abstract

The evidence for settlements of the Late Chalcolithic period in north-western inland Anatolia is extremely scarce. The excavations at Demircihüyük in the 1970ies yielded for the first time a substantial body of pottery material of this period, but with very limited stratigraphic information. Later on, the Late Chalcolithic cemetery excavated at Ilıpınar produced a large group of vessels similar to the shapes from Demircihüyük, but still difficult to evaluate. Now, after the publication of similar material from nearby Barcın Höyük, further clues have become evident. The purpose of this paper is a re-evaluation of the Demircihüyük material in the light of the new evidence, leading to an attempt at better differentiation of the pottery assemblages at the various sites. At the same time, a summary of the dispersed information available on the Late Chalcolithic settlement remains at Demircihüyük, including radiocarbon datings, is provided.

INTRODUCTION

Due to the scarcity of known sites, the Late Chalcolithic in north-western Anatolia is still an enigmatic period. The recent publication of the Late Chalcolithic remains at Barcın Höyük in the Yenişehir basin in this journal has yielded some fresh evidence (Gerritsen et al. 2010). Here excavations starting in 2005 came across the remains of a short-lived Late Chalcolithic settlement sitting on top of a Neolithic mound. The published material provides a good addition to the findings at Ilıpınar in the neighbouring İznik Basin. At this site, more than forty Late Chalcolithic burials were investigated during the 1987-89 seasons of excavation and yielded a fine corpus of pottery vessels and metal tools and weapons (Thissen 1989/90; Roodenberg 2001; Roodenberg 2008). With reference to the stratigraphy of the settlement mound where this period is not represented, this cemetery was initially assigned to Ilıpınar phase IV, but this denomination was not maintained later on.

The material from these two sites in the Eastern Marmara Region form an almost perfect match for the Chalcolithic finds from Demircihüyük, situated on the north-western rim of the Anatolian highland in the plain of Eskişehir. In his account on the pottery from the Ilıpınar necropolis Laurens Thissen already pointed out similarities with the material from Demircihüyük (Thissen 1989-90: 106-107), and in his recent study on the Barcın pottery he states that this material is “fully comparable” to the Demircihüyük Late Chalcolithic finds (Gerritsen et al. 2010, 206). But a closer look at the material from the three sites also reveals significant differences, which seem to indicate a chronological sequence.¹

¹ I am grateful to Ulf-Dietrich Schoop and Jacob Roodenberg for various comments on earlier versions of this paper.

THE DEMIRCIHÜYÜK EVIDENCE

The small settlement mound of Demircihüyük, excavated in 1975-78, dates essentially to the Early Bronze Age I-II period. However, from these layers also came thousands of Neolithic and Chalcolithic sherds displaying a wide variety of wares, shapes and decorations. We have been able to show that deposit of older settlement layers had been used in the EBA to some extent for the production of mud bricks, and the same material had been employed also for fill in various parts. With this old deposit also old pottery sherds and other finds found their way into the EBA levels (Korfmann 1983: 25; Seeher 1987: 11-17). For the material dating to the Neolithic and Early Chalcolithic period no additional stratigraphic information is available, i.e. the actual source of these objects remains unknown. It seems clear, however, that it has to be sought in the immediate vicinity of the mound, buried today under the sediment of the surrounding plain.

For the Late Chalcolithic period the case is different. Actual layers of this period – settlement phase C, and probably also B – were probed in deep trenches in squares I 10 and K 9/10 on the eastern side of the mound (Korfmann 1983: 25-27; Seeher 1987: 15-16). The observation of archaeological features was restricted to excavation square K 10; here a mud brick wall without foundation stones was encountered (Korfmann 1983, 27), and from the profile section well below the base of the EBA fortification fragments of both humeri and femora of an adult (probably male) were retrieved (Schröter 1987: 70). During the excavation we realized that this was apparently a burial, but further work in this part had to be abandoned due to safety reasons. No finds were associated with these skeletal remains.

