

# ラーファイダーン

第 XXXII 卷 2011

- ニップール発見の“一括資料” (英文) ティム・クレイデン
- 近過去を解析する：  
死、牧畜、容器、パイプの考古学 (英文) セントジョン・シンブソン
- テル・ガーネム・アル・アリ遺跡 (シリア前期青銅器時代) の  
生業と植物利用 (英文) 赤司 千恵
- レバント考古学ノート XXXII  
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- 
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- 
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- 15世紀—18世紀ダマスカス由来の陶器資料 (仏文) ベロニク・フランソワ

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## THE NIPPUR ‘HOARD’<sup>1)</sup>

Tim CLAYDEN\*

### Introduction

The Oxford English Dictionary defines ‘hoard’ as ‘a collection, especially of valuable items, hidden or stored for preservation or future use’. Excavated hoards most frequently appear to have been buried in times of threatening danger<sup>2)</sup>, and are dated either by their context, or by the latest object within them.

In early February 1890 at Nippur, under the direction of John P. Peters, a team of workmen excavated a hoard of objects bearing inscriptions. The workmen had found the largest single collection of Kassite royal inscriptions and more than ‘... half of the presently known votive inscriptions from Kassite kings ...’ [Brinkman 1976: 120]. The hoard includes forty two objects bearing Kassite royal votive inscriptions along with twenty or more inscribed objects whose authorship, beyond Kassite, cannot be defined. The sheer quantity of Kassite inscriptions in the hoard makes it important. It also provides evidence for the cultic activities of various Kassite kings at Nippur. In addition it illustrates various types of votive objects (glass axes, lapis lazuli disks and ‘knobs’) which may have been peculiar to the cultic practices of the Kassite period or just at Nippur (glass axes).

The aims of this paper are to examine various aspects of Peters’ discovery and in particular to determine as far as is possible its precise provenance and date of deposition. Secondly to identify and list the objects that made up the hoard. Thirdly to review the major groups of objects of which the hoard consists both as single type groups and as a collection of objects deposited in one of the major cult sites in ancient Babylonia. The study is complemented by a catalogue of the objects found in the hoard.

### Previous publication

In a brief note immediately after his return from Nippur, Peters [1891: 174] reported the discovery of the hoard and highlighted the presence of glass objects. The primary publication of the hoard appeared in 1897 [Peters 1897, ii: 77 and 131–136]. On the basis of the Kassite inscriptions (and the absence of any others) on a number of the objects, Peters argued that the hoard and the building in which it was found represented the stock in trade and ‘booth’ of a Kassite ‘businessman’ selling votive objects to pilgrims visiting the great temple complex of Enlil and Ninlil at Nippur [*ibid*, 131–132].

The full list of objects found in the hoard has never been published. However, the majority of the inscriptions found in the hoard were copied and published variously by Hilprecht [1893 and 1896] and Legrain [1926]. The objects themselves were not really considered and are only scantily

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- 1) It is with deep gratitude that I acknowledge the assistance Professor Erle Leichty, Dr. Richard Zettler and Alex Pezzatin have given me during the preparation of this paper and without whose interest in this work nothing could have been achieved. I am also grateful to Dr Grant Frame for his help with some of the inscriptions. The hoard objects and papers are published with the gracious consent of the University Museum, Philadelphia. The photographs of the objects are all by the author.
- 2) The diaries of the 17th century English diarist, Samuel Pepys, contain two examples of hoard burials. On 4 September 1666, as the Great Fire of London threatened to destroy his house, Pepys buried his official papers in the garden [Latham 1985: 664]. In June 1667, as the Dutch fleet moved up the Thames and threatened to sack London, Pepys sent his wife and father into the country for safety and to bury his gold in a churchyard [*ibid*, 788–789 and 796]. On 24 May 1940, under the threat of a German invasion, the London diarist ‘Chips’ Channon buried valued items (including his diary) in a tin box in a churchyard [James 1993: 254].

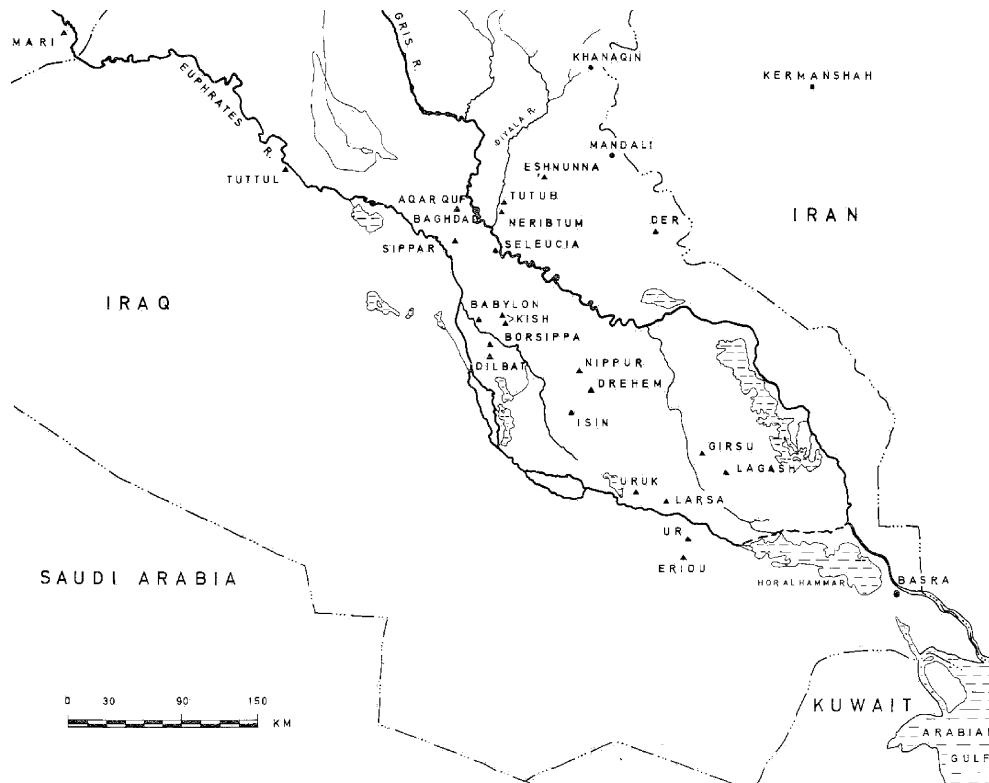


Figure 1: Map of southern Babylonia [after Oates 1986: 8].

described. The context in which the objects were found was also given only slight attention and is noted in the Hilprecht publications simply as ‘Nippur III, in a chamber on the edge of the canal outside of the great S(outh) E(ast) wall of T(emple)’ [Hilprecht 1893: 48 no. 15].

Four brief further studies have been devoted to the hoard. The first was by Hilprecht [1903: 334–336]<sup>3)</sup> who characterised Peters’ dating of the hoard as a ‘... a fantastic theory... [ibid, 335]’. Hilprecht noted the similarities in terms of context and content between the Nippur hoard and similar groups of objects found elsewhere at Nippur and Babylon [ibid, 335–336]. He argued that the Nippur hoard represented a collection of objects salvaged as raw material by a jeweller in the Parthian period. In dating the hoard it is possible that Hilprecht drew on the early work of C.S.Fischer, architect on the IVth expedition to Nippur led by Hilprecht, who helped sort out some of the problems of stratigraphy at the site. In his discussion of the stratigraphy at Nippur Fischer [1907: Plate 21.A.2] identified in a photograph taken in 1890 (the IInd expedition) the rooms in which the hoard had been found and dated them to the ‘Fortress Period’ (i.e. Parthian).

The second study was by Legrain [1920–21: 134] who argued that the hoard was of objects dedicated by Kassite kings ‘... to the various shrines of the temple ...’ and which had been removed at some later period, probably the Parthian. Further that the list of jewels and precious objects recorded on CBS 14180<sup>4)</sup> was ‘... a deed of record of such a collection ...’ [ibid].

The third review was by Brinkman [1976: 120–121 E.5.5] who noted the possibility that the hoard should be dated to the Parthian period and suggested that it would merit further investigation.

3) Herman V. Hilprecht (1859–1925) studied at Bernburg before gaining his doctorate at Leipzig in 1883. He was a lecturer in Old Testament studies at the University of Erlangen in 1885/6 before leaving for Philadelphia where in 1886 he was appointed Professor of Assyriology at the University of Pennsylvania (UoP) and in 1887 a curator at the Museum. After his resignation from the University of Pennsylvania in 1910, though he became an American citizen, he never really worked in academia again. When he died he left a collection of several thousand objects to the University of Jena in Germany [cf. Kucklick 1996: 6–7 and 33].

4) Legrain [1920–21; 1922: 102–107, no.80] and Brinkman [1976; 269, U.2.24.67].



In a short footnote Armstrong [1989: 209, fn.3] stated that the hoard was 'found in [a] secondary context in a room of the Parthian fortress'.

### **Background to the 1890 excavations at Nippur**

To assess how the hoard was excavated, it is necessary to examine the background to the excavations themselves. In the 1880s there was an emerging view in some American academic circles that they should emulate the work of European colleagues and conduct excavations in the near east [Kucklick 1996: 19–34]. In 1887 a subscription was established by twenty eight leading Philadelphians (they raised USD 16,125.00) to support an expedition to Babylonia. The Babylonian Expedition Fund (BEF)'s objectives were to conduct a significant excavation which would produce objects that could be displayed at the purpose built University Museum Pennsylvania (UMP)<sup>5)</sup> and stake America's claim to be a serious participant in ancient near eastern studies.

In 1889 the first season at Nippur (6 February – 15 April 1889), directed by Peters (who had played a key role in the formation of the BEF), had been completed. Extensive excavations had been made at the city unearthing a large number of tablets, pottery, sundry objects and Parthian/Sassanian sarcophagi. The results, though not as spectacular as the BEF had hoped, were enough, somewhat to Peters' surprise [Peters 1897, ii: 4–5], to encourage them to support a second season<sup>6)</sup>. Once again Peters led the team and after aggravating delays in Istanbul and generally on the road, excavation began at Nippur on Tuesday 14th of January 1890.

The extent of the pressure on Peters to find objects at Nippur may be gauged from a letter dated 1 April 1890 sent to Peters at Nippur by Dr William Pepper, Provost of the University of Pennsylvania (1881–1894)<sup>7)</sup>: '... I received your important communication suggesting plan of future operations, and have submitted it to the committee (i.e. the BEF). It has been decided to await definite information from you on your return to Baghdad. You will then be able to cable us about the actual finds at Niffer. I would suggest you do this upon a numerical scale. Hundred I would understand to mean discoveries of the greatest importance and extent. So that the applause attaching would elicit further enthusiasm and ensure continued support. 50 would mean a fair success with a large number of objects of ordinary character, and a certain number of more important ones. Any figures below 50 would indicate proportionate degrees of disappointment as to the number and nature of objects obtained, and as to the prospects for continuance of work at Niffer ...'<sup>8)</sup>.

Peters was keenly aware of the expectations of his sponsoring body for him to find objects. On 16 May 1890 Peters wrote from Nippur to the BEF: '... Last year I was almost afraid to meet the Committee. This year I expect honor from them. We sent from Niffer 36 or 37 boxes, I forget which, most of them double boxes; one blue coffin; seven inscribed door sockets; and one lapis lazuli stone with an inscription of twenty lines. Most of the boxes contain tablets. Niffer has now proved itself to be a peculiarly prolific hill, and to have put it in a condition when, if further excavations are conducted, finds will be rapid ...'<sup>9)</sup>.

The work at Nippur continued until 1901, but Peters' role at the site ceased in 1890 at the end of the second season of excavations. In 1897 he published his two volume account of his excavations at the site. He went back to New York where he resumed his work as a clergyman. He returned to the world of Nippur in the first decade of the 20th century when he and Hilprecht played out a spiteful public sparing match centred on the existence and excavation of the so-called 'Nippur Library' [cf.

5) See Zettler's [1992] review of the founding of the UMP.

6) See, however, Harper [1897: 43] who contradicts Peters' assessment of the views of the expedition at the end of the first season.

7) See Thorpe [1904] for a biography of Pepper.

8) Nippur Archive, Expedition I and II, 4/4 – Correspondence (1890) Fol. 1.

9) *Ibid.*; see also Peters'

Kucklick 1996: 123–140]<sup>10)</sup>. In 1905 Peters published a short essay of the ‘Library’. Thereafter he was lost to Mesopotamian and Nippur studies apart from a short article he published in 1921, the year of his death, in which he argued that the ziggurat at Borsippa was the Tower of Babel.

### Peters’ excavation methods and records<sup>11)</sup>

Hilprecht was contemptuous of the excavation methods adopted by his predecessors at Nippur and on 13 March 1900 he wrote from Nippur to Edward Clark<sup>12)</sup> lamenting the excavation methods of Haynes and Peters: ‘... In my last report I have stated that it was necessary to change the method

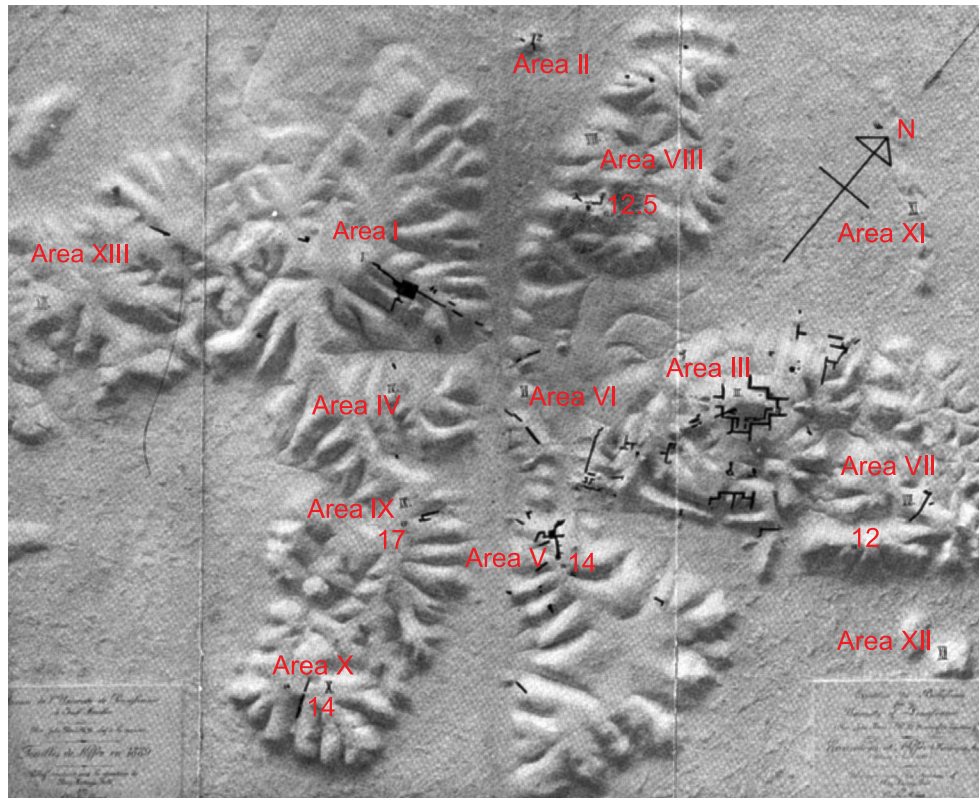


Figure 2: Contour model of Nippur made after the first season of excavations, 1889 [after Peters 1897, ii: photo opposite page 194]. Numerals indicate height in metres above the plain level. Area III is the ziggurat.

10) See <http://www.nytimes.com> (search for Nippur) for some of the press coverage of the argument (e.g. 15 August 1900 when it reported Hilprecht’s statements to have found the Nippur Library; Peters’ letter on 10 March 1905 stating his accusations against Hilprecht; the announcement on 19 November 1910 of Hilprecht’s resignation). The falling out between Peters and his expedition members began during the excavations themselves and Robert F. Harper’s letters to his brother, William R. Harper, are rich with Harper’s disregard for Peters [information courtesy of Dr Richard Zettler, e-mail 4 May 2010]. Harper went public in his review [1897] of Peters’ publication of his work at Nippur and airs a number of personal issues in an unpleasant manner and sets the tone for the Hilprecht-Peters controversy that was to follow. A further, though minor, indication of the animosity between Peters and Hilprecht may be seen in a note signed by Hilprecht in the CBS register for CBS nos. 11035–49 – ‘According to Dr Peters’ statement to me, the 15 clay labels, described here, are nos. 11035–11049, and 15 others all bearing the same legend (all 30 accordingly belonging to one room) were found [...] in the first campaign, 1889, but I personally do not remember any such find. I selected the 15 best labels of this collection for the Museum, [...] placed at the disposal of the Board of Managers to be given away to Museums [...] institutions of learning. I retained as many as 15 for the Museum, in order to have enough material to make out the inscriptions of the seal. H.V.H.’

11) I acknowledge the influence of Peter Parr, one of my Institute of Archaeology tutors (1981–84). He taught that to understand the results of an excavation it is necessary first to deconstruct and understand the excavation and publication strategy of the directing archaeologist.

12) 1848–1904, a major businessman, benefactor of the UoP and contributor to the BEF.

of excavating in all the trenches, as soon as I found out that in the old manner which was based upon the unfortunate interpretation of your committee's orders (to get tablets and objects even at the expense of losing sight of the development and history of Nuffar) the strata were entirely ruined and became useless for scientific work ...<sup>13</sup>). Such was the strength of Hilprecht's negative views of Peters' work that he published his comments [Hilprecht 1903: 334, 336, 338–339, 341, 344–345 and many other examples].

Hilprecht was a little unfair to Peters. Given the clear imperative from Peters' sponsors to find objects combined with his lack of excavation experience, it is not surprising that he set his teams to large scale excavation work including tunnelling [Peters 1897, ii: 111–112]. He had workmen (sometimes literally hundreds) operating all over the remains of the city. Excavations were on a massive scale. Working with limited and inexperienced staff, for much of the time Peters simply could not keep direct control over each trench. Accordingly a combination of the excavation methods; the absence of an architect<sup>14</sup>) on the team; and Peters' limited knowledge of how to draw a plan, meant that much of the detail of the excavation was never recorded.

But Peters was not irresponsible<sup>15</sup>). He maintained a set of records which are preserved in the collection of the UMP Archive. These include a daily dig diary recording the outline results of the excavations in each trench ('Second expedition dig notes', SEDN)<sup>16</sup>). He supplemented this by separate notes on walls ('Second expedition wall notes', SEWN)<sup>17</sup>); a finds register ('Second expedition objects register', SEOR)<sup>18</sup>) and notes on inscriptions ('Second expedition inscriptions register', SEIR)<sup>19</sup>).

Though the results of a survey of Nippur before its excavation have not survived, at the end

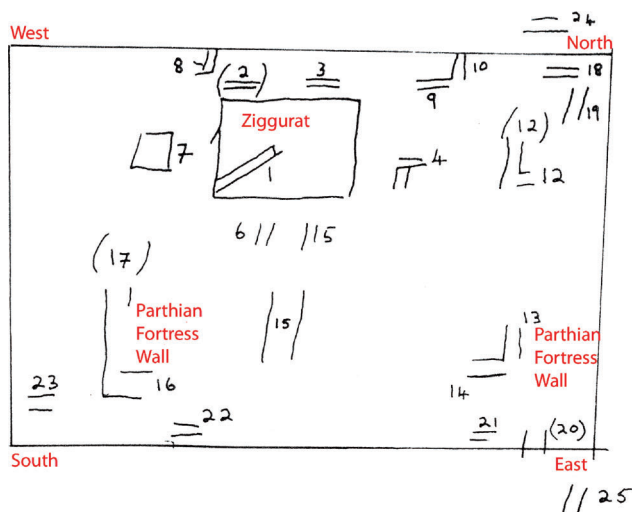


Figure 3: Peters' rough sketch of the excavation trenches in Area III (ziggurat) at Nippur as at 20 January 1890 [after Peters 1890: 20 January 1890].

of the 1889 season Peters [Peters 1897, ii: photo opposite 194] had a model of the site made [Figure 2]. In his first season (1889) Peters numbered each of the major excavation areas in a series I–XII [cf. Fisher 1907: 10, Fig.2 and footnote 1]. Within each area he gave each trench a separate number (i.e. 1, 2, 3 etc). He retained this system in the 1890 season. In his dig notes and finds registers, locations are designated by the area number followed by the trench number (e.g. III.1). A plan showing the locations of each trench was not published. However, in his site notebook Peters made a sketch plan of the trench layout on Temple Hill (Area III = the ziggurat and surrounding structures) as matters stood on Monday 20th of January

13) Nippur Archive, Expedition IV. 20/7 – Correspondence.

