

## REVISITING TELL BEGUM: A PREHISTORIC SITE IN THE SHAHRIZOR PLAIN, IRAQI KURDISTAN

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Tell Begum was previously explored by Iraqi archaeologists in the 1960s when excavations revealed a multi-period site. Among the key finds were Halaf period remains that are relatively rare in the region of the Shahrizor plain and included polychrome ceramics suggesting a local variation of the Halaf culture. Recent investigations and excavations in 2011 and 2013 revealed a 5 hectare site inhabited during the Halaf, Ubaid, Late Chalcolithic, and medieval periods. The Halaf site may have had an area of about 3 hectares, making it a relatively large settlement for that period, although its full extent is unclear. Offsite work revealed the area to have been well watered in the past, with likely neighbouring regions of woodland and abundant shrubs. The heavy sedimentation in the region has partially obscured archaeological remains, including possibly Tell Begum's lower mound. The site, nevertheless, shows continuity of settlement, indicating relative stability in settlement over long timespans.

### Introduction<sup>1</sup>

Tell Begum is a *c.* 5 hectare prehistoric mound situated in the Shahrizor Plain, an intermontane valley in Sulaymaniyah province, Iraqi Kurdistan (Fig. 1). The site lies within the area covered by the Shahrizor Survey Project (henceforth SSP; Altaweel *et al.* 2012) (Fig. 2). Initial surface collections in 2012 as part of the SSP suggested that Tell Begum may offer excellent opportunities for investigating the later prehistory of the region, specifically the Late Neolithic and Chalcolithic periods (Fig. 3). Gaining insights into the material culture from these periods is pertinent for understanding other sites detected in the survey. Interpreting prehistoric sites in the Shahrizor presents a challenge as very few excavated local sequences are available and we cannot assume that frameworks valid for other parts of ancient Western Asia may be simply applied in Iraqi Kurdistan (Altaweel *et al.* 2012; Ur *et al.* 2013). Among the goals of the SSP is to construct a local material sequence valid for the Shahrizor Plain. Moreover, both the Late Neolithic and the Chalcolithic have emerged recently as important foci for archaeological study (Nieuwenhuyse *et al.* 2013; Carter and Phillip 2010). It is now clear that many cultural innovations traditionally ascribed to later periods have in fact their roots in the Late Neolithic and Chalcolithic (Akkermans and Schwartz 2003). Much of this new research has been conducted on the plains of Upper Mesopotamia and the Taurus foothills of south-eastern Anatolia. However, the role of the Shahrizor area within the broader cultural mosaic of prehistoric Western Asia remains to be ascertained. While there have been earlier excavations at Late Neolithic and Chalcolithic sites in the region (Abu al-Soof 1964, 1966, 1969, 1985; Braidwood *et al.* 1983; Braidwood and Howe 1960; Hijara 1973, 1976; Watson 1983), previous work in the Shahrizor has been published selectively. Perhaps reflecting the relative dearth of academic investigation over the past decades, this region has been portrayed as marginal or culturally distinct from mainstream developments in

<sup>1</sup> After receiving permission from the Directorate in Sulaymaniyah the team spent three weeks at Tell Begum between 6–29 August 2013. The team comprised: Olivier Nieuwenhuyse: project director; Zana Abdulkarim Qader: representative; Akemi Kaneda: field director; Takahiro Odaka: field director; Martin Uildriks: topographer; Ian Vermeer: supervisor; Klaas Zevenhek: supervisor; Sam Botan: supervisor; Robbin van Splunder: supervisor. In addition we were visited by two colleagues Prof. Dr. Rene Cappers and Dr. Johan Nikolai from, respectively, Leiden University and Groningen University (The Netherlands).

We thank the officers of the Police Department of the village of Said Sadeq for their great assistance. Especially, our work would have been utterly impossible without the warm, incredibly effective support from the Directorate of Antiquities in Sulaymaniyah, headed by Dr. Kamal Rasheed. We owe much to his advice and guidance in setting up our project. This project has been sponsored by Leiden University Fund (LUF)/Byvanck Fonds and Waseda University Grant for Special Research Projects (2013A-093, 2013B-277).



Fig. 1 Tell Begum August 2013. View on the mound from the southwest

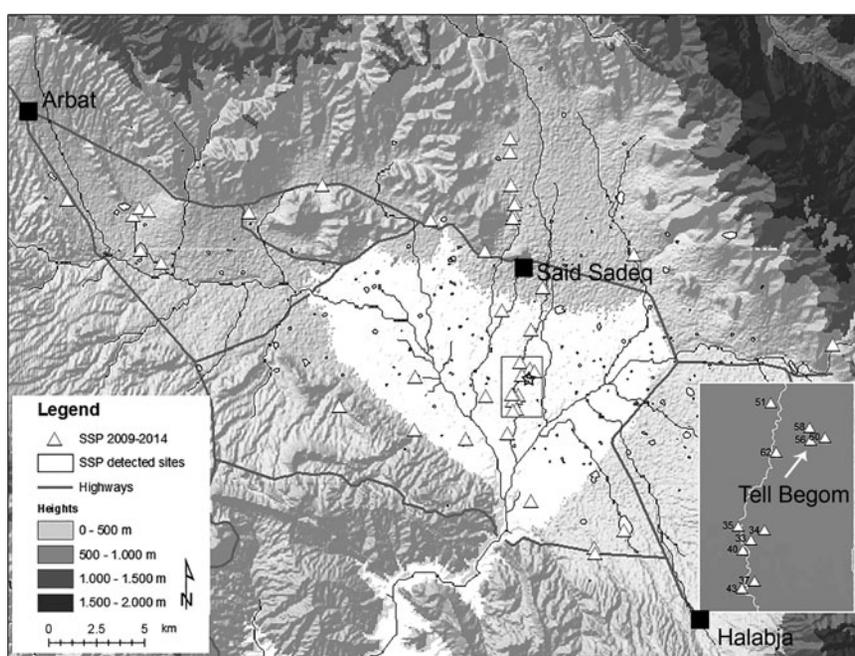


Fig. 2 Map of northern Iraq (Iraqi Kurdistan) showing the location of Tell Begum and the Shahrizor Survey Project

Mesopotamia as a whole. In some recent reviews the region is simply left blank, or indicated with question marks (e.g. for the Chalcolithic: Stein 2012: fig. 1; for the Neolithic: Kozłowski and Aurenche 2005: fig. 0.24). Replacing these question marks with sound empirical data is therefore timely.

Significantly, Tell Begum lies within the area flooded by the construction of the Darband-i Khan Dam which has resulted in lake waters reaching the foot of the mound. Although drought and socio-political conditions have led to low water tables over the past few years, these conditions may not last and the lake will eventually erode the mound. Tell Begum certainly is not alone in this regard; a rich archaeological landscape could disappear forever. As Abu al-Soof (1964: 40) has already pointed out, archaeologists working in the area should actively seek to safe-guard whatever information they can in the form of survey and excavation. With the excellent support of the Directorate in Sulaymaniyah, a small team from Leiden University in collaboration with colleagues from UCL, the University of

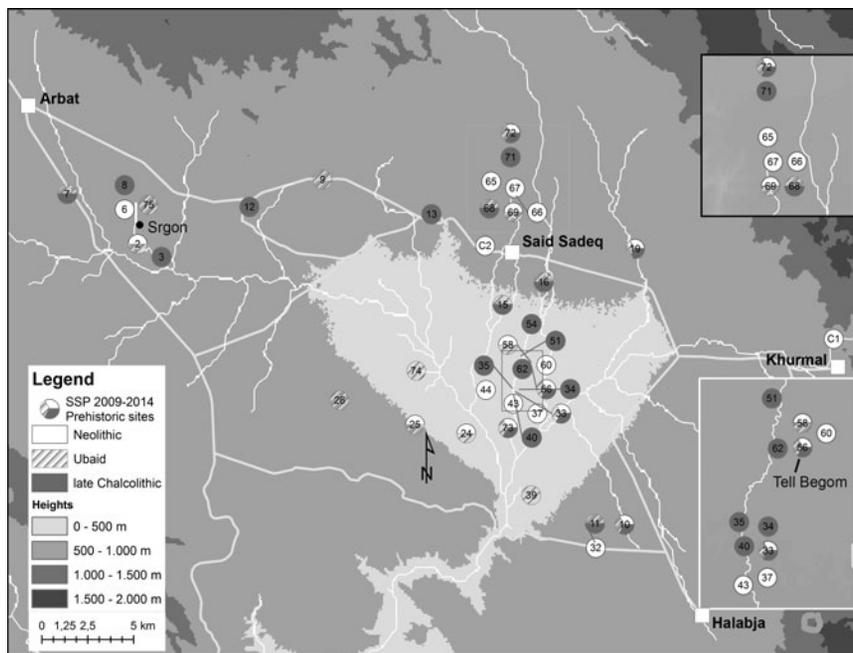


Fig. 3 Map of the Shahrizor Valley showing the location of Tell Begum and other prehistoric sites detected in the Shahrizor Survey project

Munich and Waseda University revisited the site in 2013. Our aims were to reconstruct the long-term history of the mound, to retrieve stratified materials to facilitate the SSP, to explore the geomorphology of the region, and investigate the potential for further work. A finds-processing campaign in the autumn of 2014 was unfortunately postponed due to political circumstances; a brief description of the finds and the ceramics will be provided on the basis of our field documentation.

#### *Previous work at Tell Begum*

Tell Begum has been known for some time. The first explorations at the site were undertaken in 1960 by an Iraqi team from Baghdad directed by Muhammed Ali Mustafa. In a four-week campaign two long and deep soundings were made: one on the Upper Mound (“Upper Trench”, or UT) and another on the Lower Mound (“Lower Trench”, or LT). An interview with a local resident in August 2013, confirms that the Iraqi team employed a large number of workmen. He vividly remembered seeing as a boy: “a hundred people were working there”. The soundings were not backfilled when this work was concluded. Unfortunately the earlier excavations were not published in full. Nevertheless, Ismail Hijara was present at the excavations, or learnt about the site after the team had returned to Baghdad. Hijara was especially intrigued by the unusual and stunning polychrome-painted Halaf pottery his colleagues were recovering from Tell Begum. He interpreted these ceramics as representing an intermediate stage between the Halaf and Ubaid periods—a so-called Halaf-Ubaid-Transitional (Hijara 1997). Hijara included colour photographs of the sherds in his important book on the Halaf period in northern Mesopotamia, together with a stratigraphic summary of the trench through the Lower Mound (Hijara 1997; appendix two, plates LXXXVII–XCIII).<sup>2</sup> He also passed a few of the Tell Begum sherds to Joan Oates who helped to bring the site to the attention of other Near Eastern prehistorians.<sup>3</sup>

<sup>2</sup> Ismail Hijara copied the field notes made by his colleague Shah Muhammed Ali al-Siwani who excavated the Lower Mound sounding one of the Iraqi excavators (Hijara 1997: appendix 2).

<sup>3</sup> Joan Oates kindly made a photograph of these available to the SSP team for their first report (Altaweel *et al.* 2012).

Apart from these tantalising pieces of data, or perhaps because of them, Tell Begum always remained a mysterious prehistoric mound at the periphery of Mesopotamian archaeology. We should not forget that at the time of Hijara's synthesis very few Halaf sites had been identified in this part of Iraq. Today the SSP has documented several more Late Neolithic sites in the region, but in 1960 Hijara was able to identify only two sites with Halaf occupation: Tell Sragon and Tell Begum (Fig. 4). Although key Halaf sites are known in the vicinity of the Shahrizor—Tell Arpachiyah is only some 275 kilometres as the crow flies to the northwest, Tell Songor is to the southwest in the Hamrin (Fujii ed. 1981; Kamada and Ohtsu 1993; Matsumoto and Yokoyama 1995), whilst Banahilk lies in Iraqi Kurdistan (Matson 1983; Watson 1983)—the scarcity of Halaf period sites in the Shahrizor itself, with its secluded mountainous setting, has contributed to a perception of its cultural isolation. Hijara (1997: 90) somewhat poetically spoke of the sites of Begum and Sragon in the Shahrizor Valley as the “Halaf mountains”.

#### *The geomorphology of Tell Begum*

Using a mechanical digger, three trenches (G31, G34, and G35) were excavated near Tell Begum to ascertain Holocene sedimentation in the area and to compare it with other ongoing work in the Shahrizor (see Altaweel *et al.* 2012). Additionally, elevation transects from Tell Begum were taken to indicate the general slope of the region (Fig. 5). Excavation of trench G34 reached a depth of 3.8 metres. Closer to Tell Begum, G35 was excavated to a depth of 7+ metres; Pleistocene gravels were not revealed before groundwater levels brought work in the trench to a halt. In G31 excavations reached 3+ metres before the water level impeded further exploration. The nearby Darband-i Khan raises groundwater levels in around Tell Begum and other sites close to the shore of the lake. This also makes the soils and sediments darker than the surrounding region.