The excavation in these deep soundings was carried out under difficult circumstances up to 2.5 m below ground water level. In the absence of a proper drainage system, pump pits were dug to remove water, but the trenches were flooded every night and had to be pumped out the next day. As a result, the trenches never dried and the earth remained soaking wet and very sticky. In order to separate finds, units of dug earth were laid out in a field and allowed to dry. Only then was it thoroughly searched. We were well aware of the inadequacy of this method, especially of the contamination of the trenches with earth and objects washed in from higher levels. But given the means available at the site at that time, the alternative would have been to abstain altogether from this opportunity to learn more about the deepest levels of the mound.

The definition of the Late Chalcolithic pottery assemblage assigned to settlement phase C relies in part on material from these soundings, especially in trench K 9/10, where the vast majority – about 80% of 302 sherds – belonged to ware groups F and G (Seeher 1987: 16 Fig. 2). Sherds coming from the same vessels, quite a few actually fitting together, show – like the mud brick wall mentioned above – that we are dealing with material from actual settlement layers of this period, and not from some kind of fill under the earliest EBA levels. Apparently the EBA settlers chose an old mound as a building site for their fortified village, perhaps seeking additional height to increase security. Concerning the extension of these old settlement layers, a high frequency of Late Chalcolithic sherds in the earliest EBA layers in excavation squares F/G 8 to the south of the EBA mound (Seeher 1987: 66 Fig. 15) is of significance. If one day a new search for

pre-EBA levels at Demircihüyük should be initiated, it is this area which seems most promising – here the overlying EBA layers are mostly eroded and the ground water table is much lower than directly under the mound and on its northern side (Korfmann 1983: 25 note 44).

Taking this pottery assemblage from the deep soundings as a starting point, we were able to define pottery fabrics and shapes of this period and detect Late Chalcolithic stray sherds in all EBA levels of the mound. In this way, 1393 diagnostic sherds have been identified (Seeher 1987: Fig. 8).

POTTERY FROM İLIPINAR, BARCIN HÖYÜK AND DEMIRCIHÜYÜK: A COMPARISON

From the technical point of view, a general similarity of the three complexes is obvious with the existence of both a fine and a coarse ware. Differences like the presence or absence of organic temper are probably best explained as a response to the properties of the locally available clays and/or local traditions in vessel production. At the Ilıpınar cemetery the fine ware is described as grit-tempered only with well-burnished surfaces in tones from dark-brown to anthracite and the coarse ware with rough surfaces in greyish-buff (Thissen 1989-90: 106; Roodenberg 2008: 319); at Barcın Höyük a plain burnished ware (PBW) of black, occasionally brown colours is shown to consist of two fabrics – either a mineral-tempered sandy fabric or a mineral-tempered fabric with some amount of fibres added; coarse ware is pale brown, greyish or pale orange with mineral and coarse fibre temper (Gerritsen et al. 2010: 204). At Demircihüyük, fine ware F is burnished and displays mostly black to dark brown and dark grey colours with the bowls, whereas jugs are often light grey to light greyish brown. Fine organic temper, possibly the remains of animal dung, is common. Grit temper was observed only with carinated bowls with everted rims, in addition to a more coarse organic temper. The coarse ware G displays rough surfaces, reddish brown to light greyish brown, and rather coarse temper consisting of grit and fibre (Seeher 1987: 21-22).

Concerning the shape repertoire of these sites, Ilıpınar and Barcın Höyük are related, but differences are obvious, as well. Thissen is certainly right in pointing out that the sample from the cemetery is biased – usually not every vessel type known in living culture finds its way into a grave. Due to the lack of obvious traces of use on some vessels he even reckoned with the possibility “that some of the burial inventory was specifically made for the occasion”, but other vessels were certainly in use prior to the deposition with a burial (Thissen 1989-90: 93).

Perhaps the most important difference between the two Eastern Marmara sites is the absence of carinated bowls with everted rim at Ilıpınar (Thissen 1989-90: 92), whereas this shape is the hallmark of the Barcın inventory (Fig. 1:1-2). Instead, at Ilıpınar bowls invariably belong to the inverted-rim type (Fig. 1:8-9) – a shape much less common at Barcın Höyük (Fig. 1:3).