14) For a month Peters had the services of an Hungarian surveyor, Coloman d'Emey, whose work he had to redo noting wryly that '... Coloman had been employed in the construction of Baron Hirsch's famous crooked railway in Roumelia ...' [Peters 1897, ii: 91].

15) Zettler [1984: 238] commented that '... the excavations of the University of Pennsylvania at that site, particularly those of the first two seasons, were, at least by the standards of the time, well done and recorded in detail ...'.

16) Nippur Archive, Expeditions I and II, 1890, Folder 2/5, Journal of the Excavation in two volumes: January 14 – April 12 and 16 – 26 April 1890; Peters 1890.

17) Nippur Archive, Expeditions I and II, Folder 2/7, Notes concerning walls and buildings; Peters 1890c.

18) Nippur Archive, Expeditions I and II, Folder 2/4, Catalogue of objects found in two parts: Part 1, nos 1–373; Part 2, nos 373a–823; Peters 1890b.

19) Nippur Archive, Expeditions I and II, Folder 2, no.6, 221; Peters 1890a.



1890 [Figure 3]. This is supplemented by a large scale section through the temple area, including the rooms in which the hoard was found [Peters 1897, ii: plan opposite 142 Figure 4] and a rough plan Peters had drawn by Fisher [Peters 1905: 146].

### Provenance of the hoard

In his published descriptions of the excavation of the hoard Peters commented as follows: ‘It was on a Saturday night as the men were about to stop work that in a low line of mounds in front of the ancient temple we discovered what I have sometimes designated as ‘the jeweller’s shop’. In a room at this point a large, wooden box had held a great quantity of inscribed lapis lazuli and agate tokens; knob-shaped inscribed objects of magnesite ...’ [*ibid*, ii: 77]; ‘... along the edge of the basin, above the quay, ran a line of booths, or store rooms, built of unburned bricks, forming on this side a sort of inner enclosure ... In these booths may have been sold objects needed by the pilgrims. Three booths, immediately to the right of the entrance were occupied by the manufacturers of votive objects ...’ [*ibid*, ii: 131]; and ‘... there is first a low mound rising four metres above plain level, behind which again is a depression or gully, the latter sinking to the level of one and a half metres ... this four metres elevation was a low wall like mound stretching across the south eastern front of the temple, and containing, for the most part, a single row of rooms. These rooms being excavated, proved to rest on a terrace of earth, about a metre above plain level. The walls were of unbaked brick of large, almost square blocks ... no later buildings were erected at this point, but here and there, and especially on the ruins of a tower like portion of this mound ... containing six rooms clustered together, we found later burials of the Parthian period ...’ [*ibid*, ii: 143–144].

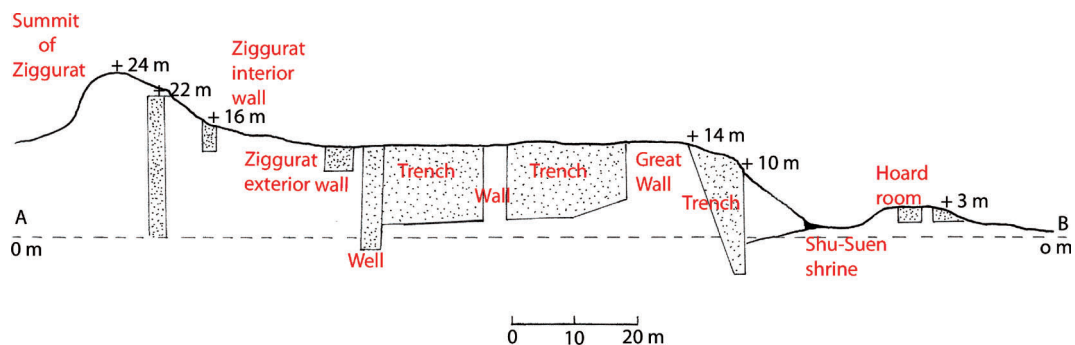


Figure 4: Section A–B through Area III including one of the hoard rooms [after Peters 1897, ii: plan opposite page 142].

The hoards were found in the line of rooms that ran along the low hill c. 3–4 meters above the level of the canal bed and in front of the line of the temple/ fortress walls. The line of the hill was broken by a depression which Peters identified as a gate-way [1897, ii: 144–145]. Peters’ plan of the excavation [*ibid*, ii: facing 142] plots the excavated areas leaving walls, baulks and un-excavated spaces blank [Figure 5]. To the east of the hoard rooms, but clearly part of the same wall line, was a large, heavily constructed structure with six rooms which may, as Peters in his excavation notes suggests, have supported a tower. The alignment of the wall lines on the west and east side of the breach suggests that they were part of a single structure and possibly once ran across the breach which was certainly deepened by erosion. The relationship between this wall line and the Parthian Fortress or the temple precinct is unclear.

A photograph<sup>20</sup> taken on 22 March 1890 (i.e. over a month after the hoard was excavated) of

20) The UMP Archive preserves an album of 65 photographs taken during the second season and compiled by Legrain. This represents just over 50% of the photos that Peters took and which he carefully listed (UMP Archive Nippur box, 21, no.269) following the

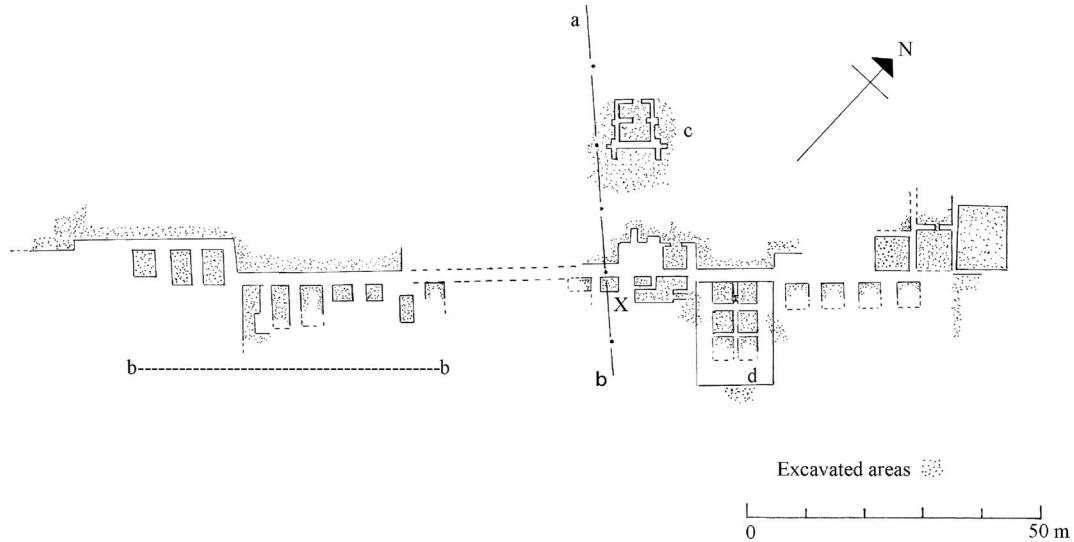


Figure 5: Plan of the line of the Parthian rooms in which the hoard was found. a–b = section through the site (cf. Figure 4); b–b = rooms in the same line as the hoard rooms; X = the hoard room; c = Shu-Suen shrine; d = Parthian tower [after Peters 1897, ii: plan facing page 142; Clayden 2011].

the general area in which the hoards were found was published [*ibid*, ii: plate facing page 132]. It is difficult to identify precisely all the features in the photographs with the published plan of the excavations at the end of the second season [*ibid*, ii: plan facing page 142]. But it is possible to identify the area in which the hoards were found to the right of the spoil heap in the centre of the picture [Figure 6]; or to the right of the standing figures on the spoil run [Figure 7].

### Excavation of the hoard

For the detail of the excavation of the hoard(s) we need to examine the excavation records. The first, and smallest part of the hoard, was found on 7 February 1890. Its excavation is recorded in sparse detail by Peters in his SEDN: '[Trench III].27. In room at this corner was found lapis lazuli inscription' [Peters 1890: 76].

Paradoxically there is greater detail in his SEOR entry for Catalogue No.116 [Peters 1890b: No.152]: 'Found in room of mud-brick about 1.5 m below surface on eastern side of gate like breach in outer wall' and '[Trench] III.27. Found in same place with inscribed stone four copper nails, large heads, an unworked piece of amethyst and some fragments of stone much crumbled away, blue within. Also one small fragment of unworked lapis lazuli'.

In his entry in the SEDN the following day, 8 February 1890, Peters records in somewhat greater detail than on the day itself, the discovery of the first part of the hoard: '[Trench III.]27. Friday in the first room found by Husein Daud was a lapis lazuli stone with inscription, and a quantity of fragments of a stone bright blue within, but corroded greenish and whitish without and crumbled into small fragments. With these were several large headed copper nails, such as would be used in a box or chest meant to keep things ...' [Peters 1890: 81].

The second, and larger, section of the hoard was excavated the following day, Saturday 8th of February, and Peters recorded the event as follows: 'Trench III.27 ...In the northeast to corner of the next room eastward, a small room without any doors in the part of its walls which remain, from

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instructions in the 1888 Kodak handbook that accompanied the camera and 5 rolls of film he used taking circa 100 photos. Two photos, which did not survive, were taken in the region of the hoards – 10 February 1890, 'cloudy bright. 11 am. Scene at new trench III.28 in front of temple. 15ft'; and 'cloudy bright. 1120 am. Scene at trench in front of temple III.26. 30ft.'

1.5 to 2.5 meters below the top of that portion of the wall which remains, from the bottom of the wall and upward, heaped together, fallen one on another were the agate, malachite, lapis lazuli, chalk (?) and other inscribed objects ... There are a quantity of large headed copper nails with them, and the whole had evidently once been contained in a box in the corner. They seem to have belonged to the stock in trade of a man who prepared votive tablets, and other objects for sale to pilgrims and visitors to the temple. Some of the smaller tablets bear merely the name of the god Adar ...' [Peters 1890: 81–82].

It is apparent that the two elements of the hoard were found in wooden boxes in adjacent rooms. Though it is impossible to be certain, the wooden boxes appear to have been abandoned at the same time in the structure. The circumstances of abandonment cannot be determined, but the failure to recover two easily transported collections of valuable objects suggests a sudden event followed by a swift demolition.



Figure 6: Photograph taken on 22 March 1890 of the excavations to the south east of the ziggurat. The rooms in which the hoard was found lie to the right of the spoil heap (photograph by J.P. Peters, published by permission of the University of Philadelphia, Negative number 5306).

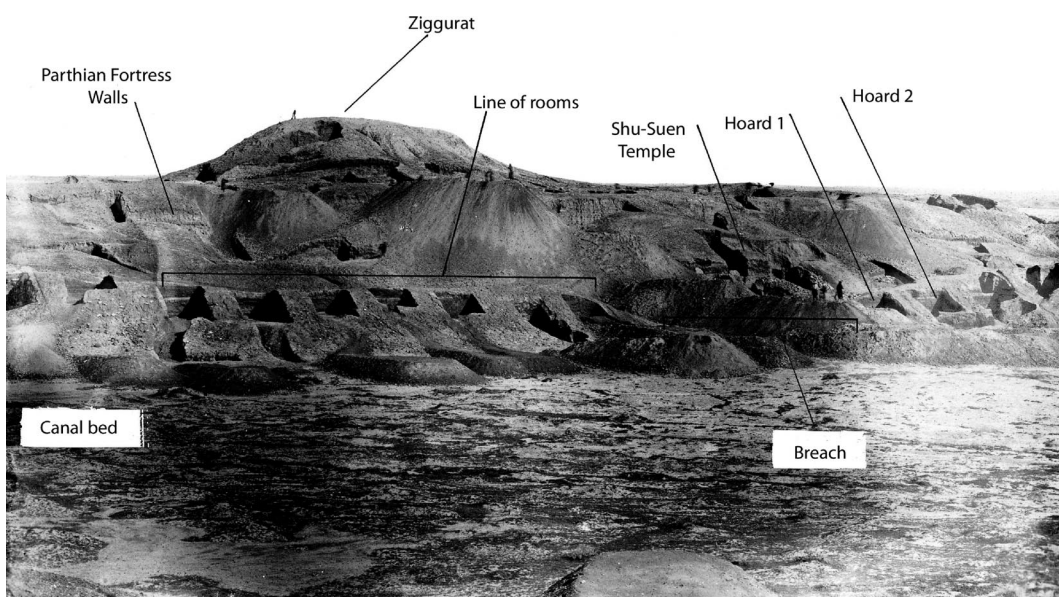


Figure 7: Photograph taken on 22 March 1890 of the excavations to the south east of the ziggurat. The hoard rooms lie to the right of the figures standing on the spoil run (photograph by J.P. Peters, published by permission of the University of Philadelphia, Negative number 5307).



### The date of the hoard's provenance

The remains in the Temple Hill consist of a ziggurat and temple complex founded in the Ur III period and which remained in continuous use through many refurbishments as a temple until quite probably the Seleucid period. In 141 B.C. the Parthians conquered Babylonia, but at Nippur the evidence of the coins found at the site provides suggests that until the founding of the Parthian fortress at the site over a hundred and fifty years later, there was little activity there [Keall 1970: 163–164]. The remains of the Parthian fortress that overlay the Babylonian temple and ziggurat complex have been analysed by Keall [*ibid.*, 21–39; 1975: 626] who, on the basis of excavated coins, defined three building phases to the structure: Phase I, start of building work at circa 82/3 AD; Phase II, the late first century AD to the first quarter of the second century AD; Phase III, the second quarter of the second century AD. The rooms in which the hoard was found could in theory have dated from the Kassite period in the second millennium B.C. to the early to middle second century AD. A number of factors do provide evidence for a closer dating of the hoard's provenance.

Firstly the line of rooms in which the hoard was found run in parallel to the south face of the ziggurat and to the 'great wall' of the Parthian fortress. But they have no known physical link to either structure. However, Peters [1897, ii: 143] reported that the walls of the structure from which the hoard was excavated '... were built of sunbaked brick of large almost square blocks ...' Hilprecht [1903: 334] noted that bricks of that type and dimension characterised the buildings on the upper surface of the mound – i.e. Parthian. In his discussion of the Parthian fortress Keall [1970: 46–47, fn. 1] comments that the bricks of the third and final phase were nearly cubical and large (33 × 33 × 25 cm) but warns that dating by brick size alone is 'impossible' [*ibid.*].

Secondly the rooms in which the hoard was found lay circa 1.5–2.0 meters below the surface of the mound. Immediately to the right of the rooms and at the same level, were rooms cut by Parthian graves [Peters 1897, ii: 144]. The Parthian graves must date either to the last phase of the Fortress or to the period after its demise. This suggests that the rooms should be dated to one of the three phases of the Parthian structure or earlier.

Thirdly, while the group of objects bearing Kassite royal inscriptions provide an earliest date, other objects from the hoard suggest a later date for their find-spot. Two items in particular assist in this discussion. The first is the lamaštu plaque (Catalogue No. 140, Figure 8) which may be firmly dated to the 9th to 4th centuries B.C. (see discussion below). The second are the fragments of beard elements in blue glass and used as inlays for cult statues. Similar items have been found at Assur, Babylon, Dilbat, Nimrud and Ur dated to the 8th to 4th centuries B.C (see discussion below).

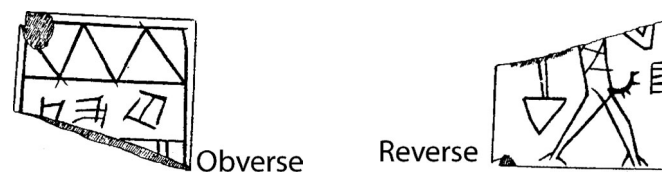


Figure 8: The lamaštu plaque found in the hoard, Catalogue No. 140 [after Hilprecht 1896: 279, no.143, Pl.61].

In addition to the objects recovered from the hoard the SEOR records that seventeen further items were found in Trench III.27 [Peters 1890b: nos. 207, 215a, 225a–c, 244k, 355b, 383, 384–6]. Unfortunately they do not obviously assist in dating the hoard contexts. The objects fall into two date and type groups. The first are a set of fragments of basalt figures, some of them bearing 'archaic' inscriptions, from the area between the main temple precinct wall and the range of rooms in which the hoards were found. They would appear to date from the mid to late third millennium B.C. and to have been from separate, earlier structures to those in which the hoards lay. The second group consists of various sundry objects including some tablets which may not with certainty be identified.

Overall, therefore, the combined evidence suggests a maximum date range for the rooms of c. 800 B.C. – 150 AD. The evidence of the brick dimensions suggests a Parthian date for the structure. The Parthian graves suggest a mid to late Parthian date for the hoard rooms.

### **The hoard**

A catalogue of the objects found in the hoard was not made by Peters at the time of excavation, nor by Peters, Hilprecht and Legrain in subsequent publications. Doing so over a century later requires the review of the published and unpublished records as well as an examination of the objects themselves. The sources for assembling a catalogue of the objects are:

- a. Hilprecht's editions [1893 and 1896] of the inscribed objects found at Nippur include a catalogue of the provenances of the objects. In the case of the items found in the hoard he referred to the find-spot as follows – 'Nippur III, in a chamber on the edge of the canal outside of the great S(outh) E(ast) wall of T(emple)' [Hilprecht 1893: 48]. Thereafter he referred back to this entry for all subsequent objects from the hoard.
- b. The CBS register at the University of Pennsylvania Museum is not wholly reliable as a source for the provenances of the objects, but examination of the entries of easily identifiable elements of the hoards demonstrates a consistency in the entries – 'Second Expedition, Temple Hill'. Sometimes the suffix 'south end' is included.
- c. In the CBS register a number of known hoard objects are listed as supplementary items with an 'a' after the CBS number. These entries are all placed between existing catalogue numbers and are all in the same distinctive hand – almost certainly Hilprecht's - in black ink. This consistency in entry suggests that they were all made at the same time and would appear to relate to the publication of the inscriptions by Hilprecht.
- d. Peters' excavation notes [SEDN, Peters 1890] and object register [SEOR, Peters 1890b] contain some details of the objects found in the hoard.
- e. Peters' inscriptions notes [SEIB, Peters 1890a] provide a record of quite a few of the hoard objects and even some for whom the only record are these notes.
- f. Peters' publication of the excavation of the hoard includes references in sufficient details to identify some of the items [Peters 1897, ii: 77, 132, 133, 134, 135 and 143].

In addition to the material for which the evidence is noted above, there is in the UMP a bag (CBS 2496) of the fragments of beards, animal figurines and axes in blue glass. There is no recorded provenance for the material. However, the bag of fragments may with confidence be identified as hoard items for a number of reasons:

- a. One of the CBS 2496 fragments may be joined to objects firmly identified as having been found in the hoard – a glass axe, Catalogue No. 57. This suggests that fragments joined to a CBS 2496 object must also have been from the hoard (e.g. Catalogue No.90).
- b. The fragments bear the same weathering as hoard items.
- c. The CBS 2496 glass axe fragments have no known parallels except the axes found in the hoard.

Other objects may also be identified as elements of the hoard:

- a. CBS 8744, a magnesite cylinder whose UMP register entry is in the same hand as the other hoard objects and identified as 'Cassite' from the II<sup>nd</sup> Expedition. The SEOR lists magnesite cylinders as hoard elements.
- b. CBS 2498a, four plaques of 'soft white stone or chalk', three of which are pierced and a fourth might also have been but too little survives. These were excavated on 8<sup>th</sup> of February, the day the second hoard was found, and are entered in the SEOR as having been found in III.27 along, and in close association with the hoard objects. These factors strongly urge that the plaques were found in, or close to the hoard and should be considered part of the group.