In summary,—and using G34 as a general guide (Fig. 6)—there appears to be a gradual increase in sedimentation between G34 and G35, as might be expected based on their relative topography (higher to lower elevation respectively). As seen also near Tell Bakr Awa, soil formation is evident, suggesting possible drying or stabilization in the area towards conditions comparable to those of today (Altaweel *et al.* 2012). Approximately the top 40 centimetres (Fig. 6:1) consists of a topsoil (10YR 4/1 dark grey) and plough zone, while a B-horizon subsoil layer (Fig. 6:2; 10YR 3/2 dark greyish brown) is found between 0.4–0.75 metres below the surface. Adopting the date for this change as identified at Tell Bakr Awa, it is likely that this soil formation and stabilization dates to the last 2300 years. Such results are to be expected given Tell Bakr Awa's proximity to Tell Begum. From 0.75–1.3 metres (Fig. 6:3) there is an abrupt transition to a more silty (10YR 7/2 light greyish colour) sedimentary structure with few calcium nodules. From 1.3 metres in G34, a graded boundary to a solid massive clay bed (Fig. 6:4; 10YR 5/4 yellowish brown) is encountered with few calcrete nodules until 3.45 metres below the surface. After this, a thick Pleistocene gravel bed (Fig 7:5) is apparent. At 2.4 metres below the surface in G34 and 2.7 metres in G35, groundwater was encountered: we were able to excavate through it in G34. For G35, greater sedimentation is evident and the Pleistocene gravel was not reached. The topsoil and subsoil features are evident to a depth of about 0.8 metres. No transitional boundary is evident before a massive clay bed continues for a further 3.6 metres. A gradational change is evident 4.0 metres below the surface, where the clay structure continued with mixed pebbles and small stones. The small stones were not consolidated. At roughly 7 metres below the surface, we were forced to stop excavating as the water level had become too high to continue further work.

Using results from G34 and G35, the soil layers encountered represent a late Holocene formation (dry: 10YR 3/1 very dark grey for G35; dry: 10YR 3/2 dark greyish brown for G35). The sediments beneath this layer, which have a generally high level of clays (wet: 10YR 5/3 brown for G34; wet: 10YR 6/4 light yellowish brown for G35), are generally consistent until the Pleistocene gravel is reached. The small pebbles and gravels encountered close to the bottom of G35 may be representative of high-energy water flow. For the most part, there has been significant sedimentary build-up in the area around Tell Begum for much of the Holocene, a picture to be expected given the site's valley location. We can deduce the likely presence of a water channel in the area between G34 and G35, where G34 represents a typical sequence of finer sediments as one gets deeper, the

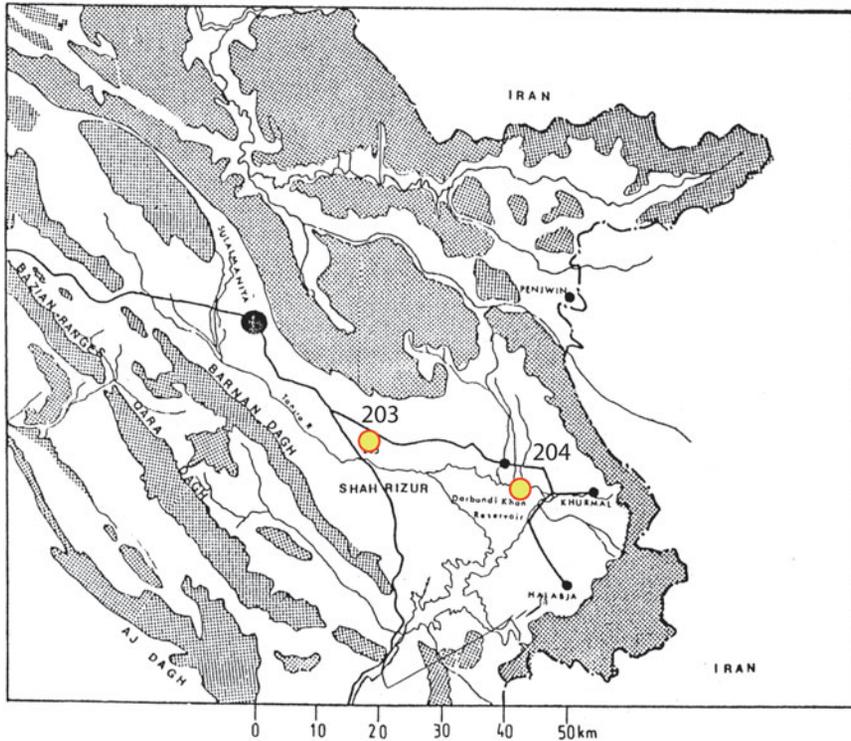


Fig. 4 The distribution of Halaf sites in the Shahrizor Valley as known by 1980. At the time only two Halaf sites were known: Tell Sragon (site 203) and Tell Begum (site 204) (Hijara 1997: 90 and fig. 99)



Fig. 5 November 17, 2010 QuickBird image showing sedimentary trenches (G31, G34, and G35) and elevation transects

result of channel cutting and deposition. Closer to Tell Begum in G35, the deeper sediments suggest the site was located near or next to a waterlogged area at some point in the Holocene. While little can be said about G31, the sediments are likely to be deep here, as we reached 3 meters before excavation

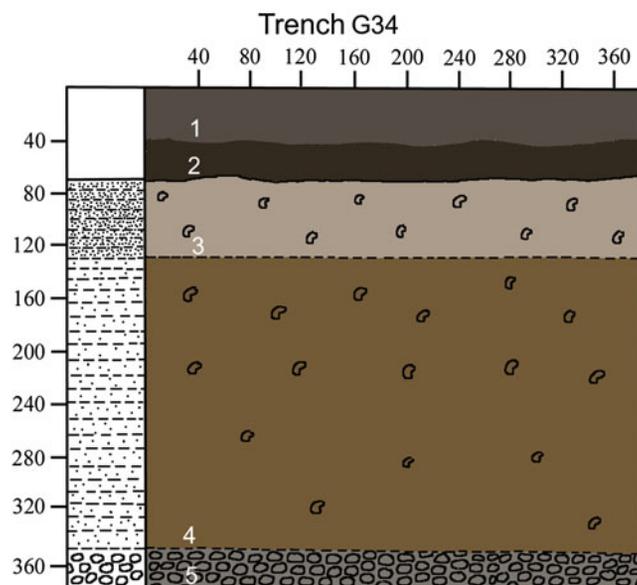


Fig. 6 Section drawing showing G34



Fig. 7 Survey map of Tell Begum (base image: Digital Globe 10.11.2012)

was brought to a halt by rising water, and the silts and clays encountered suggest another waterlogged area. A second channel, between Tell Begum and Shamlu, may, therefore, have been located here as well.

Why Tell Begum's prehistoric layers are visible is not entirely certain, although very likely the site sits on a buried Pleistocene ridge or terrace, similar to that found at Tell Gurga Chiya (about 10 kilometres southeast of Tell Begum) and Tell Bakr Awa. In essence, while the topography today shows a gradual change between G34 and Tell Shamlu, the early Holocene topography may have consisted of a number of small undulating terraces or hills that have been subsequently buried; these terraces were formed as the Pleistocene layers were eroded by alluvial action and streams,

with subsequent Holocene deposition that was deep in areas of greater water concentration and flow. From what we can determine for the wider region, in the early to mid-Holocene, these raised areas were probably a focus for settlement, as they would offer protection from periodic flooding and waterlogged areas, while also providing access to agricultural land as well as themselves being productive in food and other resources. The region was likely to have been relatively wet and well-watered at least until the late Holocene, as suggested by phytolith evidence, with many varieties of exploitable plants that thrived in wet conditions, including shrubs wetland plants, and woodland in the highlands as well as possibly in the lowland regions (Marsh and Altaweel, in Press). The fact that many phytoliths are multicells indicates relatively high water abundance for long periods into the late Holocene. The sediments in the area suggest this abundance of water at certain times of the year would have been both a recurrent problem and benefit for much of the early to mid-Holocene, while only at the later stages, or last 2,300 years, of the late Holocene do we see evidence of soil formation and decreased alluviation (i.e., more long-term drying phases).

According to the Iraqi excavators, virgin soil at Tell Begum was reached at the bottom of the LT sounding at a depth of 8.6 metres below the surface of the mound (see below). Significantly, this corresponds approximately to the present-day level of the surrounding fields. It could suggest that not very significant sedimentation occurred in the immediate surroundings and within the site, as it sits on an elevated area such as a Pleistocene terrace. To clarify this picture, we intend to carry out future geophysical work in the surrounding area to determine the location of Pleistocene gravels and their approximate depths, helping to distinguish the likely topography of the early Holocene and explain why Tell Begum and other nearby prehistoric sites are not buried and/or may have been attractive for settlement.

### *Surface Survey*

Tell Begum was surveyed during the 2012 season of the SSP as part of a cluster of thirty-one sites along Wadi Shamlu in the central Shahrizor Plain. Wadi Shamlu, despite its name, is a perennial stream fed by artesian springs as well as a network of seasonal streams immediately southwest of the modern village of Said Sadeq and close to the archaeological site of Hajji Abdallah (SSP-16). From there it runs for approximately 10 kilometres to the south where, until the late 1950s, it joined the Tanjero River but today the wadi feeds the Darband-i Khan Lake.

The site lies about 560 metres east of the central part of Wadi Shamlu and is itself surrounded by a cluster of five small low-rise mounds, which were visible on QuickBird satellite imagery as light spots and suspected to be the remains of settlements. In order to gain an initial impression of the history of habitation of Tell Begum and the neighbouring sites, they were surveyed in a 5 × 5 metre radial grid extending from the centre of the detected site over the extension of visible sherd scatter and a few meters further (Fig. 7). Only diagnostic rims, handles, spouts, decorated pieces and bases as well as small finds such as stone objects were collected.

In total 554 diagnostic sherds (16.3 kilogrammes) were collected from both the Upper Mound (n = 150, 4.19 kilogrammes) and the Lower Mound (n = 404, 12.11 kilogrammes). In assessing this pottery we were hindered by the lack of any existing ceramic framework for the Shahrizor Plain. This is not only true for the earlier, prehistoric periods but for the later, historic periods as well. For the earlier material, we have comparatively few excavated sites in the immediate region, and we must rely on evidence from other regions such as the Hamrin, southern Mesopotamia, or even the Upper Mesopotamian plains. For the later periods, the survey work on the Shahrizor Plain attests to a variety of local pottery traditions unknown in adjacent areas and still not perfectly understood. These may exist alongside better-known pottery traditions characterised by wider distributions. One example is the so-called Shamlu Ware, a characteristic ceramic type in the Shahrizor of the late Middle Bronze Age (late Old Babylonian in adjacent regions to the west) named after Tell/Gird-i Shamlu, a site 1.5 kilometres southwest of Tell Begum, downstream of the Wadi Shamlu. At Shamlu, this locally made pottery type is found in a stratigraphic sequence following Old Babylonian layers (defined by distinct pottery types of that period). It was first recognized by Jasim al-Janabi, who carried out salvage excavations at the site in 1960 (Janabi 1961; Mühl 2013: 163–66; for results of the resumed excavations in 2012–13 see Mühl forthcoming).

Leaving these issues aside for the purposes of this report, and anticipating improved chronological resolution of our pottery typologies, we have categorised the diagnostic sherds into a series of comparatively well dated and transparently described groups that should be replicable for other researchers, including Halaf Fine Ware (plain, painted or polychrome painted), Ubaid (plain, painted, incised or impressed), Late Chalcolithic coarse chaff-faced (plain, painted or red slipped), and a heterogeneous category of “Later”. The latter comprises a variety of wares, most of them wheel-made but also including nondescript handmade mineral tempered cooking wares. Some of this “Later” group can be attributed to specific periods (e.g. the Shamlu Phase of the Middle Bronze Age, or the so-called Kurdish Ware from the Ottoman Period) but others remain for the moment undated.