Another striking difference is the absence of tulip-shaped beakers at Barcın Höyük. These vessels were nearly always present in the burials at Ilıpınar (Thissen 1989-90: 92), and traces of use at least on some of them show that they were not simply made for

funerals (Fig. 1:10-11). The same is also true of the jugs and jars with vertical handles, which form a prominent part in the Ilıpınar inventory (Fig. 2:4-6). At Barcın similar vessels existed (Fig. 2:1-2), although only a few pieces have been encountered during excavation (Gerritsen et al. 2010: 205).

How do these complexes compare with the Late Chalcolithic pottery from Demircihüyük? The inverted-rim bowls from Ilıpınar are identical with the common bowls of ware F (Fig. 1:6-7). Parallels for the jugs and jars with one or two handles exist as well (Seeher 1987: Pl. 26:1-14), although here the fragmentary state of the Demircihüyük material is problematic – among the 222 sherds of jugs and jars identified were quite a lot without handle, but in addition 121 fragments of handles in fine ware F alone were found. This shows that vertical handles were a common element (Seeher 1987: 40-41). Vessel varieties comprise specimens with vertical neck with more or less everted rim (Fig. 2:8-10), with a more S-shaped profile from shoulder to rim (Fig. 2:9) and apparently also with a conical neck (Fig. 2:11).

Several sherds with incised decoration stem from tulip-shaped beakers. With the Ilıpınar examples at hand, some new reconstructions for the sherds from Demircihüyük become possible. The decoration pattern is less varied, since bands filled with dots are absent – here only bands of zig-zag hatching occur and compare to an example from Ilıpınar with zig-zag bands (Fig. 1:12 and 1:10). The application of incised decoration also on the inside of the vessel close to the rim, which occurs several times at Ilıpınar, is also attested with one sherd at Demircihüyük (Seeher 1987: Pl. 26:19). Another fragment belongs to a piece with a vertical handle close to the rim (Seeher 1987: Pl. 26:17). A complete handle of this type (Fig. 1:13) was originally not classified with the Late Chalcolithic ware F due to its content of grit temper, but the resemblance is obvious and the additional occurrence of organic temper with this piece speaks in favour of a connection. Another parallel is a coarse ware handle at the rim of a jar (Fig. 2:12), which finds a counterpart in a complete vessel from Ilıpınar (Fig. 2:7). The only vessel type from Ilıpınar not found at Demircihüyük is the squat hole-mouth bowl or pot which is always fitted with a vertically placed handle at the rim (e.g., Roodenberg 2001: Fig. 2:7-8). As a matter of fact, this shape is also absent at Barcın Höyük, which may indicate that these vessels are a local development at Ilıpınar.

Turning to the Barcın material, we see that parallels for the typical bowls with everted rim do exist at Demircihüyük (Fig. 1:4-5), although here they are much less common than the inverted-rim bowls (55 vs. 621 pieces). It is interesting to note that the sherds of this shape were found to contain not only the fine organic temper typical for ware F, but often also chaff like plant fibres and grit temper (Seeher 1987: 22 Pl. 25:9-20), thus resembling the pieces from Barcın Höyük. Deep bowls (Gerritsen et al. 2010: Fig. 9:1; cf. Seeher 1987: Pl. 26:24), jars with vertical handle (Fig. 2:1-2), and coarse ware pots with lug handles near the rim (Fig. 2:3 and 13) exist at both sites, too.

FURTHER COMPARISONS

The parallels cited above indicate a close relationship between these three sites. At the same time we see that significant forms are missing either at Ilıpınar or at Barcın Höyük, whereas almost all shapes known from these two sites exist at Demircihüyük. This seems to indicate a chronological difference between the two Eastern Marmara sites. The material from Demircihüyük does not constitute proof, but the stratigraphy at Beycesultan yields the necessary clues.

