

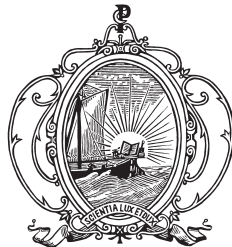
COLLOQUIA ANTIQUA

— 2 —

INSIGHTS INTO HITTITE HISTORY
AND ARCHAEOLOGY

Edited by

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HITTITE POTTERY: A SUMMARY

Ulf-Dietrich SCHOOP

Abstract

This chapter attempts to present a broad outline of the results that pottery research over the last decades has produced for the Hittite core area in northern Central Anatolia. A description of the ceramic wares is followed by a discussion of the main shapes, their function, and the rare occurrences of decoration. There is a short consideration of the role played by imports from outside the Hittite sphere. The paper concludes with some general observations on the development of Hittite pottery over time, its variation in space, and the formulation of open questions which can only be resolved by future research.

INTRODUCTION

Amongst people looking at Hittite pottery from the outside, be they interested laymen or historians (in the broader sense of the term) working outside the field of Hittite archaeology, one is often confronted with the notion that the Hittite pottery inventory is the product of an artful ceramics industry. Wherever the archaeologist digs a hole into a Hittite settlement, one is led to imagine, he is greeted by plentiful remains of beak-spouted jugs bearing shining red slips and vessels with elaborate relief decoration. Aiding this supposition are the displays in the showcases of archaeological museums and the colour plates of the exhibition catalogues. This notion is not far fetched. Why should the sophistication of Hittite culture, as we know it from the written sources and from other artefact classes, not be mirrored in the ceramic industry as well? The reality, as so often, looks different. The researcher of any Hittite pottery ensemble will find himself confronted with a rather dull assemblage obviously originating from a production process of almost industrial scale, without exhibiting much inspiration. Pottery objects displaying anything close to aesthetic value, although they do exist, are so rare that one cannot call them a general characteristic component of the Hittite pottery tradition.

In Hittite research itself pottery studies have played so far a less important role than in other fields of archaeology. In practice, interest in pottery is generally guided by its value as a powerful dating tool. In the case of the positioning of Hittite archaeological remains, however, there appeared to exist much better alternatives. Especially the existence of clay sealings giving the names of kings, queens or high officials and the mentioning of building activities or destructions in the textual record seemed to offer a much higher degree of chronological resolution. The problems inherent in such an approach became apparent only recently.¹ Before we touch upon some of the more problematic aspects in the interpretation of Hittite pottery assemblages, however, let us turn to a general characterisation of this artefact class. It is important to note in this respect that the term ‘Hittite pottery’ is understood here as encompassing the material originating from the core area of the Hittite empire, namely from the capital Boğazköy-Ḫattuša and other settlements in the northern part of Central Anatolia. Because of the difficulties of pottery dating, a simple tripartite system is employed here. For the sake of a rough orientation, ‘early’ may be equated with the 17th and the beginning of the 16th centuries, ‘middle’ with the 16th and 15th centuries, and ‘late’ with the 14th and 13th centuries BC.²

THE GENERAL CHARACTER OF HITTITE POTTERY

FABRIC TYPES

The predominant fabric type in any Hittite pottery assemblage is the so-called ‘drab ware’, an unslipped ware with completely oxidised biscuit and buff colouring. The surface is smoothed without much care. We find this fabric type represented in almost all shapes of the Hittite vessel repertoire excluding only cooking pots and large plates. The non-plastics generally consist of stone grit or sand of medium fraction size. Drab ware appears first with the application of the potter’s wheel at the beginning of the Karum period and disappears together with the Hittite ceramic tradition at the end of the Late Bronze Age.

¹ Further comments on this aspect may be found in Schoop 2003; Mielke 2006a, 13-23. See also the different contributions in Mielke *et al.* 2006; and – on a more general level – Zimansky 2005.

² This subdivision is not identical with the usual framework of the ‘Old Hittite’, ‘Middle Hittite’ and ‘Empire’ periods that has been developed on historical and philological grounds. A wholesale adoption of this latter system does not seem to be particularly suitable to describe the development of Hittite material culture. Yet the state of research does not allow the formulation of an authoritative archaeological terminology at this stage.

During the later stages of the Hittite sequence, there are signs of technical deterioration indicated by the appearance of grey surfaces and dark cores.³

Most ceramic studies discuss vessels bearing red or white slips as separate wares. The majority of these pieces is, however, better understood as 'drab ware with slip'. Exceptional is a restricted amount of vessels with white biscuit and non-plastics not otherwise found in Hittite pottery. These may or may not bear an additional white slip. Looking at a finished vessel of this kind it would have been hard to tell the difference from a white-slipped drab-ware piece. Obviously, a different choice of clay and – probably – a different firing method were involved in production here. It may well be that these vessels were not of local manufacture inside northern Central Anatolia. Both the red and white colour classes exhibit a remarkable variation in terms of quality. At the lower end of the range, we find dull, often thinly applied slips. At the opposite extreme are rich and homogeneously applied slips, sometimes burnished to a very high degree. In case of the red-coated examples, this fact led to the hypothesis that vessels treated this way were imitations of sheet metal copper prototypes.

Red and white-slipped vessels appear as early as the final Early Bronze Age in Central Anatolia and continue to be represented side by side through most of the 2nd millennium. There is, however, some degree of temporal variation contained in the relationship of both fabric types. The climax of red-coated vessels – in terms of both quality and quantity – is without doubt the Karum and early periods. White-coated pieces do not appear at this time but in exceedingly small numbers. As time progresses, this proportion is gradually reversed. At the end of the Hittite sequence, red-coated vessels may even have disappeared completely from the archaeological record. In contrast to the red-coated class that is only of medium to low standard during the second half of the Hittite period, the quality of white-coated vessels remains constant over the whole time span.

BOWLS

Several types of shallow bowls are attested throughout the 2nd millennium, although in different relative portions (see Fig. 1).⁴ The oldest of these is a hemispherical bowl with slightly inverted rim (type A). This type, being derived

³ In the pottery studies of the Upper City at Boğazköy this group has been separated from the remaining drab ware under the designation 'Töpferofenware' ('pottery kiln ware'), as it was found there associated with structures of that kind (A. Müller-Karpe 1988; 161-62; Parzinger and Sanz 1992, 68-70). The deterioration of drab ware in late contexts was also noted elsewhere, for example at Norşuntepe (Korbelt 1985, 126-28).

⁴ See Schoop 2006 for more detail on the quantitative aspects mentioned here.

