
Gülsün UMURTAK

A STUDY OF A GROUP OF POTTERY FINDS FROM THE MBA DEPOSITS AT BADEMAĞACI HOYÜK

The pottery examined in this article was uncovered during the 2000 - 2002 excavation seasons at Bademağacı (see map 1) and comes from debris soil in a mixed context together with various other objects, including a lead stamp seal (Umurtak 2002) and bronze pins.¹

DESCRIPTION OF THE MATERIAL AND ANALOGIES

WARE GROUPS

1. Wheelmade Buff Ware

The mineral-tempered paste consists of brown, reddish-coloured and yellow particles like shiny flecks. The particles are small, although medium-sized particles may be seen in some of the large and coarse pots (Fig. 8: 2). The paste has a good consistency and it is evident that the pots were made on a fast wheel. Some of the pots in this group have been covered with a thin slip formed from the natural paste of the pot, while some have no slip at all. Most of the marks occurring during the production of the pots have been erased. There is a red cross decoration inside one of the bowls (Munsell 5 YR 5/6, 5/8 "yellowish red"), the only example of this design. Firing is consistently successful as the colour of the inner and outer surfaces of the pots are the same.

Paste and surface colours: Munsell 5 YR 6/6, 7/6 "reddish yellow"; 7.5 YR 7/4, 8/4 "pink", 7/6 "reddish yellow"; 10 YR 8/4 "very pale brown".

2. Wheelmade Red Slipped Buff Ware

The paste, which consists of a high density of small grey and yellow fleck-like particles, is generally very clean and compact. The paste is buff and light brown. On most of the pieces, a thin red slip does not adequately cover the wheel marks; the slip on some of the pieces has been partially erased due to usage (Fig. 8: 3). Firing is very successful. Some of the pots are slightly burnished.

Paste colours: Munsell 7.5 YR 7/4, 8/4 "pink".
Surface colours: Munsell 10 R 4/8 "red"; 2.5 YR 4/6, 4/8, 5/6 "red"; 5 YR 6/4 "light reddish brown", 6/6 "reddish yellow".

3. Wheelmade Brownish Grey Slipped Buff Ware

It is not possible to identify the paste tempers of most pots when looking at them. However, in the slightly coarser examples, fine grey-white particles and shiny flecks can be seen. The paste is buff and greyish buff in colour and is compact. All pots are made on a fast wheel. As a result of firing, the applied slip becomes dark brownish grey and dark grey in colour. On some pots, both the inner and outer surfaces of are slipped, while only the outer surface and the inside of the mouth of some others are slipped. The slip on some of the pieces has been partially erased.

Paste colours: Munsell 7.5 YR 8/4 "pink"; 10 YR 7/2 "light grey".
Surface colours: Munsell 5 YR 4/1 "dark

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4. Coarse Ware

The orange or brown coloured paste with a sponge-like appearance is plant-straw and mineral tempered. Sometimes both the outer and inner surfaces and sometimes just the outer surface of the pieces are covered with a thin buff slip, although the slip does not sufficiently cover the straw marks. Sometimes a border of decoration is applied with orange or reddish brown paint (Munsell 2.5 YR 5/4 “reddish brown”; 5 YR 5/6 “yellowish red”) on the rims of the pots. The firing is not very successful.

Paste colours : Munsell 7.5 YR 6/6 “reddish yellow”, 7/4 “pink”.

FORMS

Plates

Plate I : Small plates with straight sides, plain rims and flattened bases (Fig. 1: 1; Table 1). These pieces belong to the Wheelmade Buff Ware group. An example parallel to these plates is seen among the surface finds from Eğriköy in the Manisa Region (French 1969 : Fig.18: 22).

Plate II : Examples of this plate type are small or medium-sized, with everted sides and straight rims. They belong to the Wheelmade Buff Ware and the Wheelmade Red Slipped Buff Ware (Fig. 1: 2; 5: 1-2; Table 1).

Similar examples of this plate type were uncovered at Beycesultan in level V (Lloyd - Mellaart 1965 : Fig. 4: 6-7).

Plate III : These plates with rims thickened on the inside and presenting a rounded base are rare. They belong to the Wheelmade Buff Ware (Fig. 1: 3; Table 1).

Similar examples were found in MBA layers of Đemirçihöyük (Kull 1988: Pl.1: 2; 27: 2).

Bowls

I. Spherical Bowls

Bowl IAl : Bowls with sides inverted towards the mouth and straight rims (Fig. 1: 4; 5: 3; 7: 1; Table 1).

