# CHRONOLOGY AND FUNCTION AT YARIM HÖYÜK, PART II

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- This article is dedicated to Hakan Kale, student, colleague, and friend, who left us far too soon. -

#### Introduction

In 1996, a team from Ege Üniversitesi in Izmir and Widener University near Philadelphia conducted one season of excavation at Yarım Höyük, a small site on the high bluff above the Euphrates River near Birecik. The importance of this site is that it was occupied at the critical juncture of the Uruk or LC 5<sup>3</sup> period and the Early Bronze Age and was in theory small enough to excavate entirely. As described in part I of this series.<sup>4</sup> theories of the Uruk Expansion and its aftermath indicated large-scale abandonment after the withdrawal of Uruk colonial sites in North Syria. This abandonment of Uruk colony sites in North Syria was then assumed to represent a total collapse of polities and all trading systems in northern Mesopotamia. That assumption has been questioned.<sup>5</sup> In this, the second and final publication of the site, we explore the chronology of this transitional period. We also investigate how sets of artifactual finds represent the site's functions, and how those functions reveal the political and economic structures of the larger geographical areas or polities in the transitional fourth-third millennia BC. Data from this site can be added to reports from Horum Höyük,<sup>6</sup> Tilbes Höyük,<sup>7</sup> Surtepe, Tilvez,<sup>8</sup> Şavi Höyük<sup>9</sup> and Zeytinli Bahçe, <sup>10</sup> and other Upper Euphrates sites and settlement units. Horum and Tilbes Höyük are now flooded under the reservoir of the Birecik Dam, although potentially more material may emerge from the remaining excavations.

## **Pottery and Pottery Chronology**

In the earlier levels of Yarım Höyük, a fairly small set of Local Late Chalcolitic and Late Uruk wares were uncovered. These assemblages cannot be considered as

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<sup>&</sup>lt;sup>3</sup> The LC 1-5 is a nomenclature for the equivalent of the Ubaid-Uruk Transition (LC 1) to Late Uruk (LC 5) periods Rothman 2001a).

<sup>&</sup>lt;sup>4</sup> Rothman, Kozbe et al. 1998, also see Rothman-Ergec 1998.

<sup>&</sup>lt;sup>5</sup> Rothman-Fuensanta 2003 and see below.

<sup>&</sup>lt;sup>6</sup> Tibet et al. 2000.

<sup>&</sup>lt;sup>7</sup> Fuensanta et al. 2002, 2000a, 2000b, 1999.

<sup>&</sup>lt;sup>8</sup> Fuensanta et al. 2000a,b.

Dittmann et al. 2002.

<sup>&</sup>lt;sup>10</sup> Frangipane et al. 2001, 2002.

dominant in the sequence when they are compared with the material of the succeeding period dated to the early part of Early Bronze Age, known in the area as "Kurban V." Kurban V was defined by Algaze 12 as a separate phase from the Late Chalcolithic (LC 3-5/Middle to Late Uruk) or the Mid-Late Early Bronze Ages. Part of its ceramic profile is a small percentage of wares that would otherwise be considered Late Chalcolithic in date. However, the later levels of Yarım Höyük have a richer repertoire consisted of a wide range of wares, which can also be recognized at the contemporaneous neighboring sites.

The pottery at Yarım Höyük <sup>13</sup> is quite uniform, showing close affinities with the typical Late Uruk and early Early Bronze Age ceramic assemblages known from other contemporary sites in the vicinity. The Yarım Höyük sherds recovered from the reliable contexts are classified into five ware groups <sup>14</sup>: grit-tempered plain simple ware, reserved slip ware, grit-tempered and unburnished cooking pot ware, chaff and grit-tempered coarse ware, Local Late Chalcolithic chaff-tempered ware, and beveled rim bowl ware.

## Grit-tempered plain simple ware

Grit-tempered plain simple ware is the main component of the early Early Bronze Age ceramic assemblage at Yarım Höyük. It occurs in a broad range of variations. These variations are distinguished according to their paste colors. Surface treatment is only observed as an occasional slip, which is usually in the same color of the paste. The paste occurs mostly in buff (10YR 8/3, 10YR 7/3 and 7/4<sup>15</sup>), pinkish-buff (7.5YR 7/3, 5YR 7/4), greenish-buff (2.5Y 8/2, 2.5Y 7/2), or light reddish-brown (5YR 6/6, 2.5YR 6/6), but rarely in grayish (10YR 7/1) colors. As the name of the ware implies, the examples are characterized with small-sized white and black grit. The white ones are crushed limestone, while the black grits appear to have been sand or basalt particles. The samples in light reddish-brown color usually have dense white grits. Most of the sherds in all the tones of buff color have black grit tempering. Infrequently, some sherds with black grits have shiny surface due to micaceous particles found naturally in sand temper or the local clay. Vegetal tempering was not seen. Except a few of the jars, all are wheel-made; some were thrown on fast wheel.

The average wall thickness changes with the vessel size. Most sherds belonging to bowls are ranged from 0.3 to 1 cm in thickness, while those belonging to jars ranged from

The early part of Early Bronze Age is defined as "Kurban V" period in the region from Samsat to north Syria after the Kurban Höyük (Urfa) sequence which has been yielded from the archaeological excavations.

<sup>&</sup>lt;sup>12</sup> Algaze 1990, 281-310.

Because of the poor preservation of the focal levels, due both to pitting by a Roman household and the effects of rain on the levels very close to the surface, Yarım Höyük excavations were only conducted for one season in 1996. Therefore, a very limited number of ceramics (480 diagnostic sherds of both ware and form) was examined for this article. Although the sample is small, in order to provide some more new data and parallels for the assemblages available in the region, we felt it worthwhile to present the Yarım Höyük pottery.

These ware groups were sorted primarily according to their distinctive inclusions observed from the sherds to be those with rims, bases, accessories (only a few spouts were taken into consideration; there are no handles or lugs among the Yarım Höyük samples) and the decorated body sherds.

<sup>15</sup> These numbers are based on the Munsell Soil Color Charts 1994.

0.6 to 1.3 cm. On the other hand, sherds of larger closed forms such as storage-sized ones have thickness between 1 and 1.6 cm.

Forms include bowls of all sizes and jars in grit-tempered plain simple ware. By far the most common type of all open forms is hemispherical bowls with either simple rims (Fig. 1, 1-30; Fig. 12,a), band rims (Fig. 2, 1-18; Fig. 12, d), band rims with a distinctive groove on rim exterior (Fig. 3, 1-8; Fig. 12,b), or club-shaped rims (Fig. 3, 11-13; Fig. 13, d).

Excluding the samples with reserved slip decoration (Fig. 6, 17-19; Fig. 9, 1-10; Fig. 12,c<sup>16</sup>), almost all of the specimens in this ware group were undecorated. In one case, a body sherd belonging to a jar was decorated with a row of thumb impressions on a ridge (Fig. 9, 14<sup>14</sup>). Another one has been decorated with incisions in a herringbone-shaped pattern (Fig. 9, 13<sup>14</sup>), which might be combined with reserved slip applied on the lower part of the vessel.

Within the plain simple ware components, the finer subvariants are distinguished by their slip in greenish-buff (2.5Y 8/2, 2.5Y 7/2) or grayish colors (10YR 7/1). Their dense paste does not have visible tempering to the naked eye. They are well fired, and as such they represent advances in the ceramic technology typical of the early Early Bronze Age. The types in this grade of plain simple ware mostly constitute open vessels represented by hemispherical bowls with simple rims (Fig. 1, 10, 18-19, 21, 24; Fig. 12,a). They are mostly small bowls or cups; the average rim diameter is 12-14 cm while wall thickness fall in the 0.2 to 0.5 cm range. The bases all of the hemispherical bowls, where the whole profile is preserved, are flat (Fig. 1, 1-4).

In general terms, band rim bowls represent a type that continues with few changes into the beginnings of the Early Bronze Age from the preceding period<sup>17</sup>, Late Chalcolithic, and constitute a connection with the succeeding Early Bronze Age assemblages in the region. However, only a few band rim bowls are present in the levels of Late Chalcolithic while a large quantity were recovered from the early part of Early Bronze Age at Yarım Höyük. The types having band rims with a characteristic groove on the exterior are diagnostic only for the beginning of Early Bronze Age of the site. This situation is consistent with samples of the same types in the vicinity. The band rims with grooves appear to have belonged mostly to deep bowls at Yarım Höyük (Fig. 3, 1-6; Fig. 13,b).