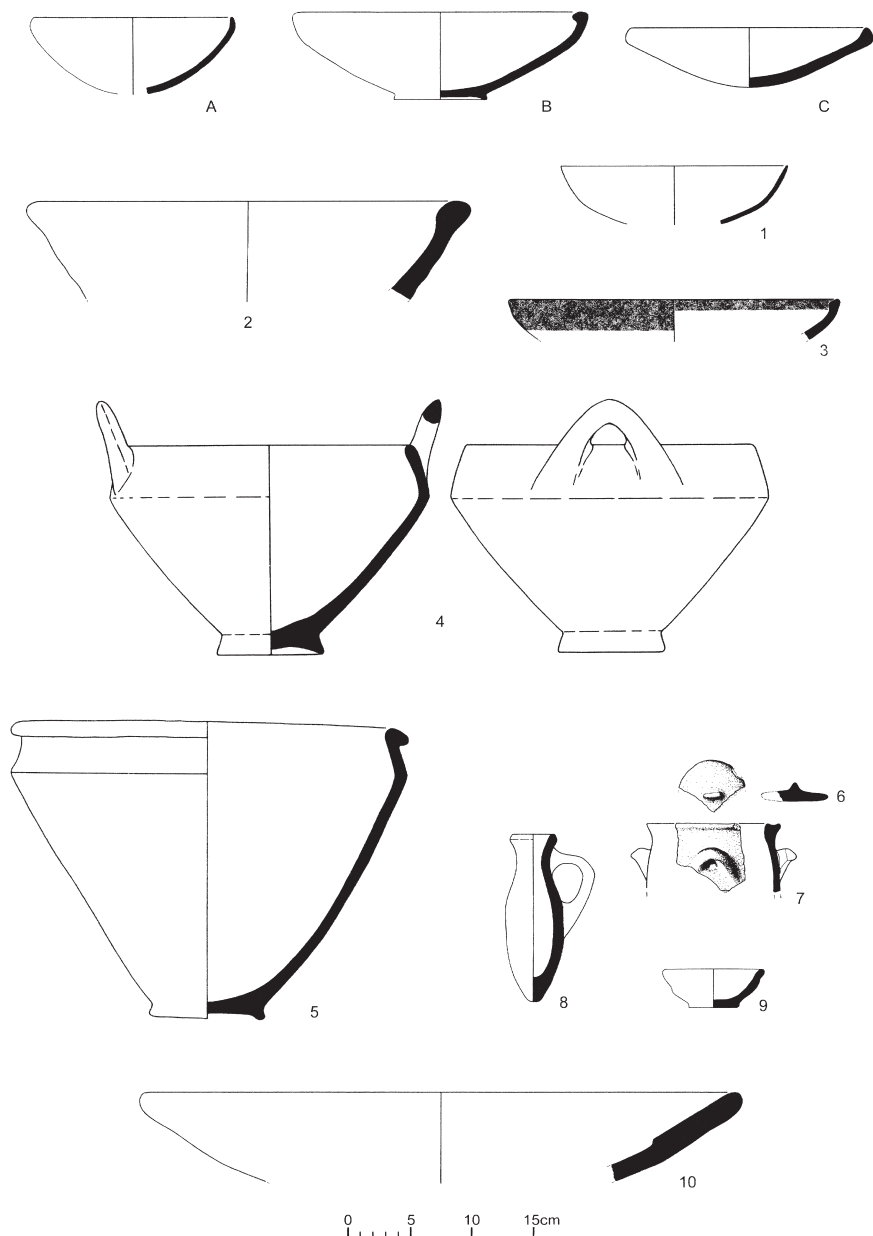


Fig. 1. Boğazköy-Ḫattuša: (A-C, 1-3) Flat bowls (A: after Fischer 1963, Taf. 90.783 [Unterstadt 3]; B: after Fischer 1963, Taf. 96.875 [Osmankayası stray]; C: valley west of Sarikale; 1: after Parzinger and Sanz 1992, Taf. 58.8 [Unterstadt 1a]; 2: Büyükkaya Northern Gate; 3: Büyükkaya Silo 5); (4-5) Deep bowls (4: after Fischer 1963, Tf. 104.948 [Büyükkale III]; 5: after Seidl 1975, 96, no. 9); (6-7) Small pots and lid (valley west of Sarikale); (8-9) 'Votive' vessels (after Fischer 1963, Tf. 119.1048, 1038 [Büyükkale III a]); (10) Baking plate (valley west of Sarikale).

from handmade Early Bronze Age bowl types, first appears at the beginning of the Karum period. The second type (B) is a bowl with a somewhat shallower profile. It shows a characteristic wedge-like strengthening on the interior of the rim. Bowls of this second type seem to emerge with the beginning of the Hittite sequence proper. The third type (C), finally, may be a development from the second. The rim strengthening is pointed rather than wedge-like, sometimes also termed 'anti-splash rim'. As it appears, likewise, at the beginning of the Hittite sequence, all three types occur side by side. More interesting is the point in time when each of the types reaches the climax of its distribution. For type A, this is the beginning, for type B the middle part, and for type C the later part of the sequence.

The majority of these bowls is always made from drab ware. Although sometimes white or red slips do occur, they have to be regarded as exceptions. With the beginning of the later part of the sequence, there appears a small sized variant of type A bowls with pointed rims and extremely thin walls (Fig. 1.1). These vessels, which deserve the designation 'eggshell ware', are fired to an extreme hardness. Eggshell bowls were obviously a kind of fine ware used during the late period when most of the earlier fine ceramic types had disappeared.

There is another group of deeper bowls with larger diameter and stronger wall thickness than those discussed above (Fig. 1.2). Judging from their wedge-like rims, they seem to be typologically related to the smaller bowl type B. The peak of their distribution equally falls into the middle part of the sequence. It is quite interesting to see that at Kuşaklı a storage room of the representative Building C was virtually crammed with bowls of this type stacked in piles.⁵

Somewhat similar is another type of a still deeper bowl with a pronounced carination and external rim strengthening (Fig. 1.5). It sometimes has two strong handles springing from the rim. This type has its quantitative climax in the middle part of the sequence, as well.⁶ It does not disappear afterwards in a literal sense but develops into a type of deep pot discussed below.

In the early part of the sequence, on the other hand, we see a range of deep bowls of a type inherited from the preceding Karum period (Fig. 1.4). They display a deep carination with a long inverted upper part that often carries a red slip. These bowls may be fitted with opposing horizontal handles which, rising high above the rim, are of triangular shape and angular in section. This type seems to disappear soon after the establishment of the Old Hittite kingdom.⁷

⁵ V. Müller-Karpe 1998, 112.

⁶ Figure on the relief-decorated Bitik vase (Özgüç 1957, pl. III) seems to carry such a bowl covered with a piece of skin or cloth.

⁷ These vessels are also called 'Ferzant bowls' after a Hittite cemetery in the Çorum district (Özgüç 1986).

On a general level, flat bowls show an organic development, with types rising and falling out of use through time in a more or less linear fashion. The conspicuous decrease of medium sized deep bowls in the Empire period, however, is a phenomenon that has yet to be explained.

PLATES

A typical component of Hittite pottery assemblages is the flat plate of very large diameter – reaching up to 80 cm (Fig. 1.10). Characteristics are thick walls and relatively broad thickened rims. As replication experiments show, the main body was handmade first while the rim was added in a second step.⁸ Often we see one or several string impressions running horizontally around the rim. These strings were attached in order to prevent the heavy vessel walls from sagging during the forming process. The fabric resembles more that of the



Fig. 2. Boğazköy-Ḫattuša: Portable oven on a baking plate from the Lower Plateau of Büyükkaya (Boğazköy Expedition, photographic archive).

⁸ Mielke 2006a, 137-40 with fig. 130.

cooking pots then that of the remaining vessel types. The clay is tempered with a high amount of coarsely crushed limestone. Firing must have been carried out without atmospheric control, as the cores are generally not oxidised. Most probably, it took place in pits or even in open fires. These features are indicative of vessels meant to resist large temperature fluctuations as they typically occur when being exposed to open fire or glowing charcoal.⁹ Indeed, the surfaces often show traces of secondary burning. Therefore, it may be assumed that the plates served as devices for baking bread, most probably of the flat pancake-like varieties known in modern Turkey as *yufka* or *pide*. This interpretation is strengthened by the discovery of such a plate at Kinet Höyük that remained inside the oven when abandoned.¹⁰ There were other uses of these plates, too, as illustrated by a find from Boğazköy-Büyükkaya, where one large plate served as a device for carrying a small domed *pisé* oven (Fig. 2).¹¹ These plates appear only after the Karum period. They may be a Hittite development of the flat-based baking trays that served the purpose in the early 2nd and 3rd millennia.¹² At the very end of the Hittite sequence, they tend to become smaller and to be made and fired like ordinary drab-ware vessels.

SMALL VESSELS

There is a range of small vessels with S-shaped profiles and slightly pointed bottoms or ring bases (Fig. 1.7). According to their proportions, they may appear as cups, beakers, small pots or flasks, often with one or two vertical handles at the rim or the shoulder. Their quantitative climax seems to have been in the middle period. During that time, they sometimes carry vertically perforated horseshoe lugs for suspension and narrow ledges at the interior of the rim. The latter served as rests for the small lids which appear in this period (Figs. 1.6; 3).

Quite distinctive is the type group usually known as ‘votive vessels’. They mostly appear as bowls with a conical profile, to a lesser degree also as one-handled juglets or flat bowls (Fig. 1.8-9). They are always of careless manufacture which may result in slightly asymmetrical shape or irregular rims. The conical bowls’ bottoms are simply wire-cut after shaping and not worked over again so that the finished vessels often have no secure footing. These miniature vessels have received their name from the fact that they are often found in

⁹ Rice 1987, 229-30, 366-68.

¹⁰ Gates 2006, 306 n. 19.

¹¹ Seeher 1995, 610 Abb. 12-13, 612.

¹² Mielke 2006a, 141-43.



Fig. 3. Boğazköy-Ḫattuša: Selection of vases from the valley west of Sarikale (Boğazköy Expedition, photographic archive).

ritual contexts. Large numbers of ‘votive bowls’ appeared, for example in the ‘sacred ponds’ at Büyükkale and in the Upper City, as well as in different temple buildings. This seems to indicate that they have been manufactured especially for sacrifice at these locations.¹³ This view ignores the fact that these vessels also appear regularly in common settlement contexts. A ritual use in the wider sense is not excluded, however. In Hittite art, there are often representations of a seated male person obviously drinking from a small bowl of this type, which he carefully holds with the tips of his fingers.¹⁴ If these bowls served in social or ritual drinking of some – probably intoxicating – liquid,¹⁵ this custom could easily have been a component of the ceremonies conducted

¹³ See Neve 1971, especially 12, 25-27.