This type of bowls is found among the Wheelmade Buff Ware (Fig. 1: 4), Wheelmade Red Slipped Buff Ware (Fig. 5: 3) and Wheelmade Brownish Gray Slipped Buff Ware (Fig. 7: 1). One piece from the Wheelmade Buff Ware has a cylindrical vertical handle attached to its body and is decorated with two horizontal rows of parallel
grooves (Fig. 1: 4). A similar bowl form with a handle and with groove decoration was found among mixed MBA pottery at Aphrodisias (Joukowsky 1986 : Fig. 457: 9).

**Bowl IA2**: Thick-sided bowls with inverted rims flattened at the top (Fig. 7: 6 ; Table 1).

Examples of this bowl type are only seen among the Coarse Ware. One of these pieces is decorated with red paint on both the inner and outer surfaces of the rims (Fig. 7: 6).

**Bowl IB1**: Bowls with inverted sides and everted rims (Fig. 5: 4 ; Table 1).

Examples of this form are found among the Wheelmade Red Slipped Buff Ware.

Similar bowl examples are seen at Beycesultan level V (Lloyd-Mellaart 1965 : Fig. 2: 23, 26), at Demirchöyük in the MBA ‘Schichtabschnitt’ 1 (Kull 1988 : Pl. 1: 9), and in the Eskişehir region among the surface finds from Bahçe hisar (Efe 1994 : Fig. 14: 56).

**Bowl IB2**: Pinch-necked bowls (Fig. 7: 2 ; Table 1).

These are only found in the Wheelmade Brownish Gray Slipped Buff Ware group.

There is a parallel example to these bowls from Troya level IVb (Blegen et alii 1951 : Pl. 178: 10).

**II. Shallow Bowls**

**Bowl IIA1**: Bowls slightly inverted at the mouth with string cut bases. The rims of some of the examples are accentuated (Fig. 1: 5-6 ; 5: 5 ; 8: 1 ; Table 2).

This bowl type is seen among the Wheelmade Buff Ware (Fig. 1: 5-6) and Wheelmade Red Slipped Buff Ware (Fig. 5: 5). One bowl, found in good condition, has a string cut base. The inside of a bowl from the Wheelmade Buff Ware group is decorated with a ‘red cross’ (Fig. 1: 6 ; 8: 1).

Examples very similar in form to these bowls are seen among wares from levels V and IVc at Beycesultan and the group called ‘Palace Ware’ by James Mellaart (Lloyd-Mellaart 1965 : Fig. 5: 10, 13, 15 ; 16: 14-18). In addition to these, parallel examples are found at Troya level IVb (Blegen et alii 1951 : Pl.178: 3), the Karum of Kanesh IV (Emre 1989 : Fig. 25-26), Gordion Cemetery (Mellink 1956 : Pl. 30:e, a), and among the surface finds from Bahçe hisar in the Eskişehir region (Efe 1994 : Fig. 14: 50).

**Bowl IIA2**: Bowls with thin sides and straight rims (Fig. 1: 7 ; 5: 6 ; Table 2).

These bowls are seen in the Wheelmade Buff Ware (Fig. 1: 7) and Wheelmade Red Slipped Buff Ware (Fig. 5: 6) groups.

Similar bowls are found in levels V (Lloyd-Mellaart 1965 : Fig. 4: 22) and IVc (ibid. : Fig. 16: 16-17) at Beycesultan, and among the MBA pottery of Sarıket Cemetery (Seeher 2000 : Fig. 65: G267, a).

**Bowl IIA3**: Bowls with everted rims (Fig. 1: 8 ; 7: 3 ; Table 2).

This type of bowls appears among the Wheelmade Buff Ware (Fig. 1: 8) and Wheelmade Brownish Gray Slipped Buff Ware (Fig. 7: 3).

Similar bowls are found in the Beycesultan level V (Lloyd-Mellaart 1965 : Fig. 2: 23; 3: 4) and at Boğazköy ‘NW Hang’ 9, ‘Unterstadt’ 5 (Orthmann 1963 : Pl. 8: 15; Fischer 1963 : Pl. 11: 140) settlements. Other examples exist among the surface finds from northwestern Anatolia at Çakırca (Mellaart 1955 : Fig. 73) and in the Konya region at Ortakaraviran II (Mellaart 1958 : Pl. VI: 82).

**III. Carinated Bowls**

**Bowl IIIA1a**: Sharply carinated bowls with inverted sides and straight rims (Fig. 1: 9 ; 5: 7-8 ; Table 2). One of these has an embossed border around the centre of the body (Fig. 5: 8).