Most obvious is the occurrence of carinated bowls with everted rims in Beycesultan LC 3 and LC 4. This vessel form is described as “a new shape characteristic for the L. Ch. 3 period” (Shape 19: Lloyd and Mellaart 1962: 93 and Fig. P.8:1.6.7.11; P.9:16-20); “this is by far the most numerous and most typical shape of L.Ch. 4” (Lloyd and Mellaart 1962: 95 and Fig. P.10:1-8.15-20; Fig. P.11:6-7.11.13.15.16; Fig. P.12:22-24.36-41). Another obvious example is a jug-handle with a knob on top from Barcın (Gerritsen et al. 2010: Fig.9:3) which finds good parallels at Beycesultan LC 3 (Lloyd and Mellaart 1962: Fig. P.8:18; P.9:23). Other comparisons between Beycesultan LC and Barcın Höyük are more on a general level due to the simple shape repertoire at the latter site. Thissen points out that both display a similar assemblage structure consisting of large bowls or dishes, jugs and jars and coarse ware hole-mouth pots (Gerritsen et al. 2010: 206).

The same is true of the material from the burials at Ilıpınar, but here carinated bowls with inverted rims take the place of the carinated bowls with everted rims. At Beycesultan, this shape postdates the carinated bowl with everted rim to a large extent: Vessels with inverted or incurving rims are described at Beycesultan as a new and rare shape in L. Ch.3 and 4, “possibly ... the prototypes for the E.B 1 bowls” (shape 20: Lloyd and Mellaart 1962: 93 and Fig. P.8:4; Fig. P.9:7; Fig. P.12:13.16.44). Indeed, the latter (Lloyd and Mellaart 1962: Fig. P.14:20-25; Fig. P.15:12-17) form a much better parallel for the carinated bowls with pronouncedly inverted rims from Ilıpınar or Demircihüyük. At Beycesultan they seem to stand at the end of a development which is not present in the stratigraphy of the excavated trench due to a hiatus between the Late Chalcolithic and the Early Bronze Age layers (Seeher 1987: 59; Schoop 2005: 149-150). This assumption is also corroborated by the fact that there is only one single occurrence of a carinated bowl with everted rim in an EB 1 context, which is described as “possibly L. Ch. 4 survival” (Lloyd and Mellaart 1962: 123 Fig. P.21:3).

The other typical shape at Ilıpınar, the tulip-shaped beaker with flat or rounded base and one or two vertical handles, has parallels at Beycesultan LC 3 and 4 in the shape of deep bowls with everted rim and narrow base and shallow cups with flaring sides (Lloyd and Mellaart 1962: Fig. P.10:9.21). The latter vessel form is also known from Kuruçay 6 (Duru 1996: Lev.66:9).

Due to the fragmentary state of the material, the shapes of jugs and jars from Demircihüyük LC ware F are less well known than the complete vessel specimens from the cemetery at Ilıpınar. The latter often display a fairly well offset neck and a globular or even squat globular body (Fig. 2:4.6), whereas the shapes at Demircihüyük often seem to have smaller bodies and less pronounced shoulders (Fig.2:8-10). At Beycesultan, parallels

come from the LC 3 and 4 levels (e.g., Lloyd and Mellaart 1962: Fig. P.9:1.24; P.10:12; P.11:8). At Kuruçay one-handed jugs and two-handed jars are abundant, but proportions differ in favour of wider necks and smaller bodies (best comparable are Duru 1996: Lev.54:1-2; 63:1; 64:8).

To some extent, the classification of the pottery shapes from the three north-western sites is hampered by the absence of detailed information on the development of pottery shapes at the transition from the Late Chalcolithic to the Early Bronze Age. With the help of material from survey sites near Eskişehir and from the salvage excavation at Kaklık Mevkii near Afyon, Turan Efe has tried to determine a horizon which predates the EBA levels at Beycesultan and Demircihüyük (Efe 1994; Efe et al.1995; Efe and Ay Efe 2007). However, most of the shapes are known from both periods or have parallels in EBA contexts only, which seems to speak in favour of a relatively late date of this material (Schoop 2005: 301). Without a stratigraphy it seems impossible at the moment to determine where in the LC-EBA sequence Kaklık Mevkii has to be placed.