The main mound was surveyed in sections related to elevation resulting in a collection of evidence from the top and base of the mound. The upper part has been much disturbed in recent times by military installations, possibly gun emplacements, dug into the surface. The leeward site of the mound was thickly covered with vegetation, long grass and thistles, therefore no diagnostics were found there. On the windward side many sherds and lithics were clustered immediately below the modern digging, presumably washed out from the loose debris of the installations. Such concentrations were packed separately and plotted with GPS. On the top of the mound, a small circular rampart connected with the military activity was observed. In spite of this recent disturbance, the earth had been compacted due to daily grazing activities of domestic livestock, and this area yielded very few diagnostic sherds ( $n = 27$ , 0.52 kilogrammes). Datable sherds include so-called “Kurdish Ware” and medieval pottery. At a height of approximately 16–18 metres on the mound (which has a total height of 21 metres above the plain) dark-painted Ubaid related pottery was found (diagnostics total  $n = 47$ ). At the central elevation, Ubaid-related and Late Chalcolithic material was dominant, but in the lower areas of the mound, where evidence for disturbance by modern military installations were again observed, painted Halaf pottery was found in higher quantities. Late Neolithic painted sherds and Coarse Ware sherds were also found here.

Surface finds across the Lower Mound was collected in three parallel rows of  $5 \times 5$  metre grids. The central row lay on the eastern side of the earlier Iraqi excavation trench; finds from the trench were collected separately and these parallel the results of the Lower Mound excavations in 2013 (Fig. 8). Halaf pottery fragments were well represented in all sample areas, dark-painted and plain Ubaid pottery occurred only in some areas (specified below). “Later” pottery was found in all sample areas with the exception of the central part of the Lower Mound (metres 45–120). There are no clear spatial boundaries between different wares or between pottery types from different periods and indeed they show a marked overlap in terms of their spatial distributions. On the Lower Mound, the material collected at the surface includes a number of wares and chronological groups that are not attested in the excavated sounding, in particular those from the Ubaid period. Ubaid-period ceramics are found scattered across the entire Lower Mound surface, but no Ubaid strata have been identified in the Lower Trench (see below).

It is very likely the ceramics excavated in 1960 were collected for study from the mound close to the soundings. We know that a selection of the excavated material was taken to Baghdad, but no doubt the vast majority of the material was left at the site. Over time this material, most of it pottery sherds, was dispersed as a result of natural processes such as slope erosion. In more recent times, the heavy use of the mound by the military and local farmers can only have accelerated this process (Roper 1976; Odell and Cowan 1987; Diez-Martín 2010). Our recorded sherd distributions likely reflect this palimpsest of ancient and modern practices rather than prehistoric occupation patterns.

It is very true that the collections made at the middle section on the Lower Mound closely parallel the surface composition left by the Iraqi team in 1960. Here the original archaeological topsoil layers, dated by the Iraqis to the medieval period, are covered by the washed-out backfill from their excavations. This new topmost level contains a mixture of material from all of the prehistoric levels represented in the Lower Mound. With a few exceptions, “Later” pottery is absent here, although the excavated dump layers did yield “Later” pottery (see below Table 4). Late Chalcolithic pottery was counted in higher concentrations in the vicinity of the Iraqi trench,

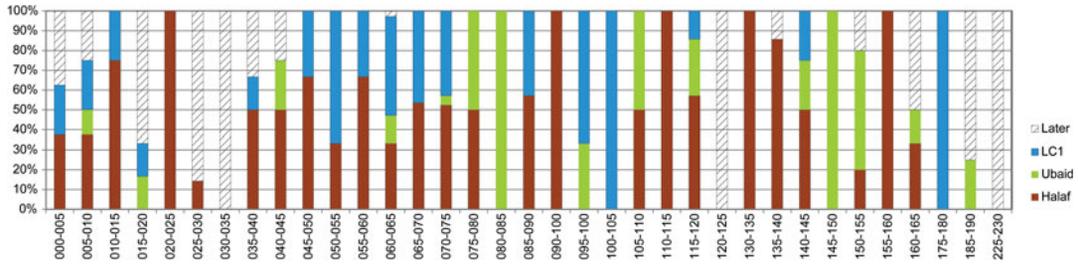


Fig. 8 Proportions of ceramic ware samples in a systematic surface collection. Upper: Upper Mound areas. Below: Lower Mound central transect

presumably because it formed part of the backfill from these excavations. The regular sherd distribution patterns were disturbed between sections 45 and 120, indicating the dumping of excavated soil all around the trench and not elsewhere.

The site survey did not only limit itself to parts of Tell Begum visible to the naked eye (SSP no. 56), as several small soil anomalies, some of the elevated, were discovered using satellite imagery.<sup>4</sup> Tell Begum is surrounded by five low hills, termed SSP-57–62, and the flat find spot SSP-63. The satellite mounds were surveyed with a radial pattern in 5 × 5 metre grids in the four main directions based on visible surface evidence. Sites SSP-58 and SSP-60 are dated to the Halaf, Ubaid and Late Chalcolithic periods. They may have belonged to the same general period of occupation as at Tell Begum but at present it is difficult to refine their chronology in relation to the main site. Site SSP-58 was covered by monochrome painted Halaf sherds, “Dark on Buff” Chalcolithic pottery and painted Ubaid sherds. Finally, Section 59 represented an area of soil different in colour from the surrounding fields and was investigated by field walking. It revealed no diagnostics, but small fragments of bricks and badly washed pottery, most of which showed similarities with medieval wares (temper and colour). At site SSP-60, a small number of diagnostics were found (no = 7), including plain Halaf Fine Ware, coarse but non-descript chaff-faced pottery (presumably prehistoric), and medieval sherds. In addition, the site yielded prehistoric lithic tools such as blades and end scrapers. The flat hill of SSP-57 revealed little evidence for human occupation apart from some flint tools such as blades, scrapers and drills, a piece of glass and a fragment of an Ubaid four-lugged vessel, as well as the possible remains of a burial at the southern slope (see Fig. 7). Sites SSP-61 to 63 were entirely unrelated to the prehistoric occupation of Tell Begum. Instead they can be dated to the Assyrian, Sasanian, medieval and modern periods (one Late Chalcolithic sherd was collected at SSP-62 and three flint tools at SSP-63).

*The Lower Mound*

On the Lower Mound, the severely eroded remains of the 1960 trench were clearly visible at the start of our work in the form of a V-shaped gully approximately three metres deep by ten metres wide, roughly oriented north–south. Hijara (1997: 127) reports that the trench originally measured 23 metres in length and 3 metres in width, reaching a remarkable depth of over 8 metres (Table 1). The excavators identified a total of twenty levels. The lowest levels XX to IV, from the base of the sounding to about 2.6 metres below the mound surface, were dated to the Halaf period. As Hijara remarks, with its 6 metre high accumulation of Halaf occupation, Tell Begum ranks as a major settlement of this period. The Halaf strata were succeeded by a mixed deposition including Halaf, Ubaid and Uruk sherds (level III), which in turn was covered by an Uruk level (II) and an Islamic level (I) (Table 1).

<sup>4</sup> Available CORONA images were taken at a time when the site was still covered by the waters of the Darband-i Khan Lake. Therefore mapping in the region of the dam

was based on imagery available on Bing Maps and Google Maps, which use satellite images of recent dates and are regularly updated.

TABLE 1: The archaeological sequence of the Lower Mound according to the 1960's excavations (after Hijjara 1997).

<i>Level</i>	<i>Depth below surface</i>	<i>Period</i>
I	0–0.9 m	Islamic
II	0.9–1.6 m	Uruk
III	1.6–1.9 m	Mixed Uruk, Ubaid, Halaf
IV	1.9–2.6 m	Ubaid, Halaf
V	2.6–3.4 m	Halaf
VI	3.4–3.5 m	Halaf
VII–XX	3.5–8.6 m	Halaf

Perhaps naively, we initially understood the current position and orientation of the eroded gully to represent the direct remains of the old sounding and we put in our trenches accordingly, oriented approximately north-south along its eastern longitudinal edge. In terms of the site's newly established grid system, these were part of trenches U9 to W9 (Fig. 9). The aim was to recover the old section wall and expose it for some distance.

The uppermost strata in all trenches yielded a very consistent, loose, crumbly soil in alternating colours of buff, brown and dark grey. As these layers were sloping strongly towards the centre of the gully, we quickly understood that we were excavating fill layers of the 1960 spoil that had been deposited in the sounding. Indeed, the sherds from these layers comprised a mixture of Uruk-Chalcolithic and Halaf pottery in roughly equal proportions. Interestingly, sherd densities in these fill layers equal those from the undisturbed archaeological strata which we excavated subsequently. This confirms our impression from the surface survey that the 1960 team had left the bulk of the excavated pottery at the site, not far from the soundings.

Ultimately we located the original excavation section in the north-east corner of our own trench (square U9). The compact, light-grey undisturbed soil was very different in colour and texture from the loose, crumbly back deposits. Curiously, this section baulk was oriented differently from the V-shaped gully that had guided us initially, running more in a NW–SW direction. After we had retraced the original section we were able to identify the original mound surface of 1960. Curiously, it was covered by some 0.9 metres of loose backfill. This puzzled us at first: why would archaeologists place their spoil so close to their trench? It then dawned on us that after the 1960 team had left the site someone had moved the spoil into the old trench. This was confirmed when we interviewed the elderly informant already mentioned, who explained that after the Baghdad team had finished their work the trench was left exposed for several decades until 2005 when a local farmer hired a bulldozer to refill it. We can now reconstruct the complex biography of this sounding (Fig. 10).

After identifying the original section of the 1960 trench, we re-excavated it to about 3 metres below the present surface of the mound. Below the upper 0.9 metres of re-deposited backfill, there were approximately 2 metres deep of original, undisturbed archaeological deposits. The old, battered section wall was scarred, pock marked and full of holes made by insects, birds and rodents, attesting to its long exposure to the elements (Fig. 11). As the severely eroded and washed-out section was impossible to read we excavated it some thirty centimetres into the baulk to provide a fresh section and to collect stratified material. Our sounding reached about 2 metres below the level we identified as the original tell surface of 1960 (Fig. 12).

Our work broadly corroborates the cultural-historical sequence identified by the previous team, but it suggests slight modifications are necessary (Table 2). We identified fifteen strata including the uppermost layer of backfill. If we disregard the latter, the uppermost Level I (stratum 2) is a shallow medieval horizon, corresponding to the previous team's "Islamic" level. This produced fragments of baked bricks and some medieval pottery in addition to Late Chalcolithic material and covered a second level attributed to the Late Chalcolithic period (stratum 3). In our sequence this level is only 0.3 metres thick, less than half of what the previous team had observed. In the limited extent of our trench we found no architecture, but the previous team has reported a series

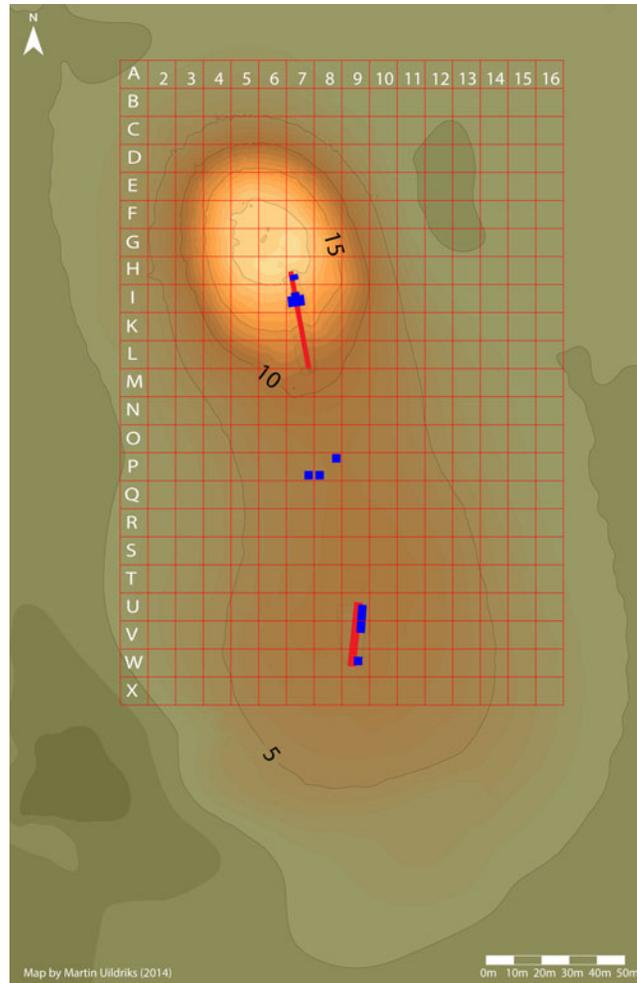


Fig. 9 Tell Begum. Plan of the mound showing the reconstructed locations of the 1960's trenches (light) and the new trenches (dark) (produced by Martin Uildriks)

of “living floors” (Hijara 1997: 127). The Late Chalcolithic level was very washed-out at the top, suggesting a significant period of abandonment and topsoil formation. This was then followed by several strata without architecture containing mostly Late Chalcolithic sherds with a minor component of Halaf sherds (Level III). It represents possibly the period in which the Late Chalcolithic community settled this part of the mound; they may have dug into the underlying Halaf deposits for material to make mud bricks. Level III is also attributed to the Late Chalcolithic period.