This type of bowls has been identified among the pottery of the Wheelmade Buff Ware (Fig. 1: 9) and Wheelmade Red Slipped Buff Ware (Fig. 5: 7-8) groups.

Examples parallel to these bowls are found at Beycesultan levels V (Lloyd-Mellaart 1965 : Fig. 3: 9, 12-13, 15-16), IVc (ibid. : Fig. 13: 4-5) and IVb (ibid. : Fig. 24: 31-32), and at Gordion Megaron 10 - layer 16 (Gunter 1991 : Fig. 7: 133-134). Other examples also exist among surface finds from Manisa-Eğriköy (French 1969 : Fig. 18: 13), Acemköy, Höyükdeğırmende and Seive Tepe (Mellaart 1958 : Pl. VII: 90-92) in the Konya region and at Örentepe (French 1965 : Fig. 9: 6) in the Göksu valley.

**Bowl IIIA1b**: Sharply carinated bowls with inverted sides, straight rims and horizontal handles attached to the rim (Fig. 5: 9 ; Table 2).

These bowls are only seen in the Wheelmade Red Slipped Buff Ware group.

We came across similar bowls among pottery from Denirci Höyük ‘Schichtabschnitt’ 1 (Kull 1988 : Pl. 1: 7), Boğazköy ‘NW Hang’ 8c-d
Bowl IIIA2: Sharply carinated bowls with inverted sides and rims thickened on the outside (Fig. 1: 10; 5: 10-11; Table 2).

A small number of this bowl type belongs to the Wheelmade Buff Ware (Fig. 1: 10) group, while a large number belongs to the Wheelmade Red Slipped Buff Ware (Fig. 5: 10-11) group. One of them has parallel slanted notches on the body (Fig. 5: 10).

Examples similar to these bowls are described among the pottery from Beycesultan levels V (Fig. P.1: 5, 15, 3: 22), IVc (ibid.: Fig. P. 12: 6) and IVb (ibid.: Fig. P. 24: 20), from the MBA accumulation at Aphrodisias (Joukowsky 1986: Fig. 477: 3), from Panaztepe IIb (Günell 1999: Pl. 63: 2), Gordian Megaron 10–layer 14B (Gunter 1991: Fig. 175), among the surface finds from Manisa–Eğriköy (French 1969: Fig. 18: 14) and Konya–Süralı Höyük, Karahisar Höyük (Mellaart 1958: Pl. VII: 100-101), as well as at Emporio where it is dated ‘end of the EBA’ (Hood 1982: Fig. 254: 2636).

Bowl IIIB1a: Small sharply carinated bowls with straight rims (Fig. 6: 1; 7: 4, Table 3).

This group was identified among the Wheelmade Red Slipped Buff Ware (Fig. 6: 1) and Wheelmade Brownish Gray Slipped Buff Ware (Fig. 7: 4) groups.

Similar bowls are found among the pottery from Beycesultan levels V (Lloyd-Mellaart 1965: Fig. 4: 20-21) and IVc (ibid.: Fig. 16: 1) and from the MBA pottery at Sanket Cemetery (Seher 2000: Fig. 65: G.306a). They also occur among the surface finds from Maltepe in the Göksu valley (French 1965: Fig. 8: 8).

Bowl IIIB1b: Sharply carinated bowls with straight sides above the carination and rims thickened on the outside (Fig. 1: 11-12; 6: 2; Table 3).

This group is represented in the Wheelmade Buff Ware (Fig. 1: 11-12) and Wheelmade Red Slipped Buff Ware (Fig. 6: 2) groups.

Similar examples were uncovered among the MBA mixed pottery at Aphrodisias (Joukowsky 1986: Fig. 457: 28), at Gordian in Megaron 10–layer 17 (Gunter 1991: Fig. 6: 107), the Cemetery area (Mellink 1956: Pl. 30: f), and at İlica Cemetery (Orthmann 1967: Pl. 1: 11).

Bowl IIIB2: Sharply carinated bowls with straight sides above the carination and rims thickened on the outside (Fig. 6: 3; 7: 7; Table 3). The carination of one of the examples protrudes outwards (Fig. 6: 3).

Examples of these bowls are found among the Wheelmade Red Slipped Buff Ware (Fig. 6: 3) and Coarse Ware (Fig. 7; 7) groups.