- The CBS catalogue provides no further confirmation beyond that they were ‘fragments [of] tablets, thin, of different shape, magnesite. Cassite period. II expedition, Temple of Enlil’.
- c. CBS 2498a, circa thirty fragments of ‘soft white stone or chalk’ including of mace heads registered and stored with the plaques noted above. The close association between the two groups of objects suggests that they were found together and should be similarly regarded as part of the hoards.

### Original Provenance of the hoard

In those cases where sufficient lines of text are preserved, the inscribed objects found in the hoard bear votive inscriptions to only five deities: Enlil (Catalogue Nos. [1], [2], 5, [6], 7, 8, 11, 20, 21, 24, [25], 26, [31], 33, 34, [35], 36, 37, 53, 55, 117, 118), Ninlil (Catalogue Nos. 9, [10], 23, 30, 32), Nin-Enlil (Catalogue Nos. 22, 27), Ninurta (Catalogue Nos. [3], 14, 56, 58, 60), Nusku (Catalogue Nos. 4, 12, 13, 15, 16, 18, 19) and [...lil<sup>21</sup>] (Catalogue No. 29). All five gods had major cult shrines at Nippur located in or about the great é.kur - ‘house mountain’ [George 1993: 116 no. 677]. Ninlil’s shrine was called the é.ki.ùr. - ‘Levelled place’ [*ibid*, 112 no. 636]; Ninurta’s the é.šu.me.ša<sub>4</sub> [*ibid*, 147, no 1065] with a number of lesser shrines; with Nusku having several at the é.me.lám.an.na. - ‘House of the radiance of Heaven’ [*ibid*, 123 no. 763], the é.me.lám.ḫus. - ‘House of awesome radiance’ [*ibid*, 124 no. 767] and the [é?].ša<sub>6</sub>.<sup>d</sup>en.líl.lá. - ‘Lovely house (?) of Enlil’ [*ibid*, 144 no. 1030] the inner sanctum of Nusku’s shrine.

One object, Catalogue No. 116, a block of lapis lazuli, bears a lengthy dedication inscription of [Burna-Bu]riaš. The inscription clearly states that the object was intended for the e.kur at Nippur (see below for a fuller discussion).

The inscribed objects bear inscriptions exclusively of Kassite kings. It is not easy to distinguish between kings who bear the same name. Objects bearing inscriptions of Kurigalzu, Kadašman-Enlil and Burna-Buriaš do present problems when their precise dating is considered. In some cases the dates are clear when a patronymic is included (e.g. Catalogue Nos. 26, 32, 53–5, 117). In the case of Burna-Buriaš no text of Burna-Buriaš I has been identified. Indeed few Kassite texts dated to before Kara-indaš have survived. On the basis of probability, therefore, we might date the texts of Burna-Buriaš to Burna-Buriaš II (1359–1333 B.C.) However, for Kadašman-Enlil distinguishing between the two kings bearing the name is not possible.

Overall the hoard objects bearing datable texts range in date from Kurigalzu I (x–1375 B.C.) to Kaštiliašu (1232–1225 B.C.). In that period the only rulers missing from the sequence of Kassite kings in the hoard inscriptions are Kara-Hardaš and Nazi-Bugaš who both ruled in 1333 B.C. during a period in which the Assyrians had at least partial control of Babylonian affairs. This extended into the reign of Kurigalzu II who was put on the throne by his father in law, Aššur-uballit I King of Assyria.

The hoard objects dated by inscriptions form a homogenous group both in terms of their excavation at Nippur; object type; the gods to which they were dedicated; and the Kassite kings who dedicated them. Combined the evidence urges the conclusion that the hoard objects were once part of the temple treasuries at Nippur. Their discovery in wooden boxes in adjacent rooms in the outer walls of a Parthian structure means that they were removed from their original locations. It would seem possible that they were recovered by someone who valued the objects for their intrinsic value as precious stones (or fake precious stone in the case of the glass axes). What their intended use was to be is unclear, though the possibility that they were to be recut for jewellery is possible. Similar hoards of what appear to have been temple fittings or treasure broken up and intended for re-use have been found for example at Babylon (Koldewey 1911: 42–49, Kassite and later objects) and

21) Which could be reconstructed as Enlil, Ninlil or Nin-Enlil.



Dedicator	Object	Dedicee	Cat. No.
Kurigalzu I/II	eye-stone	[En]lil	1, 2
	eye-stone	Enlil	5
	stone tablet	Enlil	24
	stone tablet	En[lil]	25
	amulet	En[lil]	31
	eye-stone	Nin[urta]	3
	eye-stone	Nusku	4
	stone tablet	Nin-Enlil	27
	lapis lazuli disk	Ninlil(?)	10
	amulet	Ninlil	30, 32
	cylinder seal	?	131
	stone tablet	?	28
	Burna-Buriaš II	knob	Enlil
stone block		?	116
ring		?	134
Kurigalzu II	stone tablet	Enlil	26
	amulet	Ninlil	32
	glass axe	Enlil	53, 55
	stone block	Enlil	117
	glass axe	?	54
Nazi-Maruttaš	lapis lazuli disk	Enlil	11
	knob	Enlil	34
	knob	En[lil]	35
	glass axe	Ninurta	56, 58
	lapis lazuli disk	Nusku	12, 13
	glass axe	?	57, 59
Kadašman-Turgu	stone block	Enlil	118
	lapis lazuli disk	Ninurta	14
	lapis lazuli disk	Nusku	15, 16
	lapis lazuli disk	?	17
Kadašman-Enlil I/II	eye-stone	Enlil	5
Kudur-Enlil	lapis lazuli disk	Nusku	18
Šagarakti-Šuriaš	knob	Enlil	36
	glass axe	Ninurta	60
Kaštiliašu	knob	Enlil	37
	lapis lazuli disk	Nusku	19
	glass axe	?	61
?	stone tablet	... lil	29
None	eye-stone	Enlil	6–8
	lapis lazuli disk	Enlil	20, 21
	lapis lazuli disk	Nin-Enlil	22
	eye-stone	Ninlil	9
	lapis lazuli disk	Ninlil	23

Table I: Inscribed hoard objects and the deities to whom they were dedicated.

Ur (Woolley 1955a: 42–43, a hoard of mainly First Dynasty objects).

### Objects

The hoard consists of several definite groups of objects.

### a. Eye-stones (Catalogue Nos. 1–9).

Nine eye-stones were found in the hoard at Nippur. The corpus of known inscribed eye-stones (seventy eight, including the Nippur hoard material) and the appearance of eye-stones in the written record has recently been discussed [Clayden 2009]<sup>22)</sup>. The key conclusions of the study [*ibid*, 55] are that eye-stones originated in Babylonia in the ED III/ early Akkadian period. Inscribed eye-stones did not appear until the Ur III period and then went out of favour after the reign of Nebuchadnezzar II (604–562 B.C.). Both inscribed and un-inscribed eye-stones were valued, as secular items of jewellery, until the fall of the Achaemenid Empire and the arrival of the Greeks [*ibid*, 41–46 for a study of the history of inscribed and un-inscribed eye-stones].

Inscribed eye-stones were high status objects belonging to or donated by a king or in some rare cases a royal wife or senior official. Extra-Babylonian examples are rare and confined to Assyria and in one case, Judea. There are three marked concentrations of inscribed eye-stones – the Kassite period; and the reigns of Sargon II of Assyria and Nebuchadnezzar II of Babylonian.

There is a distinction in function [*ibid*, 52–55] between inscribed and un-inscribed eye-stones. The majority of inscribed eye-stones were made as votive gifts to be dedicated to a range of deities [*ibid*, 48 Table III] and probably formed elements in cultic jewellery. Uninscribed eye-stones were used as elements in royal or cultic jewellery; precious objects given to temples and kept by them in their treasuries; as apotropaic gems; and in one case as elements of mural decoration.

The Nippur hoard eye-stones bear dedication inscriptions of Kurigalzu I/II to [En]lil (Catalogue Nos. 1–2), Nin[urta] (Catalogue No. 3) and Nusku (Catalogue No. 4); Kadašman-Enlil I/II to Enlil (Catalogue No. 5); and three with the name of the deity only – Enlil (Catalogue Nos. 7, 8) and Ninlil (Catalogue No. 9). It has been argued [*ibid*, 43] that these stones should be dated to the Kassite period.

Three other eye-stones were excavated at Nippur – a stone excavated from the Temple of Enlil and bearing a dedication inscription of Kurigalzu I/II to Enlil [*ibid*, 56, No. 13, Pl. 1.e]; a stone said to have been excavated at Nippur bearing a dedication of Kurigalzu I/II to Enlil [*ibid*, 56, No. 14, Pl. 1.f] and a broken stone excavated at the site bearing a dedication to Šamaš by a person whose name is lost [*ibid*, 58, No. 39, Pl. 3.g].

The dedications on the Nippur hoard eye-stones fall within the range of Kassite dedications seen in the wider corpus. Dedications on eye-stones to Enlil were made by Kurigalzu I/II, Burna-Buriaš and Kadašman-Enlil; to Ninlil by Lipit-Ištar, Kurigalzu I/II and Kadašman-Enlil; and to Nusku by Kurigalzu I/II [*ibid*, 48, Table III].

### b. Lapis lazuli disks (Catalogue Nos. 10–23).

Fourteen inscribed lapis lazuli disks were found in the hoard at Nippur. Nineteen other lapis lazuli disks are known. Seventeen were found at Nippur (Table III) and two in a Parthian hoard at Babylon [Koldewey 1911: 36, no. 5, Tafel 42, 1 and o]. It is possible that some of the lapis lazuli disks listed in Table III were from the hoard as in his record of the hoard made on the day of excavation Peters notes that ‘Twenty two round thin tablets of lapis lazuli varying from 4.5 to 1 cm, in diam[eter]

22) Since publication my attention has been drawn to sixteen further eye-stones in private collections and which provide further evidence confirming the conclusions of the study – a pierced eye-stone bearing on its base an ownership inscription of Ipiq-Adad II; seven eye-stones of Kurigalzu I/II bearing votive inscriptions to Ilaba [Christies 1994: 105, no. 219], Ištaran, Nin-Eanna, Ninlil, two to Zababa and one bearing a votive inscription to a deity whose name is lost; an eye-stone bearing a votive inscription of Burna-Buriaš II to Enlil; an eye-stone of Kadašman-Enlil I/II to a deity whose name is lost; an oval eye-stone bearing a votive inscription to Enlil, but the name of the dedicator is lost; an eye-stone bearing the name Ninurta only; an eye-stone bearing a votive inscription of Ešarra-hamât, wife of Esarhaddon [Bonhams 2002: 108, no. 330]; three eye-stones bearing votive inscriptions of Nebuchadnezzar II to Nabu [Ward 1887: 338–339], which might be identified with a similar stone also in private hands published in 1923 [Price]; another to Sarpanitum and one to Nergal [Christies 1988: 62, no. 133]; and a neo-Babylonian eye-stone bearing a votive inscription round the rim, but the name of the dedicator and the deity are lost.

and each inscribed on one side. Of these six are more or less broken, including the two largest. The inscriptions on those which are entire vary from six to two lines'. [Peters 1890a: No.169]. This means that eight disks originally from the hoard are now unaccounted for (Table III may list some of those that were part of the hoard, but poorly documented).

Enlil	Nazi-Maruttaš, 11, a–b; Kadašman-Turgu, d; Kudur-Enlil, g; Name only, 20–21.
Ninlil	Kurigalzu I/II, 10; Name only, 23, m–n.
Nin-Enlil	Name only, 22.
Nin-Nibru <sup>ki</sup>	Unknown, o–p.
Ninurta	Nazi-Maruttaš, c; Kadašman-Turgu, 14, e; Kaštiliašu, i.
Nusku	Nazi-Maruttaš, 12–13; Kadašman-Turgu, 15–16; Kudur-Enlil, 18; Šagarakti-Šuriaš, h; Kaštiliašu, 19; Unknown, q.
Unknown	Kadašman-Turgu, 17, f; Kaštiliašu, j; Unknown, k.

Table II: A list of the deities to whom lapis lazuli disks were dedicated and by whom. The entries 10–23 are from the hoard; those listed a–q are non-hoard disks (Table III).

The Nippur disks all bear dedicatory inscriptions of Kassite kings to a range of deities all with shrines at Nippur (see Table II). The inscriptions on the Babylon disks have not been published and their dates cannot be determined and are thus excluded from the following study.

A comparison between the hoard and non-hoard disks shows a considerable overlap between the names of the deities to whom the disks were dedicated and the kings who made the dedications. The deity, however, is still closely linked to Nippur. These factors, combined with the probability that the entire corpus of twenty eight surviving lapis lazuli disks originated in Nippur, suggests that they should be studied as a single group.

Only two of the disks – Catalogue No. 10 and Table III.1 – are pierced. The remaining hoard and non-hoard disks are not. Some (Table III. a, b, h, i, q and o) show the clear marks of having been cut from two directions from a base (cf. Figure 9).

While the disks all served a single function to act as dedicatory objects, the way in which they were displayed does appear to have differed. The two pierced disks – one bearing a dedicatory inscription of Kurigalzu I/II to Ninlil (Catalogue No.10) and the other the name Ninlil only (Table III, n) – must once have been strung. They were probably part of sacred jewellery hung on a cult statue. The manner in which the unpierced disks were displayed is unclear. One possibility is suggested by lines 85–90 of HAR-ra = hubullu XVI [Landsberger *et al.*: 1970: 7] which lists the elements of statues. At line '89 ĩnu (eye) of lapis lazuli are listed as one of these elements. Lapis lazuli disks similar in form to the inscribed examples noted above were used as eye-inlays in statues at early dynastic Mari [Kohlmeyer 1982: 75 and 85], Tell Agrab [Quarantelli 1985: 302 no. 45, 361–362 no. 45], Nippur [*ibid*, 303 no. 47, 362 no. 47] and in inlays at Kish [*ibid*, 305 no. 53, 364]. The Nippur hoard disks with their dedicatory inscriptions may originally have been used as the inlays for pupils in high status statues – possibly, given the dedicatory inscriptions, cultic. They may equally have been used as inlays in items of furniture or small objects (e.g. a box).



Figure 9: The reverse of a lapis lazuli disk from Nippur showing the manner in which it was cut from a 'tube' of stone (cf. Table III.a).

Unusually for such rich objects (e.g. eye-stones, 'knobs', kudurrus, statues etc) deposited in temples, they do not appear in either Assyrian or Elamite sites as booty. Perhaps they were too small to be collected, or if taken were re-used. It is not clear why they should have been restricted to Nippur and Babylon (?).

No.	Museum No.	Date	Dedicee	Bibliography
a.	CBS 14576	Nazi-Maruttaš	Enlil	Legrain 1926: 31, no. 55, Pl. XVIII; Brinkman 1976: 264, U.2.10; Stein 2000: 138, Ka 20.
b.	L.29–450	Nazi-Maruttaš	Enlil	Brinkman 1976: 265, U.2.16. (Figure 10.a) <sup>23)</sup> .
c.	CBS 14572	Nazi-Maruttaš	Ninurta	Legrain 1926: 10, no.53: Pl. XVIII.53; Brinkman 1976: 264, U.2.11; Stein 2000: 139, Ka 21.
d.	?	Kadašman-Turgu	Enlil	Unpublished (Figure 10.b) <sup>24)</sup>
e.	HSM 51	Kadašman-Turgu	Ninurta	Hilprecht 1893: 51, no. 61: Pl.23; Brinkman 1976: 154, L.2.3; Stein 2000: 140, Ka 24.
f.	CBS 3991	Kadašman-Turgu	?	Legrain 1926: 31, no.57: Pl. XVIII.57; Brinkman 1976: 154, L.2.6; Stein 2000: 141, Ka 28.
g.	CBS 9955	Kudur-Enlil	Enlil	Legrain 1926: 32, no.60: Pl. XIX.60; Brinkman 1976: 191, P.2.3.; Stein 2000: 142, Ka 31.
h.	CBS 14574	Šagarakti-Šuriaš	Nusku	Legrain 1926: 32, no.59: Pl. XIX.59; Brinkman 1976: 287, V.2.1; Stein 2000: 144, Ka 36.
i.	CBS 14577	Kaštiliašu IV	Ninurta	Legrain 1926: 32, no.61: Pl. XIX.61; Brinkman 1976: 176, O.2.1; Stein 2000: 146, Ka 43.
j.	IM 59769/ 5NT 563	Kaštiliašu IV	?	Brinkman 1976: 176, O.2.4.
k.	CBS 3981	?	?	Legrain 1926: 33, no.64: Pl. XIX.64.
l.	CBS 14578	None	Enlil	Unpublished (Figure 10.a) <sup>25)</sup> .
m.	CBS 14573	None	Ninlil	Unpublished (Figure 10.b) <sup>26)</sup> .
n.	CBS 8720	None	Ninlil	Hilprecht 1893: 49, no. 32, Pl. 15.
o.	CBS 14571	None	Nin-nibru <sup>ki</sup>	Legrain 1926: 32, no.62: Pl. XIX.62 <sup>27)</sup> .
p.	CBS 14579	None	Nin-nibru <sup>ki</sup>	Unpublished.
q.	CBS 14575	None	Nusku	Legrain 1926: 32, no.63: Pl. XIX.63.

Table III: ‘Non-hoard’ lapis lazuli disks also found at Nippur<sup>28)</sup>.

A related object may be the broken lapis lazuli disk found in Area X at Nippur [CBS 9227, Hilprecht 1896: 64, pl. 60, no.133; Legrain 1926: 30, pl. XVII, no.49; Stein 2000: 130–131, ka 4]. It differs from the hoard disks in that it has an inscription on both sides. The inscription is dedicatory (the name of the god to which it was dedicated is lost) by Kurigalzu I/II and refers to the object as a *AŠ.ME* <sup>na4</sup> *ZA.GÌN eb[-bi]* – ‘disk of shining lapis lazuli’. This is the same phrase used by Abi-ešuh in his year name 10?(t) (Horsnell 1999, ii: 251-252, no.193) recording his dedication of a *AŠ.ME* <sup>na4</sup> *ZA.GÌN-(na)* in the *é.babbar* at Sippar (?). Whether the ‘great emblem’ in the year

23) In a letter written and dated on 6 October 1894 at Nippur by John Haynes, a rubbing of the disk was sent to Peters. Haynes describes its provenance as follows: ‘In the mortar of mud between the large crude bricks in the eastern corner of the second stage of the ziggurat was discovered an inscribed fragmentary disc of lapis lazuli of the accompanying is a pencil rubbing’ (UPM Archives, Nippur Collection, Container 8, Folder 3). The text reads: 1. <sup>d</sup>en-lil 2. lugal-a-ni-ir 3. na-zi-ma-ru-ut-<sup>r</sup>taš 4. a-mu-<sup>r</sup>ru<sup>1</sup> (transliteration courtesy of Dr Grant Frame).

24) In a letter written and dated on 2 March 1895 at Nippur by John Haynes, a rubbing of the disk was sent to Peters. Haynes described its provenance as follows: ‘A fragment of [a] lapis lazuli disc has been found in the debris far above the tablets and is not to be connected with any well defined stratum or otherwise associated with any known period of time’ (UPM Archives, Nippur Collection, Container 8, Folder 4). The text reads 1. a-na 2. <sup>d</sup>en-lil 3. [be-l]i-šu [ka/ kad-dáš-man-tú]r-gu 4. [i-qí-iš] (transliteration courtesy of Dr Grant Frame).

25) Text reads: en-lil.

26) Text reads: <sup>d</sup>nin-lil.

27) The CBS catalogue is clear. CBS 14571 and 14579 bear the same inscription. However, the copy published by Legrain [1926: 32, no.62: Pl. XIX; Table III: P] is actually CBS 14579. This suggests that CBS 14571 is missing.