¹⁴ This theme appears repeatedly on Hittite relief vases, for example on the İnandık vase (Özgüç 1988, fig. 64.6, 31).

¹⁵ Most likely, this fluid was alcohol-based, maybe wine. Ritualised consumption of alcohol had a long history in Anatolia and the Near East even before the Late Bronze Age (Gorny 1996; Joffe 1998; Weisgerber 2005; Ünal 2005). But note that there are indications for other drugs as well being used and traded in the eastern Mediterranean at this time, for example opium and – possibly – cannabis (von Cranach 1982; Merrillees 1989; Zias 1995; Koschel 1996).

at the official cult places.¹⁶ It appears that these sometimes included the disposal of the bowls after drinking. The votive bowls remind of similar vessels from the final Early Bronze Age, which were the only wheel-thrown vessels at the time.¹⁷ Whether there was continuity of this practice remains insecure, however, as ‘votive bowls’ seem to be missing in the earlier part of the Hittite sequence.

POTS FOR COOKING AND FOR OTHER PURPOSES

As may be expected, cooking pots are a regular component of Hittite pottery assemblages (Fig. 4.5). They are very easy to distinguish as their manufacture differs decidedly from that of most other vessels and their exterior practically always shows traces of secondary burning. Like the large plates, they were made of clay with a high content of coarse stone grit. They were fired under neutral conditions, resulting in patchy, dark brown surface colours. Unlike the plates, cooking pots are always wheel-thrown. They show a globular shape with incurving hole-mouth rim. Two stout vertical handles on the shoulder served the manipulation of the frequently hot vessels. Being the most vulnerable part, their rim is always strengthened by means of horizontal thickening. During the Karum period, this thickening mostly appears at the interior of the rim, betraying the inheritance of this feature from the handmade cooking pots of the Early Bronze Age. In Hittite times, this ‘archaic’ trait is progressively replaced by external rim thickening. While the latter is narrow and formless at first, it becomes longer and sharply delimited during the later stages of the sequence.

Other types of pots are equally well represented in Hittite pottery assemblages. In the Karum period and at the beginning of the Hittite sequence, they show large variation in their rim forms, which may be straight, everted or constricted. In the middle part of the sequence, they have given way to a single type with funnel-shaped neck and horizontally everted rim (Fig. 4.1). These pots – displaying an impressive size range – are likely to have served as multipurpose vessels. In pictorial representations, they regularly appear as receptacles for beer consumed through filter-tipped straws by one or more persons.¹⁸ Another pot type increasingly replaces this older one during the second half of the Hittite sequence (Fig. 4.4). The new type shows a very deep carination with

¹⁶ Perhaps in context with the frequently mentioned ritual ‘drinking the god’. On the important role the drinking ceremony played in Hittite ritual, see Haas 1994, 669-73.

¹⁷ Orthmann 1963, 78.

¹⁸ Weisgerber 2005; A. Müller-Karpe 1988, 83; 2002, 261.

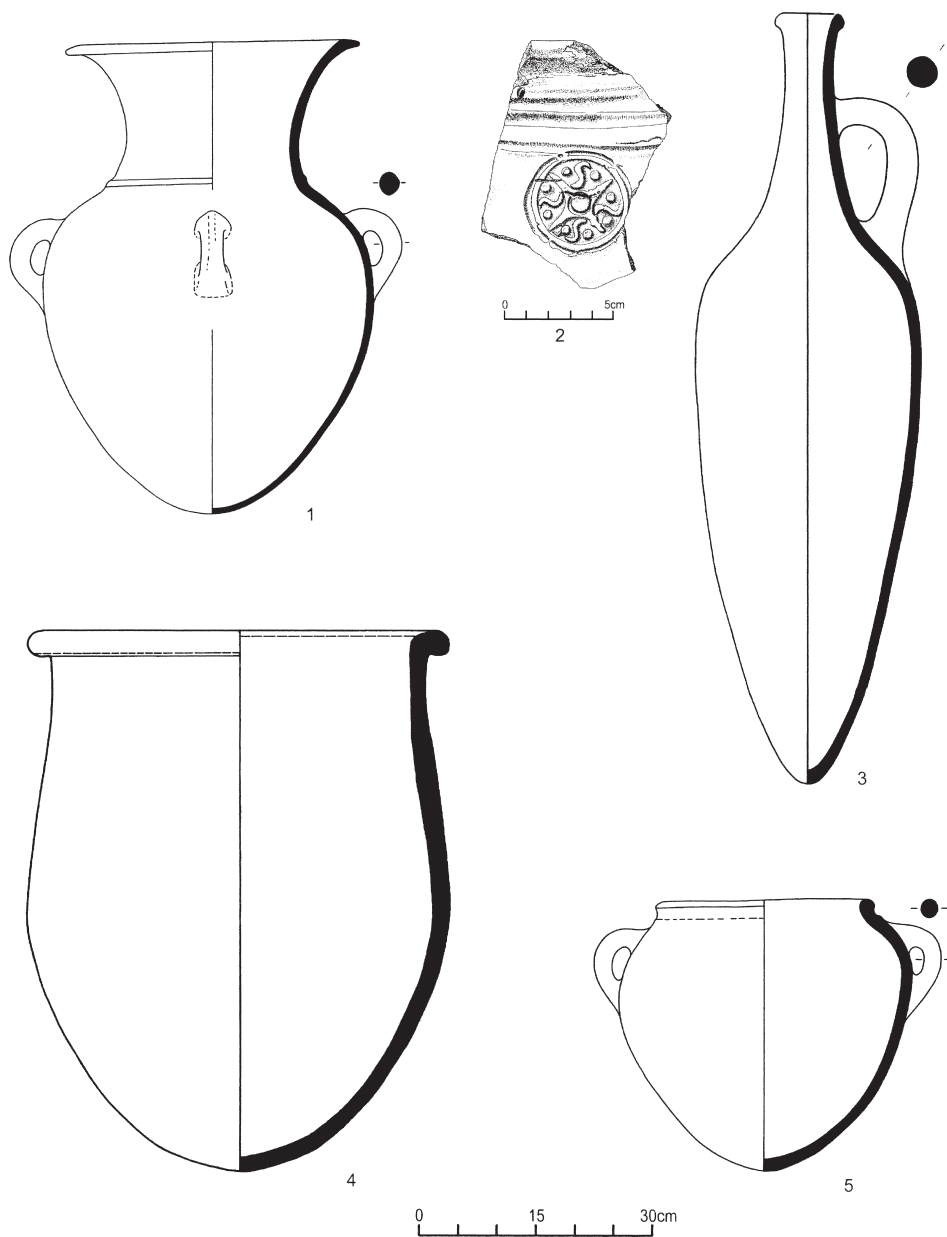


Fig. 4. Boğazköy-Ḫattuša: (1, 4) Multipurpose pots (1: after Seidl 1975, 103, no. 43; 4: after Parzinger and Sanz 1992, Tf. 17.1 [Oberstadt Temple 10]); (2) *Signe royale* (after Seidl 1972, Abb. 2 A15a [Unterstadt 2]); (3) Storage jar (valley west of Sarikale); (5) Cooking pot (after Seidl 1975, 105, no. 51).

the long upper part rising vertically above, resulting in a deep vessel with a very wide opening. This pot type seems – in a rather unusual manner – to emerge out of a functionally different vessel shape, the carinated bowls mentioned above (Fig. 1.5).¹⁹ The association with the production and consumption of beer, inherited from the older pot type, remains. This is clearly shown by the discovery of a brewery at Kuşaklı with a very distinctive assortment of complete vessels *in situ*.²⁰ As mentioned above, pots could fulfil a broad range of duties. A rather special (and necessarily final) use is their frequent appearance as urns or ‘coffins’ in Hittite graves.²¹

JUGS AND JARS

Beak-spouted jugs are often regarded as the Hittite vessel type *par excellence* (Fig. 5.1). Indeed, a range of the most splendid examples originating from different archaeological sites is housed in museums around the globe. Most of these pieces date to the Karum and early periods. In general, the jugs possess a globular shoulder with a sharp carination below. The long bottom part tapers in a concave way towards a disc-shaped basis. A single handle springs from the vessel shoulder and merges – often with a marked bend – into the back of the rim. The spout steeply rises out of the slender neck and terminates in a pronounced beak. Especially the older jugs often show two wedge-like applications on the front. It is likely that these represent a woman’s breasts and that the Hittites perceived the vessels as anthropomorphic and female in gender. The older examples often bear highly polished red slips. Together with the angular shaping, this led to their designation as ‘toreutic’, as one assumes a strong formal affinity to contemporary metal vessels.²² Although beak-spouted jugs sharply decrease in frequency during the Empire period, they do not disappear completely. Even if the point is hard to prove at this stage, it seems as if this vessel type was not a component of domestic assemblages. This agrees with their frequent appearance on pictorial representations where they are invariably shown as libation vessels, thus belonging to the world of ritual. Somewhat related are similarly shaped jugs with a narrow tubular spout springing from the shoulder (Fig. 5.2). The spout again ends in a beak. This type belongs to the early period.