Similar examples of this type exist among the pottery from the settlements of Beycesultan level V (Lloyd-Mellaart 1965: Fig. 1: 3), Aphrodisias MBA (Joukowsky 1986: Fig. 307) and Troia Vd (Blegen et alii 1951: Pl. 257: 18). A surface find from Çingantepe in the Göksu valley (French 1965: Fig. 4: 13) resembles particularly our piece because of its outwardly protruding carination (Fig. 6: 3).

Bowl IIIC1a: Gently carinated bowls with rims thickened on the outside and flat bases (Fig. 2: 1; Table 3).

This bowl type occurs only within the Wheelmade Buff Ware group.

We came across a parallel to these bowls among the MBA material at Beycesultan (Joukowsky 1986: Fig. 477: 20). The example is a red cross bowl fragment.

Bowl IIIC1b: Gently carinated bowls with rims thickened on the outside and horizontal handles attached to the rim. The handles of one of these examples present a deep vertical groove decoration (Fig. 2: 2; Table 3).

Pieces of this bowl type belong to the Wheelmade Buff Ware group.

Similar examples were found at Beycesultan levels V (Lloyd-Mellaart 1965: Fig. 2: 1-3) and IVc (ibid.: Fig. 14: 1), Panaztepe IIb (Günell 1999: Pl. 58: 4, 61: 4), Heraion MBA (Milojcic 1961: Pl. 49: 24), Thermi MBA-LBA (Lamb 1936: Pl. XLIV: 1a), and as surface finds among the material from Üyücek (Mellaart 1955: Fig. 55) in Northwest Anatolia. The closest resemblance to the decoration on the Bademağaci bowl is the example from Beycesultan IVc. In addition, similar examples with decorated horizontal handles attached to the rim are found on other types of pots from Beycesultan levels IVc (Lloyd-Mellaart 1965: Fig. 12: 12) and IVa (ibid.: Fig. 31: 11).

Bowl IIIIa2: Carinated bowl with a slightly concave profile and rim thickened on the outside to form a sharp angled protrusion (Fig. 2: 3; Table 3).

There is only one representative of this form type in the Wheelmade Buff Ware group. Similar examples are seen at Troia level V (Blegen et alii 1951: Pl. 251: 15), among the surface finds from
Northwest Anatolia - Hamidiye (Mellaart 1955: Fig. 153), in the Konya region - Seyeti Han (Mellaart 1958: Pl.VIII: 144), and at Emporio where they are dated ‘end of the EBA’ (Hood 1982: Fig. 254: 2623).

Bowl IIID1b: Carinated bowls with a concave profile and rims thickened on the outside at the mouth (Fig. 2: 4-5; Table 3).

Close parallels to these bowls, which are only found in the Wheelmade Buff Ware group, occur among surface finds from Akhisar-Kenenez settlement (French 1969: Fig. 19: 7).

IV. Bell Shaped Bowls

Bowl IVAl: Large bowls with thick sides and everted rims thickened on the outside and with a ledge on the inside (Fig. 6: 4: 7: 8; Table 4).

This bowl type has been identified among the Wheelmade Red Slipped Buff Ware (Fig. 6: 4) and Coarse Ware (Fig. 7: 8) groups.

Similar examples were uncovered at Beycesultan level IVc (Lloyd-Mellaart 1965: Fig. 16: 10) and Troia IVb (Blegen et alii 1951: Pl. 178: 1).

V. Bowls with Spouts

Bowl VA1: Deep bowls with spouts and rims thickened on the outside (Fig. 2: 6; Table 4). It is likely that some broken pieces of spouts with strainers (Fig. 2: 7-8) belong to this type of bowls.

These pieces are represented only in the Wheelmade Buff Ware group.

They have similar parallels at Beycesultan level V (Lloyd-Mellaart 1965: Fig. 2: 18) and IVc (ibid.: Fig. 13: 33-34), at Heraion MBA (Milojic 1961: Pl. 49: 23), and among the MBA-LBA finds from Thermi (Lamb 1936: Fig. 41: 7a).

Cup - Carinated cup with trefoil mouth and one handle (Fig. 6: 5; Table 4).

The sole cup of this type presented here belongs to the Wheelmade Red Slipped Buff Ware group material.

An example very similar to this piece was found at Bağbaşı by Machtdel Mellink, who assigned it to the MBA and called it a ‘quatrefoil kantharos’ (Mellink 1969: Fig. 3). Furthermore, there is a resemblance between the Bademağacı cup and some cups found at Beycesultan levels V (Lloyd-Mellaart 1965: Fig. 5: 30-31: 6: 1) and IVa (ibid.: Fig. 35: 8). Some resemblance may also be seen between our example and the goblet from level II at the Karum of Kanes (Özgüç 1986: Şeh. 37).