28) UM 51–6–290, 2N–477 is a lapis lazuli disk bearing the name Enlil only was excavated in the 2nd modern season of excavations at Nippur and awaits publication. AO 4601, dedicated by Kurigalzu I/II to a deity whose name is lost, is a pierced bead and not a disk [Delaporte 1923: no. 818; Brinkman 1976: 228, Q.2.98]. The object now appears to be lost.



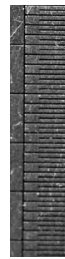


Figure 10.a.



Figure 10.b.

Figures 10.a and b: Hayne's rubbings of L.29.450 (Table III.b) and of a now lost (?) disk (Table III.d).

Figure 11.a: CBS 14578  
(Table III.l).Figure 11.b: CBS 14573  
(Table III.m).

name is on the same scale as the Nippur lapis lazuli disks is hard to tell, but that both were royally dedicated to a deity is clear. We should also note the inscription on CBS 3981 [Legrain 1926: 33, pl. 64, Pl. XIX; Table III: l] which states that the object (i.e. a lapis lazuli disk) was made of 'bright stone' [*ibid*].

### c. Stone tablets (Catalogue Nos. 24–29).

All six stone tablets found in the hoard bear votive inscriptions. In the four cases (Catalogue Nos. 24–27) in which the inscription is preserved, they are all votive inscriptions of Kurigalzu I/II or Kurigalzu II.

The surviving dedications are either to Enlil (Catalogue Nos. 24–26) or Nin-Enlil (Catalogue No.27). The inscriptions on Catalogue Nos. 28 and 29 are too broken to identify the deity to whom the stones were dedicated. These deities were all worshipped at the e.kur at Nippur.

The six tablets vary in size and material – Catalogue Nos. 24, 25 and 27–29 are of lapis lazuli. Catalogue No. 26 is of feldspar (?). Catalogue Nos. 24–25 and 27–29 appear to be 'plates' of lapis lazuli. Catalogue Nos. 25 and 27 have holes bored through them as if to allow pegging to a backing object. It is possible that the other lapis lazuli 'plates' may also have been originally fastened to a backing. Catalogue No. 26 is curiously shaped with no known parallel. Its peculiar shape may indicate that it was intended for a particular setting perhaps as an inlay in a larger object.

### d. Amulets (Catalogue Nos. 30–32).

The three amulets found in the Nippur hoard may be characterised as being of precious stone, pierced and bearing a votive inscriptions of Kurigalzu I/II to deities worshipped at Nippur. As such they form a coherent group of objects.

The Kurigalzu inscription on Catalogue No. 32 is secondary as on the obverse there is a dedicatory inscription of the Ur III ruler, Šulgi, made nearly 800 years before the reign of Kurigalzu. The Šulgi dedication is to Inanna. Šulgi rebuilt the Inanna temple of é.an.na at Uruk [George 1993: 67–68, no. 75] and the object may represent further evidence of Šulgi's patronage of the temple. How Kurigalzu came into possession of the stone is not known.

There are a number of similar gems (amulets and beads) bearing votive inscriptions of Kurigalzu I/II [e.g. Brinkman 1976: 228, Q.2.95 from Nippur dedicated to Enlil; and of Kurigalzu II, *ibid*, 225, Q.2.70 from Kish dedicated to Zababa; *ibid*, 225, Q.2.71, unprovenanced dedicated to Enlil; *ibid*, 228, Q.2.94 bead dedicated to Ninlil; *ibid*, 228, Q.2.96 from Surkh Dum dedicated to [Nin]lil; *ibid*, 228, Q.2.97, unprovenanced dedicated to Enlil; *ibid*, 228–229, Q.2.98; *ibid*, 229–230, Q.2.104].

A study of eye-stones which bear royal dedication inscriptions argues that they formed strung elements in cultic jewellery [Clayden 2009: 53]. It is possible that the amulets found in the Nippur hoard and the amulets and beads noted above were similarly strung elements of cultic jewellery, most probably in one of the cultic shrines at Nippur.

**e. 'Knobs' (pommels) (Catalogue Nos. 33–52).**

Of the nineteen stone 'knobs' that the excavation records indicate were found in the hoard, only five may now be located. The surviving 'knobs' bear dedicatory inscriptions to Enlil by Burna-Buriaš (Catalogue No. 33), Nazi-Maruttaš (Catalogue Nos. 34–35), Šagarakti-Šuriaš (Catalogue No. 36) and Kaštiliašu (Catalogue No. 37) who reigned in the period 1359–1225 B.C. The remaining 'knobs' were un-inscribed. All the dedications were to Enlil, whose principle site of worship was at the é.kur in Nippur.

All but one of the 'knobs' are made of a very friable and soft white stone sometimes referred to as 'talc' or as 'magnesite'. Catalogue No. 33 is incorrectly described by Hilprecht [1893: 49, no. 34] as being made of ivory, when in fact it is made of a hard stone, possibly limestone. Where it has survived the original surfaces of the 'knobs' have what appears to be a thin coating of what might be a glaze. In the case of the best preserved 'knob', Catalogue No. 33, the inscription can, under close inspection, to have been (wheel ?) cut into the 'glaze' surface [Figure 12].



Figure 12: catalogue No.33. Close up of the inscription cut into the 'knob' dedicated by Burna-buriaš II to Enlil [author's photograph].

The average dimensions of the Nippur hoard 'knobs' are: height 4.98 cm; diameter of upper surface 6.33 cm; diameter of lower surface 5.99 cm. A central hole runs vertically through the 'knobs'. The upper surfaces are rounded while the lower are flat. The inscriptions appear in a ruled band of text round the circumference of the upper surface. In the case of Catalogue No. 33, however, the inscription runs across the upper surface in a series of ruled lines.

Similar objects, inscribed and un-inscribed, have been found on Mesopotamian and Elamite sites in contexts dated to the mid- to late second millennium B.C. - Mittanian to the late Kassite/ middle Assyrian periods (Table IV). They have also been found in similarly dated contexts in Egypt and

the Levant [James 1978; Caubet 1991: 265–267; Caubet *et al.* 2001], though none are inscribed. The central conclusion of these three studies is that the objects were fittings for saddles and yokes and are all connected to horses and horse riding. James [*ibid.*, 105–106] notes the use of such knobs in horse trappings and chariot fittings found in the burials of Tutankhamun and Rekhmire and in similarly dated reliefs and tomb paintings. He notes the continued use of these objects in the neo-Assyrian period demonstrated by their appearance in wall reliefs and the bronze gate decoration at Balawat [*ibid.*, 107]. Zettler [1987] argued that an alternate function, especially in the Mesopotamian context and specifically in the Ur III period, might have been to serve as tie back points for door fasteners. It should be noted, however, that the ‘knobs’ as reconstructed by Zettler [*ibid.*, 218, Fig.9] are not fully pierced.

James [*ibid.*] identified two types of ‘knob’. The first [*ibid.*, 105, Types A–1 and 2] are similar to those found at Nippur and may be characterised as having flat bases, domed summits and centrally pierced. The Egyptian and Levantine examples are made of stone – marble or alabaster (though none have been subjected to material analysis). The second group [*ibid.*, Types B–1 and 2] have pointed summits and have a central piercing which only goes half way through the items. The only Mesopotamian site on which this type has been found is Nuzi [Starr 1937: Pl. 121, w]. A number, made of faience, were also found at Anšan [Carter 1996: Figure 30, nos. 10–15 and 17].

The evidence strongly suggests that the Egyptian and Levantine ‘knobs’ were used as fittings on horse and chariot trappings. Made of hard stone they would have been physically capable of surviving the wear and tear of use. The same cannot be said for the Nippur hoard ‘knobs’ which are made of soft stone with a glaze sheen on some (the exception being Catalogue No. 33). As the list presented in Table IV shows, the Babylonian examples from Nippur (including the two bearing Kassite royal inscriptions found at Susa, Table IV, u and v which almost certainly were loot from Nippur taken to Susa by an invading Elamite army), Brak (Table IV, c and d), Larsa (Table IV, i and j) and one from Kār-Tukulti-Ninurta (Table IV, n) are also made of soft materials which would have meant that they could not have withstood any robust use.

Two further aspects of some of the Mesopotamian and Elamite ‘knobs’ suggest a slightly different function. Firstly, of course, many bear dedicatory inscriptions and were probably originally dedicated in the é.kur at Nippur. The Elamite ‘knobs’ bearing ownership inscriptions or simply the name of the king (Table IV, q, r and s) were made of stone and could therefore have been horse trapping and chariot fittings. Secondly the Nippur and Larsa ‘knobs’ were deposited in temples – the Nippur examples were removed from the é.kur by an Elamite army (Table IV, v and w) or excavated from the temple by a Parthian jeweller (the Nippur hoard ‘knobs’, Catalogue Nos. 33–52). The Larsa ‘knobs’ were excavated from the upper levels of the é.babbar temple [Huot *et al.* 1983: 209]. The Tell Brak ‘knobs’ (Table IV, c and d) were recovered from the Mittanian palace.

I suggest that the soft stone and frit/ faience ‘knobs’ were also intended to be fitted to horse trappings and chariots but that the chariots were used for cultic events and not for warfare or industrial transport. Cultic chariots [Black *et al.* 1992: 52 and 112] would have been in temples for display and if used, for example to transport the statue of a god, use would have been careful, restricted and light. An example of such a chariot might appear in a year name of Hammurapi – ‘The year: Hammurapi, the king, made the throne of the high dias, finished with gold, silver, hulalu-eye-stone, mušgarru-stone and lapis-lazuli, <and> decorated like a blaze of light, for Inanna of Babylon <as> her chariot, complete in every detail’ [Horsnell 1999, 2: 121, no. 116]. Representations of such chariots may be seen in terra-cotta plaques recovered from Nippur [Legrain 1930: 27, no. 198, Pl. XXXVII; 30–31, Pl. XLVII].

None of the ‘knobs’ bear an inscription identifying what they were called in Babylonian, however, the general word for ‘knob’, *karru* [Chicago Assyrian Dictionary K. 221–222], might have been used.

No.	Site	Description	Bibliography
Mesopotamian Sites			
a.	Nuzi	Mosul marble.	Starr 1937: 32–3; Pl. 121.Q; 1939: 468–9.
b.	Nuzi	Mosul marble.	Starr 1937: 32–2; Pl. 121.V; 1939: 468–9.
c.	T.Brak	Frit/ talc, 3.8 × 6.0 cm. TB 8089.	Oates <i>et al.</i> 1997: 87–8, fig. 128, 244–5, no.72.
d.	T.Brak	As c, TB 8099.	Oates <i>et al.</i> 1997: 87–8, fig. 128, 244–5, no.72.
e.	Alalakh	'Alabaster'; AT/59/18.	Woolley 1955: 296, no.27; Pl. LXXXII, no.27.
f.	Alalakh	'Alabaster'; AT/39/27.	Woolley 1955: 296, no.28; Pl. LXXXII, no.28.
g.	Alalakh	'Alabaster'; AT/39/14.	Woolley 1955: 296, no.29; Pl. LXXXII, no.29.
h.	Alalakh	'Alabaster', AT/39/264.	Woolley 1955: 296, no.29.
i.	Larsa	Faience, 6.7 cm high, L.78.15	Huot <i>et al.</i> 1983: 209, fig.36.a, 228.
j.	Larsa	Broken, faience, L.78.17	Huot <i>et al.</i> 1983: 209
k.	Nippur	Faience, ht. 6.05; upper dia. 5.4; lower dia. 5.52; shaft dia. 4.5; dia. of central perforation 1.3 cm. CBS 19930 <sup>29)</sup> .	Unpublished.
l.	KTN <sup>30)</sup>	Stone, base 5, dia. 4 cm, T.283	Eickhoff 1985: 54,84; Taf. 4.5.
m.	KTN	Stone, broken, T.327.	Eickhoff 1985: 54, 89; Taf. 4.7.
n.	KTN	Frit, 6.5 × 1.0 cm.	Eickhoff 1985: 54,84; Taf. 4.4.
o.	Assur	'Frit', Ass 20278.	Andrae 1935: 98; Taf. 41.q.
p.	Assur	Clay, Ass 20283b.	Andrae 1935: 98; Taf. 41.k.
Elamite Sites.			
q.	HT <sup>31)</sup>	'Calcite', ht. 4.5; dia. 6.6 cm. bearing an ownership inscription of Adad-eris <sup>32)</sup> .	Herrero <i>et al.</i> 1990: 2, 7, no.4.
r.	TZ <sup>33)</sup>	Yellow marble, G T–Z.71, bearing an inscription of Untaš-Napariša <sup>34)</sup> .	Ghirshman 1966: Pl. LXIII.7, LXXXVIII.
s.	TZ	Yellow marble, G T–Z.76, bearing an inscription of Untaš-Napariša.	Ghirshman 1966: Pl. LXIII.7 LXXXVIII.
t.	Marlik	'Frit' (ht. 7.0; dia. 5.3 cm), found in a tomb. Surface glaze.	Negahban 1996,1: 310, no.958; 1996, 2: Pl. 137, no.958.
u.	Anshan	Faience, broken.	Carter 1996: Fig. 30, 16.
v.	Susa	'Magnesite', AO 4625, bearing a dedication inscription of Kurigalzu II to Enlil (ht. 0.5; dia. 0.65 cm).	Scheil 1913: 32–33, no.1; Brinkman 1976: 225, Q.2.71.
w.	Susa	'Magnesite', bearing a dedication inscription of Šagarakti-Šuriaš to Enlil (ht. 0.5; dia. 0.65 cm).	Scheil 1913: 33, no.2; Brinkman 1976: 287–8, V.2.3.

Table IV: 'Knobs' found on Mesopotamian and Elamite sites.

29) The CBS catalogue records that the object was 'presented by Sultan to H.V.H and by the latter to Board of Trustees of U[niversity] of P[ennsylvania] as Mrs S.C.H collection'. A great number of tablets and objects 'Mrs Hilprecht' or 'Mrs S.C.H.' were registered into the University of Pennsylvania Museum CBS series between November 1902 and December 1910. The entries are mixed in with registrations of objects from the excavations at Ur and Eridu in the 1929–30 season.

30) Kār-Tukulti-Ninurta.

31) Haft Tépe.

32) Adad-Eriš was a contemporary of Kadašman-Enlil II (1263–1255 B.C.).

33) Tchoga Zanbil.

34) Untaš-Napariša reigned at some point in the third quarter of the 13th century B.C.



**e. Glass axes (Catalogue Nos. 53–111).**

Fragments of glass axes bearing dedicatory inscriptions of the Kassite kings Kurigalzu II and Nazi-Maruttaš, and possibly of Šagarakti-Šuriaš and Kaštiliašu were found in the hoard. Eight fragments of glass axes have been published in some form or another. The published and unpublished fragments will appear in a forthcoming article [Clayden 2011]. As the study will be comprehensive I will not repeat the discussion and catalogue here. The key conclusions of the paper [*ibid*] are that the glass axes date to the late 14th to late 12th century B.C. and are thus circa two centuries later than the earliest phase of glass production in Mesopotamia. They are, however, unique in terms of their size (circa 30 × 10 cm) and the inscriptions which are the earliest on glass in Mesopotamia. The axes were dedicated to a range of deities – Enlil, Ninlil and Ninurta. This suggests that the axes served a cultic function and, like the rest of the hoard, were originally deposited in shrines in the é.kur complex at Nippur.

**f. Glass statue elements (Catalogue Nos. 66–104).**

Thirty eight glass fragments of animal horns (Catalogue Nos. 66–71), limbs (Catalogue Nos. 72–4), and curled hair (Catalogue Nos. 75–104) were found in the hoard. The objects were not recognised for what they were at the time and the single CBS numbers (2496 and 14722) was assigned to a number of fragments. As noted above a number of joins between fragments of known hoard items and objects in the CBS 2496 and 14722<sup>35)</sup> range means that they too should be regarded as having come from the hoard. It is possible that this collection of fragments is what Peters referred to in his site record of the excavation of the first box of the hoard – ‘a quantity of fragments of stone bright blue within, but corroded greenish and whitish without, and crumbled into small fragments’ [Peters 1890: 81–82].

The curved horns, animal legs and hooves are all in blue glass though the surfaces are badly weathered. The Akkadian term for these horns may have been *qarnu* [Chicago Assyrian Dictionary Q, 136–137]. The closest published parallels for the Nippur Hoard examples are from the earliest, Kurigalzu I, level of the palace at Dūr-Kurigalzu (level IV). In what may have been a store room/treasury, Room 15, on or about a series of white plastered benches a number of ‘... small objects of frit were found, some of which were the horns of small animals ...’ [Baqir 1945: 14, Pl. XXVII, Fig. 30, DK3–129]. The Dūr-Kurigalzu horns, like those from Nippur, fall into two types – larger curved caprid horns; smaller curved and twisted antelope like horns. The Dūr-Kurigalzu horns bear surface striations, while the Nippur objects do not. Similar horn fragments in blue glass were found at Larsa in the late second millennium B.C. remains of the é.babbar temple complex [Huot *et al.* 1983: 209, L.78.315–6]. With these parallels we might similarly date the Nippur hoard fragments to the second half of the second millennium B.C.

The use of glass inlays in statues in Babylonia in the second half of the second millennium B.C. is attested in a text [Gurney 1953: 23, no. 22] found at Dūr-Kurigalzu. The text records that eye-brows, eye-balls and ‘facings’ of a statue of a sheep for the Palace of the Stag at Dūr-Kurigalzu were to be made of lapis lazuli of na<sub>4</sub> bu-su ba-al-lu – ‘mixed glass’ [Oppenheim 1970: 13].

Thirty items of blue glass objects depicting fragments of hair curls were found in the hoard. The items are either sections of panels with a central hole for pinning to a surface (Catalogue Nos. 75, 77, 83, 85, 88, 90, 94, 98, 99), or single curls some of which may have been parts of panels. The best example is Catalogue No. 98 which is a near complete plaque. The panels may be reconstructed from the surviving fragments and would appear to have been roughly 3–4 cm square; 0.45–1.3 cm thick; and with a central ‘peg hole 0.4–0.8 cm in diameter. These panels had four curls on each. The central hole suggests that they were originally pinned to a backing surface, possible

35) The entries in the CBS catalogue for CBS 14722, 14723 and 14728 were made in 1924, two decades after the excavations at Nippur had ended and some have a question mark next to the entry for the season in which they were excavated.

a wooden core for a figurine.

In Mesopotamia the closest parallels for the Nippur hoard hair curls, may be identified with the beards of composite statues known dating from the 9th – 4th centuries B.C. Curls at Assur dated to the 9th – 8th centuries B.C. have survived [Klengel-Brandt 1995: 34, nos. 7–9]. Beard curls from Nimrud date to the 8th – 7th centuries B.C. [Barag 1985: 75–76, nos. 62–4, Pls. 8 and 9; Reade 2002: 175–176]. Babylonian curls dated to the 8th and possibly as late as the 4th centuries B.C. have been excavated at Dilbat [Barag 1985: 76, no. 65, Pl. 8] and Ur [*ibid*, 76, no. 66, Pl. 8]. However, perhaps the best parallels for the style of the curls found in the Nippur hoard material may be identified with the composite figure in lapis lazuli which once adorned the side panels on a throne from the é.sag.íl temple at Babylon [Koldewey 1911: 47, Abb. 79; Wetzel *et al.* 1957: 34–38: Tafel 36–39 and 45.a, 2, 8, 11 and 14; 45.b 1–2, 4–23; George 1993: 139–140].

We might also note, however, that in fifteenth century Mycenae glass hair curls similar in form, but in panels of three (not four as at Nippur) to the Nippur hoard examples were manufactured in quantity [Yalouris 1968: 11–12, figures 7–9]. These curls were strung in the form of a chaplet placed on the skull of a burial. However, there is no evidence to suggest a direct link between the Mycenaean objects and contemporary Mesopotamia.

**g. Glass objects (Catalogue Nos. 105–110).**

The functions and original forms of the objects in this group are impossible to define. All that may be noted is that they were originally blue glass. The linear items (Catalogue Nos. 106 and Catalogue Nos. 108–110) may be ‘humps’ knocked off them. They may have been decorative elements fastened to a larger object.