Another common type of grit-tempered ware consists of open bowls, which are characterized by a raised ridge on their exterior immediately under the rims (Fig. 4, 1-14; Fig. 12,b). Their straight upper wall is a chronologically significant characteristic for dating the samples to the early Early Bronze Age assemblage. <sup>18</sup> Even though a subvariant of this type with a slightly incurved wall and a pointed raised ridge is assigned to the Late Chalcolithic period elsewhere in the region <sup>19</sup>, at Yarım Höyük a few specimens with this

<sup>&</sup>lt;sup>16</sup> Also Rothman, Kozbe et al 1998, Fig. 5.

<sup>17</sup> Compare with Kurban Höyük (Algaze 1990, pl. 30) and Arslantepe (Palmieri 1981, p. 115, Fig. 8:79).

<sup>18</sup> Algaze 1990, 284-5.

<sup>&</sup>lt;sup>19</sup> Compare with Kurban Höyük (Algaze 1990, 246, pl. 20: K).

profile (Fig. 4, 5-10; Fig. 12,b) were again found in the earliest phase of Early Bronze Age. It may show that this property continued unchanged but in restricted numbers from the preceding period.

In general, the rarest grit-tempered plain simple ware variants at Yarım Höyük were small cups with sinuous sides (Fig. 5, 1, 3-5) and cyma-recta cups<sup>20</sup> (Fig. 5, 2). Both of the types were recovered infrequently as a couple of sherds during the early part of Early Bronze Age of the site. However, the former type has been particularly common in Late Chalcolithic while the latter one has been representative for the later parts of Early Bronze Age. As stated above, both of these periods were not detected extensively on the site. This may explain the limited presence of typologically very well-defined cyma-recta cups at Yarım Höyük. The cyma-recta cups are always made in the dense greenish-buff (2.5Y 7/2) variant of the plain simple ware.

The jars of the early Early Bronze Age plain simple ware assemblage are found in various sizes ranging from medium to storage-sized (Fig. 6, 1-19; Fig. 7, 1-15; Fig. 13, d). Almost all of the sherds are necks without attached body pieces. Since there are no intact jars; it is not possible to outline a jar type fully in Yarım Höyük material. On the whole, like the sizes of jars, the width of the mouths are variable, too. The jars necks with simple everted rims represent the most popular jar type among the buff and orange-buff variants of grit-tempered plain simple ware (Fig. 7, 1-10). The other common jars in this group are characterized by either their slightly thickened (Fig. 6, 1-11) or rounded rims (Fig. 6, 12-19; Fig. 7, 11-12). Some of the jars with rounded rims have horizontally reserved slip decoration on their necks, which probably would have combined with diagonal bands on the body (Fig. 6, 17-19).

The last component of Yarım Höyük grit-tempered plain simple ware is a selection of bases and pedestal bases. A variety pedestal bases (Fig. 10, 1-6, 18; Fig. 12, c), probably belonging to footed bowls, are common only in the early Early Bronze Age levels of Yarım Höyük. We know that pedestal bases first occur at the very beginning of Early Bronze Age and continue with few changes throughout the rest of Early Bronze Age in the region. Some fragments with tubular feet (Fig. 10, 19-22) that might be interpreted as parts of "fruit stand-like" pedestaled bowls or any footed vessels were not attested before the initial part of Yarım Höyük's Early Bronze Age. It seems that the pedestal bases have a rich variety of parallels both to the north and south of Yarım over a wide geographical range from the very beginning up to the middle-late part of Early Bronze Age. They usually have concentric incisions or grooves on exterior (Fig. 10, 20-22; Fig. 12, c) as a decoration. A variety of flat (Fig. 10, 8-16) or ring bases (Fig. 10, 7,

<sup>&</sup>lt;sup>20</sup> Cyma-recta cups were first named and defined by R. Braidwood for the Amuq sequence (Braidwood-Braidwood 1960, 352-3; Fig. 269:9-10).

<sup>&</sup>lt;sup>21</sup> Kurban Höyük (Algaze 1990); Birecik Early Bronze Age Cemetery (Sertok-Ergeç 1999); Birecik-Suruç (Özdoğan-Karul 2002); Tilbes (Fuesanta-Rothman-Bucak 2000); Gre Virike (Ökse 2002); Zeytinlibahçe Höyük (Frangipane-Bucak 2001).

<sup>&</sup>lt;sup>22</sup> Hacınebi (Pearce 2000b); Kurban Höyük (Algaze 1990); Mezraa Höyük (Yalçıklı-Tekinalp 2002); Şaraga Höyük (Sertok-Kulakoğlu 2002); Hassek Höyük (Hoh 1981, 1984); Arslantepe VIB2 (Frangipane-Palmieri 1983); Carchemish (Woolley-Barnett 1952).

17), which may have been attached to medium and small-sized vessels, are associated with this ware as well. The diameters of these bases fall in the 3 to 5.5 cm range.

## Reserved slip ware

Even though the ware characteristics of the reserved slip ware does not differ from the normal grit-tempered plain simple ware, it is considered here as a different component because of its distinctive decoration (Fig. 9, 1-10, Fig. 12, c<sup>23</sup>). This type of decoration is not restricted in paste colors; buff, light greenish-buff, brownish-buff or reddish-brown colors, all have reserved slip decoration. The only distinctive ware feature in terms of dating is that the ceramics with reserved slip decoration with reddish-brown paste have been identified as the latest examples of the early Early Bronze Age. This ware appears to be tempered with small black grits.

The greater portion of this ware group has only diagonally reserved slip decoration that is generally radiating from the neck-body conjuctions. Besides this, only a few sherds have horizontal bands of reserved slip alternating with the diagonal ones (Fig. 9, 3-4, 6). However, the pattern of horizontal and diagonally reserved slip is diagnostic for the Kurban V period (the late Chalcothic/Early Bronze transition) in the region. Reserved slip decoration seen on body sherds of Yarım Höyük is combined with either incised cross-hatching (Fig. 9, 9-10<sup>21</sup>) or with a band of stitches (Fig. 9, 8<sup>21</sup>).

The use of reserved slip decoration is always in association with the vessels in the shape of jars both in medium or large sizes at Yarım Höyük. This type of decoration is not present on open forms throughout the early Early Bronze Age sequence of Yarım Höyük, although it does appear at some other of the Upper Euphrates sites. <sup>24</sup> The one complete example is a burial jar, apparently of a child without more grave goods than a bead or two, buried under a house floor.

## *Grit-tempered and unburnished cooking pot ware*

We recovered grit-tempered and unburnished cooking pot ware (Fig. 3, 14; Fig. 7, 16) in small quantities at Yarım Höyük. The paste and tempering features of this coarse ware obviously differed from those of the preceding Late Chalcolithic chaff-tempered samples. This type of handmade ware is generally characterized with a gritty dark buff (10YR 7/4) colored paste. The other paste colors are pinkish-buff (5YR 7/4) and brown (7.5YR 5/3). White and gray colored, medium-sized grits are abundant in the paste. The exterior is never burnished, and the vessels usually have the same colored slip as the paste on their partially smoothed surface. Average ware thickness ranges from 0.6 to 1.2 cm. The sherds of this group mostly belong to closed and large forms. None of jars have handles.

Also Rothman, Kozbe et al 1998, Fig. 5)
 Kurban Höyük (Algaze 1990, 312; pl. 75 F).

# Local Late Chalcolithic chaff-tempered ware

At Yarım Höyük, Local Late Chalcolithic chaff-tempered ware<sup>25</sup> (Fig. 8, 1-12; Fig. 13, a<sup>26</sup>) represents the main constituent of the Late Chalcolithic ceramic assemblage. The paste is brown (7.5YR 5/4) or reddish-brown (10R 5/8) in color. Some sherds have a gray oxidized core. Chaff impressions give the sherds a porous apperance. Although very coarse chaff is always the dominant inclusion, a few small black grits were occasionally observed in the clay matrix of some samples. On most of the vessels, surface treatment is absent. The application of slipping or burnishing is not common in this ware. All of the examples are handmade. With the features just listed this pottery is defined as a coarse ware. Large-sized, globular jars with short and sharply everted necks are very characteristic for this ware (Fig. 8, 1-7). In many cases, fire-blackened smudges are found on the exterior of the jars. On the average, the ware's thickness ranges from 0.5 to 0.8 cm for the jars.