¹⁹ The high carination of the prototype is sometimes still indicated by a horizontal clay band or a slight bend in the profile, i.e. a typological rudiment that has lost its original purpose.

²⁰ V. Müller-Karpe 2000; 2001a; 2005. The identification of the room as ‘brewery’ was made possible by the botanical finds that unambiguously indicate beer production (Pasternak 2000).

²¹ An example for the funeral use of pottery in cremations is the cemetery at Osmankayası (Bittel 1958), in pot burials the cemetery at Yanarlar (Emre 1978).

²² Fischer 1963, 36-41.



Fig. 5. Boğazköy-Ḫattuša: (1) Beak-spouted jug (after Neve 1984, 67, Abb. 4.1 [Unterstadt 3c]); (2) Tubular-spouted jug (after Neve 1984, 69, Abb. 6.14 [Unterstadt 3c]); (3) Lentoid flask (after Fischer 1963, Taf. 49.488 [Unterstadt 2]).

A rather special vessel type is the lentoid flask (also known as ‘pilgrim flask’). These flasks always show a narrow neck and handles attached to the shoulder (Fig. 5.3). Their complex manufacture required a high degree of sophistication on the potter’s side.²³ In contrast to most other types in the Hittite pottery inventory, lentoid flasks never appear in plain drab ware. Their surface is always sealed by a highly burnished slip that may be of red or (in most cases) white colour. The reason for this is that they served as containers for fluid or semi-fluid contents. As pictorial representations illustrate, they seem to have been used as travelling accessory, a kind of canteen containing the traveller’s food ration. As in later times, this may have often been a yoghurt-based fresh cheese of high protein and fat content.²⁴ Lentoid flasks first appear during the Karum period. They are represented throughout the Hittite sequence.

Large jars with a strong handle stretching from the narrow neck down to the vessel shoulder seem to have been among the favourite storage facilities in Hittite households (Fig. 4.3). They mostly belong to the plain drab-ware class. Again, the rim part is thickened to prevent chipping and breaking during use. As with the cooking pots, the initially formless thickening develops into a long wedge-shaped rim during time. Their bases show a rounded shape in the beginning but become increasingly pointed during the late period. The strong tapering was facilitated by squeezing the bottom part together after initial shaping. As the potter could not smooth out the interior at this stage anymore, the process left typical twisted clay pillows inside the bottom part. Obviously, these jars could not stand independently. Yet, they were not dug in, either, as this would have prevented their owner from emptying the contents. We generally find them leaning in the corners of storage rooms or cellars of Hittite houses. As the surfaces are not normally sealed, they probably contained water or water-based fluids like wine, but also dry agrarian products that allowed pouring like grain or pulses. Private storage of this kind demonstrates short-range planning at best, a strong indication for the important role of the state in terms of supply, bulk storage and long-range planning on behalf of the household.²⁵

²³ On the two documented *chaînes d’opératoires* in the manufacture of these flasks, see A. Müller-Karpe 1988, 27-29.

²⁴ Sauter *et al.* (2001) were able to identify physical remains of this kind inside a lentoid flask from Troy VI.

²⁵ See, in this respect, the huge state-controlled grain silos of which a great number has been identified in the capital and increasingly at other Hittite centres as well (Seeher 2000). The above observations apply to urban settlements only, of course. About the situation in the countryside, we are not informed.

SPINDLE BOTTLES AND LIBATION ARMS

Two rather special vessel shapes have to be considered as imports from outside the immediate Hittite culture area. Both are made from a particular fabric type, the so-called Red Lustrous Wheel-Made Ware, which is discussed below. The first type is the spindle bottle, a descriptive term that recalls the elongated shape of this vessel (Fig. 6.3). A tapering neck is attached to the shoulder and ends in a thin disc-shaped rim. A comparatively strong handle springs from the shoulder. The vessel stands on a sturdy hollow base. Although there are still difficulties in tracing the prototypes of the vessel, its place of origin seems to have been the island of Cyprus where spindle bottles manufactured from other ware classes also occur.²⁶ Their function in Hittite contexts is still unclear. An *in situ* find from Kuşaklı, where a spindle bottle was found lying inside a bathtub, seems to support the older suggestion that they served as containers for scented oils or perfumes, maybe also imported from the south.²⁷ The delicate shape of these bottles makes it somewhat questionable, however, whether they were suitable transport containers.²⁸

The second type is the libation arm or, more cautiously, the arm-shaped vessel (Fig. 6.4). Its body consists of a long tapering tube with a ring base at the broader end. Attached to the opposite side is a carefully sculptured hand holding a small hemispherical bowl. By means of the bowl, the vessel body could be filled or emptied. An interpretation as incense burners – as known from Egypt – is unlikely since the bowls never show traces of secondary burning. A function as a libation vessel seems more probable, although there is no positive evidence yet to support this. In contrast to the beak-spouted jug, arm-shaped vessels are never depicted in this function in art. Unlike spindle bottles, arm-shaped vessels do not normally appear in domestic contexts. This fact at least strengthens the supposition that they were used in the context of ritual and cult.²⁹

STORAGE VESSELS

The production of large storage containers, too heavy to be easily moved around like ordinary vessels, goes back into the 3rd millennium BC in Central

²⁶ Eriksson 1993, 25.

²⁷ A. Müller-Karpe 1995, 19-20; Eriksson 1993, 143-44.

²⁸ See Seeher's remarks on this topic: Seeher 2002, 66; and in Kozal 2003, 73.

²⁹ See the recent discovery of what seems to be a temple's pottery refuse, dumped into a dysfunctional water reservoir in the Upper City at Boğazköy. The deposit contained an impressive number of arm-shaped vessels and spindle bottles (Seeher 2001b, 341-62; 2002, 59-70). For references on the different views proposed for the function and possible Hittite designation of the arm-shaped vessel, see Frantz-Szabó 1987; Kepinski 1987; A. Müller-Karpe 1988, 145.