**h. Various glass fragments (Catalogue Nos. 111–5).**

The fragments of glass are too broken to allow any identification as to of what they may once have been a part.

**i. Stone blocks (Catalogue Nos. 116–8).**

Of the five rough blocks of stone found in the hoard, three are of lapis lazuli and bear dedicatory inscriptions to Enlil of [Burna-Bur]iaš (Catalogue No. 116); Kurigalzu II (Catalogue No. 117); and Kadašman-Turgu (Catalogue No. 118). The remaining two blocks (Catalogue Nos. 119–120) are of a friable white stone and are not inscribed and may, therefore, not be related functionally to the lapis lazuli objects.

Catalogue No. 116 bears an interesting text of which sixty three lines are preserved arranged in three columns. The text records that it was inscribed on a block of lapis lazuli (line 15') brought from the mountains (line 16') and weighed 7 1/3 minas (line 17'). It states that the block was dedicated to Enlil at the é.kur (at Nippur). There can be no doubt as to the original origin of the object.

Catalogue No. 117 is an irregular block of lapis lazuli bearing a six line dedicatory inscription of Kurigalzu II to Enlil<sup>36)</sup>. The original provenance of the fragment at Nippur and the é.kur is possible.

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36) The following note was written by Dr Grant Frame, to whom I am grateful for the information: ‘This inscription, written in Sumerian on an irregular block of lapis lazuli found among a hoard of objects discovered in area III at Nippur, records the dedication of the object to the god Enlil by Kurigalzu II. The inscription is basically a duplicate of the inscription on a knob from Susa (cf. Table IV.v above). The inscription was collated from a cast (CBS 8599)’.

Text

- 1) <sup>d</sup>en-líl
- 2) lugal-a-ni-ir
- 3) ku-ri-gal-zu

The third block, Catalogue No. 118, bears a twenty line dedicatory inscription of Kadašman-Turgu to Enlil. In his publication of the object Hilprecht [1893: 51, no. 63, pl. 24] states that it was found ‘in a room in the mounds s(outh) of t(emple)’. As noted above, it is apparent from Peters’ dig notes that the block was found in the first box of the hoard to have been excavated.

The value lapis lazuli held in ancient Mesopotamian society is well document [see Winter 1999, especially 54–55, notes 1–4]. The scale of the donations represented by the lapis lazuli blocks from the Nippur hoard may be gauged by the various gifts of lapis lazuli (worked and un-worked) Burna-Buriaš sent to the Pharaoh Amenophis IV as part of the routine of international correspondence between kings. In all gifts are recorded of 9 minas of apparently un-worked lapis lazuli [Moran 1992: 13, EA 7.49–62; 18, EA 9. 19–38; 19, EA 10. 43–49]; and ten ‘lumps’ and 20 beads [*ibid*, 22, EA 11. 24–34]. When Assur-uballit opens correspondence with the Pharaoh the only lapis lazuli he sends as greeting gift is a cylinder seal [*ibid*, 39, EA 16. 9–12]. On one occasion Tušratta of Hatti sent 20 ‘pieces’ of lapis lazuli – weight and size not defined [*ibid*, 45, EA 19, 80–85], and on another a necklace of lapis lazuli [*ibid*, 50, EA 21. 33–41]. The late second millennium B.C. Ulu Burun shipwreck provides tangible evidence that lumps of raw lapis lazuli were transported around the ancient middle east as a valuable commodity [Yalcin *et al.* 2005: 639, f].

#### **j. Stone axe heads (Catalogue No.121).**

The fragment of the blade of a lapis lazuli axe was found in the hoard. The surface has been rubbed down and the inscription is lost, but the rulings for ten lines of text may be discerned. The blade has been cut by a saw, an action that may have dated to its excavation and intended re-use by its Parthian owner.

Fragments of only two other lapis lazuli axes have survived which is probably a testament to the intrinsic value of the raw material and its subsequent re-use. A small fragment was found at Nippur CBS 9467 [Clayden *et al.* forthcoming]. It too bears traces of an erased inscription. The third fragment dates to the neo-Assyrian period and was found in a temple at Tell Haddad [Mancini 1985: 320 and 418, no.211; Al-Rawi 1994: 35–37, Fig.3].

#### **k. Mace heads (Catalogue Nos. 122–5).**

Fragments of at least two mace heads were found in the hoard. They are made of the same friable stone of the ‘knobs’ discussed above. They are pierced vertically. There is no surface decoration. There is no means of dating the objects beyond the possibility that they should be dated to the same period as the majority of objects in the hoard – the Kassite period.

Similar mace heads were excavated at Dūr-Kurigalzu from the palace complex [Baqir 1945: 13; Baqir 1946: 90]. Otherwise only three other ‘Kassite’ mace heads are known – from Babylon a diorite mace head bearing an inscription of the early Kassite king, Ulam-Buriaš [Wetzel *et al.* 1957: 38, no.21, pl. 42.i; Brinkman 1976: 318–319, X.2.1]; from Dūr-Kurigalzu a ‘chalky limestone’ mace head bearing an intricate design and brief inscription [Baqir 1945: 8 and 13, Pl. XXV.27 and XXVI.28]; and from Nineveh a stone mace head bearing an inscription of Kadašman-Enlil [Campbell-Thompson 1932: 107, Pl. LXXXIII.267; Brinkman 1976: 134, J.2.8].

By contrast ceremonial mace heads are well known from contemporary Elamite sites. Many, for example, bearing the name Untaš-Gal were found in the Kiririša East temple at Tchoga Zanbil [Ghirshman 1966: Pl. LXXXVIII-XCI, LVII- LXI]. One of the Kiririša mace heads is interesting

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4) dumu bur-na-bu-ri-ia-aš

5) nam-ti-a-ni-šē

6) in-na-an-ba

1–6) To the god Enlil, his lord: Kurigalzu, son of Burna-Buriaš, gave (this object) for the sake of his life.

as it is set in a short metal stand enabling it to be displayed without a staff [*ibid*, Pl. LVII, no.2]. The value of these objects is suggested by the inclusion of several examples in the cargo of the mid-14th century B.C. wreck of a trading vessel sunk off the coast at Ulu Burun [Pulak 1988: 24].

Cocquerillat [1952] discussed the history and symbolism of mace heads in Mesopotamia. Their function as cultic objects and in law cases in the Old Babylonian period is noted [*ibid*, 132–135]. It is not possible to comment about the possible functions of the Nippur hoard mace heads beyond that their fragile nature would have precluded any vigorous use.

**l. Stone plaques (Catalogue Nos. 126–130).**

These objects are made of the same soft white stone as the knobs discussed above are. There are no surviving surface details. Where the fragment is large enough, they are pierced which suggests that they were originally fastened to a backing object. What that was is unknown. The diameter of the holes suggests a small nail as the fastening means.

**m. Cylinder seals (Catalogue Nos. 131–133).**

The description of the Catalogue No. 132 fits the published description of CBS 8914 [Legrain 1925: 210, no.236; Pl. XVI] and may possibly to be identified with it<sup>37</sup>. If the identification is correct the seal is dated to the Akkadian period. It is an oddity in the hoard as it falls outside the date range for the rest of the objects in the group. The reason why an object so much older than the rest of the corpus should have been included cannot be determined.

**n. Rings (Catalogue Nos. 134–9).**

None of the rings excavated from the hoard have survived or can now be located. Only one bore an inscription. A section of an inscription of Burna-Buriaš survives on Catalogue No. 134, and is the only inscribed ring from the hoard. There are no parallels for an inscribed ring, though of course rings appear in temple inventory texts of all periods.

**o. Lamaštu plaque (Catalogue No. 140).**

This object has not survived, but a drawing was published [Figure 7]. The form is well known and is one of 63 known lamaštu plaques [Thureau-Dangin 1921; Osten 1927; Klengel 1959–60 and 1961–63; Farber 1980–83: 441]. The plaques were protective amulets.

On the basis of the plaque found in Kassite Grave 43 in the AHG site at Ur [Woolley 1965: 89], Farber dates the earliest lamaštu plaque to the Kassite period and the latest to the Graeco-Persian period [*ibid*, 442]. The majority of the plaques have no provenance and where the provenance is known the contexts date to the first millennium B.C. The date of the Ur plaque is, therefore, important in understanding the history of this class of objects.

The Ur plaque was found in Kassite Grave 43 in the AH area of the site [Woolley 1965: 89]. The grave was a 'much ruined brick tomb containing at least three bodies' [*ibid*]. Other items in the tomb were a shell ring; a string of beads (U 16375); glass ring beads (U 16385); an Old Babylonian haematite cylinder seal [U 16365, BM 122956, Collon 1986: 159, no. 392, Pl. XXIX]; and an open vessel [Woolley 1965: Plate 38, no.16]. At the AH area the excavated remains above the well preserved Old Babylonian houses were very scrappy [*ibid*, 77–78]. The stratigraphy is far from clear and firm dating on stratigraphic grounds of the remains and graves that cut them is not reliable. The Old Babylonian cylinder seal found in the grave is probably a historic object re-used as a bead or amulet and should not be used to date the grave. In conclusion, therefore, the dating of Kassite Grave 43 is so uncertain and cannot with even the slightest degree of certainty be dated to the Kassite

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37) I am grateful to Dr Dominique Collon who suggested the identification (letter dated 4 February 1997).



period. Against this background the lamaštu plaque found in Kassite Grave 43 should not be used to date the emergence of the production of lamaštu plaques in Mesopotamia. Dating the grave to the first millennium B.C. is probable.

In the absence of firmly dated lamaštu plaques before the first millennium B.C., we must conclude that the Nippur plaque (Catalogue No. 140) should be similarly dated.

**p. Other (Catalogue Nos. 141–156).**

Little may be said of this collection of objects.

**Conclusions**

The Nippur hoard is an important collection of objects. They are possibly all that remains and which may be identified of the cultic treasures that once were deposited in the shrines and temples of Nippur. The inscribed objects and the bulk of the glass fragments (axes) are dated to the Kassite period. Some of the smaller glass items (e.g. the hair curls) may date to the first millennium B.C.

The classes of objects are in themselves of interest. The lapis lazuli disks appear to have been used only at Nippur and Babylon (?). The glass axes are unique and provide important evidence for the development of glass use on Babylonia. The ‘knobs’ provide evidence for the decoration of cultic chariots chiefly in the Kassite period. And the inscribed stone blocks are rare, as most other examples have long since been broken up and re-used, survivors of the practice of dedicating large lumps of lapis lazuli – the most precious stone in Mesopotamia.

The objects appear to have been excavated from the ruins of the Babylonian temples by a Parthian jeweller (?) interested in the objects for their material, rather than their cultural or religious value. They were stored in wooden boxes in adjacent ruins and for some reason were abandoned and forgotten. The archaeology of their discovery and the date of the provenance on the context in which they were found may be reconstructed from the dig records left to us by Peters and we hope that in part we have restored some of his reputation so besmirched by Hilprecht. Peters’ records are insufficiently detailed to provide evidence to determine whether or not the boxes were contemporary with the rooms in which they were found, or whether they were later and hidden in the ruins as classic hoard.

**Abbreviations**

AAA	Annals of Archaeology and Anthropology, Institute of Archaeology, University of Liverpool, Liverpool 1908–1948
ADOG	Ausgrabungen der Deutschen Orient-Gesellschaft in Assur, Berlin, 1956–
AJA	The American Journal of Archaeology, second series, Norwood 1897–
AJSLL	The American Journal of Semitic Languages and Literature, Chicago 1895–1941
GGAM	Glass and glass making in ancient Mesopotamia, (ed. A.L. Oppenheim), 1970, New York.
Iranica Antiqua	Leiden 1961–
Iraq	London 1934–
JAOS	Journal of the American Oriental Society, Boston 1843–
JCS	Journal of Cuneiform Studies, New Haven 1947–
JGS	Journal of Glass Studies, New York 1959–
JNES	Journal of Near Eastern Studies, Chicago 1942–
MDP	Mémoires de la Délégation en Perse, Paris 1900–
MIO	Mitteilungen des Instituts für Orientforschung, Berlin 1953–
MSL	Materials for the Sumerian Lexicon, Rome 1937–
Museum Journal	Philadelphia 1910–
PBS	Publications of the Babylonian Section, Philadelphia 1911–
RA	Revue d’assyriologie et d’archéologie orientale, Paris 1884–

RLA	Reallexikon der Assyriologie, Berlin 1928–
SEDN	J.P. Peters, Second Expedition Dig Notes, University Museum, Nippur Archive, Expeditions I and II, 1890, Folder 2/5, 2 volumes January 14 – April 12 and 16 – 26 April 1890 [Peters 1890].
SEIB	J.P. Peters, Second Expedition Inscription Book, University Museum, Nippur Archive, Expeditions I and II, 1890, Folder 2/6 [Peters 1890a]
SEOR	J.P. Peters, Second Expedition Object Register, University Museum, Nippur Archive, Expeditions I and II, 1890, Folder 2/7 [Peters 1890b].
SEWN	J.P. Peters, Second Expedition Wall Notes, University Museum, Nippur Archive, Expeditions I and II, 1890, Folder 2/5, 2 volumes January 14 – April 12 and 16 – 26 April 1890 [Peters 1890c].
Sumer	Baghdad, 1945–
Syria	Paris, 1920–
WVDOG	Wissenschaftliche Veröffentlichung der Deutschen Orient-Gesellschaft, Leipzig 1900–
ZA	Zeitschrift für Assyriologie, Leipzig 1886–
ZoAR	Zeitschrift für Orient-Archäologie, Berlin 2008–

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## Catalogue

### Eye-stones

1. Es 1902: An eye-stone (dia. 3.95; th. 1.0 cm) bearing a 3 line votive inscription of [Ku]rigalzu I/II to [En]lil [Hilprecht 1896: 64, no.134 pl. 61; Brinkman 1976: 226, Q.2.83; Clayden 2009: 56, no. 16, pl. 2.a].
2. CBS 8670: Fragment of an eye-stone (1.7 × 1.2 cm) bearing the remains of a 2 (?) line votive inscription of [Kurigal]zu I/II to [En]lil [Hilprecht 1893: 50, no.52 pl. 22; Brinkman 1976: 226, Q.2.82; Clayden 2009: 56, no. 17, Pl. 2.b].
3. Es 1912: A chipped eye-stone (dia. 2.8; th. 1.0 cm) bearing a 3 line votive inscription of Kurigalzu I/II ti Nin[urta] [Hilprecht 1896: 64, no. 135 pl. 61; Brinkman 1976: 227, Q.2.85; Clayden 2009: 57, no. 21, Pl. 2.c].
4. Es 1906: An eye-stone (dia. 3.2; th. 2.4 cm) bearing a 4 line votive inscription of Kurigalzu I/II to Nusku [Hilprecht 1893: 50, no. 51 pl. 22; Brinkman 1976: 226, Q.2.84; Clayden 2009: 57, no. 23, Pl. 2.g].
5. CBS 8674: A chipped eye-stone (dia. 3.6 cm) bearing a 5 line votive inscription of Kadašman-Enlil I/II to Enlil [Hilprecht 1893: 51, no. 65 pl. 25; Brinkman 1976: 134, J.2.11; Clayden 2009: 58, no. 32, Pl. 3.c].
6. CBS 8683a: An eye-stone (dia. 1.8 cm) bearing the name [...]lil round the outer circumference. In his SEIB drawing Hilprecht shows the signs for Enlil, but this was omitted in the published drawing [Peters 1890a: SEIB; Hilprecht 1893: 52, no. 73 pl. 26; Clayden 2009: 58, no. 38, Pl. 3.e–f].
7. Es 1908: A pierced eye-stone (2.4 × 1.65; th. 0.8 cm) bearing the name Enlil only [Hilprecht 1896: 64, no. 139, pl. 61; Clayden 2009: 58, no. 40, Pl. 3.h].
8. CBS 8687: An unpierced eye-stone (dia. 1.55 cm) bearing the name Enlil only [Hilprecht 1893: 49, no. 29, pl. 15; Clayden 2009: 58, no.41, Pl. 3.i].
9. CBS 8723a: A pierced eye-stone (dia. 1.9 max; th. 0.95 cm) bearing the name Ninlil only [Hilprecht 1893: 49, no. 31, Pl. 15; Clayden 2009: 59, no.46, Pl. 4.c and 8.c].

### Lapis lazuli disks

10. Es 1920<sup>38)</sup>: Pierced disk (dia. 2.5 cm) bearing a three line votive inscription of Kurigalzu I/II to Nin-lil (?) [Peters 1890a: SEIB; Hilprecht 1893: 50, no. 49, Pl. 22; Brinkman 1976: 225, Q.2.73].
11. Es 1924: Circa 75% of a disk (dia. 2.97 cm) bearing a six line votive inscription of Nazi-Maruttaš to Enlil [Peters 1890a: SEIB; Hilprecht 1893: 50, no. 53, Pl. 22; Brinkman 1976: 264, U.2.9; Stein 2000: 139, Ka 22].
12. Es 1921: Circa 50% of a disk (dia. 4.4 cm) bearing five surviving lines of a votive inscription of Nazi-Maruttaš to Nusku [Peters 1890a: SEIB; Hilprecht 1893: 51, no. 58, Pl. 23; Brinkman 1976: 264, U.2.12].
13. Es 1926: Chipped disk (dia. 2.05 cm) bearing a five line votive inscription of Nazi-Maruttaš to Nusku [Peters 1890a: SEIB; Hilprecht 1893: 51, no. 54, Pl. 22; Brinkman 1976: 264, U.2.13; Stein 2000: 139, Ka 23].
14. CBS 8673<sup>39)</sup>: A disk (dia. 2.7 cm) bearing a five line votive inscription of Kadašman-Turgu to Ninurta [Peters 1890a: SEIB; Hilprecht 1893: 51, no. 62, Pl. 23; Brinkman 1976: 154, L.2.4; Stein 2000: 141, Ka 27].
15. Es 1905: A chipped disk (dia. 3.7 cm) bearing six surviving lines of a votive inscription of Kadašman-Turgu to Nusku [Peters 1890a: SEIB; Hilprecht 1893: 51, no. 59, Pl. 23; Brinkman 1976: 153–154, L.2.1; Stein 2000: 140, Ka 25].
16. Es ?: An abraded disk (dia. 2.75; th. 0.3 cm) bearing a five line votive inscription of Kadašman-Turgu to Nusku

38) On display at the Istanbul Archaeological Museum, Istanbul.

39) Unavailable in August 1997 or September 2000. The CBS catalogue lists this as a 'nearly complete baked single column tablet. Ur Period' registered into the UMP on 20.02.1917.

- [Hilprecht 1896: 64, no.138, Pl. 61; Brinkman 1976: 154, L.2.5; Stein 2000: 140, Ka 26].
17. CBS 8722<sup>40</sup>: Fragment of a disk (dia. 2.55 cm) bearing four surviving lines of a votive inscription of Kadašman-Turgu to a deity whose name is lost [Hilprecht 1893: 51, no. 60, Pl. 23; Brinkman 1976: 154, L.2.2].
  18. Es 1923: A chipped disk (dia. 2.5 cm) bearing a five line votive inscription of Kudur-Enlil to Nusku [Peters 1890a: SEIB; Hilprecht 1893: 51, no. 64, Pl. 25; Brinkman 1976: 191, P.2.4].
  19. CBS 8682<sup>41</sup>: A complete disk (dia. 2.35; th. 2.16 cm) bearing a five line votive inscription of Kaštiliašu to Nusku [Hilprecht 1893: 52, no. 71, Pl. 26; Brinkman 1976: 176, O.2.3; Stein 2000: 146, Ka 44].
  20. CBS 8721a<sup>42</sup>: A complete disk (dia. 1.7; th. 0.4 cm) bearing the name Enlil only [Peters 1890a: SEIB; Hilprecht 1893: 49, no. 30, Pl. 15].
  21. Es ?: A complete disk (dia. 1.2; th. 0.15 cm) bearing the name Enlil only [Peters 1890a: SEIB; Hilprecht 1896: 65, no. 142, Pl. 61].
  22. CBS 8685.2<sup>43</sup>: A complete disk (dia. 1.7 cm) bearing the name Nin-Enlil only [Peters 1890a: SEIB; Hilprecht 1893: 49, no. 28, Pl.15].
  23. Es ?: A complete disk (dia. 1.2; th. 0.15 cm) bearing the name Ninlil only [Peters 1890a: SEIB; Hilprecht 1896: 65, no. 141, Pl. 61].