#### Beveled rim bowl ware

Because of its chronological importance,<sup>27</sup> this distinctive bowl of chaff-tempered ware was recorded separately as "beveled rim bowl ware" (Fig. 7, 17<sup>24</sup>) in the Late Chalcolithic period assemblage. Its diagnostic shape and coarse manufacture are easily recognized in the whole pottery corpus of Yarım Höyük. The bowl has a light buff colored (10YR 8/3) and due to its dense chaff tempering, fairly porous paste.

The two carbon 14 samples that we were able to recover give a range of dates that generally agree with the relative chronology. Both were found in sealed layers of a two meter deep pit in Operation 6. Radiocarbon dating analyses by Beta Analytic, Inc. of Miami, Florida yielded dates of 4630 +/-70 and 4430+/-70 BP. Based on the intercept of the calibrated curve used by Beta Analytic and the radiocarbon determination yield dates of 3345 and 3045 BC cal. The depth of deposits, the small sample of datable carbon, and the pottery chronology described above indicate that occupation was less than 300 years or perhaps the site was episodically utilized in the Late Chalcolithic period (see below).

# The Role of Yarım Höyük from Pottery Function

We interpret Yarım Höyük as a small food producing settlement on the west bank of the Euphrates River. Based on its floral and faunal remain reports<sup>28</sup> and limited variety in its artifact corpus,<sup>29</sup> agriculture, minor pastoralism, and hunting appear to be the main subsistence practices at Yarım Höyük.

<sup>&</sup>lt;sup>25</sup> It is identified with the "local chaff-faced simple ware" of the Amuq F phase (Braidwood-Braidwood 1960).

Also Rothman, Kozbe et al 1998, Fig. 4.

It is well known that beveled rim bowls are one of the primary ceramic hallmarks of the Uruk Period. However, their widespread distribution can be linked with their practical function such as bread baking or cheese production. So, the occurrence of beveled rim bowls can not be considered as a fine chronological indicator (Helwing 2000, 152).

<sup>28</sup> Rothman, Kozbe *et al.* 1998, 79-84.

The number of the key artifacts that are indicative for any kinds of craft activities, such as spindle whorls or loom weights, are fairly insignificant at Yarım Höyük.

Evidence for these practices include fauna and floral remains and some processing tools. Excavators recovered many flint implements at the site (Fig. 11). A superficial study of these chipping tools reveals that they were probably used for harvesting, plantprocessing (cutting reeds and other soft plants) and possibly butchering animals. The residents of the site were growing crops such as emmer wheat, barley, lentils, and nuts<sup>30</sup> There were not any reliable signs showing surplus production on the site, although separating the Uruk and Kurban V (EB I) could be difficult because of the pitting from the Terra Sigillata A occupation. Production was apparently only for its residents' subsistence, certainly from the Early Bronze I period.

An adequate discussion of animal husbandry at Yarım Höyük is difficult, because of the preservation of animal bones.<sup>31</sup> The same levels of interest were not only rain soaked, but also the erosion of mudbrick was a problem, because the residents of ancient Yarım Höyük used fine pebbles, not straw to make their mudbrick. 32 In addition to the use of domesticated sheep, goat, pig, and cattle, about ten percent of the animal remains were from wild species residents hunted.<sup>33</sup>

Thus we may safely say that the residents of Yarım Höyük practiced a mixedfarming economy, included agriculture with small-scaled animal keeping.

Above we focused on the technological features of the five wares recovered at the Yarım Höyük excavations. We were able to distinguish distinct Uruk and local pottery assemblages. Here in the second part, the pottery functions and the patterns of use will be examined. In doing so, the differences in typical use of pottery within each assemblages may be revealed. However, we know that "use" has both social and ethnic elements, and a study on vessel use identifies daily behavioral routines<sup>34</sup> in respect to their subsistence and the role of this one site in broader settlement systems<sup>35</sup>.

The shape and size of a vessel are the primary criteria to identify the function of ceramics.<sup>36</sup> During the manufacturing process, the measurable and observable properties such as paste composition, wall thickness and surface treatments are applied consciously to a vessel by the potter according to its intended use<sup>37</sup>. It is well known that vessel shapes represent a wide range of activities performed by people. Among those practices, cooking, food consumption, serving or storage are the easiest ones to recognize. Another attribute that indicates how pottery was actually used in the past is use-alteration

<sup>&</sup>lt;sup>30</sup> Miller 1998, 79.

<sup>31</sup> After the analysis done on 500 animal bones, the major domestic species present at Yarım Höyük in all periods were distinguished as domestic sheep, goat, pig, and cattle (Weber 1998, 81).

Residents of the nearby village of Aşağı Bayındır still make mudbrick the same way.

Residents of the hearty viriage of rights and birds 10% of the animal bones from Yarım Höyük belonged to wild animals like gazelle, deer, aurochs, fish, and birds (Weber 1998, 81-82).
34 Pearce 2000a, 36.

<sup>&</sup>lt;sup>35</sup> Skibo 1992, 34.

Henrickson 1990; Henrickson-McDonald 1983; Rice 1987.

<sup>&</sup>lt;sup>37</sup> Rve 1981, 24-26, 60; Skibo 1992, 35-36.

evidence,<sup>38</sup> which is only associated with the users of the vessels. Thus, when we take the physical and morphological properties of pottery into consideration together with the use-alteration data, it is possible to make some inferences about the daily routines of pottery users.

By examining the ceramics and artifacts found in the features of all *loci*, four activity areas can be constructed at Yarım Höyük. These were all from spaces inside buildings (Fig. 14): Operation 1, Locus 12,<sup>39</sup> Operation 1 Locus 021,<sup>40</sup> Operation 2, Locus 8 (Fig. 16),<sup>41</sup> and Operation 2, Locus 16 (above Fig. 16 from which pot burial was dug)<sup>42</sup>. Five types of activity sets are identified on the site for food preparation including 1) plant-processing, grinding, and cooking, 2) serving, and 3) food consumption, 4) food storage, and 5) garbage disposal (see some other functional artifacts, Fig. 17). It seems plausible that food preparation, serving and food storage constitute the greatest portion of all the activities attested at Yarım Höyük (see Table 1 for proveniences).

The local wares of Yarım Höyük Late Chalcolithic pottery are dominated by jars. Their size and shapes correspond to the forms of long-term and short-term storage of liquids and dry goods. The variety in their neck and rim shapes, as well as their relative size, indicates which of these vessels were suitable for storing of both liquid and dry contents. The secondary function of these jars should have been long or short-distance transfer of liquids or dry materials, including transport of containers themselves. None of the local jars have use-alteration evidence for cooking or any kinds of activity relating with fire.

In addition to the jars, the Local Late Chalcolithic assemblage at Yarım Höyük contained large, open and deep bowls. Some of those bowls with fire-blackened smudges can be identified as cooking and/or roasting vessels, while others which are more finely made were probably used as serving dishes. The patterns of soot on the cooking bowls are consistent with having been used in fire. In contrast to neighboring sites, diagnostic local casseroles and hammerhead bowls are generally utilized for cooking and serving purposes were not recognized at Yarım Höyük. The average diameter of the serving dishes is about 30 cm that exactly fits with the expected forms of serving vessels for a group consumption such as a family.

The quantity of the small bowls and cups, convenient only for individual serving and eating, is very high in Yarım Höyük material of the Early Bronze Age period. These vessels have diameters ranging between 10 and 16 cm, which are just sufficient for an

<sup>&</sup>lt;sup>38</sup> Ceramic surface accretion such as carbon deposition resulted from cooking over an open fire or residues left by the contents of vessels and use-wear (ceramic attrition) attributes are considered as two forms of use-alteration evidence. Henrickson 1990, 87-88; Pavlu 1997, 75, 77; Pearce 2000a, 37; Rice 1990, 4-5; Skibo 1992, 39-46.

<sup>39</sup> Rothman Kozbe et al 1998, Fig. 10.