The lowest strata (Level IV) contained exclusively Halaf pottery. This Halaf level was compact and washed-out at the top, suggesting a period of abandonment with topsoil formation before this part of the mound was resettled in the Late Chalcolithic. The Halaf strata showed a series of superimposed open areas or courtyards without any architecture but was full of domestic debris (Fig. 13).<sup>5</sup> In addition to pottery sherds a range of small finds characteristic of the Late Neolithic period were recovered from this level, including basalt grinding stones, perforated sherds, and chipped sherd discs.

In contrast to the earlier excavations and the material collected from the surface of the mound, we recovered no Ubaid period pottery from the sounding. It is likely that the Ubaid sherds we recovered

<sup>5</sup> The severe erosion of the 1960 section, with deep scarring, modern plant roots and animal holes, extended throughout our excavation and this meant that it was not possible to take samples for radiocarbon dating.

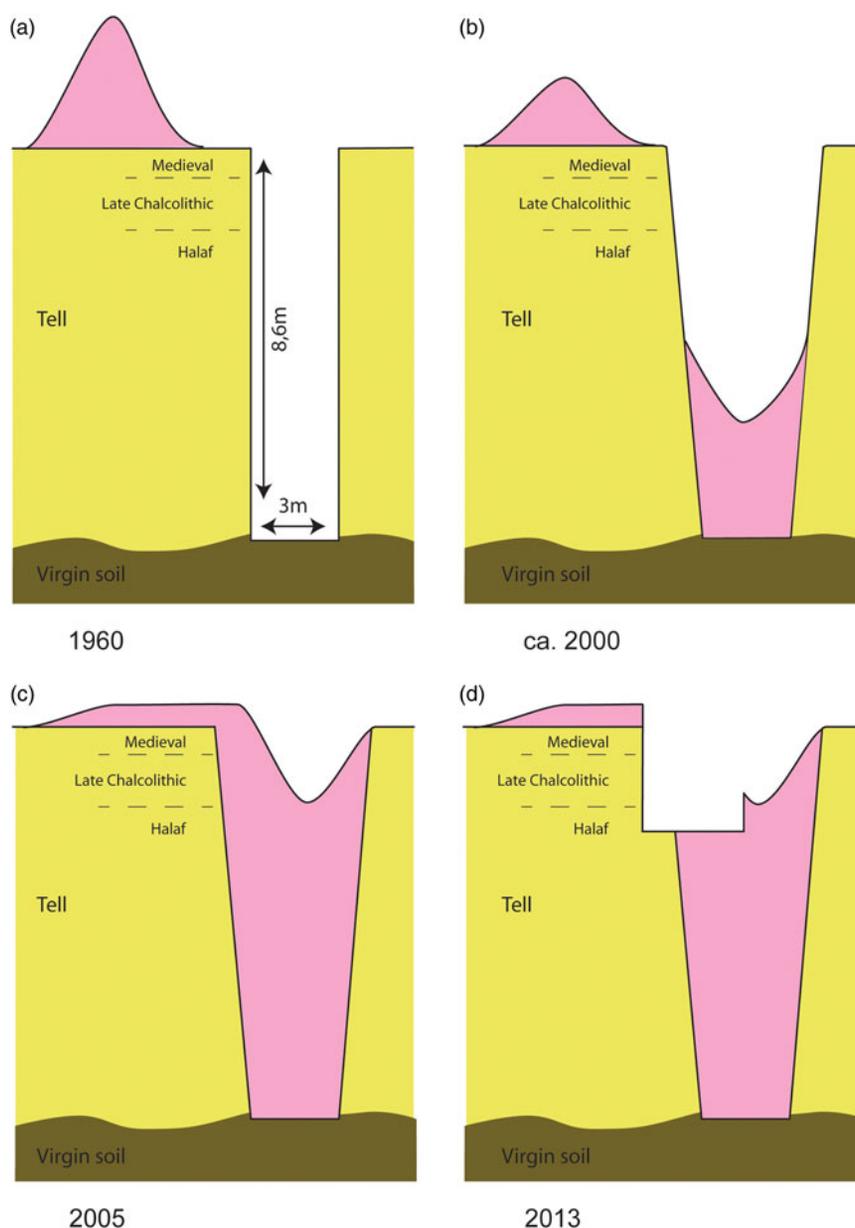


Fig. 10 Schematic reconstructed history of the 1960's trench through the Lower Mound (not to scale). (a) The Iraqi sounding in 1960 with the backfill put close to the sounding. (b) Some forty years later part of the backfill has washed back into the trench while the baulks are severely eroded. (c) In 2005 a local farmer hires a bulldozer to level the remaining backfill, partially filling the old trench. (d) In 2013 a new sounding is made through the backfill and into the original section

from the Lower Mound surface had been excavated from the Upper Mound sounding by the previous team. In summary, the Lower Mound appears to consist of two superimposed archaeological deposits, Halaf and Late Chalcolithic respectively, plus a thin layer of medieval habitation. It appears to have been abandoned and resettled several times over its long history.

#### *The Upper Mound*

As was the case with the Lower Trench, the outlines of the 1960's trench were also clearly identifiable on the southern to south-eastern slopes of the Upper Mound. However, no documentation of this



Fig. 11 Lower Trench. The battered, worn east section of the 1960 sounding at the Lower Mound as it looked in 2013. (a) View from above. (b) View from the west

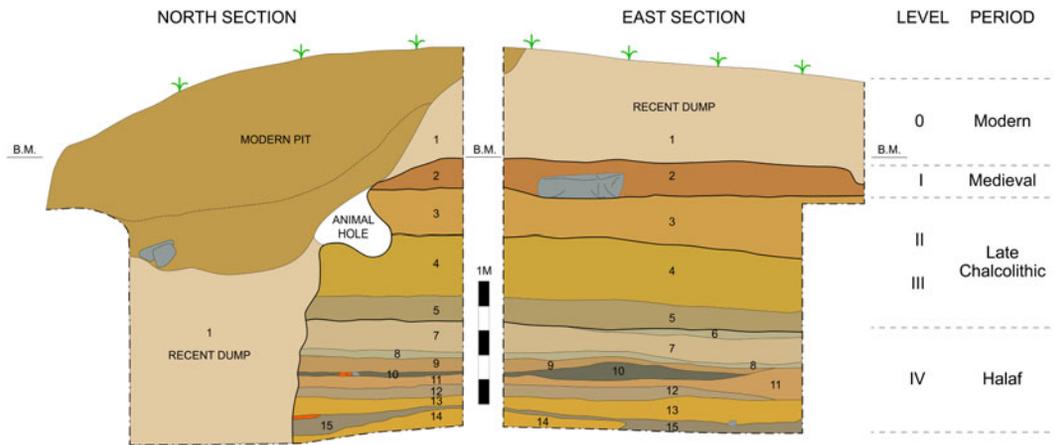


Fig. 12 Lower Trench. Part of the eastern section of the Iraqi sounding of 1960 exposed and partially re-excavated in 2013

TABLE 2: The archaeological sequence of the Lower Mound according to the 2013 exposures.

<i>Level</i>	<i>Strata</i>	<i>Depth below present-day surface</i>	<i>Period</i>
0	1	0–0.9 m	1960's backfill covering original tell surface
I	2	0.9–1.2 m	Medieval
II	3	1.2–1.5 m	Late Chalcolithic
III	4–5	1.5–2.2 m	Late Chalcolithic
IV	6–15	2.2–3.2 m	Halaf



Fig. 13 Lower Trench. Superimposed open areas dated to the Halaf period (level IV). (a) Stratum 7. (b) Stratum 13. (c) Stratum 15

earlier excavation was available to guide our work; in his presentation of Tell Begum, Hijara (1997) discusses only the Lower Mound sounding. The orientation of the old sounding seems not to be perfectly aligned to the north-south grid but lies perpendicular to the slope of the mound. At this location, the side of the Upper Mound is less steep and gradually gives way to the Lower Mound (Fig. 9). It is possible that these topographic features influenced the decision of the Iraqi excavators to locate their sounding here.

By 2013 the old Upper Mound trench had been considerably eroded as well as partly filled. It is represented by a surface depression extending to a length of about 40–50 metres in a north-northwest to south-southeast direction, with a width of approximately 7 metres east-west.<sup>6</sup> The profile is irregular but mostly V-shaped, reaching a depth of about 1–2 metres (Fig. 14). To evaluate the chronological sequence of the Upper Mound, we decided to remove the modern fill and to clean part of the old trench. Two small re-excavation areas were focused within and around the old trench: the first was situated approximately one third of the way from the highest part of

<sup>6</sup> The traces of the trench, approximately 40–50 metres long, also appears in a CORONA satellite image (1107–2170Aft, Aug 3, 1969).



Fig. 14 The remains of the old archaeological trench at the Upper Mound prior to our work. View from the south

the depression (UT-1); a second trench was placed just below the highest point (UT-2). According to the newly established grid system for the site, UT-1 was located in Square I7 and UT-2 in H7 (Fig. 9). UT-1 began as a 3.0 metres (N–S) by 7.0 metres (E–W) trench, crossing at almost right angles with the eroding traces of the old trench. It was subsequently extended by a further  $3 \times 3$  metres to the north. We reached the bottom of the old trench, about 4 metres below the highest surface level of this operation (Fig. 15). It was a step trench and, although originally 2 metres wide, subsequent erosion means that its uppermost width today is 2.5 metres. The maximum depth of the trench is 2.9 metres and within the small area that we excavated we observed one of the previous team's steps.

It is clear that the Iraqi team had excavated architectural remains. Not only did we observe the remains of walls and floors within the sections, but they had also left standing a part of a building close to the bottom of the trench. As far as we could reconstruct, its walls were not made of mud bricks but of *tauf*. In terms of the observed stratigraphy, this building forms part of our strata 10 to 11. The bottom of the 1960 sounding seems to have reached below the floor level of this building (our stratum 12). After cleaning the old sections and excavating their sides, at least twelve archaeological strata were observed, including the uppermost topsoil stratum 0 (Figs. 16, 17). These strata may be grouped into a series of five occupation levels (Table 3):

*Level I (Strata 2–3)*: Several visible pebbles and white gypsums, although no artificial structure could be observed. Relatively loose, light grey ashy soil had accumulated.

*Level II (Strata 4–5)*: This level contains what may be a partly-preserved floor which slopes upward to the north. Whitish light grey soil containing abundant accumulated artefacts.

*Level III (Strata 6–9)*: This relatively thick level began with the construction of a plastered floor measuring 2–3 centimetres in thickness, which was however only preserved in fragments. The building to which the floor must have belonged could not be traced, but its existence seems to have ended with a major conflagration. The patches of floor level that we identified had been burnt heavily, and they were covered by a 0.2–0.3 meter thick deposit of red-brown and dark ashy soils. The floor seems to have been cut into the uppermost remains of wall B, while some pits or depressions from this level seem to have disturbed the underlying stratum 10. We took three samples for micro-morphological study from this level (the locations have been indicated on Fig. 17).

*Level IV (Strata 10–11)*: The various strata comprising this level consisted of very hard greyish-brown soil with relatively few artefacts. Interestingly, however, a fairly well-preserved *tauf* building, its walls still standing to a height of about 0.9 metres, had been excavated by the previous team. The walls of this building were clearly visible in the sections. The Iraqi team had removed part of the wall during their excavation, but they had left the lower parts standing to a height of about 0.4



Fig. 15 UT-1 from the north

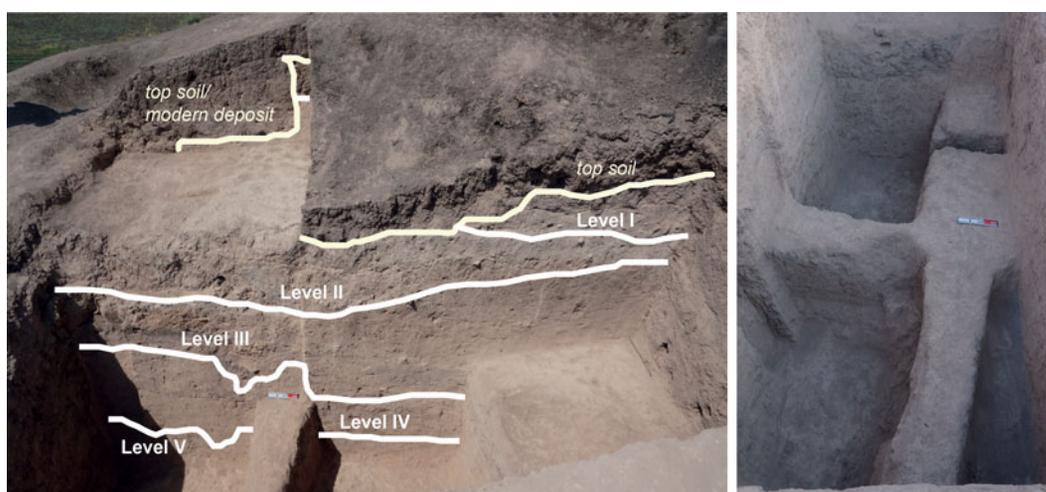


Fig. 16 Upper Trench. The western section of the Iraqi sounding in 1960, exposed and re-excavated in 2013

metres while excavating their trench below its base. Although with such a small exposure the details of the building remain unclear, at least three integrated walls were observed. Wall B measuring about 0.5 metres wide runs approximately east-west and is apparent in the west section (Fig. 16). Wall A seems to have been of a similar size, running in an approximately north-south orientation and making a straight angle with wall B in the trench. At the junction of these two walls at the eastern part of the old trench is what we provisionally termed “wall C” which may either form a much thicker wall, or a solid platform or some other large construction. If so, this building perhaps had a non-domestic, public, purpose (Fig. 17). It appears that wall C had also been partially removed by the previous excavators, presumably to allow for inspection of the section.