### Inscribed stone tablets

24. CBS 8662a<sup>44</sup> + 8666 + an un-numbered fragment. Three fragments (1.7 × 1.7 and 3.65 × 7.25 cm) published separately of a lapis lazuli tablet bearing a four line votive inscription of Kurigalzu I/II to Enlil. The SEOR [Peters 1890b, no. 169] records the fragment as follows: ‘... two fragments of a larger tablet, larger 3.5 × 5.0 cm, with four lines of inscription almost entire. Smaller fragment 2.5 [cm] in length. Total length of original 7 cm’ [Peters 1890: SEOR, no. 169 with rough drawing; Peters 1890a: SEIB; Hilprecht 1893: 50, nos. 41 and 46, Pl. 21; Brinkman 1976: 222–223, Q.2.58; Stein 2000: 133, Ka 9].
25. CBS 8667a: Nine joined fragments (5.1 × 6.0; th. 0.7 cm) of a lapis lazuli tablet bearing a six line votive inscription of Kurigalzu I/II to En[lil]. The remains of a piercing survive at the bottom left corner [Hilprecht 1893: 50, no. 47, Pl. 22; Brinkman 1976: 222, Q.2.57].
26. CBS 8600<sup>45</sup>: Shaped feldspar (?) tablet (3.0 × 12.2 × 0.9 cm) bearing a two line votive inscription of Kurigalzu II to Enlil [Peters 1890a: SEIB; *ibid*, 1890b: SEOR no. 165; Hilprecht 1893: 49, no. 35, Pl. 18; Brinkman 1976: 223, Q.2.60].
27. CBS 8665<sup>46</sup>: A fragment (2.0 × 2.6 cm), with two holes front to back, of a lapis lazuli tablet bearing two surviving lines of a votive (?) inscription of Kurigalzu I/II to Nin-Enlil [Hilprecht 1893: 50, no. 45, Pl. 21; Brinkman 1976: 223, Q.2.61].
28. CBS 8663a, registered into the UMP from the BEF on 17.07.1917<sup>47</sup>: Fragment of a lapis lazuli tablet (1.8 × 1.2 cm) bearing two surviving lines of a votive inscription of [Kurigal]zu I/II to a deity whose name is lost [Hilprecht 1893: 50, no. 42, Pl. 21; Brinkman 1976: 223, Q.2.64].
29. Es ?: Fragment of a lapis lazuli tablet (2.1 × 2.2 cm) bearing traces of three surviving lines of a votive inscription of a name now lost to [...]lil [Peters 1890a: SEIB; Hilprecht 1896: 65, no. 140, Pl. 61].

### Amulets

30. CBS 8668<sup>48</sup>: A broken and pierced lapis lazuli tablet (2.8 × 3.45 cm) bearing a five line votive inscription of Kurigalzu I/II to Ninlil [Peters 1890a: SEIB; Hilprecht 1893: 50, no. 48, Pl. 22; Brinkman 1976: 223, Q.2.62].
31. CBS 8664a (registered into the UMP from the BEF on 17.07.1917): Fragment of a turquoise tablet (3.4 × 3.4; th. 0.8 cm) bearing four surviving lines of a votive inscription of Kurigalzu I/II to En[lil]. The reverse is cut and pierced [Hilprecht 1893: 50, no. 44, Pl. 21; Brinkman 1976: 223, Q.2.59].

40) Unavailable in August 1997 or September 2000. The CBS catalogue lists this as an ‘inscribed lapis lazuli disk’ registered into the UMP on 23.07.1917. It incorrectly identifies it with Hilprecht 1893, Pl. 15 no.30 – CBS 8721.

41) Unavailable in August 1997 or September 2000. The CBS catalogue lists this as a ‘ft. of lapis lazuli’ registered into the UMP on 20.02.1917.

42) The CBS catalogue lists this as an ‘inscribed round lapis lazuli tablet’ registered into the UMP on 23.07.1917. It incorrectly identifies it with Hilprecht 1893, Pl. 15 no. 32 – CBS 8720.

43) Unavailable in August 1997 or September 2000.

44) CBS 8662a registered into the UMP from the BEF on 17.07.1917.

45) The UMP cast of this item is incorrectly labelled 8599b.

46) This item is possibly lost.

47) This item is possibly lost.

48) This item is possibly lost.

32. CBS 8598: Lower portion of an agate (?) tablet (4.4 × 4.3; th. 0.8 cm) with an eight line votive inscription of Šulgi to Innana on the obverse, and on the reverse nine lines of a votive inscription of Kurigalzu II to Ninlil recording the capture of the palace of Ša-a-ša [Peters 1890a: SEIB; Peters 1897: ii 133; Hilprecht 1893: 48, no. 15; 50 no. 43, Pl.s 8 and 21; Brinkman 1976: 223, Q.2.63; Steible 1991: ii 195–196 Šulgi 41; Stein 2000: 130, Ka 3].

### Knobs

33. CBS 8730<sup>49)</sup>: A stone (alabaster ?) knob, with a central hole, bearing on the upper surface a five line votive inscription of Burna-Buriaš II to Enlil. The base is flat with two parallel grooves running the circumference of the lower ridge (ht. 3.8; upper dia. 5.85; lower dia. 6.3; shaft dia. 5.28; dia. of hole 1.2 cm) [Hilprecht 1893: 49, no. 34, Pl. 18 and X; Cocquerillat 1951: 22 no.16; Brinkman 1976: 107, E.2.6].
34. CBS 8728: A white faience (?) and very friable knob with an abraded votive inscription, running about the upper surface, of Nazi-Maruttaš to Enlil (ht. 4.5; upper dia. 6.82; lower dia. 7.9; shaft dia. 5.1; dia. of hole 1.2 cm). Two parallel grooves run round the circumference of the lower base. The upper surface is rounded and the base flat. The surface is poorly preserved and where the cream/ off white glaze is lost the surface is soft and easily dusted away [Hilprecht 1893: 51, no. 56, Pl. 23 and X; Brinkman 1976: 264–265, U.2.14].
35. CBS 8727, registered into the UMP from the HVH[ilprecht] collection on 23.12.1909: A magnesite (?) knob, with a central hole, bearing about the upper circumference a votive inscription of Nazi-Maruttaš to En[lil] (ht. 5.2; dia. 6.1 cm) [Hilprecht 1893: 51, no.57, Pl. 23; Brinkman 1976: 265, U.2.15].
36. CBS ?<sup>50)</sup>: A magnesite (?) knob, with a central hole, bearing about the upper circumference a votive inscription of Šagarakti-Šuriaš to Enlil (ht. c. 5.0; upper dia. 7.0; dia. of hole 1.1 cm) [Hilprecht 1893: 51, no.69, Pl. 25; Brinkman 1976: 287, V.2.2; Stein 2000: 143, Ka 34].
37. CBS 8729<sup>51)</sup>: A white faience knob (ht. 4.6; dia. 6.8 cm) with an abraded votive inscription of [Kaštil]iašu IV to Enlil running about the upper circumference. Two parallel grooves run round the circumference of the lower base. The upper surface is convex and the base flat. The entire surface is covered with the remains of a thin cream/ off white glaze, and where it is lost the surface is very delicate [Peters 1890a: SEIB; Hilprecht 1893: 51, no. 70, Pl. 26; Cocquerillat 1951: 22 no. 22; Brinkman 1976: 176, O.2.2; 189 O.5.6; Stein 2000: 146, Ka 42].
38. ? : Inscription only recorded in SEIB [Peters 1890a: SEIB].
39. ?<sup>52)</sup>: The SEOR, no.162 [Peters 1890b], has the following entry - 'One object of same white stone, uncoloured shaped like a native lamp, broken off at top, one line inscription about the width. From same place (i.e. the hoard). Height 6 [cm], di[ammeter] of base 4.25 [cm] and of inscribed part below rim 14 cm. Hole through center.' The entry is accompanied by a rough drawing and a rough copy of the inscription. The copy is captioned - 'One of the chalk inscriptions from the shop' [Peters 1890b: SEOR no. 162; Peters 1890a: SEIB].
- 40 and 41. ?<sup>53)</sup>: The SEOR, no.161 [Peters 1890b], records the excavation of two faience (?) knobs in the hoard. One is described as follows - '... soft chalk stone, like columns with a wheel on top. Upper surface convex, lower flat. Larger one coloured green ... larger 8 cm high, di[ammeter] of base 5.5 [cm], d[iameter] of top 4.75 cm.'
- 42 to 52. ?<sup>54)</sup>: The SEOR, no.163 [Peters 189b], records the excavation of seventeen inscribed knobs - 'Seventeen objects of same material (i.e. 'soft white chalk'), in shape like 161 (i.e. 40 and 41 above), but with columns reduced in length, and circumference of all parts greater. Each one line of writing in a ring about the upper convex surface. They differ somewhat in size. On average one measures h[eight] 4.5 cm, di[ammeter] of base 6.75 [cm], and of upper surface 7 cm. Di[ammeter] of hole 1 cm' [Peters 1897, ii: 133–134].

### Glass Axes

53. CBS 9462 + 8800<sup>55)</sup>: Fragment of the socket, collar and blade bearing a seven line dedicatory inscription to Enlil by Kurigalzu II (length 9.0; ht. at blade root 6.3; th. 2.0. cm.) [Hilprecht 1893:50, no.39; Pl.20; Pl.XI, no.26; 54, no.27; Pl. XI; Brinkman 1976: 224–225, Q.2.69].
54. CBS 4544 + 4550: Four fragments (two numbered 4544 and two 4550; width 6.5; th. at upper edge 1.2; th. at lower edge 1.0; th. at centre 1.34) of a glass axe preserving traces of five lines of a seven line dedicatory inscription of Kurigalzu II. CBS 4542, bearing a text in Akkadian, is not, as published by Legrain [1926: 30, no.51; Pl. XVIII] part of this axe whose inscription is in Sumerian [*ibid*; Barag 1970: 148; Brinkman 1976: 224, Q.2.67].

49) Registered into the UMP from the BEF on 30.07.1917.

50) Possibly lost (noted as missing in 1976 and not available in August 1997, September 2000 and May 2008).

51) Could not be found May 2008.

52) Now apparently lost.

53) Now apparently lost.

54) Now apparently lost.

55) CBS 9462, previously considered lost, was in January 2009 found by Dr Richard Zettler, and joined to CBS 8800.



55. CBS 8661a: A section of the socket, collar and blade of an axe (th. of the socket walls 0.95 and 1.15; width of collar 1.1; width of upper edge of blade root 1.85 tapering to 1.5) bearing the remains of a dedicatory inscription of Kurigalzu II to Enlil [Hilprecht 1893: 50, no.40; Pl. 21; Brinkman 1976: 224, Q.2.68].
56. CBS 8671a: Section of a blade and part of the root bearing five lines of a longer dedicatory inscription of Nazi-Maruttaš to Ninurta (th. at root 1.7; th. at surviving upper edge 1.4) [Hilprecht 1893: 51, no.55; Pl. 22; Legrain 1926: 31, no.56; Pl. XVIII; Barag 1970: 148; Saldern 1970: 215, no.8; Brinkman 1976: 263–264, U.2.7].
57. CBS 4543 + 4547 + 4549 + 4558 + an un-numbered fragment: Fragments of an axe blade on which survive a part of seven lines of a longer dedicatory inscription of Nazi-Maruttaš to a deity whose name is lost (th. at lower edge 1.1; th. at central area 1.2) [Hilprecht 1903: 49; Legrain 1926: 30, no.52; Pl. XVIII; Hallo 1963: 141, fn. 88; Oppenheim 1970: 13; Barag 1970: 148; Saldern 1970: 215, no.8; Brinkman 1976: 263, U.2.6; Stein 2000: 138, Ka 19].
58. CBS 4542 + 8681a + ES 1903 + ES 1910: Fragments of an axe blade bearing nine lines of a longer dedicatory inscription of Nazi-Maruttaš to Ninurta (CBS 4542 + 8681a th. of root at base 1.5; th. at lower edge at line seven 1.3; th. at upper edge at line seven 1.1; ES 1903 6.5 × 4.3 × 1.5; ES 1910 4.8 × 3.3 × 1.2) [Peters 1890b: page (12) (CBS 8681a only); Hilprecht 1893: 52, no.75; Pl.26; *Idem* 1896: 64, nos. 136 and 137; Pl.61; Legrain 1926: 31, no.54; Pl. XVIII; Barag 1970: 148; Saldern 1970: 215, no.8; Brinkman 1976: 263, U.2.4; Stein 2000: 136–137, Ka 17].
59. CBS 8685a: Section of an axe blade bearing nine lines of a longer dedicatory inscription of Nazi-Maruttaš to a deity whose name is lost (surviving length 6.1 and width 6.1; th. at the end nearest the socket 1.7 and at the farthest edge 1.25; th. at top and bottom 1.22) [Hilprecht 1893: 52, no.78; Pl. 27; Brinkman 1976: 263, U.2.5; 289, V.2.7; Stein 2000: 135, Ka 15].
60. CBS ?<sup>56</sup>: Fragment of a blade (ht. 5.26; width 2.1) preserving traces of four lines of a longer dedicatory inscription of [Šagarakti-Šur]iaš (?) to Ninurta [Hilprecht 1893: 52, no.76; Pl. 26; Barag 1970: 148; Saldern 1970: 215, no.8; Brinkman 1976: 188, O.5.2; 288–289, V.2.7; Stein 2000: 145, Ka 41].
61. CBS 8686a: Fragment of an axe blade (2.35 × 2.85; th. of upper edge 1.5) preserving a small section of four lines of a longer inscription of [Kaštilia]šu(?) [Hilprecht 1893: 52, no.79; Pl.27; Brinkman 1976: 188, O.5.1; Stein 2000: 147, Ka 46].
62. CBS 4548: Fragment of an axe blade (1.6 × 1.6; th. 1.1) with a small section of a longer inscription [Brinkman 1976: 263, U.2.6].
63. CBS 8680: Fragment of an axe blade (length 10.75; ht. from upper to lower edge 6.9; th. at the upper edge 0.5, and lower edge 0.6) bearing a small section of an inscription [Hilprecht 1893: 52, no.72; Pl. 26; Brinkman 1976: 188, O.5.2; Stein 2000: 146–147, Ka 45].
64. CBS 2496 + 4538 + 4539 + 4540 + 13214 + two un-numbered fragments: Joined fragments (Surviving length 12.11; width of blade at root 5.8 extending to 7.2; th. of blade at root 2.0 tapering to 1.2) of a glass axe bearing eighteen lines of an inscription which cannot be read because the surface is heavily calcined [Unpublished].
65. CBS 2496: Circa 50 small fragments of glass axe blades (some bearing very small sections of inscriptions) [Unpublished].

### Glass statue elements

#### Horns

66. CBS 2496a: A fragment of a glass curved horn preserved from the root almost to the tip and covered with a whitish patina (dia. at root 1.65; dia. at tip 1.25; length 5.75 cm) [Unpublished].
67. CBS 2496b: A fragment of a glass curved horn preserved from root to tip and covered with a whitish patina (dia. at root 1.73; dia. at tip 1.48; length 5.28 cm) [Unpublished].
68. CBS 2496c: A fragment of a glass curved horn preserved from just above to the root to just below the tip with a whitish patina (dia. at root 2.8; dia. at tip 1.8; length 5.9 cm) [Unpublished].
69. CBS 2496d: A fragment of the central section of a glass curved horn with a whitish patina (max dia. 2.9; 2.6 cm at the other end) [Unpublished].
70. CBS 2496e: A fragment of the central section of a glass curved horn with a whitish patina (max dia. 3.0 × 1.68 cm; 2.5 × 1.4 cm at the thinnest end) [Unpublished].
71. CBS 2496g: A fragment of the inner curved edge of a glass horn (length 3.7; width 2.4 cm) [Unpublished].

#### Limbs

72. CBS 2496.35: A fragment of a glass bovid hoof (?) (surviving ht. 1.08; dia. 1.2–1.6 cm) [Unpublished].
73. CBS 14723.6: The lower portion of the leg and upper area of a glass bovid hoof (ht. 2.5 and hoof dia. 1.8 cm)

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56) No CBS number appears to have been assigned and Hilprecht [1893: 52, no. 76] states that he used Peters' field notebook.

[Unpublished].

74. CBS 14723.8: A length of a glass limb (length 4.1; dia. 0.95 cm) [Unpublished].

#### Locks of hair

75. CBS 2496.1: A glass panel with an offset hole and four locks of hair ( $2.4 \times 2.4$ ; th. at top of locks 1.3, at hole 0.8 cm). The reverse is smooth [Unpublished].
76. CBS 2496.2a: A fragment of a glass panel with one complete lock of hair and c. 50% of a second ( $3.05 \times 2.2$ ; th. 1.35 cm). The reverse is smooth [Unpublished].
77. CBS 2496.8: A fragment of a glass panel with part of the central hole and traces of two locks of hair ( $0.85 \times 1.6 \times 1.0$  cm). The reverse is smooth [Unpublished].
78. CBS 2496.21: A small fragment ( $1.94 \times 1.85$ ; th. 0.45 cm) of a panel preserving a small area of curls. The inner surface survives [Unpublished].
79. CBS 2496.22: A small fragment ( $1.7 \times 1.8$ ; th. 0.58 cm) of a panel preserving part of the lower contours. The inner surface survives [Unpublished].
80. CBS 2496.23: A large fragment (ht. 3.2; surviving width 2.65; th. at center 0.62 cm) of a panel preserving a curl and part of a second. The lower and upper edges, though abraded, and the left edge are intact [Unpublished].
81. CBS 2496.24: A fragment of a glass panel preserving parts of two curls ( $2.1 \times 2.2$ ; th. 1.18 cm) [Unpublished].
82. CBS 2496.27: A small fragment ( $2.1 \times 1.6$ ; th. 1.1 and towards the central area 0.5 cm) of a panel with a curl and one edge preserved [Unpublished].
83. CBS 2496.27a: A fragment ( $2.95 \times 1.88$ ; th. 1.18; dia. of hole 0.3 cm) of a panel on which two curls, a single edge and the inner surface remain. A small section of the peg hole is also preserved [Unpublished].
84. CBS 2496.28: A single lock of hair of a glass panel with flat reverse ( $1.5 \times 1.35$ ; th. 1.25 cm) [Unpublished].
85. CBS 2496.29: A fragment of a glass panel preserving two hair curls, a section of one edge and part of the central hole with a flat reverse ( $1.7 \times 1.85$ ; th. 1.02; dia. of hole 0.3 cm) [Unpublished].
86. CBS 2496.30: A fragment ( $1.7 \times 1.0$ ; th. 1.4 cm) of a panel with a badly broken curl and a small section of an edge [Unpublished].
87. CBS 2496.31: A small fragment ( $1.5 \times 1.5$ ; th. 1.5 cm) section of a panel on which a badly abraded curl and the inner surface are preserved [Unpublished].
88. CBS 2496.32: A small fragment ( $1.9 \times 2.3$ ; th. 1.1 thinning to 0.65 cm) of the abraded central area of a panel preserving much of the peg hole [Unpublished].
89. CBS 2496.32a: A fragment of a glass panel preserving a hair curl, one corner and with a smooth reverse ( $1.2 \times 1.3$ ; th. 0.95 cm) [Unpublished].
90. CBS 2496.33 + 14722.4: A substantial fragment (surviving ht. 3.65; width 3.8; th. at upper edge – curls – 0.6 and at lower 1.0; dia. of hole 0.3 cm) of a curved panel with trailing beard curls. The right side of the panel is preserved and a small section of the left as well, though abraded, is preserved reflecting the triangular form of the piece and the ridged terminals of the beard. The upper surface is also preserved, especially on CBS 14722.4, but also at the tip of CBS 2496.33. The inner surface is slightly curved and preserves a textured surface, possibly the product of a moulding process on a wooden core during manufacture. The central peg hole survives [Unpublished].
91. CBS 2496.36: A fragment of a glass panel preserving two hair curls and a section of an edge with a smooth reverse ( $1.8 \times 1.4$ ; th. 1.25 to top of curl and to central area 0.75 cm) [Unpublished].
92. CBS 2496.37: A fragment of a glass hair curl with a small section of an edge preserved ( $1.3 \times 1.6$ ; th. 1.3 cm) [Unpublished].
93. CBS 2496.42: A small fragment (surviving length 2.7; th. 0.38; width 0.8 tapering to 0.6 cm) of what might be the bound hair section (rectangular in profile) of a pendant curl [Unpublished].
94. CBS 2496.43: A small section ( $2.9 \times 2.6$ ; th. 0.65 cm) of the lower portion of a panel with the lower edge preserved and part of the peg hole. The surface is contoured, but no curls survive. The flat rear surface is badly abraded [Unpublished].
95. CBS 2496.44: A flat fragment (surviving length 2.8 and width 1.3; th. 0.6 cm) of a slightly contoured section of a panel with a rounded edge [Unpublished].
96. CBS 2496.45: A fragment ( $1.95 \times 1.5$ ; th. 0.65 cm) of a what might be the central area of a panel of curls [Unpublished].
97. CBS 2496.46: A fragment ( $1.2 \times 1.5$ ; th. 0.75 cm) of what might be the central area of a panel of curls [Unpublished].
98. CBS 14722.1: A roughly square plaque with a central hole and four symmetrically arranged curls ( $2.48 \times 2.88$ ; th. 1.1 at locks and 0.8 cm at hole) [Unpublished].
99. CBS 14722.3: A large fragment (surviving ht. 3.88 and width 2.9; th. 2.9; th. at lower end 1.6; at hole 0.5; dia. of hole 0.4 cm) of a panel with a thicker lower (?) and intact edge decorated with two curls thinning towards a thinner contoured central area through which part of a peg hole is preserved. The inner surface is preserved and is

flat, but is fragile and flakes [Unpublished].