Jugs

I. Trefoil Mouthed Jugs

Jug IA1: Jug with a trefoil mouth, everted rim and a slightly indicated neck: the body section is missing (Fig. 3: 1; Table 4).

This piece is from the Wheelmade Buff Ware. A parallel to the Bademağacı example is from Beycesultan level V (Lloyd-Mellaart 1965: Fig. 7: 12).

Jug IA2: Short-necked jug with trefoil mouth: the body section is missing (Fig. 3: 2; Table 4).

This jug is from the Wheelmade Buff Ware group.

Similar jug examples have been identified among the pottery from Beycesultan level V (Lloyd-Mellaart 1965: Fig. 7: 13), Panaztepe IIb (Güneş 1999: Pl. 106: 1: 162: 2), Liman Tepe MBA 4 (Erkanal-Güneş 1996: Fig. 6), Demircihöyük MBA ‘Schichtabschnitt’ 2/3 - 4 (Kull 1988: Pl. 10: 1), and the MBA pottery of Sarıtepe Cemetery (Seeher 2000: Fig. 62: G.127).

Jug IB1: Long-necked jar with a trefoil mouth: the body section is missing (Fig. 3: 3; Table 4).

This piece belongs to the Wheelmade Buff Ware group. A parallel to this example can be seen among the MBA pottery from Sarıtepe Cemetery (Seeher 2000: Fig. 64: G.196, g).

II. Beak Spouted Jugs

Jug IIA1: Beak spouted jugs with body sections missing (Fig. 6: 6: 7: 5: 8: 4-5; Table 4).

This jug type is found among the Wheelmade Red Slipped Buff Ware (Fig. 6: 6: 8: 4) and Wheelmade Brownish Gray Slipped Buff Ware (Fig. 7: 5: 8: 5) groups.

There are some similarities between the Bademağacı pieces and some of the beak spouted jugs from Beycesultan V (Lloyd-Mellaart 1965: Fig. 6: 12-17), IVc (ibid.: Fig. 18: 3) and IVb (ibid.: Fig. 27: 6) settlements.

Jars

I. Spherical Jars

Jar IA1: Jars inverted towards the mouth with slightly thickened rims (Fig. 3: 4; Table 5).

Examples are only from the Wheelmade Buff Ware group.
Parallels to these jars were found at Demirchöyük MBA ‘Schichtabschnitt’ 3 - 4 (Kull 1988 : Pl. 25: 12) and at Boğazköy ‘NW Hang’ level 8c-d (Orthmann 1963 : Pl. 22: 206).

**Jar IA2:** Jars inverted towards the mouth with thick rims (Fig. 3: 5-6 ; 7: 9 ; Table 5). Some of the examples of this group have parallel horizontal groove decorations on the body (Fig. 3: 6).

Examples of this jar type are found among the pottery of the Wheelmade Buff Ware (Fig. 3: 5-6) and Coarse Ware (Fig. 7: 9) groups.

There is a parallel to this group from the Karum of Kaneş level IV (Emre 1989 : Fig. 27, 29).

**II. Pinch-Necked Jars**

**Jar II A1:** Jars slightly inverted towards the mouth with thickened rims and a ledge on the inside below the rim (Fig. 3: 7 ; Table 5).

Similar examples to this jar type, belonging to the Wheelmade Buff Ware group, are seen among the pottery from Panaztepe IIb (Güneş 1999 : Pl. 109: 3), and in the MBA-LBA settlements at Thermi (Lamb 1936 : Pl. XLVI: 4a).

**Jar II A2:** Jar slightly inverted towards the mouth with thickened rim and a ledge on the inside below the rim: the body section broadens outwards with a sharp turn (Fig. 3: 8 ; Table 5).

A parallel to this jar from the Wheelmade Buff Ware group, was found among the surface finds from Örenştepe (French 1965 : Fig. 9: 9) in the Göksu valley.

**Jar II A3:** Jar with rim thickened on the inside and the outside and a slightly concave profile below the rim (Fig. 3: 9 ; Table 5).

Examples similar to this jar belonging to the Wheelmade Buff Ware group, come from the Demirchöyük MBA ‘Schichtabschnitt’ 1 and 2/3 (Kull 1988 : Pl. 7: 11), from Panaztepe IIb (Güneş 1999 : Pl. 95: 5), and from Troia Middle VI (Blegen et alii 1953 : Fig. 432: 6).