*Level V (Stratum 12)*: The lowest occupation level reached the bottom of the old step trench and represents accumulations below the architectural remains of level IV. These strata contained very few artefacts.

In terms of archaeological periodisation, all levels in UT-1, except the topsoil level 0, would appear to be prehistoric. Although we must remain extremely cautious at this stage because of the very small size and the fragmented nature of the collected pottery samples, we may tentatively propose a

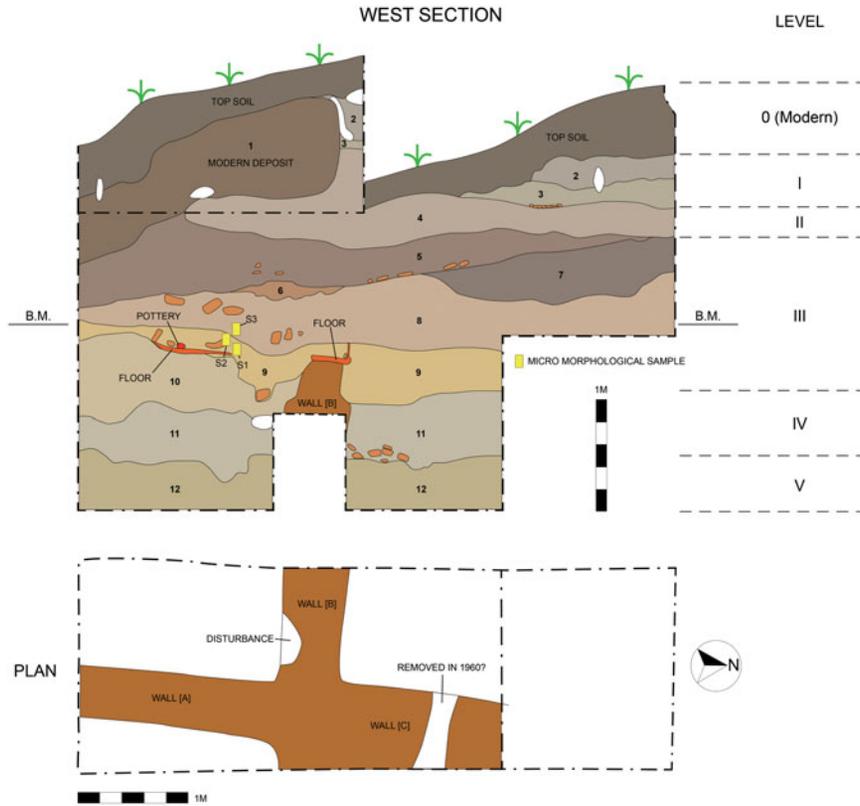


Fig. 17 Upper Trench. The western section and the plan left on the bottom of UT-1 part of the Iraqi sounding in 1960, exposed and re-excavated in 2013

TABLE 3: The archaeological sequence of the Upper Mound according to the 2013 exposures.

<i>Level</i>	<i>Strata</i>	<i>Approximate depth below present-day surface</i>	<i>Period</i>
0	1	0–0.6 m	Topsoil, medieval, modern, tell surface
I	2–3	0.6–1 m	Late Chalcolithic?
II	4–5	1–1.3 m	Late Chalcolithic
III	6–9	1.3–2.7 m	Late Chalcolithic
IV	10–11	2.7–3.3 m	Late Chalcolithic
V	12	3.3–3.7 m	Late Chalcolithic / Ubaid?

TABLE 4: Pottery counts from the Lower Mound trench.

	<i>1960's dump</i>	<i>Medieval</i>	<i>Late Chalcolithic</i>		<i>Halaf</i>	<i>Total</i>
	<i>(Level 0)</i>	<i>(Level 1)</i>	<i>(Level 2)</i>	<i>(Level 3)</i>	<i>(Level 4)</i>	
Chaff-Faced Ware	1041	11	143	101	21	1317
Fine Mineral Ware	11	0	0	18	0	29
Coarse Mineral Ware	10	0	0	1	0	11
Grey-Burnished Ware	0	1	1	0	0	2
Halaf Fine Ware	738	0	20	32	233	1023
Halaf Coarse Ware	0	0	0	0	144	144
Later pottery	74	2	0	0	0	76
<b>Total</b>	<b>1874</b>	<b>14</b>	<b>164</b>	<b>152</b>	<b>398</b>	<b>2602</b>

sequence from Post-Ubaid or LC1 to LC2 or, perhaps, LC3 for levels V to I. During the cleaning of the sections and the parallel excavations, a limited number of potsherds were collected from stratigraphically secure contexts, especially from Levels I–IV. These include fragments of Late Halaf and possibly Ubaid painted wares, but these may have been intrusive from earlier periods buried deep within the Upper Mound. The great majority of the pottery from UT-1 is chaff-tempered wares characteristic for the Late Chalcolithic period (for a discussion of this material, see below). Although it is hard to estimate with any certainty the precise time period for each level due to the poor quality of the sampled pottery, we may note that most of the ceramics from Levels I–III are chaff-tempered plain wares while chaff-tempered painted wares were relatively abundant in Levels IV–V. There was no pottery from this sounding that we would interpret either as Middle-Late Uruk or as a local variety of the later Late Chalcolithic (LC4–5) according to Upper Mesopotamian terminology.

UT-2 is situated 4 metres to the north of UT-1, some three meters higher up on the slope towards the top of the mound and close to what we perceived to be the upper end of the 1960 sounding. It formed a rectangular plan measuring 2 (N–S) × 3 (E–W) metres. Both the eastern and the western sides form extensions to the grid system of the boundaries of UT-1 (Fig. 9). It was excavated to a depth of 2.5 metres (Fig. 18). The old trench was recovered in this area too; here it measured approximately 2 metres wide and 2 metres deep, although the bottom of the trench appears to have been quite uneven. The sections attest to considerable disturbance, but we cannot date this precisely. To some extent this part of the mound may have been disturbed in the past as lying close to the top of the mound more recent, military activities may have had an impact. We could not observe any occupation levels. The fill of the old trench contained numerous Late Chalcolithic potsherds and lithics, some pottery from the Halaf and Ubaid periods, and an assortment of modern artefacts such as tea glasses and metal cans.

#### *The Central Trenches*

Situated centrally within the site, approximately halfway between the other excavation areas, two small 3 × 3 metre trenches were opened to explore the stratigraphic relationships between the other trenches and to assess the archaeological periods represented by the mound (trenches P7 and P8). We restricted the work to what could be described as an extensive form of surface scraping (Pollock 1987, 1990; Pollock *et al.* 1991), removing the topsoil layers to inspect the uppermost archaeological deposits.

Both exposures yielded essentially the same results. Immediately below the ploughed surface layer (topsoil) lies a much washed-out series of dark-brown to grey strata, which we date to the medieval or sub-recent periods. This layer yielded some burials, small pits and other features dug from the mound surface. The small amount of pottery collected from this layer, some of it remarkably well preserved, dates to the medieval or sub-recent periods. A large jar fragment was dated to the Late Sasanian to Early Islamic period (Ahmad: *n.d.*). In addition, numerous small fragments of baked brick were found, as well as a few complete or nearly intact examples (Fig. 19). In terms of material, texture, colour and size, these bricks (*c.* 5–8 centimetres thick) closely resemble fired bricks observed at other medieval sites in the region such as those at Bakr Awa. A small building probably stood at this location, now entirely destroyed by natural erosion and ongoing agricultural activities.

Below this stratum appears a chunky light-brown/beige soil very similar in texture to the top-most Late Chalcolithic layers observed in the Lower Trench. The collected finds included a handful of prehistoric pottery sherds and some animal bones but no architectural remains. We tentatively interpret this to represent the top most layer of the prehistoric mound as documented elsewhere at the site.

#### *The prehistoric small finds*

Notwithstanding the limited scope of the exposures, a large corpus of prehistoric, medieval and sub-recent to recent artefacts were found. Recent objects, most of them coming from the top regions of the Upper Mound, include tea glasses, tin cans of industrially-processed foods, rusted metal tools, and ammunition, attesting (presumably) to the presence of the military on the Upper Mound.



Fig. 18 UT-2 from the southeast



Fig. 19 Trench P7. Fragment of medieval or sub-recent baked brick

Medieval finds were concentrated predominately in the area of the Central Trenches, including baked bricks and ceramics. Prehistoric finds formed the largest artefact category both in the two trenches on both the Upper and Lower Mounds. Many of these were found in mixed fill deposits, but the stratigraphically secure strata also yielded a diversity of objects. Made of stone, pottery, and flint, the prehistoric small finds compare well with what is known from later prehistoric sites in the broader region. They attest to various industrial crafts, household activities and, perhaps, administrative practices being carried out at the mound.

Ground stone tools in various shapes and sizes, most of them found in a fragmentary condition, were quite common (Fig. 20). Dark-grey basalt was frequently used, but other stone types were identified as well.<sup>7</sup> The tools mostly include grinders, pestles and mortars for processing foodstuffs and various other soft materials (Collet and Spoor 1996; Huigens *et al.* 2014; Suleiman and Nieuwenhuyse 2002; Voigt 1983). A few axes or celts were also found (Wright 1992). Smaller tools

<sup>7</sup> No analysis has so far been made of the stone types represented.



Fig. 20 Selection of ground stone tool artefacts from the Lower Trench and the Upper Trench

for lighter tasks include a few stone bowls, palettes, and a number of long, pointed stones with circular sections that may have been instruments for grinding specialised products. We came across one possible example of a perforated stone, which has been interpreted diversely as a “digging stick” for preparing the ground for agriculture, a net sinker for fishing, or a loom weight (Braidwood *et al.* 1952: 21; Braidwood and Howe 1960: 45; Wright 1981: 49).

Quite common among the finds were perforated and unperforated discs (Fig. 21). These were usually made of pottery, or more precisely of re-used pottery sherds, but a few stone discs were also found. The pottery discs measured between 2.5 and 8 centimetres in diameter, and between 0.5 and 1.5 centimetres in thickness. As known at Late Neolithic Tell Sabi Abyad, and other later prehistoric sites, unperforated pottery discs were on average thicker, larger, and heavier than the perforated discs (Brüning *et al.* 2014; Keith 1997). The smaller versions overlapped in size and weight with the perforated discs and may have had comparable uses. They are usually interpreted as spindle whorls and so attest to wool manufacturing, but their exact function is debated (Rooijakkers 2012). Bernbeck and Kieft-Costello have instead suggested that the re-used sherds were jetons, mnemonic devices associated with techniques of managing livestock (Bernbeck 2008; Kieft-Costello 2000, 2002). Such discs have been found *in situ* in a potter’s workshop at the post-Ubaid site of Kosak Shamali on the Syrian Euphrates, where they were used for shaping pottery vessels (Nishiaki and Matsutani 2001). Future studies may seek to investigate use wear traces to elucidate the roles played by these common artefacts. True spindles, that is, shaped in a conical or a bi-conical form, have in any case so far not been attested at Tell Begum.