Rothman Kozbe et al 1998, Fig. 11.

All Rothman Kozbe et al 1998, Fig. 13.

<sup>&</sup>lt;sup>42</sup> Floor with grinding stone, bronze pin, and axe pieces above the floor of locus 8, possibly the same building.

<sup>43</sup> Pearce 2000a, 37-38; Pollock-Coursey 1995, 104-107.

<sup>44</sup> Henrickson-McDonald 1983.

individual portion<sup>45</sup> with their small capacity. The large and open bowls were generally recovered together with the smaller ones in the activity areas of food preparation. This indicates that food preparation and consumption have taken place in a single area of the site at the very beginning of the Early Bronze Age.

Like the local assemblage of Late Chalcolithic, a broad assortment of jars in various sizes is also present in the repertoire of the Early Bronze Age. Probably, the most common activity that they were utilized in should have been the storage of liquid and dry contents.

The choices of cooking pots of the early part of Early Bronze Age are different from the preceding period. In other words, the chaff-tempered forms of Late Chalcolithic were not present anymore in the succeeding levels, and a clear marker of the Early Bronze Age at Yarım Höyük.4

#### In sum

The classification of Yarım Höyük pottery indicates that the full range of Local Late Chalcolithic and Late Uruk ceramics is lacking, while the pottery dated to the earliest phase of the Early Bronze Age at the site represents a more complete corpus. So it seems, Yarım Höyük may have been a specialized function site during the Late Chalcolithic period, while it was a self-sufficient village during early Early Bronze Age. It appears that the influence of southern migrants along this stretch of the Upper Euphrates was considerable in the latest part of the Contact Period, <sup>47</sup> and the occupation at Yarım Höyük continued into the immediate post-Uruk period even though the enclave's probable center, Şadi Tepe, 48 was abandoned after Uruk collapse. As we will discuss below, the Early Bronze I center was probably to the north, rather than south, at Surtepe.

# Yarım Höyük in Broader Geographical and Cultural Contexts

The reason, as stated above and in our part I article<sup>49</sup>, for excavating Yarım Höyük was to address one part of the theory, commonly known as the Uruk Expansion, as summarized above. <sup>50</sup> If Algaze's theory is correct, what we should be seeing in the North

<sup>45</sup> ibid.

Algaze 1990, 288; Jamieson 1993, 39.

Algaze 1993, 29 cites this stretch of the Upper Euphrates in Turkey as a continuation of the North Syrian clusters

Algaze 1993, 29 cites this stretch of the Upper Euphrates in Turkey as a continuation of the North Syrian clusters Hacınebi, which is located 10 km north of Yarım Höyük on the opposite side of the Euphrates. Its Phase B2 had a material culture showing intensive interaction with southern Mesopotamia in the so-called "Contact Period" (Stein 2000, 16). Hacinebi was either abandoned and served as an Early Bronze cemetery, or became a smaller settlement under the modern village that sits on part of the site.

The center of the enclave is very likely to have been Şadi Tepe. It has an abundance of classic Uruk pottery, wall cones typical for a center, chipping tools and flint debitage on its surface (Algaze 1991, 203, Fig. 25b: 65).

<sup>&</sup>lt;sup>49</sup> Rothman, Kozbe et al 1998.

<sup>50</sup> Algaze 1993.

is a major decline in settled population and a political, social and economic re-orientation, one at a much less complex socio-economic level.

To understand what in fact happened one must solve the mystery is why the Uruk settlements in the north like Habuba Kabira and Jebel Aruda, Tiladır, and Şadi Tepe were abandoned in the first place. The exchange network that Algaze proposes as the cause of southern expansion appears to have continued after the abandonment. Jemdet Nasr and Early Dynastic cities in the south like Uruk-Warka grew. Metals, logs, and semi-precious stones continued to flow to the south. Evidence of new sources of raw materials could explain the abandonment in part, but to date the use of alternative sources of copper ores and other materials dated to the beginning of the Early Bronze Age have not been demonstrated. The south's resource rich neighbors in the north and east appear to have supplied it in ever greater numbers. There is no evidence of any attack on the North Syrian sites. In other words, the abandonment was probably not due to a cessation of trade opportunities.

Some researchers have cited the presence of Transcaucasians in the Euphrates as a source of instability. New research indicates that some number of these people were probably in the area from the middle of the fourth millennium BC<sup>51</sup>, and the pottery that marks their presence is only infrequently found on sites south of the Taurus and certainly not in North Syria.

In terms of settlement pattern, we do see a change (Fig. 15). Many LC5<sup>52</sup> or Late Uruk sites were abandoned in the area immediately north of Carchemish. At the same time the overall population size does not appear to decline.<sup>53</sup> We are really unsure of the total population size, however, because the richest arable and pasture land lies away from the Euphrates River in Gaziantep and Urfa provinces, where rich plains like the Suruç and Harran have not been surveyed. Sites like Tilbeşar, Kazane, and Titriş are examples of major post-Uruk centers, albeit in the Mid-Late Early Bronze Age, that the dam surveys would not have located readily. No doubt, many more remain undiscovered.

With other factors unable to explain neither this putative collapse nor the reorganization that followed, an alternative explanation may be increased socio-cultural development among local polities. Although there was no overall political organization to unite the north economically and symbolically, local polities grew in strength and cohesion. In brief, they began to take over the organization and advantages of trade.

One material indication of this change may be the development of new centers. In the transitional Uruk-Early Bronze Kurban V, sites considered local Late Chalcolithic began to build monumental platforms. In the Upper Euphrates, one was discovered at Surtepe north of modern Birecik. After the abandonment of Şadi Tepe, Surtepe appears to have been the center of a cluster of sites near Birecik. Excavators have found others at Tel-es Sweyhat near Habuba Kabira, Mozan in the Balikh, and al Hazna in the southwestern Khabur basin. These appear to be well spaced over the landscape like the

<sup>&</sup>lt;sup>51</sup> Sagona 2000.

<sup>52</sup> Rothman 2001b.

<sup>&</sup>lt;sup>53</sup> Rothman and Fuensanta 2003:596.

temple centers of southern Mesopotamia. Each may well represent a local polity, perhaps empowered by Late Chalcolithic period trade and the *local* organization they developed for control of production and exchange.

This new organization may well represent not a collapse, but a local reorganization. For example, Lupton<sup>54</sup> argues, "The post-contact [EB 1/2] settlement pattern in the Karababa area was marked by a significant increase in site density over that seen in the preceding contact [Late Chalcolithic/Uruk, LC3-5] period. The majority of these new settlements were small villages or hamlets, and the overall impression is of a continued low degree of regional system integration. The three-tier settlement structure of the fourth millennium settlement patterns also endures and Samsat remains the one dominant site in the area." Samsat "continued to act as a focal point in larger, supra-local exchange networks,"55 and its basic position in its local area remained largely unchanged."56

The catalogue of functional types at Yarim pottery may be a reliable reference of cultural behavior patterns of the pottery makers and users. <sup>57</sup> It opens the possibility that some of the small sites were special function food producing sites, perhaps occupied by local male populations, serving centers in the Late Chalcolithic. After the withdrawal of southern settlements, a systematic change to more self-sufficient, typical villages occurred. The new centers of small polities with more local traditions in pottery and artifact styles began rebuilding a centralized administrative system, with labor in building monumental platforms acting as a way to mobilize labor and loyalty.

Sadly, because of Yarim Höyük's poor preservation, these ideas can only be suggested and not tested there. Although most of the sites along this stretch of the Upper Euphrates have been sampled only minimally as salvage excavations, the data from all of them drawn together may provide a clearer picture of the nature of relations with southern populations and of the changing organization of the north. It is these organizational seeds that would grow into the small urban centers of the middle Early Bronze Age.

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<sup>&</sup>lt;sup>54</sup> Lupton 1996, 85.

<sup>55</sup> Lupton 1996, 95.

The same picture was available during the transion from the Late Chalcolithic to Early Bronze Age I in northwest Syria (Mazzoni 2000).