100. CBS 14722.5: A fragment (1.3 × 1.8; th. 1.2 cm) of a panel on which a curl and an edge are preserved [Unpublished].  
 101. CBS 14722.9: A single curl (surviving length 3.15; dia. of curl 1.1; th. of band 0.4; th. of curl 1.1 cm) of what might be the representation of bound hair. The lock curves away from the line of the hair band [Unpublished].  
 102. CBS 14722.10: A curl from the end of a band of hair (th. 0.9; dia. 1.44 cm) [Unpublished].  
 103. CBS 14723.7: A section (surviving length 3.0; th. 0.42; width 1.2 tapering to 0.7 cm) of what might be the bound hair section (rectangular in profile) of a pendant curl [Unpublished].  
 104. CBS 14728.1: A fragment of the edge of a glass panel with two surviving curls and a slightly curved inner surface (3.18 × 1.55; th. 1.1 cm) [Unpublished].

### Glass rods

105. CBS 2496.10: A fragment (width 1.9; surviving length 1.08; surviving ht. 1.1 cm) of the base area of a rod similar to CBS 14722.2 [Unpublished].  
 106. CBS 2496.18: A fragment (1.65 × 1.25 cm) of two ‘humps’ as seen on CBS 14722.2 [Unpublished].  
 107. CBS 2496.19 + 2496.20: A fragment (surviving length 4.35; 1.98 × 2.25; th. 1.0–1.5 cm) of a rod going down to a lower ridged edge which appears to be curved and with what might be traces of a gold glaze on the interior (?) surface and an incised line [Unpublished].  
 108. CBS 2496.25: A fragment (1.5 × 0.8 cm) of what might be ‘humps’ as seen on CBS 14722.2 [Unpublished].  
 109. CBS 2496.26: A fragment (surviving length 1.2; width 1.62; ht. 1.5 cm) of a ‘rod’ with two ‘humps’ [Unpublished].  
 110. CBS 14722.2: A fragment (surviving length 2.04; width 1.75; ht. 1.35 cm) of a ‘rod’ with two ‘humps’ [Unpublished].

### Various glass fragments

111. CBS 2496.38: A virtually complete curved panel (2.6 × 2.7; th. 0.6 cm) bearing the ‘scars’ where knobs have been knocked off and wisps of hair [Unpublished].  
 112. CBS 2496.39: A fragment (2.5 × 1.8; ht. 1.9 cm) resembling a small helmet. The object is badly abraded and it is unclear whether or not any of the edges are original [Unpublished].  
 113. CBS 2496.40: A fragment (surviving length 2.5 and width 1.65; th. 0.6 cm) of a panel (?) with a curved outer edge and flat base with surface ‘scars’ [Unpublished].  
 114. CBS 2496.41: A panel (2.1 × 1.2; th. 0.8 cm) on which the barest hint of a rectilinear pattern on the upper surface may be discerned. The reverse is flat, though indented possibly as a result of moulding and rolling in the process of manufacture [Unpublished].  
 115. CBS 14728: A fragment (2.2 × 1.3; ht. 0.9 cm) of a panel with two curls on the upper surface. Flat base and a small area of an edge preserved. The fragment might be part of a quatrefoil panel, but it is not clear [Unpublished].

### Stone blocks

#### Inscribed

116. Es 1900: A chipped block (13.0 × 7.35 × 3.0 cm) of lapis lazuli with one smooth surface on which is inscribed three columns (sixty three lines of surviving text) of a votive inscription of [Burna-Bu]riāš<sup>57)</sup> [Hilprecht 1893: 51, no. 68, Pl.25; Thureau-Dangin 1908: 122–125; Brinkman 1976: 107, E.2.7].  
 117. CBS 8599: An irregular block of lapis lazuli (5.1 × 9.25 × 5.0 cm) bearing a complete six line votive inscription of Kurigalzu II to Enlil. The SEOR entry no 152 reads – ‘Blue stone (lapis lazuli), inscribed on one side with six lines of inscription, inscribed portion 4.5 × 3.5 cm. Except at inscription without shape’ [Peters 1890b: no. 152; Peters 1890a: SEIB; Hilprecht 1893: 49, no. 36, Pl.18; Brinkman 1976: 229, Q.2.101].  
 118. Es 1935: A block of lapis lazuli (17.5 × 11.0 × 9.0 cm) with one worked face on which is inscribed a 20 line votive inscription of Kadašman-Turgu to Enlil. The other faces are roughly worked. Though in his publication of the inscription Hilprecht does not record that it was from the hoard the site note books and Peters’ discussion of it make the provenance clear [Peters 1890: SEORb; Peters 1890a: SEIB; Hilprecht 1893: 51, no. 63, Pl. 24; Peters 1897: ii 132–133; Poebel 1921: 34–37; Brinkman 1976: 154–155, L.2.8].  
 119–120. CBS 2497 (= Ni 403): Two rough blocks (larger lump 10.0 × 16.0 × 8.0; smaller lump 12.0 × 10.0 × 9.0 cm) of a very soft and friable white stone with a sandy outer layer. In appearance the material is similar to the knobs and mace heads found in the hoard [Peters 1897, ii: 133–134].

### Stone axe head

121. CBS 8597: The blade of an axe of lapis lazuli with the upper, lower and cutting edge preserved (6.4 × 5.7 × 1.5 cm). A ten line partially erased inscription survives on one side. The UMP register records the provenance as ‘Second

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57) Brinkman [1976: 107, n. 32] notes the possibility, which he rejects, that the name could be read [Šagarakti šu]riāš.

Expedition, Temple Mound', whereas Hilprecht notes unequivocally that it was from the hoard [Hilprecht 1893: 54, no. 78, Pl. XI].

### Mace heads

122. CBS 2498.1: Circa 33% of a mace head of soft white 'chalk' with a socket hole preserved in part and green overlaid by grey concretion over a third of the outer surface (ht. 2.4; dia. c. 5.5; dia. of hole 1.6 cm) [Unpublished].
123. CBS 2498.2: Circa 25% of a mace head of soft white 'chalk' with a very worn surface preserving the original height and length of the socket hole (ht. 4.35; dia. 5.0; dia. of hole 1.9 cm) [Unpublished].
124. CBS 2498.3: Circa 20% of a mace head of soft white 'chalk' with a brown concretion on the outer surface and with only a small length of the socket hole preserved (ht. 4.0; dia. 5.0 cm) [Unpublished].
125. CBS 2498.4: Circa 5% of a mace head of soft white 'chalk' with only the outer surface and possibly a small section of the socket hole preserved of the original worked areas (ht. 2.85; width 4.1 cm) [Unpublished].

### Stone plaques

126. CBS 2498.5: A broken plaque of soft white 'chalk' pierced at two points (width 5.59; th. 0.55 cm). Where preserved the surface appears to have a thin brown layer [Unpublished].
127. CBS 2498.6: A broken plaque of soft white 'chalk' pierced at two points at the same distance from the edge of the object (width 5.0; th. 0.55 cm). None of the original surface appears to have been preserved [Unpublished].
128. CBS 2498.7: An extremely friable broken plaque of soft white 'chalk', unpierced and apparently with no surviving original surfaces (width 4.45; th. 0.60 cm) [Unpublished].
129. CBS 2498.8: A fragment of a centrally pierced disk (dia. c. 3.2; th. 0.60; dia. of central hole 0.50 cm) of soft white 'chalk', and with a cream glaze (?) [Unpublished].
130. CBS 2498.9: Circa thirty small fragments of mace heads and plaques, all of soft white 'chalk' [Unpublished].

### Cylinder seals

131. CBS 8669 + CBS 8684: Two sections of three (the third was not recovered) of an agate cylinder seal (original length c. 2.6; dia. 1.0 cm) bearing a five line votive inscription of Kurigalzu I/II to a deity whose name is lost [Peters 1890a: SEIB; Hilprecht 1893: 50, no. 50 Pl. 22; 52, no. 74, Pl. 26; Brinkman 1976: 229, Q.2.103].
132. CBS 8914: 'A large cylinder of white stone veined with red, length 5 cm., cir[cumference] 10.8 cm. Representation seated figure, behind him the sacred tree, before him two standing figures. Behind the first a sun. Behind the second a columnar altar, and above it the moon and star. Rude work' [Peters 1890b: no. 170; Peters 1897, ii: 133; Legrain 1925: 210, no.236; Pl. XVI].
133. CBS 8744: '... an unworked cylinder of mottled grey stone 3.5 cm long...' which may be identified with a blank cylinder seal (ht. 4.15; cir. 2.58; dia. of hole 1.6 cm) [Peters 1890b: no. 171; Peters 1897, ii: 133].

### Rings (stone or metal)

134. CBS 8675: Fragment of an agate ring (original dia. 2.7; width 0.96 cm) bearing part of an inscription of Burna-Buriaš [Peters 1890a; Hilprecht 1893: 51, no. 66 and no. 67, Pl.26; Brinkman 1976: 108, E.2.9].
- 135–138. ? : Four further fragments of agate rings which cannot now be located [Peters 1890b: nos. 167–168].
139. ? : '... a copper ring ...' which cannot now be located [Peters 1890b, no. 171].

### Lamaštu plaque

140. ? : Lower half (2.15 × 2.4 × 0.5 cm) of a lamaštu plaque with an unreadable inscription on the reverse [Peters 1890b: no. 203 (with rough diagram); Hilprecht 1896: 279, no. 143, Pl. 61].

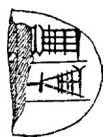
### Other

141. CBS 2496.47: C. 50% of a white faience bead (th. 0.5; width 1.0; surviving length 1.0 cm) [Unpublished].
- 142–143. ? : '... two uninscribed fragments of an agate bowl or vase ...' which cannot now be located [Peters 1890b: no. 168].
- 144–153. ? : '... ten beads of different stones ...' which cannot now be located [Peters 1890b, no. 171].
154. ? : '... a shell ...' which cannot now be located [Peters 1890b: no. 171].
155. ? : '... a few small fragments of objects in alabaster, lapis lazuli, and malachite ...' which cannot now be located [Peters 1890b: no. 171].
156. ? : '... a few small pieces of gold unworked ...' which cannot now be located [Peters 1890b: no. 171].

**Eye-stones (Catalogue Nos. 1–9).**



No.1 [after Hilprecht 1896: Pl.61, no.134].



No.2 [after Hilprecht 1893: Pl.22, no.52].



No.3 [after Hilprecht 1896: Pl.61, no.135].



No.4 [after Hilprecht 1893: Pl.22, no.51].



No.5 [after Hilprecht 1893: Pl.25, no.65].



No.6.a [after Hilprecht 1893: Pl.26, no.73].



No.6.b [after Peters 1890a].



No.7 [after Hilprecht 1896: Pl.61, no.139].



No.8 [after Hilprecht 1893: Pl.15, no.29].



No.9 [after Hilprecht 1893: Pl.15, no.31].

**Lapis Lazuli disks (Catalogue Nos. 10–23).**



No.10 [after Hilprecht 1893: Pl.22, no.49].



No.11 [after Hilprecht 1893: Pl.22, no.53].



No.12 [after Hilprecht 1893: Pl.23, no.58].



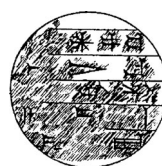
No.13 [after Hilprecht 1893: Pl.22, no.54].



No.14 [after Hilprecht Pl.23, no.62].



No.15 [after Hilprecht 1893: Pl.23, no.59].



No.16 [after Hilprecht 1896: Pl.61, no.138].



No.17 [after Hilprecht 1893: Pl.23, no.60].

**Plate A:** No.1, *Es* 1902; No.2, *CBS* 8670; No.3, *Es* 1912; No.4, *Es* 1906; No.5, *CBS* 8674; No.6.a–b, *CBS* 8683a; No.7, *Es* 1908; No.8, *CBS* 8687; No.9, *CBS* 8723a; No.10, *Es* 1920; No.11, *Es* 1924; No.12, *Es* 1921; No.13, *Es* 1926; No.14, *CBS* 8673; No.15, *Es* 1905; No.16, *Es* ?; No.17, *CBS* 8722.  
Not to scale.





No.18 [after Hilprecht 1893: Pl.25, no.64].



No.19 [after Hilprecht 1893: Pl.26, no.71].



No.20 [after Hilprecht 1893: Pl.15, no.30].



No.21 [after Hilprecht 1896: Pl.61, no.142].

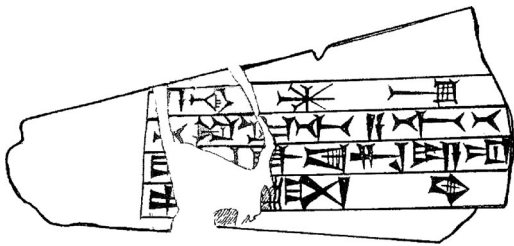


No.22 [after Hilprecht 1893: Pl.15, no.28].

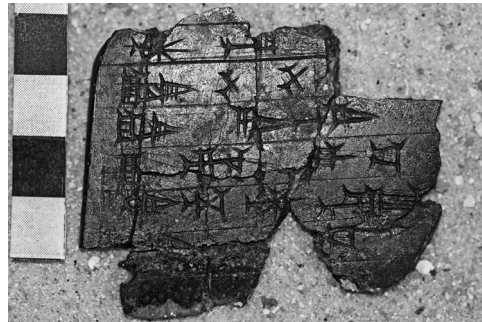


No.23 [after Hilprecht 1896: Pl.61, no.141].

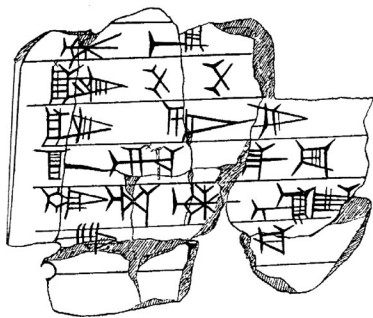
**Inscribed stone tablets (Catalogue Nos. 24–29).**



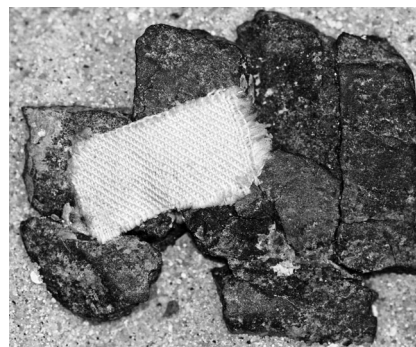
No.24: Inscription [after Hilprecht 1893: Pl.21, no.s 41 and 46].



No.25.a: Obverse.

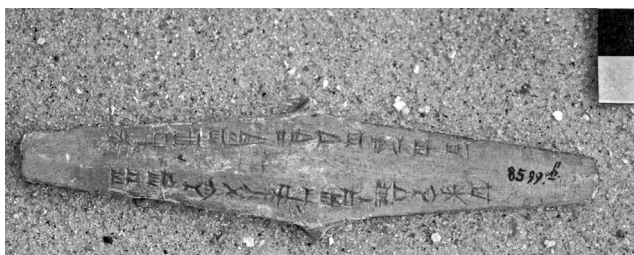


No.25.b: Inscription [after Hilprecht 1893: Pl.22, no.47].

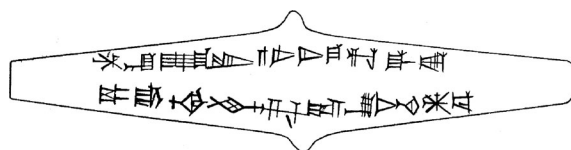


No.25.c: Reverse.

**Plate B:** No.18, *Es* 1923; No.19, *CBS* 8682; No.20, *CBS* 8721a; No.21, *Es* ?; No.22, *CBS* 8685.2; No.23, *Es* ?; No.24, *CBS* 8662a + *CBS* 8666 + one un-numbered fragment; No.25.a–c, *CBS* 8667a. Not to scale.



No.26.a (cast).



No.26.b: Inscription [after Hilprecht 1893: pl.18, no.35].



No.27 [after Hilprecht 1893: Pl.21, no.45].

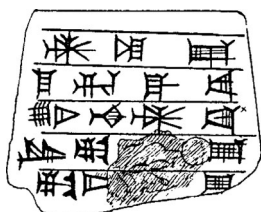


No.28.a and b: Inscription [No.28.b after Hilprecht 1893: Pl.21, no.42].



No.29 [after Hilprecht 1896: Pl.61, no.140].

**Amulets (Catalogue Nos. 30–32).**



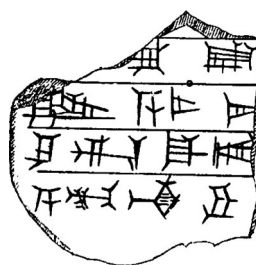
No.30 [after Hilprecht 1893: Pl.22, no.48].



No.31.a (obverse).

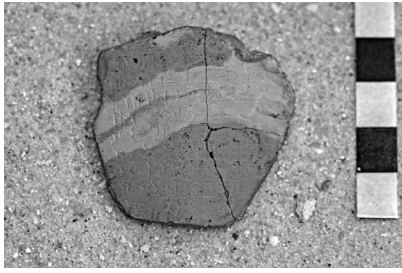


No.31.b (reverse).

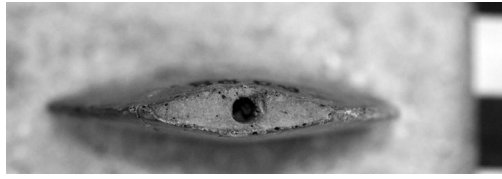


No.31.c: Inscription [after Hilprecht 1893: Pl.21, no.44].

**Plate C:** No.26.a–b, CBS 8600; No.27, CBS 8665; No.28.a–b, CBS 8663a; No.29, Es ?; No.30, CBS 8668; No.31.a–c, CBS 8664a.  
Not to scale.



No.32.a (Cast).



No.32.b (Cast, end view).



No.32.c: Inscription  
[after Hilprecht 1893:  
Pl.21, no.43].

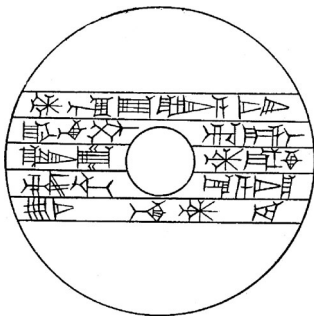
**Knobs (Catalogue Nos. 33–52).**



No.33.a: Summit.