Virtually no administrative artefacts were recovered from the excavations even though stamp seals and clay tokens are commonly found at sites of this period (Fiandra 2009; Rothman 2002: 67; Schmandt-Besserat 1992). The very limited scale of the excavations, the poor stratigraphic context of most of the excavated deposits, and the lack of sieving to recover small artefacts may have contributed to the absence of such artefacts at Tell Begum. The excavations yielded one possible

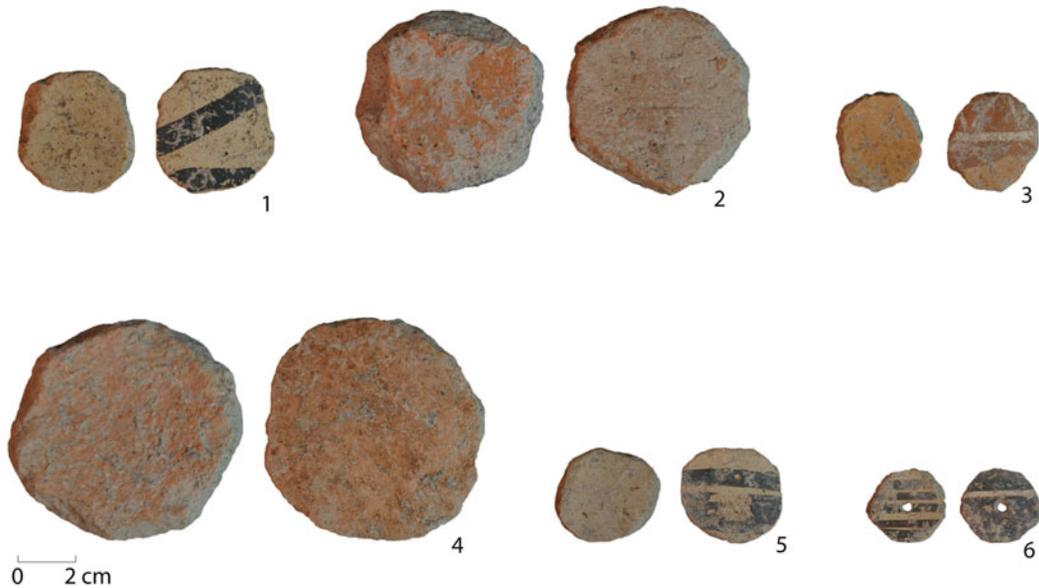


Fig. 21 Selection of pottery discs from the Lower Trench. Late Chalcolithic and Halaf levels

spherical token, made of clay, with a diameter of approximately 2 centimetres. Only further excavation can elucidate the role of administration at the site.

Flint tools, débitage and a few cores attest to lithic production. An initial, preliminary inspection by Laurence Astruc (personal communication) suggests that a variety of flint sources were exploited. Interestingly, among the items collected are some good examples of blade manufacture with the help of pressure technique (Altınbilek-Algül *et al.* 2012; Chabot and Pelegrin 2012). This technique required a remarkable level of skill and was likely practiced by experienced specialists (Altınbilek-Algül *et al.* 2012: 173–174). Obsidian tools have so far not been found.

#### *The prehistoric pottery*

The team counted all the pottery that had been collected from the various trenches (it was not weighed) in the field. As with the ceramics collected from the surface of the mound—anticipating more detailed studies at Tell Begum and in the Shahrizor as a whole—we relied on rough-and-ready ceramic categories that, hopefully, are replicable for other researchers. We have employed the concept of a ceramic “ware” to refer to groups sharing a broadly similar *chaîne opératoire* but allowing for variability in vessel shape and decoration. This led to the identification of: Chaff-Faced Ware, Fine Mineral Ware, Coarse Mineral Ware, Grey-Burnished Ware, Halaf Fine Ware, Halaf Coarse Ware and a general category of “Later” pottery (Table 4, Table 5).

Two main periods of prehistoric occupation with their respective ceramic assemblages are readily identified: Halaf and Late Chalcolithic. The former is represented by Halaf Fine Ware and Halaf Coarse Ware; the latter by Chaff-Faced Ware and Fine Mineral Ware. The few ( $n = 2$ ) plant-tempered Grey-Burnished Ware sherds that we came across in the Lower Mound levels 1 and 2 most likely belong to the Late Chalcolithic period as well (Gut 1995: 96, Taf. 127); at Nineveh, these also occur in levels MM 45–37, Early Middle Uruk or LC 3 (Gut 1995: 287).

These two periods cannot, however, be entirely separated in terms of the pottery counts. While Halaf pottery constitutes the majority of ceramics in the Halaf strata of the Lower Trench (level 4), Halaf Fine Ware sherds are found scattered throughout the Late Chalcolithic strata of both the Lower Mound and the Upper Mound (Fig. 22). They also form a significant component of the slope wash as well as the fill of the 1960’s trench high up on the Upper Mound, two contexts that otherwise yielded mostly Chaff-Faced and “Later” pottery (Fig. 22). It is possible that the prehistoric pottery sherds recovered from these contexts were included within the mud bricks of

TABLE 5: Pottery counts from the Upper Mound trench.

	<i>Late Chalcolithic</i>	<i>Slope wash</i>	<i>Trench fill</i>	<i>Total</i>
Chaff-Faced Ware	169	454	1112	1735
Fine Mineral Ware	30	0	0	30
Coarse Mineral Ware	0	1	17	18
Halaf Fine Ware	19	29	109	157
Later pottery	5	151	391	547
Total	223	635	1629	2487

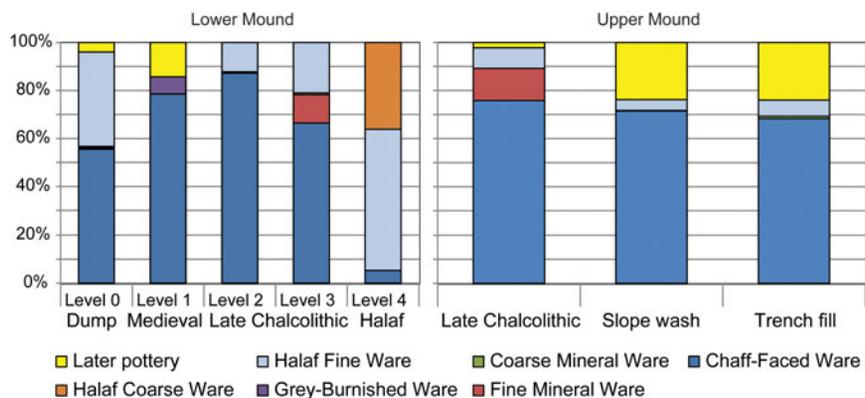


Fig. 22 Proportions of pottery groups in the Lower Mound (left) and Upper Mound (right) trenches

buildings as has been found, for example, at Late Bronze Age Tell Sabi Abyad in northern Syria (Nieuwenhuyse 1997). *Vice versa* a small proportion of intrusive Late Chalcolithic sherds was recovered from the uppermost Halaf stratum of the Lower Mound (Table 4).

Later pottery included examples of so-called Kurdish Ware dated to the medieval period as well as so-called Shamlu Ware from the Old Babylonian period, but for the most part it remains to be properly analysed. At the Lower Mound, “Later” pottery was limited to the 1960’s dump and the medieval stratum (Table 4). At the Upper Mound it comprised a good part of the collections recovered from the old trench fills and in the washed-out slopes from the top of the mound (Table 5).

Two ceramic categories characterise the Halaf strata at Tell Begum, so-called Halaf Fine Ware and Halaf Coarse Ware. They differ in ceramic technology, vessel shape and decoration. The major differences as far as the ceramic *chaîne opératoire* is concerned are in the wall thickness and the clay fabric. Halaf Coarse Ware sherds are thicker (hence, the vessels were presumably larger), more often have dark, incompletely oxidised cores and were made of clay containing many small mineral inclusions and, occasionally, small plant particles (Fig. 23:27). Future work should elucidate the nature of these properties. In some examples the mineral inclusions appear to be angular, and may represent crushed stone purposely added as a temper. In others the inclusions may have been naturally present in the clays selected by the potters (obviously the two possibilities are not mutually exclusive). The Halaf Coarse Ware was identified only in the Lower Mound Halaf level 4 (Table 4). Halaf Fine Ware on the other hand is characterised by thin-walled, smaller vessels made of a more compact, cleaner clay (Fig. 23:1–26). The two groups also differ in the proportions of decorated vessels. Whereas about seventy percent of the Halaf Fine Ware was decorated, the Halaf Coarse Ware was usually left plain. Halaf vessel shapes include convex-sided bowls with open or vertically oriented contours, bowls with S-shaped wall, and collared vessels; all forms often had a disc base (Fig. 23).

If we take the Halaf Fine Ware as a whole, including items collected from across the mound, an extraordinary diversity in decoration is apparent. This pottery was painted in monochrome, in

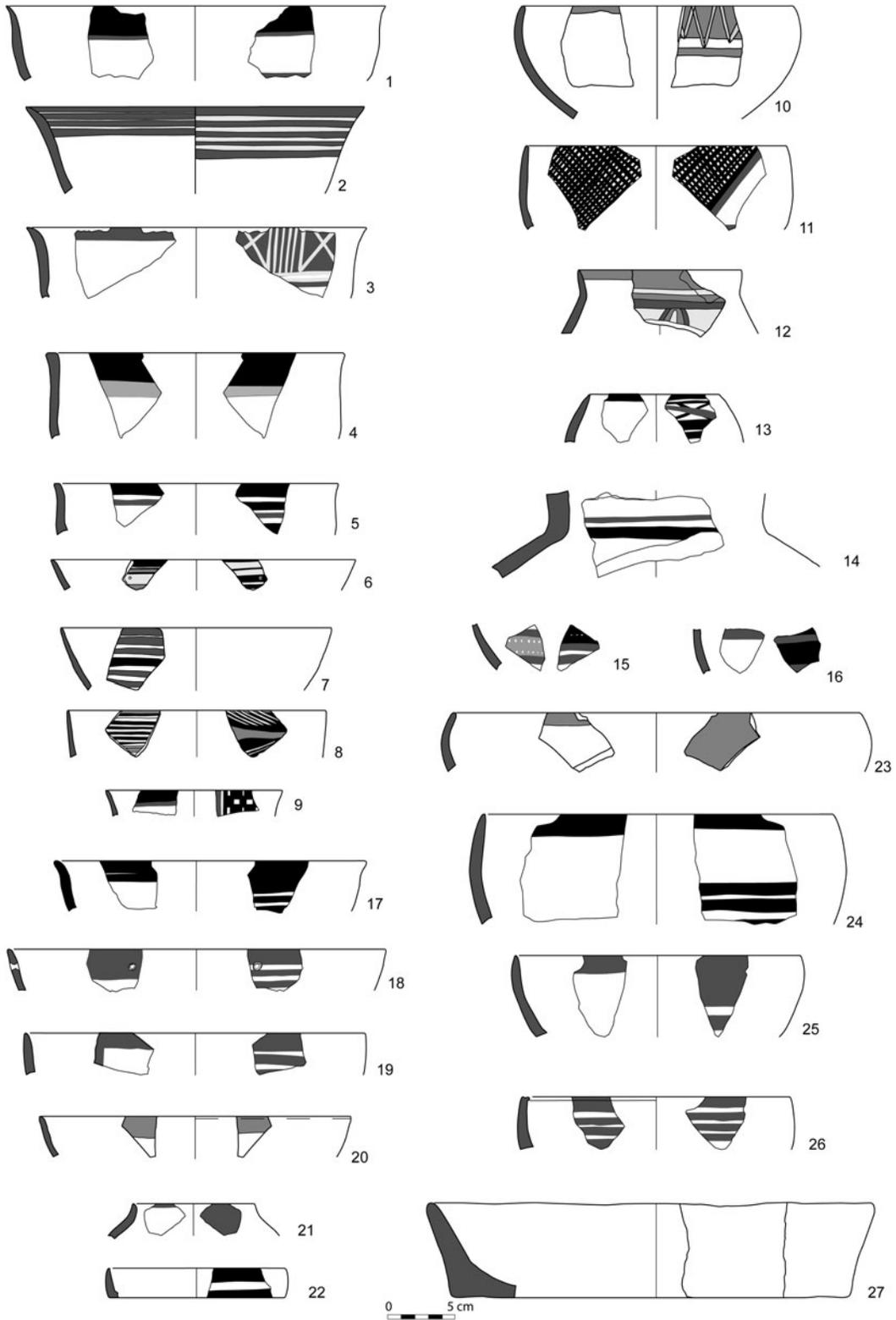


Fig. 23 Examples of Halaf Fine Ware (nos. 1–26) and Halaf Coarse Ware (no. 27). Nos. 1–16: polychrome painted. Nos. 17–26: monochrome painted. Nos. 6 and 18 carry a repair

TABLE 6: Decoration techniques associated with Halaf Fine Ware pottery.