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Table 1: Proveniences

Op	Loc	Lot	NS	EW	Top	Bottom	Fill	Quality	Interpretation
1	03		9.00	9.00	0.00	0.00	surface clearing	tertiary	mixed surface material
1	04	12	9.00	9.00	0.00	.05	clean fill burned bldg fill	secondary	sod layer some collapse
1	05	3	4.50	4.50	.05	.20	clean fill	tertiary	sub-sod aerial fill
1	05	4	4.00	4.00	.05	.20	burned earth traces of floor	secondary	hearth base
1	05	5	5.00	5.00	.20	.26	coffee brown wet	secondary	erosional fill
1	05	6	.80	.45	.20	.25	burned earth	secondary	pit?
1	06		.80	.45	99.57	99.09	small stones in 2 lines	primary	drain?
1	07		0.00	0.00	99.57	0.00	in among drain stones	primary	bowl
1	08		4.50	4.00	100.3 9		uneven floor	primary	eroded interior floor
1	09		1.50	1.00	98.70	98.74	limestone	secondary	plaster collapse from wall
1	10		1.50	1.00	98.74	98.50	sherds under floor	secondary	floor underlayment
1	11		1.00	1.60	98.66	0.00	stone construction	primary	drainage
1	11	07	1.00	1.60	98.66	0.00	stone construction	primary	drainage
1	12		.60	.90	98.80	98.60	burned earth small stones	primary	hearth or craft installation
I	13		6.80	1.30	98.57	98.30	stone and mortar	primary	exterior house wall
1	14	32	6.80	.50	98.74	98.54	packed clay bricky fill	secondary	outside floor
1	15		8.00	1.60	98.65	98.46	stone mortar	primary	house wall
1	16		6.20	2.20	98.81	98.70	packed earth sherds	primary	inside floor
1	17		6.80	1.30	98.30	98.20	bricky stoney fill	secondary	packing for 13 wall
1	18	08	4.50	4.50	99.05	98.70	loose soil	secondary	fill over room floor
1	19		4.00	2.50	98.70	98.35	hard packed bricky	primary	2nd inside floor
1	20		.90	.80	98.98	98.68	burned and ashy fill	primary	ash pit or hearth
1	21	09	4.00	2.50	99.09	98.86	clean earth	secondary	clean fill prep building
1	21	10	4.00	2.50	98.86	98.75	burned earth bricky	secondary	collapse of level
1	21	11	4.00	2.50	98.93	98.75	soil with charcoal flecks	good secondary	smoothed collapse
1	21	12 13	4.00	2.50	98.75	98.40	bricky bits charcoal	secondary	wall collapse
1	22		5.00	2.50	98.60	98.12	wall	primary	exterior wall of house
1	24	16	1.00	2.75	98.37	98.12	small stones	primary	interior house wall
1	25	17	2.50	1.00	98.28	98.16	bricky fill	secondary	wall collapse fill
1	26		.70	1.00	98.43	98.10	2 courses limestone pieces	primary	platform? hearth?
1	27	15	.80	2.75	98.35	98.28	ashy loose	secondary	between floor fill
1	28		.80	2.75	98.28	98.25	ashy covered gray green surface	primary	base of interior floor
1	29		.80	2.75	98.25	98.10	loose earth under 28 surface	secondary	under floor packing
1	30	19	4.50	4.50	98.74	98.50	gravelly	tertiary	between floor fill
1	30	20	4.50	4.50	98.62	98.50	gravelly	tertiary	between floor fill
1	31		4.50	4.50	99.42	98.85	earth scattered stones sherd	tertiary	erosion building collapse
1	32		2.50	1.70	99.37	99.05	wall foundation assoc fill	primary	wall foundation
1	33	24	2.00	2.00	98.10	97.72	gravel no artifacts	tertiary	sterile
1	33	25	4.50	2.50	98.10	97.92	soft brown clay soil	tertiary	sub-foundation pit fill
1	33	26	4.50	2.50	97.92	97.72	sterile clay	na	sterile
1	34	26	4.50	4.50	98.70	98.56	loose fill with floor 38 below	secondary	over floor fill
1	34	28	4.50	4.50	98.56	98.22	soft earth artifacts	secondary	fill over floor
1	34	30	.65	.50	98.56	98.46	ashy soft earth	secondary	ash pit
1	34	31	.50	.60	98.56	98.46	ashy soft earth	secondary	ash pit

Op	Loc	Lot	NS	EW	Top	Bottom	Fill	Quality	Interpretation
1	35	27	4.50	4.50	98.85	98.75	mudbrick clay & soft fill	secondary	living floor assoc 36
1	35	29	3.50	2.50	98.75	98.63	clay & soft earth w/artifacts	secondary	living floor
1	36		1.70	3.00	98.60	98.50	stones pottery fill plaster	primary	building wall
1	37		3.00	1.50	98.92	98.35	stone and plaster	primary	wall
1	38		4.50	1.00	98.45	98.42	hard packed green earth ashy	primary	floor underlayment
1	39	33	4.50	4.50	98.58	98.29	hard packed clay earth	secondary	wall underlayment
1	40		4.50	4.50	98.29	98.22	gray soil	secondary	floor
1	41		4.50	1.10	98.66	98.02	stone plaster loose earth	primary	building wall
1	42		1.50	1.00	98.54	98.34	stone clay	primary	interior wall
1	43		2.00	4.50	98.10	97.90	stones clay fill	secondary	under between floor fill
2	03	1	9.00	9.00	96.41	96.21	slope wash sod layer	tertiary	sod layer
2	03	2	9.00	9.00	96.21	95.81	stones fill mudbrick plaster	secondary	fill above eroded floor
2	03	3	9.00	9.00	95.81	95.36	foundation stones hard fill	primary/ secondary	eroded floor of house
2	04		4.50	4.50	95.36	95.30	foundation stones sand loose	secondary	>floor foundation & burial
2	05		4.50	4.50	95.21	94.71	small stones clay soil fill	secondary	> <floor &="" burial<="" fill="" td=""></floor>
2	06		4.50	4.50	94.71	94.55	in situ stones	primary	above floor foundations
2	07		3.50	2.80	94.55	94.44	plaster loose earth mudbrick	primary	plastered floor
2	08	4	4.00	3.50	94.50	94.41	small river pebble under floor	primary	floor underlayment
2	08	5	4.00	3.50	94.50	94.28	flat stones in regular lines	primary	stone foundation
2	09		.70	1.20	94.41	94.20	mudbrick in line	primary	mudbrick wall
2	10		.50	3.80	94.30	93.90	stone wall fill	primary	continuation of Loc8
2	11		2.00	.85	94.55	94.46	hard packed earth pebbles	primary	outside surface
2	12		1.40	3.30	93.91	93.77	hard packed earth pebbles	primary	outside surface
2	13		4.50	4.50	93.80	93.76	fill large irregular stones	tertiary	foundation terracing
2	14		2.50	4.50	93.76	93.50	large stones fill	tertiary	foundation for terracing
2	15	7 8	4.00	2.00	93.50	93.33	clay stones fill	tertiary	foundation to sterile
2	16		4.50	9.00	96.21	96.03	stone mudbrick fill	secondary	collapse over floor
3	03		4.50	4.50	93.49	93.39	gravel earth	sterile gravel	sterile
4	03		2.00	2.00	96.62	95.92	foundation stone bricky soil	secondary	fill over soil
5	03		2.00	2.00	98.14	97.54	sod fill	tertiary	mixed surface erotional
5	04		2.00	2.00	97.54	97.44	burnt mudbrick ashlar stone	secondary	piece of foundation floor
5	05		2.50	2.50	98.10	98.00	sod fill	tertiary	sod erosional
5	06	1	1.20	1.30	97.44	96.95	soft undifferentiated fill	secondary	trash pit
5	06	2	1.20	1.30	96.95	96.45	soft wet fill	secondary	trash/ storage? pit
5	06	3			96.45	95.80	undifferentiated fill	secondary	trash/storage pit
6	03	1	4.50	4.50	97.70	97.60	sod fill mixed pottery	tertiary	sod erosion
6	03	2	4.50	4.50	97.60	97.50	empty fill	secondary	erosional & collapse
6	04	3	1.55	1.55	97.50	96.85	loose artifact filled soil	secondary	storage/trash pit
6	04	4	1.55	1.55	96.85	96.35	soft wet earth	secondary	storage/trash pit
6	04	5	1.55	1.55	96.35	96.14	very wet earth few artifacts	secondary	pit
7	03		4.50	4.50	99.46	99.26	sod burned earth	tertiary	surface erosion
7	04	1	2.00	2.00	97.87	97.72	sherds fill	tertiary	erosional layer
7	05	1	2.00	2.00	97.72	97.22	burned earth tumbled fill	tertiary	collapse over building