DISCUSSION

Some 35 years ago, at the time when the Late Chalcolithic pottery complex from Demircihüyük was excavated, there was almost no comparative material known from north-western Anatolia. In the light of the investigations at Ilıpınar and Barcın Höyük, at least the picture of the pottery repertoire of this period has become somewhat clearer. However, differences are obvious and find their explanation in various factors: First of all, distances between the sites and their position in different environments have to be kept in mind. Ilıpınar and Barcın Höyük, 30 km away, lie in the hinterland of the Sea of Marmara. Demircihüyük, on the western end of the Anatolian highland, is 100 km as the crow flies to the south-east of Ilıpınar, and Beycesultan lies in inland western Anatolia, some 200 km as the crow flies to the south of the Eastern Marmara region and about 150 km south-west of Demircihüyük. Secondly, the character of the sites and the extent to which they have been investigated is very different, resulting in a different material basis: at Ilıpınar more than 40 burials of a cemetery were investigated, at Barcın Höyük several small soundings were dug into a settlement layer deposit about 0.50-0.65 m thick, and at Beycesultan a wide and very deep trench was sunk into the Chalcolithic levels, yielding about 6 m stratigraphy for the LC 3 and 4 layers alone. At Demircihüyük, finally, Chalcolithic in situ material came only from two small soundings, but the majority consists of stray finds from the EBA levels of the mound.

The third reason for the differences in the pottery repertoire seems to be chronological. In my opinion, Barcın Höyük is probably partially older than Ilıpınar LC, and Demircihüyük LC seems to be at least partially contemporary with both of them. However, the radiocarbon datings (Fig. 3) support this assumption only to some extent. The sample from Barcın Höyük (charcoal?) comes from settlement layers (Roodenberg, J., van As, A. and S. Alpaslan Roodenberg 2008: 55, 62), whereas the two Ilıpınar dates were obtained from bone samples from two different burials (Roodenberg 2008: 320). The two samples from Demircihüyük were assigned to the Late Chalcolithic phase C

(Quitta 1987: 13): Kn2780 comes from the bones of the supposed burial in excavation square K10 mentioned above. Kn2670, on the other hand, was obtained from a sample of bones from the deepest layers reached in excavation square K9.

This small number of radiocarbon datings certainly does not constitute a reliable basis. Barcın Höyük LC could actually begin earlier than Ilıpınar LC, but the Demircihüyük samples seem very late indeed. Even if we omit sample Kn 2670 due to its limited stratigraphical reliability and its unusually long standard deviation of 130 years, we are left with a date within the second half of the fourth millennium BC for the sample from the burial. But perhaps it is this origin of the sample which is actually the reason for the late date: the adult burial at Demircihüyük might represent a period when this part of the old mound was not used as a settlement ground any more. In other words, the burial could belong to the hiatus between the Late Chalcolithic phase C and the earliest EBA phase D, which is supposed to set in somewhere around 2900 BC.

Radiocarbon dates from other Late Chalcolithic sites comprise Beycesultan LC 3 and Kuruçay 6A, which lie around the middle of the fourth millennium BC (Schoop 2005: Fig. 4.8). A date for Beycesultan LC 1, on the other hand, falls within the first half of this millennium, thus comparable to the date from Barcın Höyük and sample GRN 16151 from Ilıpınar shown in Fig. 3. From the point of view of pottery typology, this equation does not seem right, and here further evidence is urgently needed, preferably an excavation at a site in north-western inland Anatolia yielding a complete stratigraphy for the transition from the Late Chalcolithic to the Early Bronze Age. Further clarification may eventually come from new radiocarbon datings, which will be more reliable than the Beycesultan and Demircihüyük dates obtained many decades ago.

At the moment we have to state that the Ilıpınar-Barcın Höyük-Demircihüyük horizon is lacking a clear connection with earlier sites: We know quite a few sites with settlement layers belonging to the fifth/early fourth millennium BC, e.g. Beşik-Sivritepe, Gülpınar and Kumtepe A in the West, Toptepe 1 and Hoca Çeşme 1a in Thrace, Beycesultan LC 1-2, Aphrodisias Pekmez LC 1 in the south and Orman Fidanlığı VI-VII, Kes Kaya and Yazır Höyük in the east. But none has yielded more than hints on the origins of the pottery inventory of these three north-western sites. The current absence of significant stratigraphies not only here, but also in other parts of Anatolia has prompted Ulf-Dietrich Schoop to state that “The second half of the Chalcolithic is one of the least well-understood periods in Anatolian archaeology” (Schoop 2011: 29). Further research will have to show to what extent climatic changes, social developments, migration and/or other factors can be held responsible for this situation.