	<i>Lower Mound contexts</i>			<i>Upper Mound contexts</i>			<i>Total</i>
	<i>Dump</i>	<i>Halaf</i>	<i>Late Chalco</i>	<i>Late Chalco</i>	<i>Slope wash</i>	<i>Trench fill</i>	
Plain	320	79	13	7	8	51	478
Painted monochrome	319	84	25	10	11	41	490
Painted polychrome	94	70	14	1	8	7	194
Painted-and-impressed	2	0	0	0	0	0	2
Painted-and-incised	1	0	0	0	1	0	2
Impressed	1	0	0	0	0	2	3
Incised	0	0	0	0	0	3	3
Incised-and-impressed	0	0	0	0	1	0	1
Slipped	1	0	0	1	0	5	7
Total	738	233	52	19	29	109	1180

polychrome, slipped, impressed, incised, or painted in combination with impressions or incisions (Table 6). The polychrome painted designs are indeed stunning (Figs. 24 and 25). Several paint colours are attested, including brown (2.5YR5/6–3/2, 7.5YR5/3), red (10R5/6–4/6), grey, black and white. Often the potters applied horizontal painted lines in alternating colours of brown, black and white. In some instances they painted the surface completely with red, brown or black, and then added fugitive white-painted lines. The white pigment is intriguing. In many instances a granular textured light-coloured paint covering the underlying pigments suggest that the white pigment was applied last, possibly *after* the firing. Motifs include cross-hatching, alternating multicoloured lines, circular designs, and compositions containing solid triangles. A few zoomorphic representations were observed as well.

The excavations may reveal a chronological significance for the painted-and-incised and impressed pottery. Hijara published examples (Hijara 1997: pl. LXXXVII:1, pl. XCIII, respectively) but he did not record from which levels they came (Hijara 1997: 129). Strikingly, the material recovered from stratigraphically secure Halaf contexts in the Lower Mound sounding includes only plain, monochrome painted and polychrome painted pottery (Table 6). All examples of Halaf Fine Ware with incisions or impressions either come from the Lower Mound 1960's dump, or from the Upper Mound slope wash and trench fills. This may be a matter of sampling, but it may also reflect chronology. The Halaf strata that we excavated at the Lower Mound—only the uppermost part of the 8 metre high Halaf mound identified by the previous team—may represent a different phase from those that yielded the Halaf impressed and incised sherds during the earlier excavations. Despite the very limited dataset collected so far at Tell Begum, if this suggestion is accepted it implies that a phase yielding painted-and-incised Halaf Fine Ware may have preceded a phase characterised by polychrome painted pottery but without the incised varieties. Further excavations of stratified Halaf sites in the Shahrizor is necessary to evaluate this possibility.

Hijara has already suggested that the Halaf levels of Tell Begum were later than the classic Late Halaf of Tell Arpachiyah on the Mosul plain and that they might represent a transition from the Halaf to the Ubaid period (Hijara 1997: 129). The best parallels from the Halaf pottery of Tell Begum come indeed from Halaf sites dated to late in the period. In particular, the S-shaped bowls and vessels with disc bases find excellent parallels at sites dated from the Late Halaf to the so-called Halaf-Ubaid-Transitional (Tell Aqab: Davidson 1977: 129, 144–47, 153–54, forms 17 and 19; Tepe Gawra: Tobler 1950: 132, fig.74; Tell Arpachiyah: Mallowan and Cruikshank Rose 1935: 139, fig. 65:2, fig. 66:1; Chagar Bazar: Mallowan 1936: 43, Pl. II:5, 44, 47, fig. 22:6, fig. 25:4). Recent work by a Spanish team at Chagar Bazar in north-eastern Syria has yielded good comparable material dated to the final stages of the Halaf period (Cruells *et al.* 2013; Gómez-Bach 2009, 2011; Gómez-Bach *et al.* 2012). Halaf Fine Ware decorated with painting and incisions is generally seen as typical for the Late Halaf and Halaf-Ubaid-Transitional stages (for a review see Gómez-Bach 2011).

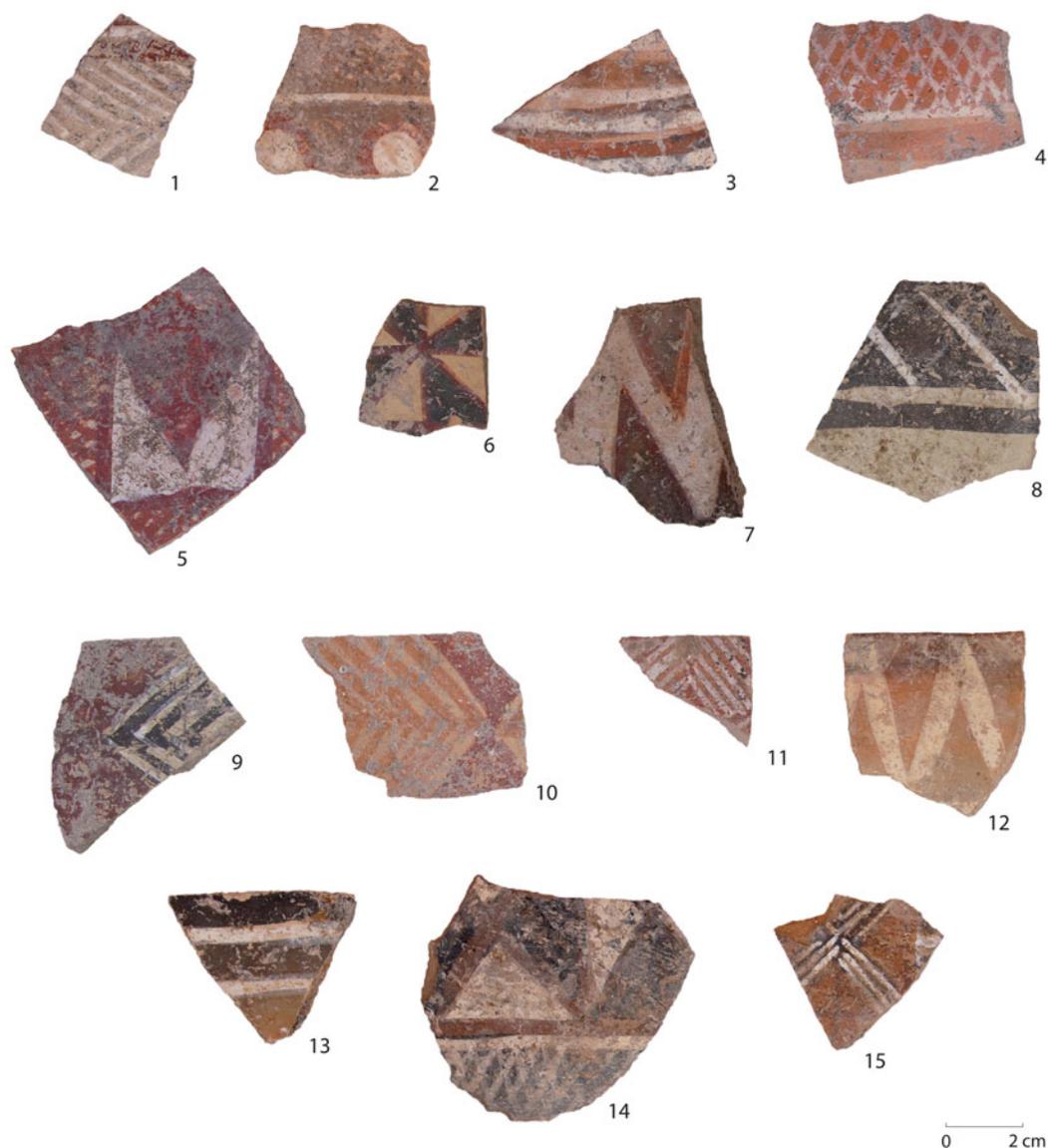


Fig. 24 Examples of polychrome painted Halaf Fine Ware

While it has been generally accepted that a gradual change in ceramics marked the shift from the Halaf to the Ubaid period, with indications in the literature of what ceramics might represent this transition, the question of the absolute dates for this period remain open to much debate (Breniquet 1996; Campbell 1992; Campbell and Fletcher 2010; Davidson 1977). A recent synthesis of the available radiocarbon dates reveals that the “transition” may have lasted for several centuries between *c.* 5500 and 5100 cal. B.C. (Campbell 2007; Campbell and Fletcher 2010), in other words, it may have lasted as long as each of the periods it separates (Campbell and Fletcher 2010: 79). Where precisely Tell Begum should be placed within this long continuum remains to be further investigated.

As for the Late Chalcolithic, massive amounts of mostly plain, usually roughly-finished plant-tempered ceramics were recovered from all excavated areas (Tables 4 and 5). The quantity and variety of plant inclusions vary with most of the Chaff-Faced Ware showing relatively coarse plant particles in the clay. The exterior surfaces were mostly roughly smoothed, but a few instances of



Fig. 25 Examples of polychrome painted Halaf Fine Ware

burnishing have been observed. Most of the Chaff-Faced Ware shows a dark core attesting to incomplete oxidation in the firing. The majority of this pottery is plain (about ninety-five percent of all Chaff-Faced Ware sherds counted) although decorative techniques include red slipping and painting (Fig. 26:9, 11), and incised or impressed wares were also attested (Table 7). A smaller proportion of Fine Mineral Ware occurs in the Late Chalcolithic levels of both the Lower Mound and the Upper Mound (Fig. 22). This pottery is made of a compact, clean clay, often containing fine mineral particles. Well oxidised during the firing, surface colours are buff to orange (5Y8/3, pale yellow, 10YR6/2, greyish yellow brown, 2.5YR6/6, orange). This category includes various small bowls, jars and goblets (Fig. 26:12).

Chaff-Faced Ware vessel shapes include jars with outwardly oriented, S-shaped necks (Fig. 26:1–6), jars with sharply articulated necks and a sharp interior angle (Fig. 26:7–9), closed shapes with a concave upper profile (Fig. 26:11), urn-like pots with vertical walls, bowls with either convex or straight walls (Fig. 27:5–19) and basins with flat bases and straight walls (Fig. 27:20–25). The Iraqi team had earlier recorded bevelled rim bowls in the uppermost levels of the Lower Mound sounding (Hijara 1997:127); this is corroborated by our work that yielded several examples of bevelled rim bowls from the uppermost Late Chalcolithic level (and from the

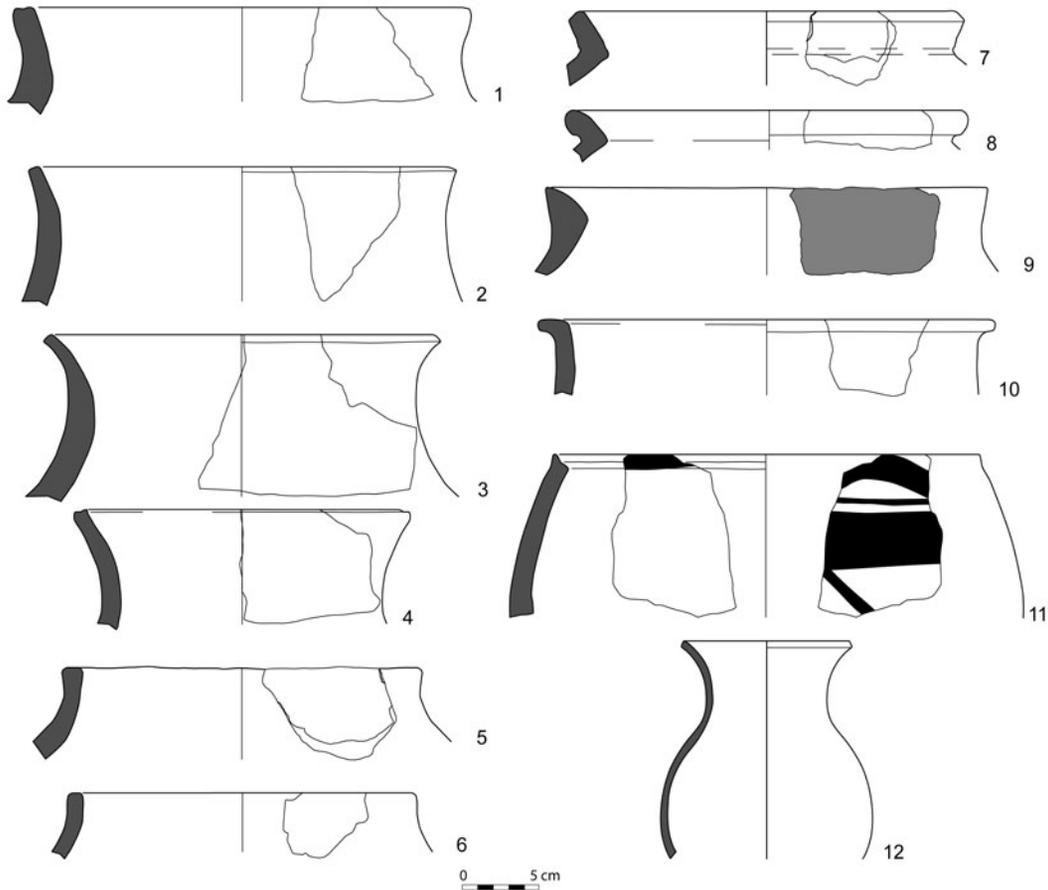


Fig. 26 Examples of Chaff-Faced Ware (nos. 1–11) and Fine Mineral Ware (no. 12)

TABLE 7: Decoration techniques associated with Chaff-Faced Ware pottery.