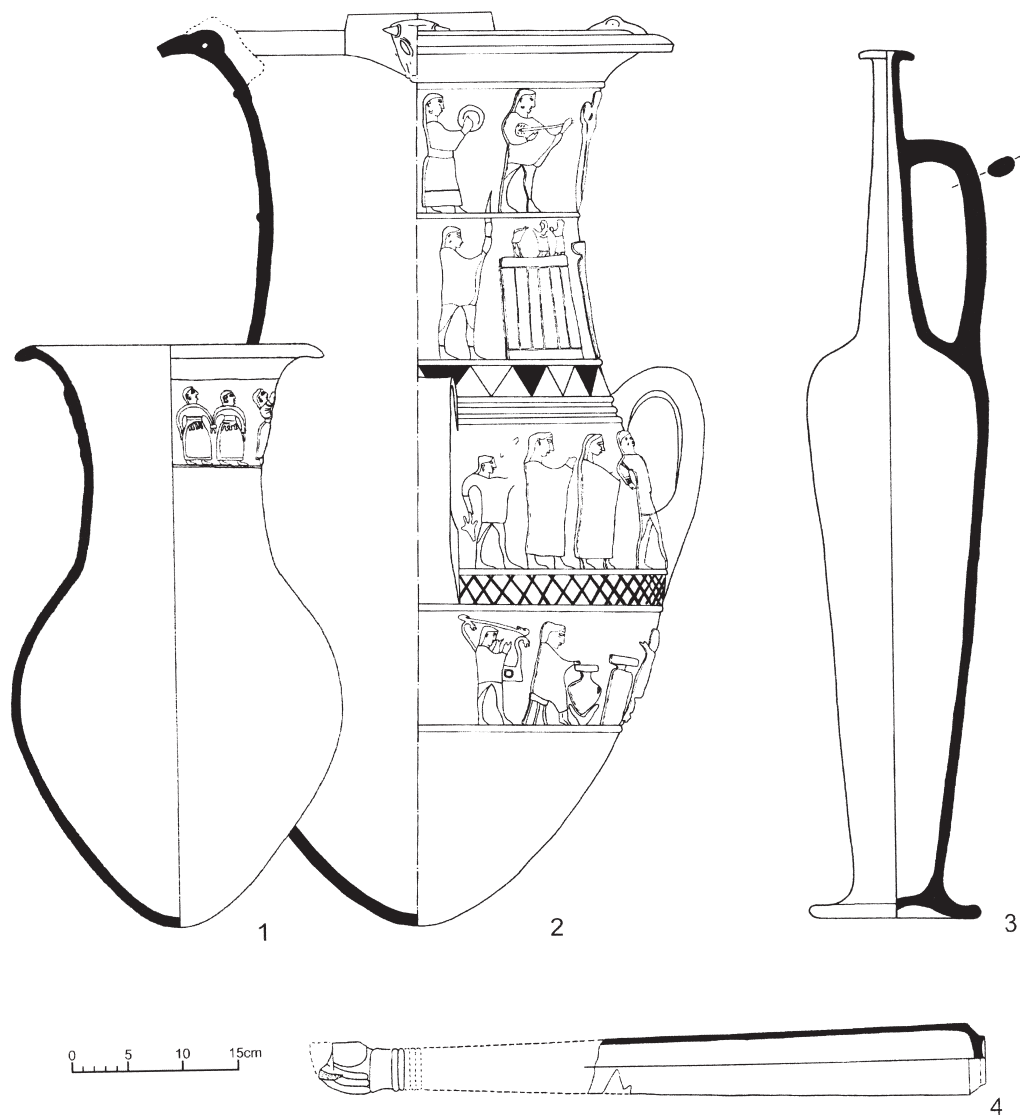


Fig. 6. Hüseyindede Tepesi (1) and İnandıktepe (2): Relief-decorated vessels (after Mielke 2006a, Abb. 141). Boğazköy-Ḫattuša: (3) Spindle bottle (after Parzinger and Sanz 1992, Taf. 21.5 [Oberstadt Temple 15]); (4) Arm-shaped vessel (after Fischer 1963, Taf. 122.1124 [Unterstadt 1]).

Anatolia. In contrast to their forerunners, which are made from coarse clay with heavy tempering, the pithoi of the 2nd millennium are evenly fired and their fabric does not differ from that of smaller vessels. The manufacture of clay containers of this size required a high degree of technical sophistication.³⁰

One of the oldest types is a group of pithoi with massive beak-shaped spouts (*Pithoschnabelkannen*). They are common during the Karum period but their use does not seem to have been continued far into the Hittite period proper. Because these vessels had to be tipped in order to let their content be poured out of the spout, it is not likely that they have been dug in. As they regularly appear in household contexts, they are probably functionally related to the large jars described above, which are younger.

Besides beak-spouted pithoi there appear still larger storage vessels that were not supposed to be moved again once installed in their place. They reach heights up to 2 m and may have filling volumes approaching 2000 litres. Pithoi of this type are not normally encountered in domestic contexts. Instead, we often find them arranged in long rows inside official storage buildings. Their lower part was sunk into the floor, so that they could easily be filled and emptied through their large orifices. The massive everted rims, often flat on the upper side, made it possible to fasten lids of some kind. An early example of storage structures of this kind would be the Karum period 'pithos building in M/18', and a late one, the magazines of Temple 1, both in Boğazköy.³¹ They were intended for middle-range storage (as opposed to the large silos mentioned above that could remain unopened for years or even decades). While most of the pithoi will have contained dried foodstuffs, some of them were meant for the storage of different kinds of oil whose importance and availability in Hittite culture is well documented.³² It was probably stock of the latter kind, which aided the fire in consuming the palace at Maşat Höyük after an enemy had put it to the torch.³³ One can still feel the rage of this infernal conflagration when looking at the vitrified wall stumps at Maşat.³⁴ After the disintegration of the Hittite state, pithoi disappear from the archaeological record for some time. They were replaced by private storage pits dug into the ground as they had been in use before the Hittites.

³⁰ See Winter's observations on modern pithos manufacture in Crete (Winter 1972).

³¹ Schirmer 1969, 32-36 (pithos building); Neve 1969, 15 Abb. 3 (Temple 1).

³² Hoffner 1995.

³³ Özgüç 1978. See especially the colour pls. A-D. Cf. Özgüç 1982, 74.

³⁴ See, in contrast, the comparatively well preserved remains of Temple 1 at Boğazköy, which seems to have been empty when set alight (Seeher 2001a, 625-26).

POTTERY DECORATION

Hittite pottery is essentially undecorated and monochrome. The painting tradition that characterised the pottery repertoires of the final Early Bronze Age and the beginning of the Karum period in Central Anatolia (the so-called ‘Intermediate’ and ‘Cappadocian’ pottery groups) came to an end before the onset of the Hittite period. There are, however, some exceptions from this rule and it is to them that we will turn our attention now.

Relief decoration: Relief-decorated vessels belong to the most spectacular products of the Hittite ceramic industry. Splendid examples are the vases from İnandıktepe and Bitik, augmented now by two new discoveries from Hüseyindede Tepesi (Fig. 6.1-2).³⁵ The vessels bearing this kind of decoration are mostly large pots with flaring necks, like the example illustrated in Fig. 4.1. The relief parts were sculptured separately before being applied to the vessel’s surface. Garments are generally given in white, exposed human skin in dark brown colour. Although there are forerunners of the relief technique in the final Early Bronze Age and in the Karum period, multiple narrative friezes first appear in the early period. Represented are always topics from the religious sphere. Unlike the rock carvings at Yazılıkaya, however, we mostly see humans and not supernatural beings depicted on the relief vases. They are arranged in ritual processions with priests and priestesses, gift bringers, musicians, dancers and acrobats participating. Also depicted are transport vehicles, altars and shrines. Animals may be shown as objects of sacrifice or part of games, such as the bull-leaping scene on one of the Hüseyindede vases. Gods may be present in form of their cult images as on the İnandık vase. There are also scenes of a more private nature, usually a male figure opening the veil covering a woman’s head. On the İnandık vase there is even a coitus scene represented. According to T. Özgüç, we see here the *hieros gamos*, the holy marriage of the supreme gods of the Hittite pantheon, impersonated in the depicted ritual by the king and the queen.³⁶ Although this may well be the case, it is rather astonishing not to see this central part of the whole narrative iconographically more pronounced.

Somewhat different are the rare representations of gods. Only small fragments of such images have survived. Because of this, we do not know into which kind of composition they were integrated. Most fragments show a chariot

³⁵ See, Özgüç 1988, 84-106 (İnandıktepe); 1957 (Bitik); Sipahi 2000; 2001 (Hüseyindede). The most exhaustive treatment of this artefact class may be found in Boehmer 1983. See Mielke 2006b for a revised dating of the relevant Level IV at İnandıktepe.

³⁶ Özgüç 2002, 251.

drawn by the sacred bulls Šeri and Hurri. Their master, the Storm God Teššub, is just mounting the vehicle.³⁷ A singular fragment from Boğazköy additionally shows sphinxes associated with such a representation.³⁸

Relief-decorated vessels certainly served a purpose outside the ordinary. In several instances, we see plastic bullheads attached to the inside of the rim.³⁹ A pipe integrated into the vessel's wall connects to the heads that serve as outlets. A fluid poured into the pipe would spurt from the bulls' muzzles into the interior of the vessel. In other words, these vessels were libation instruments of some kind.