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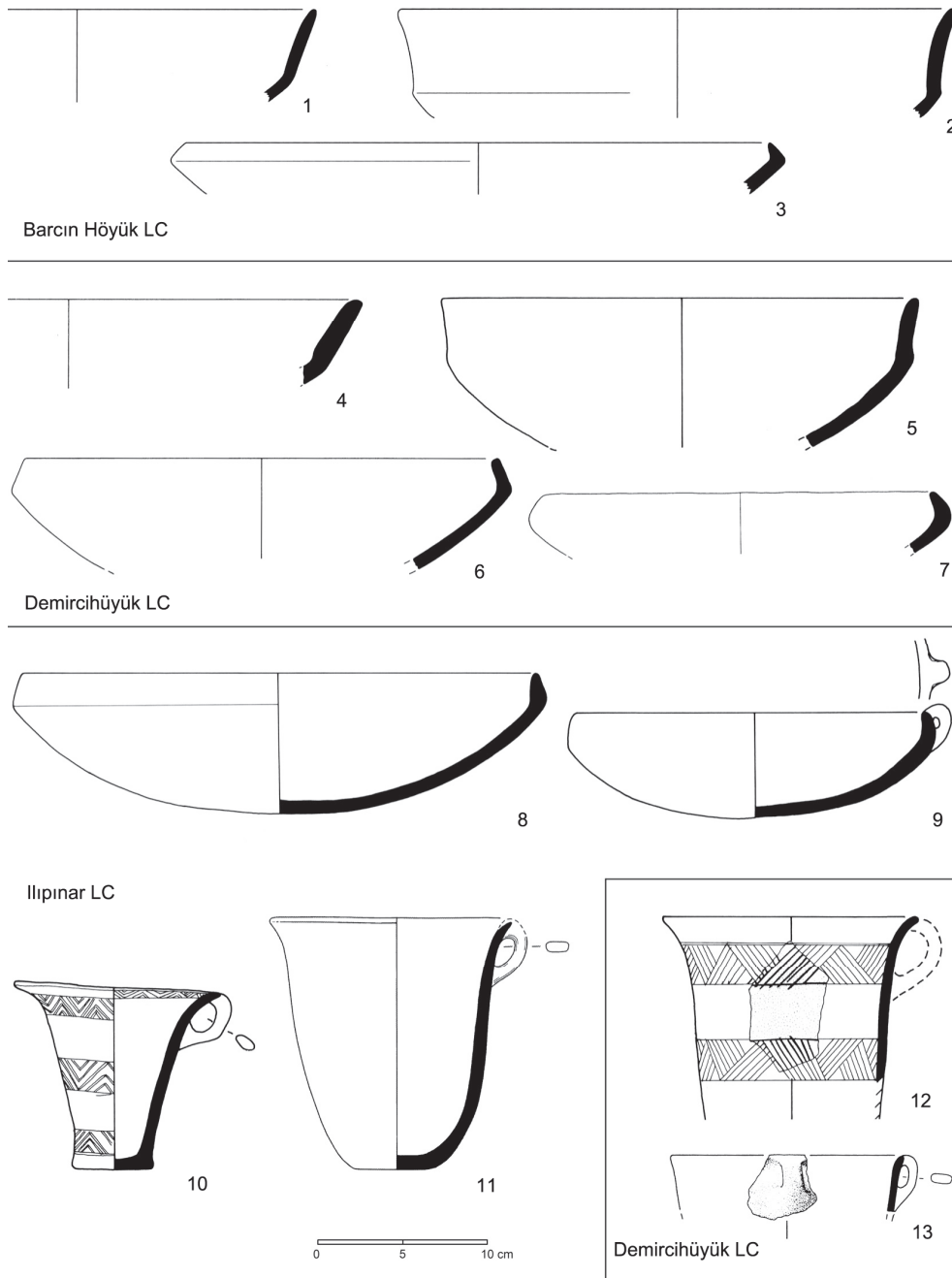


Fig. 1. Bowls and beakers from Barcın Höyük, Ilıpınar and Demircihüyük.