# Yarım Höyük

Drawing no:	YH no:	Operation no:	Locus no:	Lot no:	Drawing no:	YH no:	Operation no:	Locus no:	Lot no:
Fig. 1,1	208/13	6	004		2	190/9	5	006	2
2	208/14	6	004		3	202/9	6	003	1
3	150/18+21	2	015		4	202/10	6	003	
4	215/5+9	6	004	3	5	184/14	5	006	1
5	87/6	1	034	28	6	190/10	5	006	2
6	170/2	5	004		7	95/3	1	041	
7	170/3	5	004		8	176/15	5	005	
8	184/5	5	006	1	9	202/5	6	003	
9	216/4	6	004	4	10	202/4	6	003	
10	176/5	5	005		11	95/1	1	041	1
11	185/4	5	006	1	12	117/8	2	005	
12	185/2	5	006	1	13	108/13	2	003	3
13	190/4	5	006	2	14	83/10	1	035	
14	190/7	5	006	2	15	303	7	003	
15	71/1	1	031		16	18/13	1	001	
16	184/7	5	006	1	Fig. 4,1	109/4	2	003	3
17	150/10	2	015		2	104/6	2	003	
18	216/1	6	004	4	3	122/2	2	007	1
19	18/3	1	001		4	108/9	2	003	3
20	211/2	6	004		5	105/3	2	003	2
21	202/2	6	031	22	6	133/11	2	008	
22	185/5	5	006	1	7	109/16	2	003	3
23	t76/4	5	005		8	105/2		003	2
24	181/3	5	006		9	108/16	2 2	003	2
25	83/4	1	035		10	133/12	2	008	
26	73/1	1	030	20	11	108/5	2	003	3
27	39/2	1	021		12	18/11	1	001	
28	184/6	5	006	1	13	108/4	2	003	3
29	176/10	5	005		14	125/2	2	008	
30	184/2	5	006	1	Fig. 5,1	216/3	6	004	4
Fig. 2,1	98/2	1	043		2	109/6	2	003	3
2	88/2	1	035	29	3	87/2	1	034	28
3	117/4	2	005		4	216/3	6	004	4
4	71/4	1	031		5	176/2	5	005	
5	113/9	2	004		6	117/1	2	005	
6	94/1	1	039	33	7	83/5	1	035	
7	176/13	5	005		8	16/3	1	005	5
8	185/1	5	006	1	9	181/2	5	006	
9	176/12	5	005		10	87/4	1	034	28
10	177/7	5	005		11	83/7	1	035	
11	18/4	1	001		12	184/11	5	006	1
12	18/6	1	001		13	83/11	1	035	i .
13	108/16	2	003	3	Fig. 6,1	117/9	2	005	
14	190/13	5	006	2	2	197/3	02	16	
15	150/15	2	015		2	197/3	2	016	
16	150/7	2	015		3	113/6	2	004	
Fig. 3,1	95/4	1	041		4	114/5	2	004	

Drawing no:	YH no:	Operation no:	Locus no:	Lot no:	Drawing no:	YH no:	Operation no:	Locus no:	Lot no:
5	18/14	1	001		6	150/11	2	015	
6	109/15	2	003	3	7	133/15	2	008	1
7	133/9	2	008		8	215/1	6	004	3
8	133/7	2	008		9	15/7	1	005	3
9	202/7	6	003		10	16/10	1	005	5
10	114/3	2	004		11	118/7	2	005	
11	18/12	1	001		12	71/7	1	031	-
12	117/2	2	005		13	83/13	1	035	·
13	114/7	2	004		14	208/12	6	004	
14	158/4	2	015	8	15	50/17	1	021	12
15	133/10	2	008		16	176/17	5	005	
16	211/4	6	004		Fig. 10,1	77/2	1	014	22
17	158/6	2	015	8	2	102/12	6	003	***************************************
18	118/4	2	005		3	109/1	2	003	3
19	133/4	2	008		4	108/17	2	003	3
Fig. 7,1	110/14	2	003	3	5	133/16	2	008	
2	18/15	2	003	1	6	108/12		003	3
3	197/2	2	016		7	105/15	2	003	2
4	110/2	2	003	-	8	190/7	5	006	2
5	118/8	2	005	1	9	190/16	5	006	2
6	83/8	1	035		10	181/13	5	006	1
7	133/8	2	008		111	181/12	5	006	
8	118/11	2	035		12	184/1	5	006	1
9	94/3	ī	039	33	13	133/18	2	008	
10	108/2	2	003	3	14	95/5	ī	041	
11	121+136	2	006	6	15	117/19	2	005	+
12	110/15	2	003	3	16	117/18	2	005	-
13	215/8	6	004	3	17	133/17	2	008	·
14	150/17	2	015		18	114/6	2	004	
15	109/14	2	003	3	19	108/20	2	003	3
16	176/14	5	005	1	20	77/1	1	014	22
17	42/5	1	021	9	21	118/2	2	005	
Fig. 8,1	50/5	1	021	12	22	118/6	2	005	
2	56/2	1	024	16	Fig. 11,1	54	1	021	13
3	42/3	i	021	9	2	43	1	021	9
4	39/5	1	021		3	180	5	006	1
5	61/2	1	025	17	4	51/11	1	021	12
6	42/1	1	023	9	5	175/2	5	005	12
7	61/3	1	025	17	6	173/2	1	005	3
8	113/1	2	004		7	112		003	3
9	105/9	2	003	2	8	119	2	005	, ,
10	105/10	2	003	2	9	24	1	008	-
11	142/2	2	014		10	111	2	003	3
12	110/13	2	003	3	111	115	2	003	)
Fig. 9,1	73/2	1	030	20	12	201	6	003	1
2	208/11	6	004	20	13	106	2	003	1
3	39/8	1	021		14	152	2	015	7
4	18/16	1	001		15	111	2	003	3
5	158/13	2	015	8	16	175/1	5	005	3

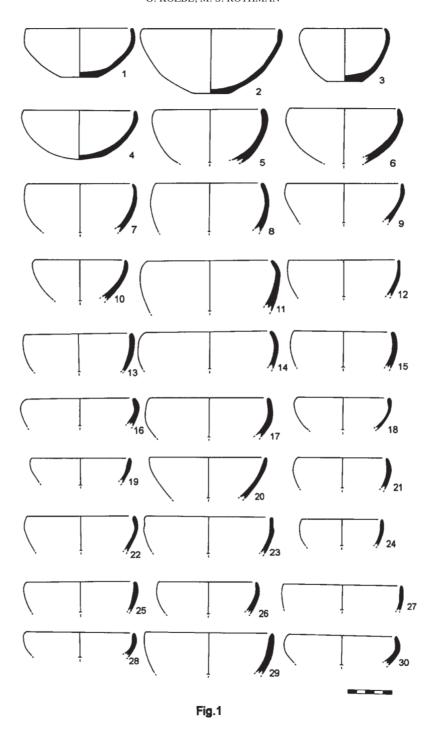


Figure 1. Yarım Höyük open, plain simple ware bowls.

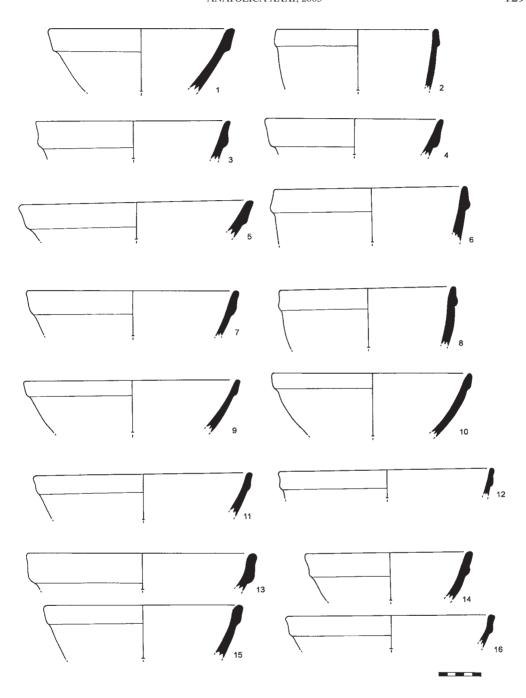


Fig.2

Figure 2. Yarım Höyük band rim bowls.