**III. Cylindrical Jars**

**Jar III A1:** Jar with rim thickened on the inside and outside, with two parallel vertical cylindrical handles (Fig. 7: 10 ; Table 5).

This piece is the only jar in the Coarse Ware group.

**IV. Concave Necked Jars**

**Jar IV A1:** Long-necked concave profile jar with rim thickened on the outside (Fig. 3: 10 ; Table 6).

A parallel to this piece from the Wheelmade Buff Ware was found at Beycesultan level IVc (Lloyd-Mellaart 1965 : Fig. 22: 7).

**Jar IV B1:** Long cylindrical necked jars with rim thickened on the outside and a ledge on the inside of the mouth in some examples (Fig. 3: 11-12 ; Table 6). Some decorations consist of parallel horizontal (Fig. 3: 11) and intersecting horizontal-slanted (Fig. 3: 12) lines in the form of grooves on the necks of these jars.

The pieces described here belong to the Wheelmade Buff Ware group.

**V. Jars with a Basket Handle**

**Jar V A1:** Jar inverted towards the mouth with a straight rim and a basket handle (Fig. 4: 1 ; Table 6).

The only example of this type belongs to the Wheelmade Buff Ware group.

**Jar V B1:** Jar slightly inverted towards the mouth with a rim thickened on the outside and a basket handle (Fig. 4: 2 ; Table 6). The jar is circumventted below the rim with a horizontal groove decoration.

The only example of this type belongs to the Wheelmade Buff Ware group.

It is possible to see a similarity between the section of the Bademajac piece and a teapot found at Acemhöyük level III (Emre 1966 : Fig. 58). Other parallels to this piece are found in the material from the ‘NW Hang’ 9 (Orthmann 1963 : Pl. 9: 38) and 8b (ibid. : Pl. 32: 303-305) settlements at Boğazköy.

**Pithos:** Pithos with a rim thickened on the outside and a groove circumventing the top of the mouth section, most likely intended for a lid to rest on. The body was apparently shaped to form a cylindrical shape (Fig. 4: 3 ; Table 6).

This piece from the Wheelmade Buff Ware group has a parallel among the Aphrodisias MBA pottery (Joukowsky 1986 : Fig. 307: 1).

**Lugs, Handles and Bases**

According to the variety of material examined, it is evident that lugs and handles were not widely used. Examples of lugs are reverse ‘U’ shaped among the Wheelmade Buff Ware group; however, the type to which they belong remains unclear (Fig. 4: 4-5). Similar examples of reverse ‘U’ shaped...
lugs are found at the Demircihöyük MBA 'Schichtabschnitt' 2 (Kull 1988 : Pi. 20: 2-4), Troia V (Blegen et alii 1951 : Pl. 243: 32.22, 36.867), Thermi MBA-LBA (Lamb 1936: Pi. XLVI: la) and Boğazköy 'NW Hang' 9 (Orthmann 1963 : Pl. 12: 99) settlements.

Handles present the following forms : vertically cylindrical (Fig. 1: 4 ; 6: 5-6 ; 7: 5, 10), horizontal on the rim (Fig. 2: 2 ; 5: 9) and basket handle (Fig. 4: 1-2).

Base forms are rounded (Fig. 1: 1-3 ; 4: 6: 6: 5), string-cut and rounded (Fig. 1: 5 : 4: 7-9 : 8: 6-7), string-cut and flat (Fig. 1: 6 : 2: 1 : 4 : 10 : 8: 8) and ring bases (Fig. 4: 11-13 : 6: 7-9).

Among the studied material, string-cut and rounded bases are of a significant quantity and worth of attention. The occurrence of this base type at 'NW Hang' 8c-d (Orthmann 1963 : Pi. 26: 241) is very significant for us.

Decoration

Paint decoration, such as the 'red cross' design (Fig. 1: 6 ; 8: 1) and borders on the inner and outer rims of the pots (Fig. 7: 6), occurs. Along with these, other decorations such as horizontal, vertical and slanted parallel grooves (Fig. 1: 4 : 2: 2 : 3: 6: 11-12 : 4: 2) and notches (Fig. 5: 10), are also seen.

CONCLUSION

The group of pottery finds described above represents the first archaeological evidence indicating the existence of an MBA settlement at Bademağıacı.