1 Gerritsen et al. 2010, Fig 7:4; **2** l.c. Fig. 7:7; **3** l.c. Fig. 7:3; **4** Seeher 1987, Pl. 25:18; **5** l.c. Pl. 25:16; **6** l.c. Pl. 24:6; **7** l.c. Pl. 24:21; **8** Roodenberg 2001, Fig. 2:3; **9** Thissen 1989-90, Fig. 16:11; **10** l.c. Fig. 17:2; **11** Roodenberg 2008, Fig. 10:2; **12** Seeher 1987, Pl. 26:16, new reconstruction; **13** l.c. Pl. 23:21.

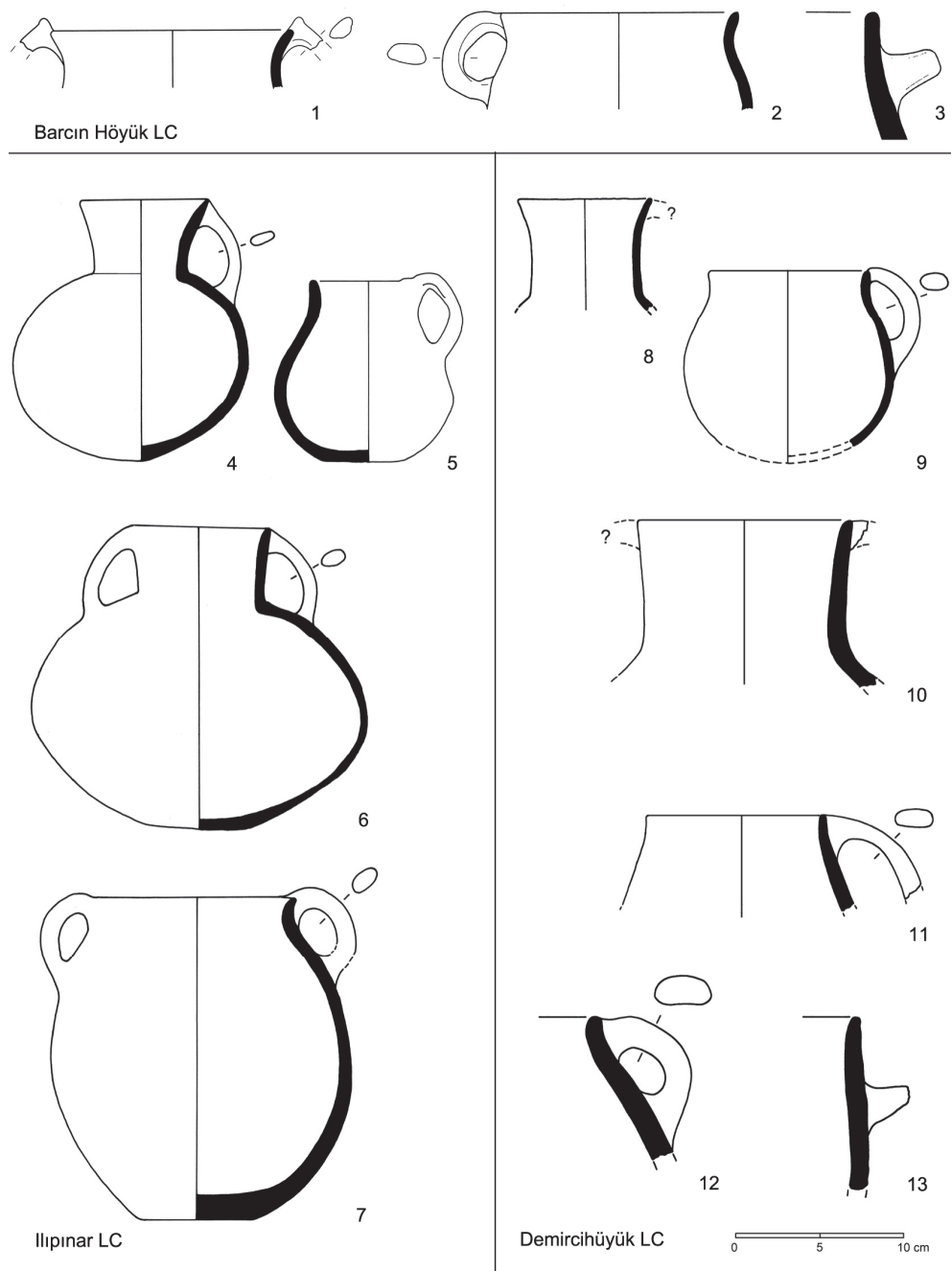


Fig. 2. Jugs and jars from Barcin Höyük, Ilıpınar and Demircihüyük.

1 Gerritsen et al. 2010, Fig. 9:3; 2 l.c. Fig. 10:4; 3 l.c. Fig. 11:2; 4 Thissen 1989-90, Fig. 