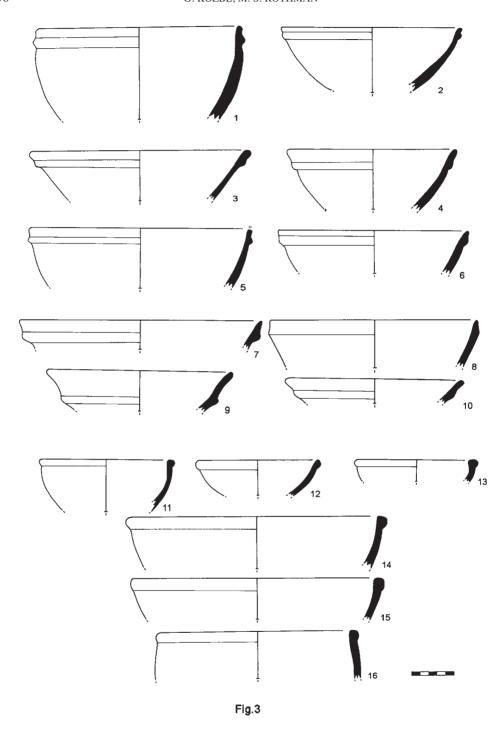


Figure 3. Yarım Höyük band rim bowls with exterior ridge and club rim bowls.

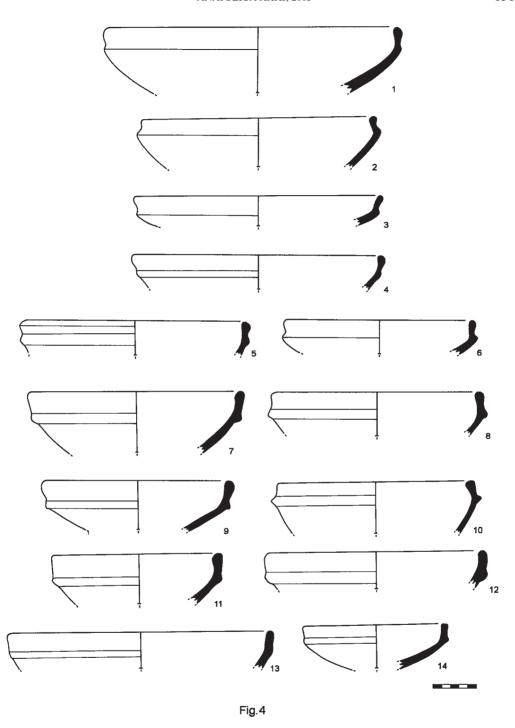


Figure 4. Yarım Höyük grit-tempered open bowls with raised ridges.

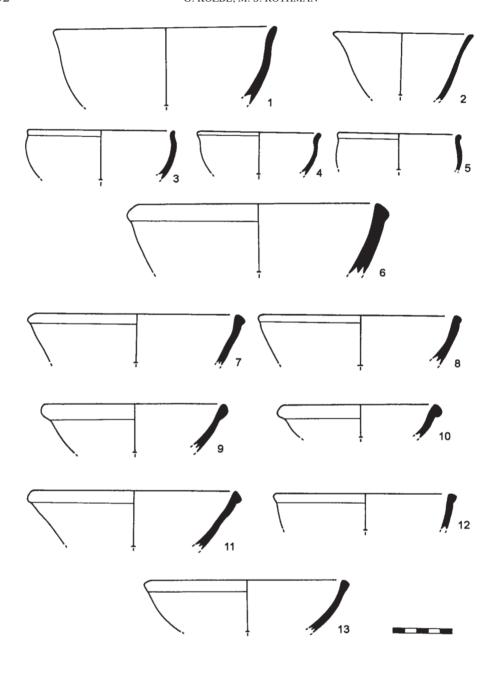


Fig.5

Figure 5. Yarım Höyük grit-tempered sinuous and cyma recta cups.

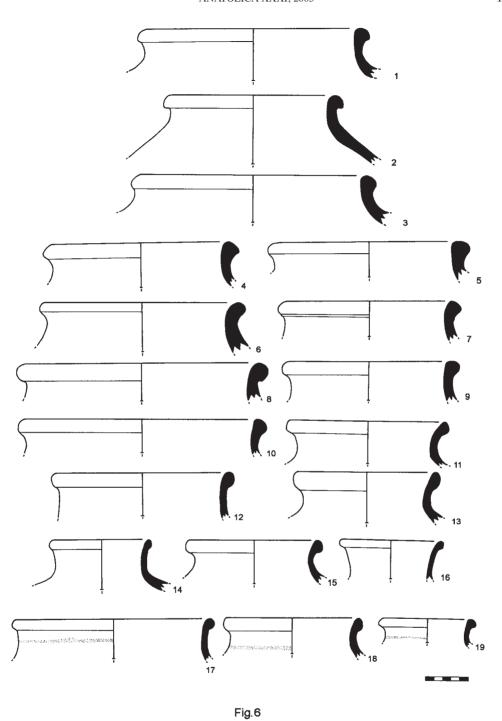


Figure 6. Yarım Höyük medium to storage sized jars.

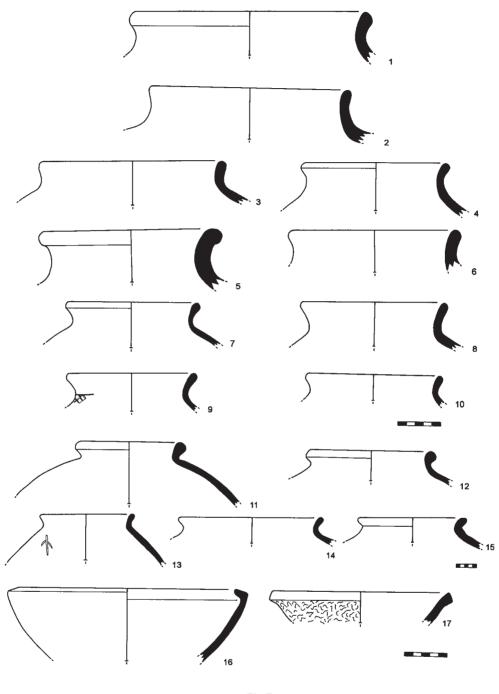


Fig.7

Figure 7. Yarım Höyük buff and orange buff variants of plain simple ware jars, beveled rim bowls.

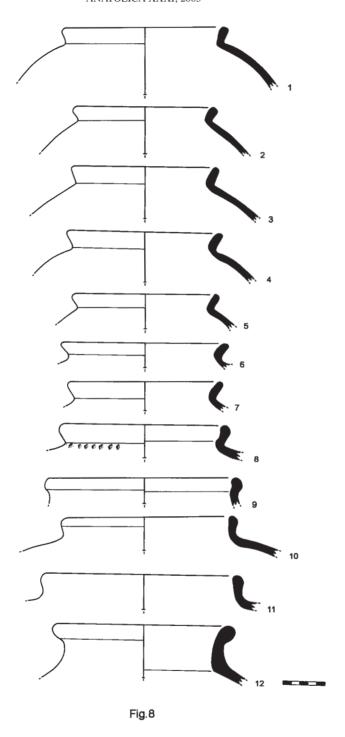


Figure 8. Yarım Höyük chaff-faced jars.