The artistic climax of relief-decorated vessels certainly belongs to the earlier part of the Hittite era. The further development of this artefact class is still hard to trace due to the scarcity of finds from well-stratified contexts. According to R.M. Boehmer, the rigid composition in superimposed friezes is abandoned in the time following.⁴⁰ The depiction of cultic scenes becomes increasingly replaced by animal representations, mostly bulls and horses. At the end of the Hittite sequence, the reliefs have lost their polychromy. The latest depictions are strongly stylised.⁴¹ They resemble the crude animal-head attachments occurring on vessel handles at this time.⁴²

Another kind of relief decoration is represented by a small group of bowls whose interior is densely covered by hemispheres the size of a pinhead. In most cases, there are traces showing a manipulation of the outer surface. According to R.C. Henrickson, the potters achieved the effect by forcing clay pegs through the outer face into the interior.⁴³

Painting: Painting is a decoration technique that is very rarely found on Hittite vessels from Central Anatolia. In most cases, red or brown paint has been applied in careless strokes of a broad brush on a white slip, often itself of crumbly consistency. The motifs are generally simple like lattice designs, triangle rows or zigzag lines. More complex designs, as exemplified on a large pot from İnandiktepe,⁴⁴ are extremely rare. We may see here influences coming from south-eastern Anatolia where Hittite-type pottery with painted designs

³⁷ Boehmer 1983, 40-42.

³⁸ Seeher 2001b, 352-53; 2002, 65; 2007.

³⁹ For example on the vessel from İnandiktepe (Özgüç 1988, fig. 85, pl. 41). A large number of fragments have been recovered at Boğazköy. They are treated by Boehmer (1983, 47-52) under the heading *Vexiergefäße*.

⁴⁰ Boehmer 1983, 21.

⁴¹ Boehmer 1983, Taf. XLIII.

⁴² Parzinger and Sanz 1992, 62-63.

⁴³ Henrickson 1995, 85-86. I must admit that I find it very hard to see any practical sense in a technique as strange as this.

⁴⁴ Özgüç 1988, 83, 136, figs. 25-26, pls. 35, 84.4.

seems to be more common.⁴⁵ Most of the larger objects belonging to this class date to the early period. This does not necessarily exclude a possible continuation of the technique into later times.⁴⁶

Another region within the Hittite orbit that displays a painting tradition is Cilicia. Here, however, we are dealing with a late development that belongs to the very end of the Late Bronze Age. This phenomenon has been related to the political detachment of Cilicia from the empire's weakening centre at this time and its concomitant cultural reorientation.⁴⁷ In this case, we would see here an essentially non-Hittite feature.

Incision and similar techniques: Incision and related techniques are equally rare. Most of the motifs are of a very simple nature. There are horizontal rows of triangles, which may be cut out or incised with stab filling. Apart from these, we sometimes find circular impressions applied by the aid of hollow tubes.⁴⁸ Painting, incision and impression were also used to fill the relief figures' costumes with 'textile' decoration.⁴⁹ They serve here as an extension and complementation of the master technique. A remarkable find without parallels yet is an incised bowl from the Lower City of Boğazköy whose interior shows the depiction of a warrior with possible Aegean affinities.⁵⁰

Stamp decoration: Most prominent amongst the stamp impressions on Hittite pottery is the so-called *signe royal* (Fig. 4.2). The stamp left a round pictogram in relief with a diameter of 4-6 cm. A raised circle encloses a four-beamed star symbol with a round button in its centre. Between the pointed beams, we find S-shaped flames detached from the centre.⁵¹ The spaces in between may be filled by small spheres. The symbol figures prominently on the shoulders of large red-coated pots or jars. The impression was left unslipped and contrasts strongly with the darker background. The sign seems to be a sun symbol.⁵² Its function on the vessels remains unknown,

⁴⁵ Konyar 2002; 2006.

⁴⁶ An important point to note here is that a group of 'handmade' painted pottery from Boğazköy-Büyükkale (Fischer 1963, 34) and from late contexts of the Upper City (Parzinger 1995) has been found not to be Hittite but Early Iron Age in date (Genz 2003).

⁴⁷ Ünlü 2005, 154-55.

⁴⁸ Fischer 1963, 75, Taf. 127, Taf. 128.1195, 1177.

⁴⁹ For example, on the İnanlık vase, see Özgüç 1988, pl. 55.2 (painting), pl. 81 (incision), pl. 80.2 (impression).

⁵⁰ Bittel 1976.

⁵¹ The most comprehensive discussion of stamp marks on Hittite pottery is Seidl 1972. See the same work for the many variations in which the *signe royal* may appear.

⁵² Beran 1965; cf. Beran 1967, 49 n. 7.

however.⁵³ It first appears during the later Karum period but apparently has forerunners going back into the 3rd millennium.⁵⁴ It probably disappears before the onset of the Empire period. Besides the *signe royal*, there are other impressions showing cross, flower and animal motifs. Oval impressions with different 'twig' motifs, hidden under the lower side of jar handles, may refer to the vessels' original contents. In an identical position, we sometimes see finger impressions or multiple notches on cooking pots, which have been tentatively identified as potters' marks.⁵⁵

Decorative slips: Partial slips that cover only the upper part of a vessel's surface are a regular feature in the Hittite ceramic repertoire. The lower limit of the slip is normally situated where the vessel profile displays a pronounced change in direction. The trait is inherited from the Karum period when vessels decorated this way are quite common. It is still pronounced in the early period. The slip is invariably of red colour. White slips usually cover the complete vessel surface. Partial slips occur mostly on deep bowls with sharp carinations, themselves a characteristic of this time. They may also be found on smaller closed vessels. Much less they are encountered on large vessels like beak-spouted pithoi. In the middle of the Hittite sequence, most of the shapes associated with partial slips strongly decrease in frequency. The technique itself appears much less often than before. At the same time, there is a reduction of the vessel types to which it has been applied. In contrast to earlier times, the slip now exclusively covers the strengthened rims of flat (uncarinated) bowls (Fig. 1.3). Although partial slips linger on in the time following, it is still unclear whether they reach the final stage of the Hittite sequence.

A special case is a group of vessels that bear a coat of golden colour. If one examines such pieces under the microscope, it becomes clear that the potter accomplished this effect by the application of a thin wash containing a high amount of minute mica particles in suspension. It has, therefore, received the name 'Gold Ware' in the literature.⁵⁶ Apart from a few cases in which the gold wash has been applied over a white coating, it generally appears directly on the untreated buff surfaces of the vessels. As it rubs off quite easily, it is sometimes hard to recognise. This means on the other hand that the metallic

⁵³ A proposal has been their interpretation as marks applied by the royal administration (hence the name), which is unlikely. The alternative view, explaining them as markers for cult vessels (Seidl 1972, 69), equally has no strong foundation.

⁵⁴ Seidl 1972, 67.

⁵⁵ On 'twigs', finger impressions and notches, see Seidl 1972, 73-76.

⁵⁶ Bittel 1937, 37. For an overview of this ware, see Mielke 2006a, 42-44. It would appear to be more exact to change this designation into 'Goldmica Ware' (*Goldglimmerware*).

appearance of the vessels was much more pronounced at the time they were in use than it is now. Vessels with mica wash are rare. Although there are exceptions, most of them are small vessels, often bowls with shapes differing somewhat from the rest of the assemblage. Together with the fact that micaceous clays are missing inside the Kızıllırmak bend, it becomes likely that either the raw material for the coating or – more likely – the vessels themselves were imported from elsewhere. The area of origin is not known but it is tempting to see connections with south-western Anatolia where pottery with mica wash seems to be quite common.⁵⁷ Gold-mica vessels were obviously a type of fine ware. There has certainly been an intended association with vessels made from sheet metal. We should not, however, underestimate the intelligence of the ancients and consider the vessels pure imitations, in use maybe by the second rate of the Hittite *beau monde*. Nobody would have been misled about their true nature and they most likely had a value by themselves. Although we do not yet know very much about this pottery group, its use seems essentially to be a phenomenon of the first half of the Hittite sequence.

Writing on pottery: The Hittites did not usually write on pottery. Exceptions are two hieroglyphic signs, which sometimes appear – separately – on the outer faces of bowls or pots. One of these, a triangle with an internal cross, is the sign for ‘king’. The other one, a sign resembling an arrow, has the phonetic value ‘zi’. A. Müller-Karpe quite plausibly reads the latter as ‘ziti-’ for ‘man’. He draws a connection with the provisions which had to be supplied for certain ceremonies by the king on the one hand and by ‘the men of the city’ or ‘the men of the country’ on the other. The labelling of the vessels, which presumably were filled with the supplies in demand, would have made it easy to check whether each side had fulfilled its duty.⁵⁸ Apart from such small vessels, there sometimes appear numerical or hieroglyphic signs on pithos rims. They probably gave information on the capacity and supposed contents of these storage containers.⁵⁹

IMPORTS

Imported pottery from outside the Hittite realm is in evidence only in restricted numbers at the Hittite centres excavated so far. The greatest part consists of a very distinctive kind of fabric, known as ‘Red Lustrous Wheel-Made Ware’

⁵⁷ Mellaart and Murray 1995, 1, 21, 100-08.