17:3; 5 Roodenberg 2008, Fig. 2:5; 6 Thissen 1989-90, Fig. 18:1; 7 l.c. Fig. 18:2; 8 Seeher 1987, Pl. 26:13; 9 l.c. Pl. 26:4; 10 l.c. Pl. 26:6; 11 l.c. Pl. 26:2; 12 l.c. Pl. 27:10; 13 l.c. Pl. 27:7.

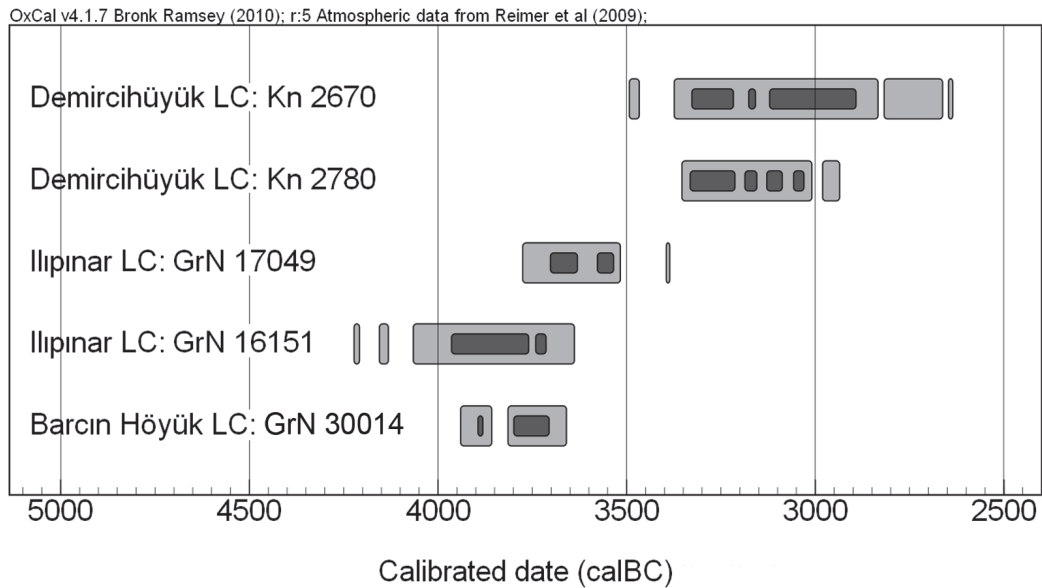


Fig. 3. Radiocarbon datings from from Barcın Höyük, Ilıpınar and Demircihüyük.

The plot shows the one and two sigma ranges (68.2 and 95.4% reliability) in different shades of grey (Kn 2670: 4380±130 BP; Kn 2780: 4470±55 BP; GrN 17049: 4850±60 BP; GrN 16151: 5060±110 BP; GrN 30014: 4990±40 BP).

Illustration by Seeher, using OxCal v4.1.7.