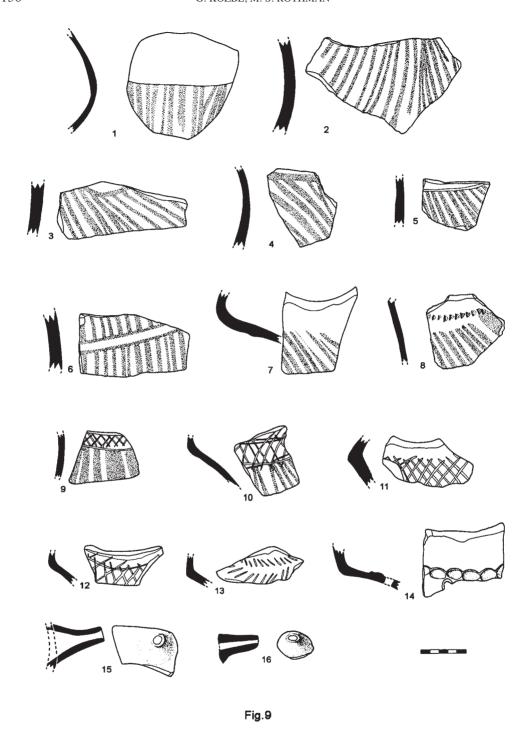


Figure 9. Yarım Höyük reserved slip, incised, and thumb impressed strip sherds.

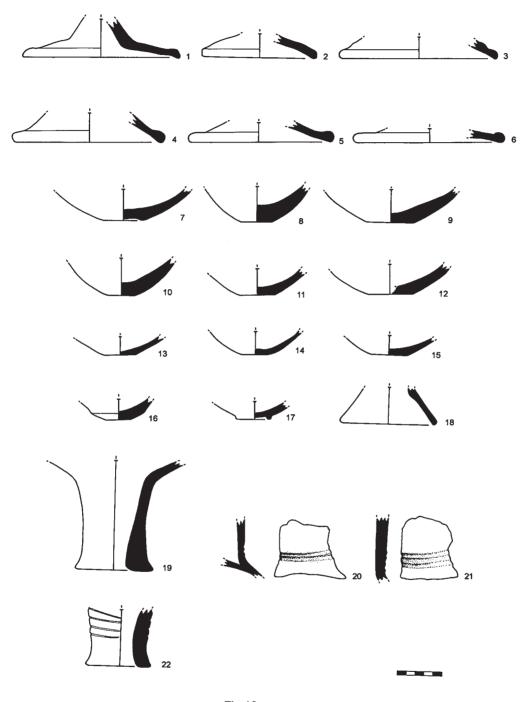


Fig.10

Figure 10. Yarım Höyük bases of various wares and periods.

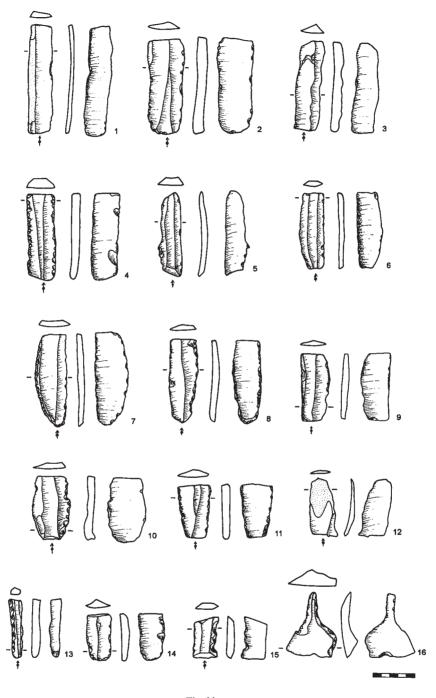


Fig.11

Figure 11. Chipped stone implements from Yarım Höyük.

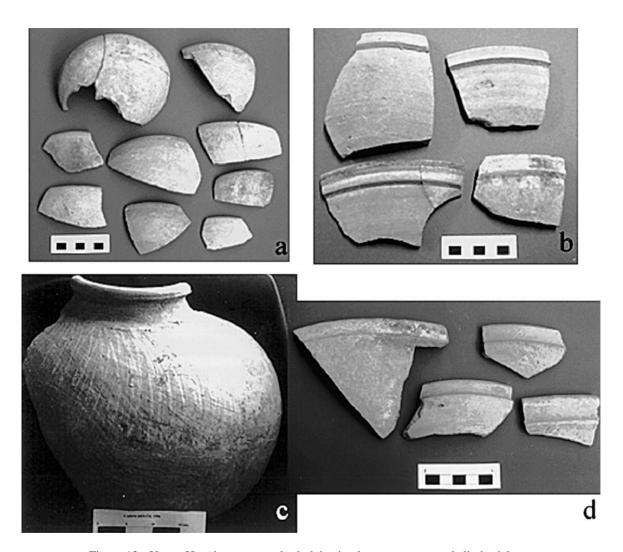


Figure 12. Yarım Höyük pottery- a, b, d plain simple ware, c reserved slip burial pot.









Figure 13. Yarım Höyük pottery- a-d plain simple.

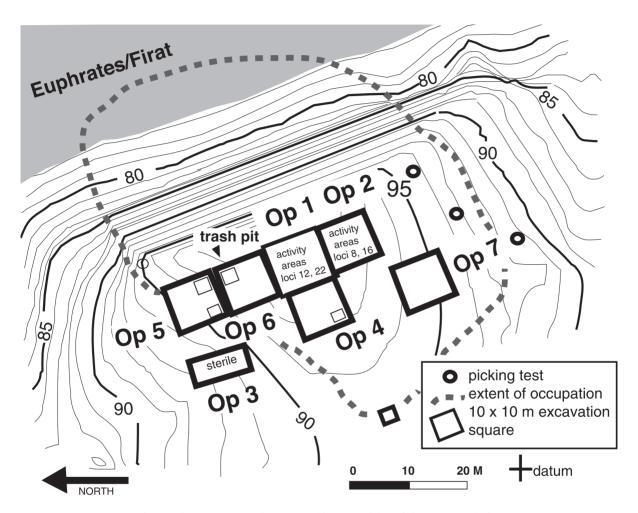


Figure 14. Yarım Höyük topographic map with activity areas and pits.

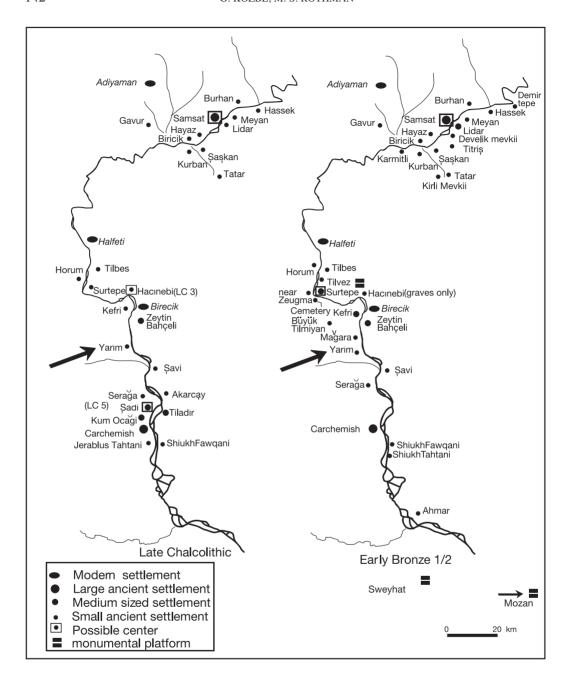


Figure 15. Late Chalcolithic and Early Bronze I/II site distributions.



Figure 16. Yarım Höyük Loci 7-12 with reserved slip pot burial from above.

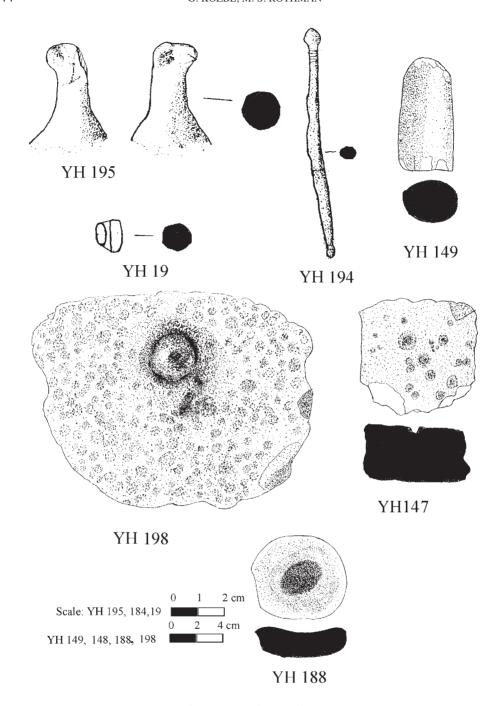


Figure 17. Various artifacts.