⁵⁸ A. Müller-Karpe 1998, 106-07; 2002, 261. For a different view, see Gates 2001.

⁵⁹ See, for example, the signs on pithoi from the magazines of Temple 1 at Boğazköy (Bittel 1937, 53-54 and Taf. 38; Neve 1969, 14-16 and Beilage 5).

(RLWm).⁶⁰ The characteristic feature of this fabric is a compact, bright orange body of well-levigated clay, which does not contain any visually recognisable temper. Vessels made from RLWm had a wide distribution in the eastern Mediterranean during the Late Bronze Age, occurring in Cilicia, Cyprus, Syria, the Levantine coast, down to Egypt and Nubia in the south.⁶¹ They appear in a variety of shapes, including bowls of several types, jugs and jars, lentoid flasks, libation arms and spindle bottles.⁶² The distinct appearance and the composition of the clay clearly point to a common, specific place of origin. Although the actual production centres have not been found yet, mineralogical studies narrowed the area of question down to the south Anatolian coast and northern Cyprus.⁶³ Central Anatolia was reached by only a fraction of the RLWm shape repertoire. With a few exceptions, it was limited to spindle bottles and libation arms as discussed above (Fig. 6.3-4). It has long been held that finds of RLWm do not appear in the Hittite lands before the 14th century, about a century later than in its remaining distribution area.⁶⁴ This view has now to be changed. New researches at Kuşaklı and Boğazköy conclusively show that the import of RLWm into Central Anatolia sets in at the same time as elsewhere, i.e. toward the beginning of the 15th century. *Bulk import* of this ware, however, seems indeed to be a feature of the 14th and 13th centuries. In fact, Boğazköy is the place with the highest number of finds from any single location.⁶⁵ The special distribution pattern of this ware still awaits a satisfying explanation. It seems to be clear, however, that it was imported for its own value and not or not only because of the vessels' possible contents.

Mycenaean painted pottery, another ceramic class with a wide distribution in the eastern Mediterranean during the Late Bronze Age, did not reach Central Anatolia but in exceedingly small numbers. For a long time a group of flasks and stirrup jars from Maşat Höyük far to the north was the most substantial indicator altogether of such imports.⁶⁶ There is a thin scatter of isolated finds

⁶⁰ In the older literature, we also find the designation 'Syrian Ware' or *Syrische Keramik* for this fabric type, a term coined by E. Gjerstad (1926, 200-09) at an early stage of research in this matter.

⁶¹ On Red Lustrous Wheel-Made Ware, see Eriksson 1993; Kozal 2003; Mielke forthcoming.

⁶² Eriksson 1993, 19-30.

⁶³ Knappet 2000; Knappet *et al.* 2005.

⁶⁴ For the 'classical' dating, see Eriksson 1993, 133-34. For a re-evaluation of the evidence, see Mielke 2007. The situation in the valley west of Sarikale exposed by the new excavations at Boğazköy supports Mielke's views.

⁶⁵ This is especially true since the substantial augmentation of RLWm vessels at Boğazköy through recent excavations (see above n. 29).

⁶⁶ Özgüç 1978, 66, 127-28, pls. 83-84; Özgüç 1982, 102-03, pl. 47.5-6.

for the rest of the Hittite core area.⁶⁷ Imports from the island of Cyprus show a comparably weak distribution pattern.⁶⁸ Only south of the Taurus Mountains, in modern Cilicia, are finds of Mycenaean and Cypriot origin somewhat more frequent. As in the case of RLWm, all these imports date into the later part of the Hittite sequence. Seen as a whole, Hittite interest in Cypro-Aegean products seems to have been low. This situation is somewhat contradictory if seen together with the substantial import of RLWm, for which a Cypriot origin is at least probable.

The search for western Anatolian pottery imports (especially for such from the Trojan culture area) has remained negative so far.⁶⁹ An interesting question is whether the vessels with micaceous slips discussed above may represent imports from south-western Anatolia, a region that appears to have had stronger cultural ties with Central Anatolia than the Aegean coastlands.⁷⁰

A completely unresolved issue is the likely exchange of pottery inside the Hittite realm, as there is no possibility for the time being to distinguish Hittite pottery products originating from different places.

POTTERY DEVELOPMENT AND OPEN QUESTIONS

Any deductions about the development of Hittite pottery must naturally be based on secure dating. It is exactly in this respect that we see a paradigmatic shift in Hittite archaeology taking place at present⁷¹. Before the consequences of these changes do not become more visible, it would be rather premature to draw any but the broadest outlines of the resulting scheme. I wish to give here some very general remarks on four aspects only: The origin of the Hittite tradition, the changes observable through the sequence, its disappearance towards the end of the 2nd millennium and, lastly, its variation in space.

This is not the place to go into the old question on the origin of the Hittites and their possible migration into Anatolia. From the perspective of the study of material culture, it has to be stressed that there is not the slightest break in tradition between the Karum period (the so-called ‘Middle Bronze Age’) and

⁶⁷ For a recent summary of Aegean-related finds from Late Bronze Age Central Anatolia, see Genz 2004a.

⁶⁸ Kozal 2003, 69-70.

⁶⁹ See Seeher 2005.

⁷⁰ Gunter 2006, 355-57.

⁷¹ See Seeher 2001a; A. Müller-Karpe. 2003; Schoop 2003; Mielke *et al.* 2006.

the following Hittite era.⁷² Purely archaeologically speaking, they are one and the same thing. To a certain degree, this also applies to the still older final Early Bronze Age or 'Transitional period'. Most obvious is a change in the technological sphere. After *ca.* 1900 BC, more or less suddenly, the majority of vessels became manufactured on the fast rotating potter's wheel, causing a strong change in the appearance of pottery. But looking more closely at the vessel shapes and other characteristics of the inventory we still observe strong continuity. Thus, if there ever was a break in the cultural sequence of northern Central Anatolia it should have happened even earlier in the 3rd millennium. Our insight into these matters is hampered, however, by the fact that the transition between the quite misnamed 'Copper Age', i.e. the middle part of the Early Bronze Age, and the final Early Bronze Age has never been closely researched.⁷³ The beginning of the Early Bronze Age is completely unknown to us.⁷⁴

Returning to the transition of the final Early Bronze Age to the Karum period, it is rather evident that the presence of Syrian merchants in Central Anatolia played a certain part in triggering off the process of political integration and the associated changes in material culture in this area. This long-known situation by itself does not explain very much in terms of the causal and structural relationships underlying this development. Not only were the foundations of the emerging ceramic shape repertoire entirely native Anatolian, even the potter's wheel was not a new introduction as it was in restricted use before. Still, we see two related features here that represent a break with the preceding period and lead into the following Old Hittite period: first of all, the wholesale introduction of the wheel most probably reflects the transformation of pottery manufacture from household to specialist production; secondly, the fine ceramic artefacts that were produced show that they played an important role in the personal or public display of wealth and power, or both.

⁷² Also, note the methodological inconsistency inherent in these designations. 'Karum period' is a term originating from economic history, 'Middle' or 'Late Bronze Age' are derivations from the Three-Ages System and 'Hittite' is an ethno-linguistic designation. As we use these terms as labels only, this fact may be regarded as of secondary importance. It shows, however, that the subdivision of the cultural sequence was not the product of a coherent path of reasoning but a mixture of quite different historic aspects.

⁷³ This has certainly to do with the fact that the last 'Copper Age' assemblages were recovered in the 1960s. At that time, little attention was paid to the internal material variation of the different phases or periods and the occurrence of sharp breaks between them was seen as a quite natural phenomenon.

⁷⁴ The work of reference on the 3rd millennium, although somewhat outdated now, is still Orthmann 1963. But note that the assemblages of which his 'Early Bronze Age 1' consists have meanwhile been recognised as being much older in reality, stretching from the 6th to the 4th millennia BC (Thissen 1993; Özdoğan 1996; Schoop 2005).

This practice did not continue afterwards. One after the other, the elaborate shapes, the different kinds of decoration and most of the fine-ware types were abandoned during the middle and late periods. Thus, the artistic aspect of pottery manufacture does not correlate to the rise of Hittite political and economic power. There is not even a simple inverse relationship, as the ups and downs in Hittite political history during the middle and late periods, which definitely had economic repercussions on the urban population, are not reflected in pottery development. Pottery seems to have gradually lost its status as a prestige good to other artefact classes and to have turned into a mere object of utilitarian value. Interestingly enough, exactly when this development becomes most obvious, i.e. at the beginning of the late period, foreign pottery imports appear in greater numbers, most notably Red Lustrous Wheel-Made Ware.