The fact that no 2nd millennium BC settlement has yet been excavated in the Burdur-Antalya region increases the worth of the material examined here. James Mellaart includes some settlement sites in the area around Burdur on a map showing the distribution of MBA centres in Southwest Anatolia with an accompanying list of place names (Lloyd-Mellaart 1965 : 76-77; map 1). However, he does not mention the types of material gathered from these sites. In the excavations and surveys that we have carried out over the past 25 years in the Burdur-Antalya region, we have not come across any 2nd millennium material (Duru 1994 ; 1996 ; 1997a ; 1997b : 1998 : 2000 ; 2001 ; Duru-Umurtak, in press). The systematically excavated site closest to Bademağıacı is Beycesultan. Examples similar to the pottery groups made on a fast wheel during the MBA at Beycesultan, such as the 'buff wares with a red, buff, brown or purplish wash', 'plain buff wares', have been identified with some local variations among the Bademağıacı material (see above). Regional preferences seem to have been an important factor in the pottery production during this period. The similarities between both centres are not restricted to the ware groups identified; they also concern the pottery forms of the Bademağıacı material and those of levels V and IVc at Beycesultan.

In the same way, significant similarities have also been noted between the Bademağıacı MBA pottery, the Demircihöyük MBA accumulation, and the IVb and V settlements at Troia. With no doubt, did at least indirect relations exist during the MBA between the northern regions of western Anatolia and our area. It is yet premature to attempt the evaluation of the extent of the relations between Bademağıacı and places like Aphrodisias, the Manisa-Akhisar area, Panaztepe, Liman Tepe, Gordion, and such other centres as Heraion, Emporio and Thermi in the Aegean where parallel finds are a few. Similarities in pottery shapes also occur between the Bademağıacı material and that of 'NW Hang' levels 9, 8c-d, 8b and 8a at Boğazköy. It is evident that forms common to both centres increased during the 8 c-d period. However, the magnitude of parallelism with pottery from the Karum of levels IV and II, Acemhöyük III and II and surface finds from the Konya plain, remains limited.

As mentioned at the beginning of this article, objects such as a lead stamp seal (Umurtak 2002) and bronze pins, of which two examples are described here, were found in the same context as the MBA pottery during the Bademağıacı excavations. Some comments on these are presented below.

Pin with a poppy-shaped head : The head of the pin resembles a slightly accentuated poppy shape. The stem of this well-preserved pin is circu-

3) Prof. Dr. Mehmet Özsüt has been doing surveys in the Burdur Region for many years; however, as there is no detailed information about 2nd millennium pottery in his publications, they have not been used as a source in this article.
4) As the references for these have already been given, they will not be repeated in this section.
lar with a pointed end (Fig. 9: 1, 3. L. 8.4 cm, W. [head] 1.0 cm, D. [stem] 0.3 cm). This kind of object is sometimes called a vase-head pin (Boehmer 1972: 84-85; Schmidt 1902: 258). The results of the trace element analysis of this pin are as follows: 5

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<td>Fe</td>
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<td>Cu</td>
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An example of this pin type that closely resembles the Bademağacı one was found in settlement VII at Troia. However, although this latter pin was assigned to level VII (Schmidt 1902: 258/6486), the level to which it really belongs is still under debate (Szczci-Çalış-Szczci 2002: 460). A bronze pin of the same type was found outside the city walls at Boğazköy; unfortunately, here also the level to which it belongs remains unclear (Boehmer 1972: 84-85; Pl. XXIV: 578). Other material collected in the area where the pin was found, indicating the presence of a settlement dated between the 19th and the 14th/13th centuries BC, allowed Kurt Bittel to conclude that this pin cannot be dated later than the fall of Hatti at ca. 1200 BC (ibid.: footnote 663).

Another pin with a poppy-shaped head from the Amasya Museum is dated to the MBA (Bilgi 2001: n° 203, photo. 102). There are examples of poppy-head pins from the Aegean World and the Balkans. These examples are chronologically much younger than the Bademağacı pin (Boehmer 1972: 85; Bouzek 1985: Fig. 84: 1-15). Another pin found in

Pin with a head shaped like a pair of wings:
The top of the head of this pin is flattened in the middle to form a rectangular shape. This gives the head the appearance of a pair of wings. The head narrows as it meets the stem to form two horizontal embossed borders. The circular stem of the pin ends with a sharp point. (Fig. 9: 2, 4. L. 10.8 cm, W. [head] 0.6 cm, D. [stem] 0.2 cm). This type of pins is usually called cube-headed pins, although published examples show that they are not really shaped like cubes. The results of the trace element analysis of this pin are as follows:

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<tr>
<td>Sb</td>
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<td>Co</td>
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<td>Cu</td>
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The Bademağacı pin has a much gentler profile than other parallel types (it has no sharp angled sides). Different variations of this pin type occur at Boğazköy ‘Unterstadt’ levels 4, 1 and Büyükkale levels IVd, IVb, IVa and III (Boehmer 1972: Pl. XVIII: 320; XX: 419-420; XXII: 490, 491, 492). Other similar examples were found at Alaca Höyük (Koşay-Akok 1966: Pl. 44: Al.m.6; 119: Al.g.182, Al.g.242, Al.m.6, Al.k.35, Al.k.6; 1973: Pl. LXXXIII: Al.t.147, Al.r.252), Alişar (von der Osten 1937: Fig. 283: d.2214, d.1543, c 446, d 1022), Kaman Kalehöyük III (Omura 1991: Fig. 9: 5) and

5) This element analysis was carried out by Prof. Dr. Hadi Özbal (Boğaziçi University); I extend my thanks to him for his contribution.
6) I extend my thanks to Prof. Dr. Önder Bilgi for drawing my attention to this example and for sharing his comments on the subject.
Ikiztepe I (Alkim et alii 1988: Fig. 222, Pl. LVIII: 3). Some of these, also similar in shape, belong to the same period as the Bademağacı pin. The evaluation as whether the metal items found together with the MBA pottery at Bademağacı were locally produced, or were imported from elsewhere, is still premature. It is interesting to note that some of the Bademağacı pins indicate the existence of a significant level of relations with and influence from Central Anatolia. Some pottery forms, certain stampseal and pin shapes were obviously popular in the main centres of Central Anatolia during the Middle Bronze Age. They seem to have reached the Burdur-Antalya region in a short time, thus pointing out to the rapid development of the trade networks during this period in Central Anatolia towards our region which remained, in any case, mainly influenced by Mesopotamia.

Recently, the city of Parha, named on a bronze tablet found at Boğazköy, was suggested to be identified with Perge, while the Kastaraya river was identified with the Aksu river (Otten 1988: 272-273). The city of Parha, located in the region of Lukka near the western border of Tarhuntaşša (Dinçol et alii 2000: 2, 12) was therefore one of the southern neighbours of Bademağacı. No find that could be linked to a Hittite settlement has yet been uncovered at Bademağacı. However, some of the Bademağacı MBA pottery forms resemble material found in Assyrian Trade Colony Period settlements in the northern areas of Central Anatolia, especially at Boğazköy; moreover, metal objects similar to those from Bademağacı have been found at both Assyrian Trade Colony and Hittite settlements. These facts point out that relations were established between both regions as far back as the first centuries of the 2nd millennium BC.

The MBA settlement at Bademağacı belongs apparently to a period previous to the abandonment of the 'red cross bowl' tradition which disappeared after the first centuries of the 2nd millennium (Korfmann 1983). The settlement must have thus been at least partly contemporary with settlements V and IVc at Beycesultan, Bademağacı's north-western neighbour. The thickness of the accumulation layer where the Bademağacı MBA material was found shows that the duration of occupation was most probably long. Consequently, some chronological differences may occur between pieces belonging to this group of finds. From a geographical point of view, the location of Bademağacı on the northern slopes of the Taurus Mountains in the vicinity of the Çubuk Pass on the main route to the coast, must have given the place a strategic importance. 7

G. U.

BIBLIOGRAPHY


7) I thank Miss Angela Bell MA (Istanbul University) for translating this article into English.
Lamb, W., 1936 : Excavations at Thermi in Lesbos, Cambridge.
Müller, W., 1902 : Heinrich’s Trojanische Altertümer, Berlin.
Schmidt, H., 1902 : Heinrich Schliemann’s Sammlung Trojanischer Altertümer, Berlin.

Abbreviations
AJA American Journal of Archaeology
An. St. Anatolian Studies
Ist. Mitt. Istanbuler Mitteilungen
KST Kazı Sonuçları Toplantısı
TAD Türk Arkeoloji Dergisi
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Δ Wheelmade Buff Ware
● Wheelmade Red Slipped Buff Ware
■ Wheelmade Brownish Gray Slipped Buff Ware
♦ Coarse Ware

Tables 1-2
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Tables 3-4
POTTERY FINDS FROM THE MBA DEPOSITS AT BADEMAĞACI Höyük

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Fig. 2
Fig. 3
Fig. 5
Fig. 6
Fig. 7
Fig. 9