	<i>Lower Mound contexts</i>				<i>Upper mound contexts</i>			<i>Total</i>
	<i>Dump</i>	<i>Halaf</i>	<i>Late Chalco</i>	<i>Medieval</i>	<i>Late Chalco</i>	<i>Slope wash</i>	<i>Trench fill</i>	
Plain	1003	21	213	10	154	426	1040	2867
Paint	32	0	7	0	7	17	32	95
Slipped	6	0	6	1	5	10	17	45
Impressed	0	0	0	0	1	0	1	2
Incised	0	0	5	0	2	1	20	28
Painted-and-incised	0	0	1	0	0	0	0	1
Slipped-and-incised	0	0	0	0	0	0	1	1
Applique	0	0	0	0	0	0	1	1
Total	1041	21	232	11	169	454	1112	3040

1960's dump) (Fig. 27: 2–4). Characteristic of Late Chalcolithic pottery, the rims were frequently flat, bevelled or beaded, while many rims show grooved lips. Some of the bowls show thickened, bevelled rims with a triangular profile.

The ceramics would suggest that the Late Chalcolithic levels at Tell Begum should be dated after the Ubaid period but precede the appearance of the complete Uruk assemblage. The Chaff-Faced Ware finds good comparisons at Tell Brak, Tell Hamoukar, Tell Feres al-Sharqi and other northern Syrian sites in the LC1–3 stages (Baldi 2012; Brustolon and Rova 2007; Gut 1995;

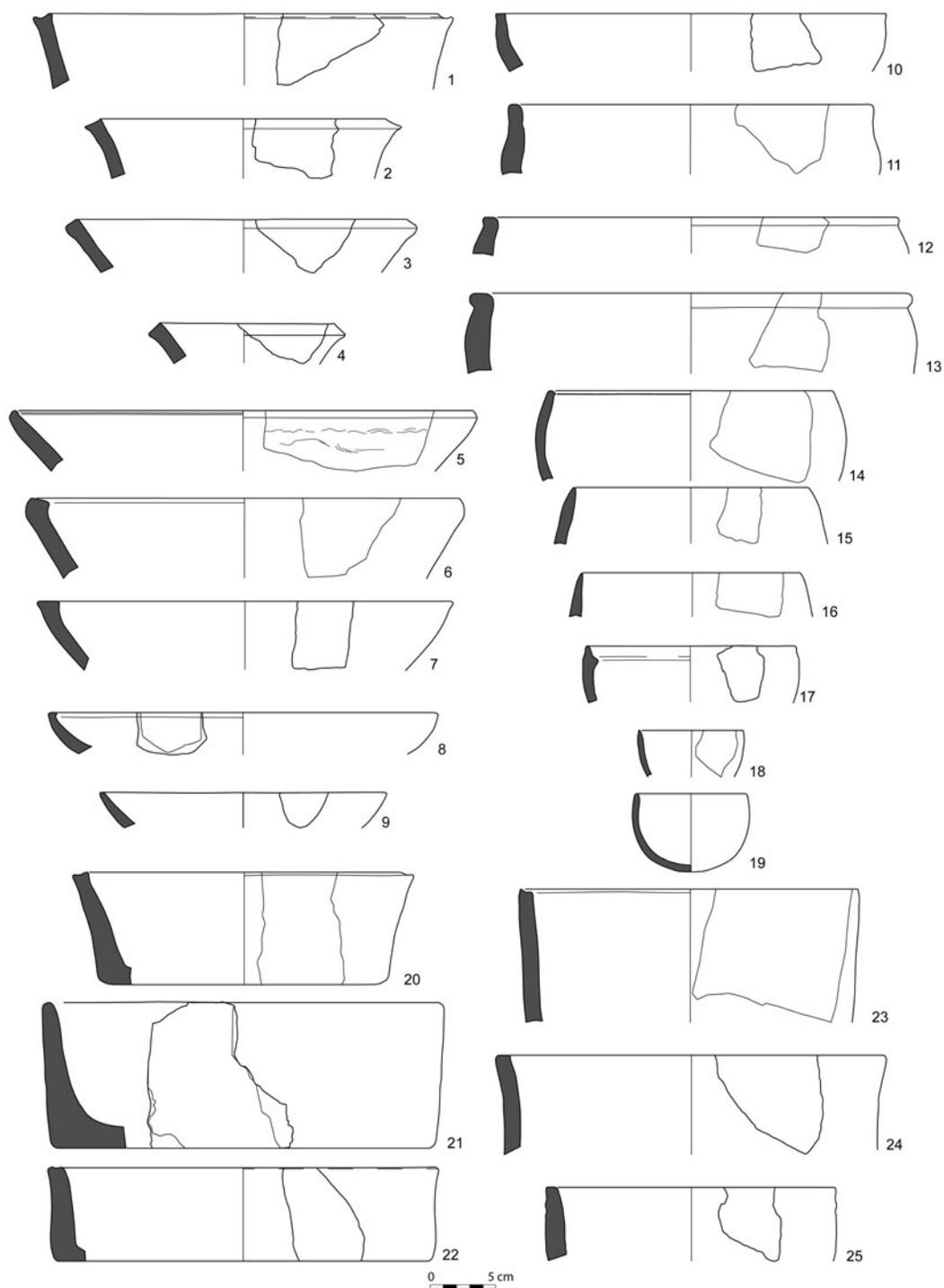


Fig. 27 Examples of Chaff-Faced Ware

Jayyab 2012; Oates 2012). Interestingly there is a complete absence at Tell Begum of flint-scraped so-called Coba bowls and casseroles, two key types for the Upper Mesopotamian Post-Ubaid horizon (Brustolon and Rova 2007; Helwing 2012; Marro 2012). This possibly represents a regional phenomenon during the early stages of the Late Chalcolithic; an investigation of the Late Chalcolithic ceramic assemblages collected in the SSP should explore this further. In contrast with

other sites identified in the SSP, no elements typical of the “southern later Uruk” are present at Tell Begum such as wheel-made vessels, loop handles or vessels with nose lugs. The few Grey Burnished Ware sherds and bevelled rim bowls suggest a date in the LC3 period for the uppermost Late Chalcolithic strata at the Lower Mound. In conclusion, the Late Chalcolithic at Tell Begum is provisionally dated to the LC1–3 stages, *c.* 4300 to 3600 cal. B.C.

### *Conclusions*

The brief campaign of archaeological work at Tell Begum in 2013 revealed much and also gave rise to many questions that hopefully can be addressed by future work. Tell Begum offers excellent opportunities to investigate the Late Halaf and the early stages of the Late Chalcolithic periods, explore the relationships between local prehistoric communities and their environment on the Shahrizor Plain, and assess the broader, supra-regional cultural affiliations these communities established with surrounding regions.

From the sedimentary remains, we can say that the region around Tell Begum was likely to have been well watered with a relatively wet climate during the early to mid-Holocene, possibly extending to approximately 2300 B.P., and comparable with the evidence from the region around Bakr Awa (Marsh and Altaweel: *in press*). There was abundant and diverse plant resources. While periodic dry phases may have occurred before 2300 B.P., these have not been identified. The wet phases appear to have resulted in woodland and shrubs with perennial water sources. In fact, the sediments suggest Tell Begum may have been located near or next to one or two palaeochannels. Deep sedimentation progressively built up across the region during the Holocene through the process of alluviation, with the formation of thick layers of clay. The location of Tell Begum may suggest that it lay on an elevated Pleistocene terrace, offering protection from possible periodic flooding from neighbouring watercourses. However, the proximity to well-watered areas would have offered easy exploitation of the local resources of reeds, woodland, and agricultural land.

Our work has by and large corroborated the chronological findings from the earlier excavations but refined their conclusions. We have now a clearer understanding of the history of habitation at the mound. The results from the surface collection demonstrate that the surface pattern reflects recent activities at the site rather than patterns of ancient occupation. These reveal a distinct pattern of soil deposition by the Iraqi excavators, especially at the lower mound. The collection also reflects more recent military and agricultural activity that contributed to its spread.

People settled at this location in the Halaf period. The extent of the settlement in its early stages remains unclear but it included the Lower Mound. With a minimum size of approximately 3 hectares, Tell Begum would rank as a medium-sized Halaf site (Akkermans 1993; Nieuwenhuys 2000; Ur 2010). Interestingly, the cluster of small sites surrounding Tell Begum shows evidence of Halaf occupation; future investigations may explore the relationships between these “satellites” and the main mound. The Lower Mound was abandoned at the very end of the Halaf period, during what may represent a transitional stage between the Halaf and the Ubaid. Scattered finds of painted and plain Ubaid sherds point to Ubaid occupation at some location at the site. As no Ubaid levels were attested either in the Lower Mound or the excavated Upper Mound trenches, such levels may be hidden in unexcavated levels of the Upper Mound. The mound as a whole was not totally abandoned after the Halaf period, but occupation contracted or shifted its location. The Lower mound was resettled in the early stages of the Late Chalcolithic (LC1). At this stage Tell Begum perhaps reached its largest extent of about 5 hectares. After the LC3 the entire mound appears to have been abandoned for a long period. Subsequent intermittent use of the mound is attested by pottery from the Late Bronze Age, the Ottoman period, and recent military activities on the highest parts of the Upper Mound.

Both the Halaf and the Late Chalcolithic periods remain very poorly understood in the region and a better understanding of the ceramics at Tell Begum will facilitate the interpretation of other sites detected during the Shahrizor survey. The work at Begum has significantly improved our understanding of the material culture and, in particular, the pottery associated with these two periods. Future work includes the detailed study of the finds in order to situate them in a local framework. In this regard, the results from Tell Begum may fruitfully be compared with those of

the “Shahrizor Prehistory Project”, undertaken by UCL, UCL Qatar and the Sulaymaniyah Directorate, that is excavating two previously unexplored mounds in the vicinity of Halabja: Tepe Marani (Late Neolithic) and Gurga Chiya (Chalcolithic and Late Bronze Age) (Wengrow *et al.* 2016). Pertinent issues include a proper characterization of the lithic and ceramic industries, establishing the absolute date of ceramic types, and improving our insight in the local and supra-regional affiliations of pottery groups. For both periods attested at the mound, the lithics and the ceramics both closely resemble those of neighbouring regions yet at the same time are distinct. A good case in point is the stunning polychrome-painted Halaf Fine Ware. Although such pottery is widely attested across Upper Mesopotamia, close parallels to the specific style attested at Tell Begum are presently difficult to identify. Is this because Tell Begum represents a phase of the Halaf culture so far not attested elsewhere, or does this pottery reflect a regionally distinct “Shahrizor Plain” cultural tradition? These and other intriguing questions will guide further studies at the mound.

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### العودة الى تل بيجوم: موقع قديم في سهل شهرزور، كردستان العراق

بقلم: أوليفر نيوفينهويسه، تاكاهيرو أوداكا، أكيمي كانيدا، سيمون مهل، كمال رشيد و مارك الطويل

سبق وان تم استكشاف تل بيجوم من قبل أثريين عراقيين في الستينات من القرن الماضي حيث كشفت الحفريات عن موقع متعدد العصور. من بين أهم ما اكتشف كانت بقايا من عصر حلف وكانت نادرة نسبيا في هذه المنطقة من سهل شهرزور وتضمنت فخاريات متعددة الألوان مما يدل على التنوع في حضارة حلف. وكشفت التحريات الأخيرة التي تمت في عامي 2011 و 2013 عن موقع مساحته خمسة هكتارات كان مأهولا خلال عصور حلف وعبيد والعصر النحاسي والعصور الوسطى. وقد كانت مساحة موقع حلف تبلغ 3 هكتارات مما يجعل المستوطنة تعتبر كبيرة نسبيا بالنسبة لذلك العصر، رغم عدم وضوح مدى اتساعها. وتبين من العمل الذي تم خارج الموقع بأن المنطقة كانت وافرة الماء في الماضي مع احتمال وجود غابات وشجيرات مجاورة لها. هذا وأدت الترسبات الثقيلة في المنطقة الى حجب البقايا الأثرية جزئيا بما فيها الركاب الأسفل من تل بيجوم. رغم ذلك فيبدو أن الموقع بقي مستوطنا لعصور عديدة مما يشير الى وجود استقرار نسبي في الأستيطان طوال فترة زمنية طويلة.