A last set of changes seems to occur at the very end of the Hittite sequence. This period is still badly defined, so the following remarks have to be taken with some caution. This time, we see a decline not in the aesthetical but in the technological standard of the pottery repertoire. I already mentioned this in context with the appearance of the *Töpferofen* variety of the dominant drabware fabric type. At the same time, there is a further contraction of the shape repertoire. This may be a result of the quickly dissolving economic basis of the Hittite state that is reflected in other fields of the archaeological record as well. The following Early Iron Age means an almost complete break with the Hittite tradition in material, cultural and economic respects.⁷⁵ Only during a short initial phase, lasting not more than maybe a generation, are there some reminiscences of the preceding phase. These disappear together with the potter's wheel immediately afterwards. At least, the situation shows that this development is not the result of a simple population replacement. Rather, the traumatic events following the disintegration of the Hittite state seem to be responsible. A consequence of the breakdown of the economic and administrative structures was, as it seems, a sudden depopulation of northern Central Anatolia caused by migration, starvation and violence. The remaining strongly reduced communities returned to a lower level of political and economic integration. They had to find to a new identity, a process mirrored in material culture change and, thus, also in the pottery repertoire. This process may or may not have been augmented by newcomers, individuals or groups dislocated in the wake of system collapse.

This leads us to look upon Hittite pottery from another, spatial perspective: One of the more interesting if unresolved questions is the ceramic situation in

⁷⁵ On the Early Iron Age sequence at Boğazköy, see Genz (2000; 2004b), from which the following statements are derived.

the Hittite countryside. It has long been recognised that in the tradition of handmade Early Iron Age pottery there re-emerge certain features seemingly ‘lost’ since the end of the Early Bronze or the Middle Bronze Ages.⁷⁶ This means that there must have existed one or more lines of pottery development in northern Central Anatolia, based on Early Bronze Age traditions, which branched away during the Hittite ‘interlude’ of the 2nd millennium. Two main questions result from this situation: Where were these traditions situated? Why do we lack any information on them yet? The second question may be answered more easily: If we find handmade pottery of Early Bronze Age appearance on a survey, we are naturally inclined to date it into the 3rd rather than into the 2nd millennium. The first, on the other hand, may prove to be more complex. Do we have to look into the Anatolian periphery of direct Hittite control? A possible candidate would be the Pontic region where the Kaška settled, notorious raiders of Hittite territory, described in the sources as being a rather backward tribal society.⁷⁷ Otherwise, could it be that inside the Hittite realm the rural population used pottery being different from that made at the large centres?⁷⁸ Due to the deficiency in excavation, both possibilities lack empirical foundation. Yet, even on a hypothetical plane, both are not completely satisfying. A tribal social organisation would not necessarily have prevented northern Anatolians from using the potter’s wheel. At least in the early period we do have quite ordinary pottery of the ‘standard’ type in evidence at the Black Sea littoral.⁷⁹ Lastly, if the Kaška were newcomers in the 14th century, why should they have continued local Early Bronze Age traditions?⁸⁰ As for an ‘archaic’ Hittite rural population, we should at least expect some import of their pottery

⁷⁶ For more detail on this question, see Genz 2005 (with earlier references).

⁷⁷ von Schuler 1965; Klinger 2002; Glatz and Matthews 2005.

⁷⁸ There are some indications from extant survey data that Hittite pottery from smaller settlements tends to appear (or to be?) more archaic (see Ökse 2000, 98, 106; Dönmez 2002). It is self-evident, however, that the question will not be resolved without excavation and external dating.

⁷⁹ So, for example, at İkitzepe (V. Müller-Karpe 2001b), Düdartepe and Tekkeköy (Kökten *et al.* 1945). See also Dönmez 2002, who argues on the basis of survey data for a gradual retreat of Central Anatolian influences from the Black Sea area during the 2nd millennium BC. According to him, the coastal area was void of wheel-made pottery by the end of the Karum period, while in its hinterland it continues into the Old Hittite period. Note that in his paper the term ‘Middle Bronze Age’ differs from common understanding as it encompasses in addition the ‘Transitional period’ (final Early Bronze Age) and the ‘Old Hittite period’ (early Late Bronze Age). **In my opinion, it would make more sense to eliminate the Anatolian ‘Middle Bronze Age’ from terminology rather than to enlarge it.**

⁸⁰ Additionally, we have good evidence from the textual sources of a constant, if somewhat problematic, intermingling of Kaška tribesmen with Hittites apart from mutual raiding (von Schuler 1965, 63-64, 73-74, 81-82). Interactions of this kind should lead – one would expect – to a certain degree of material acculturation of the economically weaker partner rather than suppress it. See von Schuler (1965, 29-33) and (Klinger 2002) for the ambiguities concerning the date of the first appearance of the Kaška in the Pontic Mountains.

products at the large centres where they would have shown up in the excavations long ago. Not a trace of such objects has come to light so far, however, be it at Boğazköy-Ḫattuša or at any of the other excavated places.⁸¹

This takes us to another set of questions. If rural communities used pottery of the standard type, what did the production process look like and what were the structures of distribution behind it? Did the centres distribute pottery into the countryside, where the local population would have had to buy it, presumably along with other (but which?) redistributed goods? Was it produced locally, yet dependent on some – formal or informal – guidelines on what it was supposed to look like? It has become almost a banality to stress the uniform character of Hittite pottery all over the core area of the empire, up into the Keban region in eastern Anatolia. This even led to the much-discussed hypothesis that the capital enforced this ceramic uniformity to ensure the internal coherence of the empire in its multiethnic composition.⁸² Still, this uniformity may be more apparent than it is real. Without solid relative regional sequences, we do not have the prerequisites to compare contemporaneous pottery of different origin, neither typologically nor by the application of techniques offered by the natural sciences.

CONCLUSION

To sum up, we saw that there is a strong line of continuity in Central Anatolian pottery development beginning sometime in the 3rd millennium BC and running through to the end of the Empire period. The overwhelming majority of ceramic vessels always belonged to the undecorated standard drab-ware fabric type. The largest part of the more distinct types, distinguished by elaborate shape, high quality slips or decoration, belongs to the beginning of the Hittite sequence. The tradition and the techniques of manufacture were inherited from the preceding Karum period. This repertoire accompanied the rise of the Hittite elite during the period of state formation. In the time following, production of

⁸¹ At Boğazköy, a very small number of extraordinarily coarse non-Hittite vessel remains have recently been discovered in Hittite levels dating into the first half of the 15th century. They have been fired without atmospheric control, some are evidently handmade. These fragments, including a beak-spouted jug, are typologically Anatolian but recall Early Bronze Age and Karum period traditions (where such coarse objects are absent, however). These new finds do not answer the questions posed here, as we lack comparable finds from other contexts in the capital, from other Hittite settlements, and from excavations elsewhere that could indicate their place of origin. Instead, they rather illustrate how little we know about the archaeological landscape of Late Bronze Age Anatolia.

⁸² Gates 2001.

these artful objects ceased. Pottery seems to have lost its social role and to have become a mere commodity. At the same time, the first ceramic imports from outside the Hittite world appear. The broad range of functional types and their differentiated distribution inside the settlements reflects the economic complexity daily life had assumed in Hittite urban centres. The sudden collapse of the Hittite state utterly destroyed the world of the Late Bronze Age. The subsequent reorganisation of life in Central Anatolia broke with the traditions that characterised the preceding period, including material aspects such as the process of pottery manufacture.

Many of these developments are visible only in broad outlines at present. The major task for the future, as far as it concerns Hittite pottery research, will be the establishment of multiple independent regional sequences, based on a purely archaeological methodology. This is the only way to arrive at deeper insights into the variation of material culture in time (which is the basis for all further interpretation). Insights into variation in space will give us new information on whether and how the different parts of the empire and its periphery arrived at and participated in a Hittite identity, as reflected in material culture. Insights into variation in function will teach us about the economic differentiation inside and between Hittite communities of different complexity. All these aspects have a bearing on those dark areas in our historical knowledge on which the written sources are sketchy or silent. We will arrive eventually at a better understanding of the internal functioning of the society that created one of the earliest territorial empires in the Old World and managed to survive five centuries of constant change.

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