No.33.b: Side view.



No.33.c: Inscription [after Hilprecht 1893: Pl.18, no.34].



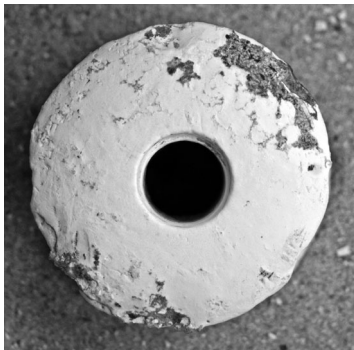
No.34.a: Summit.



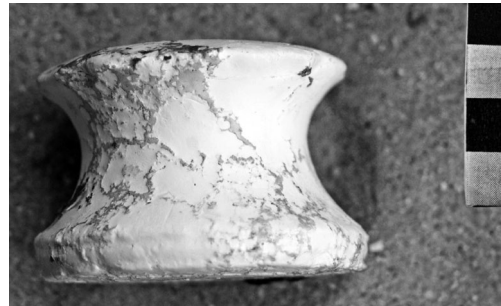
No.34.b: Side view.



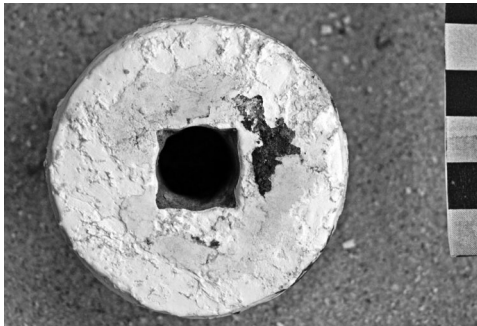
No.34.c: Inscription [after Hilprecht 1893: Pl.23, no.56].



No.35.a: Summit.



No.35.b: Side view.



No.35.c: Base.



No.35.d: Inscription [after Hilprecht 1893: Pl.23, no.57].

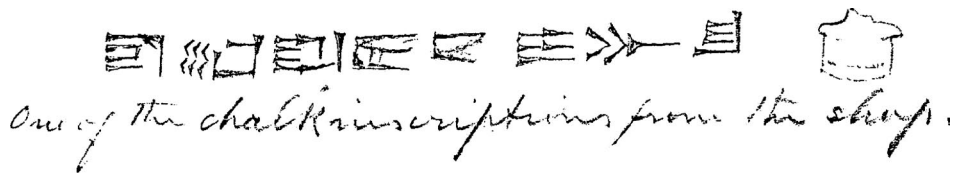




No.36 [after Hilprecht 1893:  
Pl.25, no.69].



No.37 [after Hilprecht 1893:  
Pl.26, no.70].

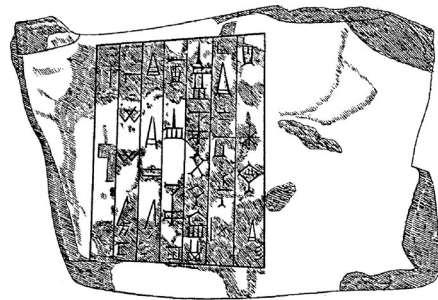
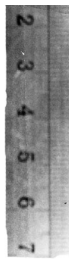


No.38: The diagram and caption in the SEIB [Peters 1890a]. Note the diagram of a knob and the reference to 'the shop', i.e. Peter's interpretation of the hoard.

**Glass Axes (Catalogue Nos. 53–65).**



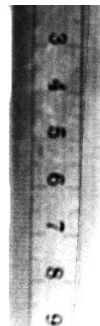
No.53.a (socket).



No.53.b: Inscription [after Hilprecht 1893: Pl.20, no.39].

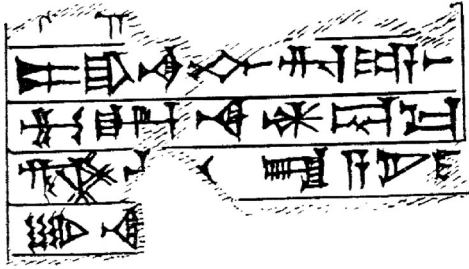


No.53.c (socket).

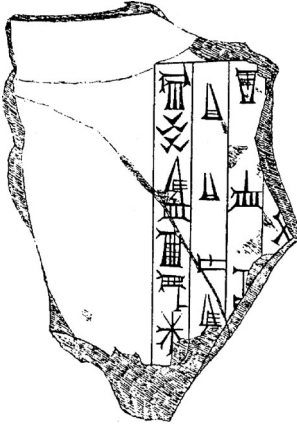


**Plate F:** No.36, CBS ?; No.37, CBS 8729; No.38; No.53.a-c, CBS 8800 (a and c) + CBS 9462 (b).  
Not to scale.





No.54: Inscription [after Legrain 1926:  
Pl.XVIII, no.51].



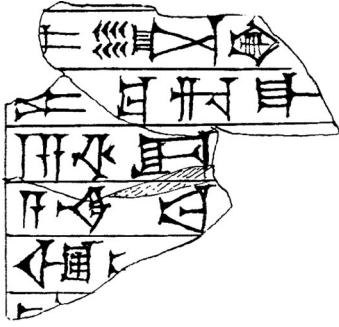
No.55.a: Inscription  
[after Hilprecht 1893:  
Pl.21, no.40].



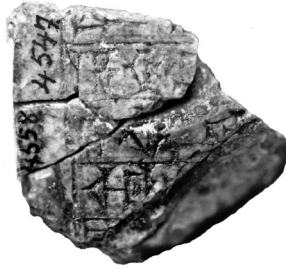
No.55.b: Socket from above.



No.56.a: Inscription  
[after Hilprecht 1893:  
Pl.22, no.55].



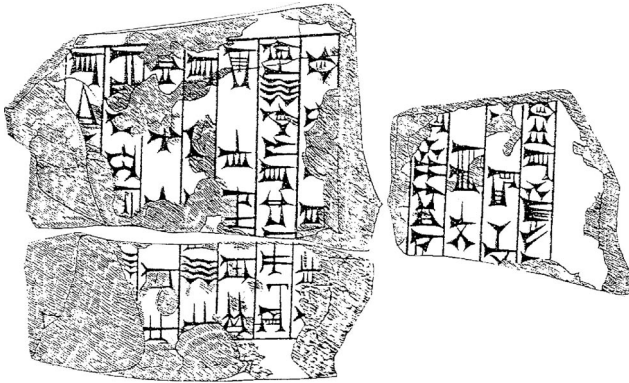
No.57.a: Inscription  
[after Legrain 1926: Pl.  
XVIII, no.52].



No.57.b.



No.57.c.



No.58.a: Inscription [after Hilprecht 1893: Pl.26, no.75;  
*ibid* 1896: Pl.61, no.s 136 and 137].

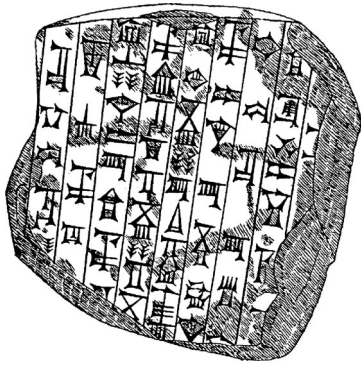


No.58.b: Obverse (CBS 4542 and CBS 8681).



No.58.c: Reverse (CBS 4542 and CBS  
8681).

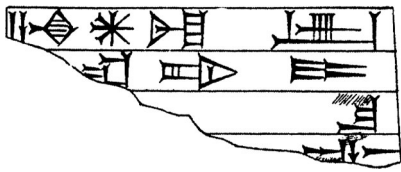
**Plate H:** No.57, CBS 4543 + CBS 4547 + CBS 4549 + CBS 4558 + one un-numbered fragment; No.58, CBS 4542 + 8681a + Es 1903 + Es 1910.  
*Not to scale.*



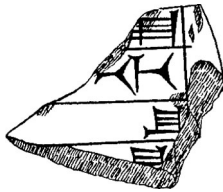
No.59.a: Inscription [after Hilprecht 1893: Pl.27, no.78].



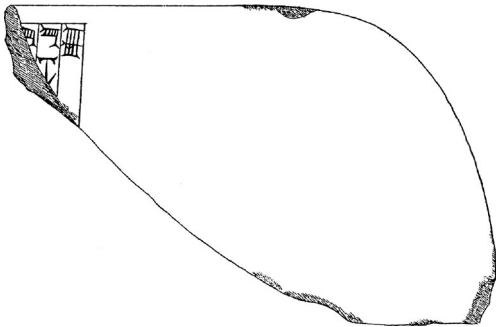
No.59.b: Obverse.



No.60: Inscription [after Hilprecht 1893: Pl.26, no.76].



No.61: Inscription [after Hilprecht 1893: Pl.27, no.79].

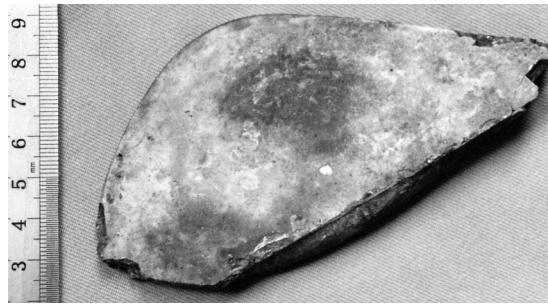


No.63.a: Inscription [after Hilprecht 1893: Pl.26, no.72].





No.63.b: Inscription (detail).



No.63.c: Reverse.



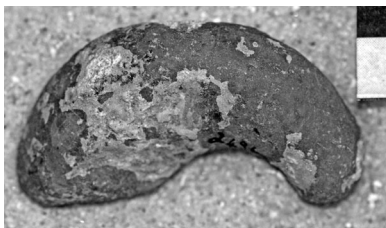
No.64.



No.65.

**Glass statue elements (Catalogue Nos. 66–104).**

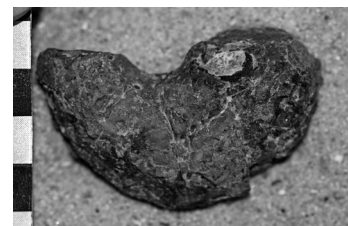
*Horns*



No.66.

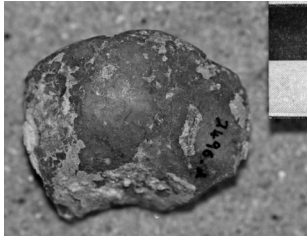


No.67.



No.68.

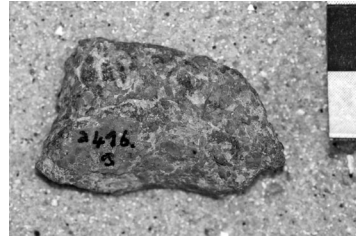
*Plate J: No.63, (cont.); No.64, CBS 2496 + CBS 4538 + 4539 + 4540 + 13214 + two un-numbered fragments; No.65, mainly CBS 2496; No.66, CBS 2496a; No.67, CBS 2496b; No.68, CBS 2496c.*



No. 69.



No. 70.



No. 71.

*Limbs*



No. 72.a.



No. 72.b.



No. 73.a.



No. 73.b.

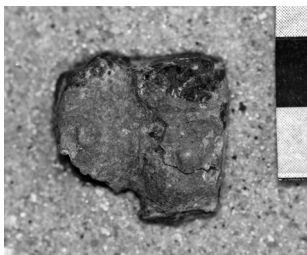


No. 74.a.

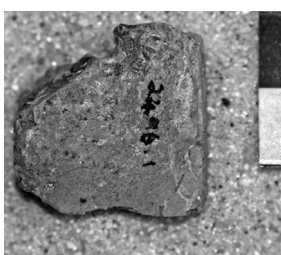


No. 74.b.

*Locks of hair.*



No. 75.a.



No. 75.b.



No. 75.c.

**Plate K:** No. 69, CBS 2496d; No. 70, CBS 2496e; No. 71, CBS 2496g; No. 72.a-b, CBS 2496.35; No. 73.a-b, CBS 14723.6; No. 74.a-b, CBS 14723.8; No. 75.a-c, CBS 2496.1.

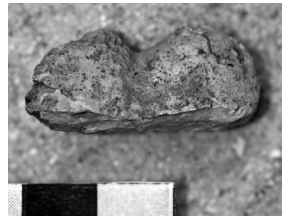




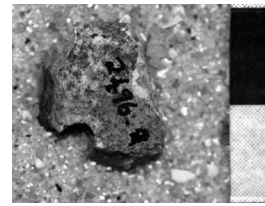
No. 76.a.



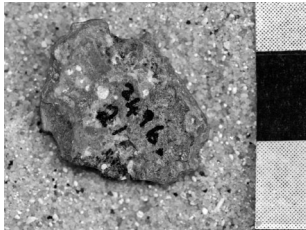
No. 76.b.



No. 76.c.



No. 77.



No. 78.a.



No. 78.b.



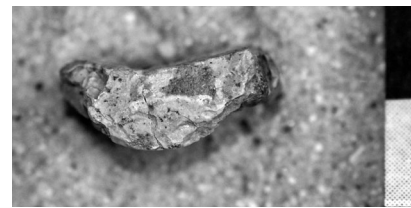
No. 78.c.



No. 79.a.



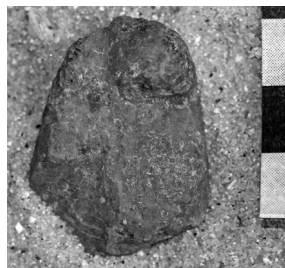
No. 79.b.



No. 79.c.



No. 80.a.



No. 80.b.



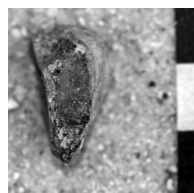
No. 81.a.



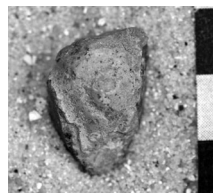
No. 81.b.



No. 82.a.



No. 82.b.

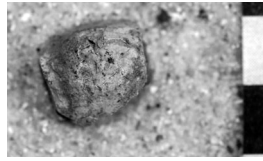


No. 82.c.

**Plate L:** No. 76.a-c, CBS 2496.2a; No. 77, CBS 2496.8; No. 78.a-c, CBS 2496.21; No. 79.a-c, CBS 2496.22; No. 80.a-b, CBS 2496.23; No. 81.a-b, CBS 2496.24; No. 82.a-c, CBS 2496.27.



No.84.a.



No.84.b.



No.85.a.



No.85.b.



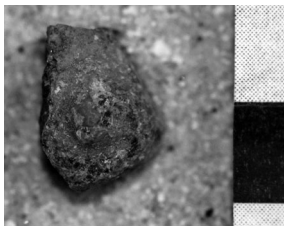
No.86.a.



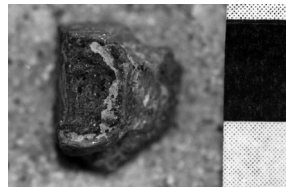
No.86.b.



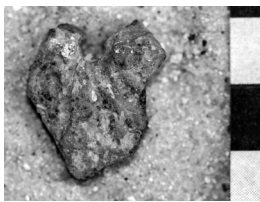
No.86.c.



No.87.a.



No.87.b.



No.88.a.



No.88.b.



No.88.c.



No.89.a.



No.89.b.



No.89.c.

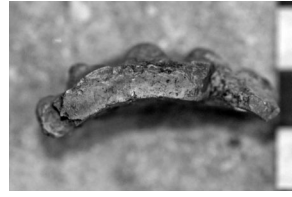
**Plate M:** No.84.a-b, CBS 2496.28; No.85.a-b, CBS 2496.29; No.86.a-c, CBS 2496.30; No.87.a-b, CBS 2496.31; No.88.a-c, CBS 2496.32; No.89.a-c, CBS 2496.32a.



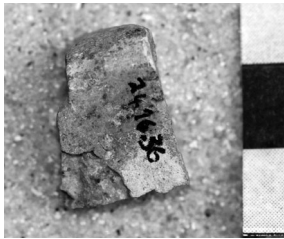
No.90.a.



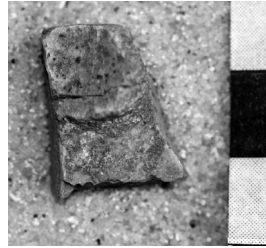
No.90.b.



No.90.c.



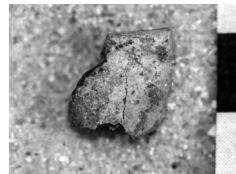
No.91.a.



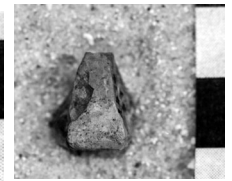
No.91.b.



No.92.a.



No.92.b.



No.92.c.



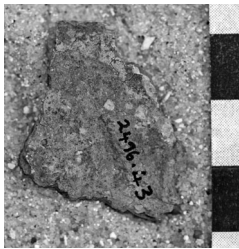
No.93.a.



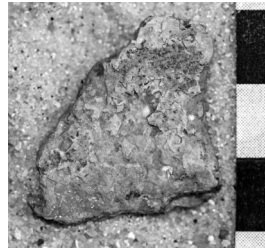
No.93.b.



No.93.c.



No.94.a.



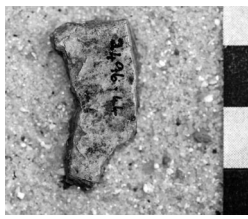
No.94.b.



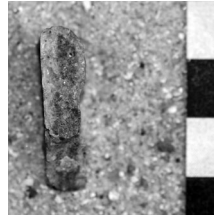
No.94.c.

*Plate N: No.90.a-c, CBS 2496.33 + CBS 14722.4; No.91.a-c, CBS 2496.36; No.92.a-c, CBS 2496.37; No.93.a-c, CBS 2496.42; No.94.a-c, CBS 2496.43.*

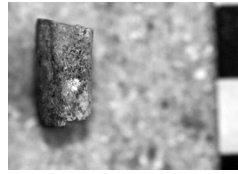




No.95.a.



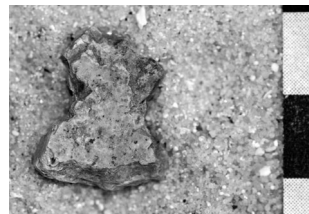
No.95.b.



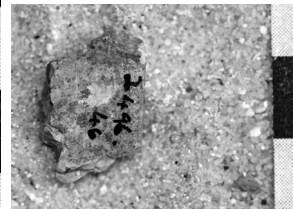
No.95.c.



No.96.a.



No.96.b.



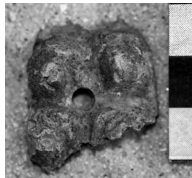
No.97.a.



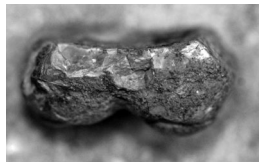
No.97.b.



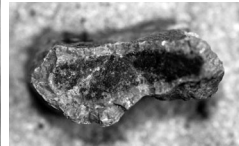
No.98.a.



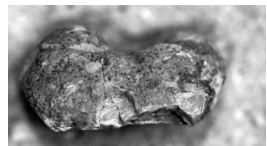
No.98.b.



No.98.c.



No.98.d.



No.98.e.



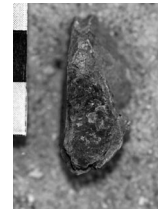
No.99.a.



No.99.b.



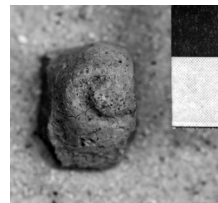
No.99.c.



No.99.d.



No.100.a.



No.100.b.



No.100.c.

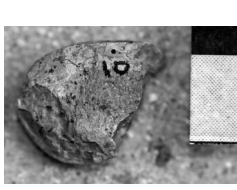


No.101.a.



No.101.b.

**Plate O:** No.95.a-c, CBS 2496.44; No.96.a-b, CBS 2496.45; No.97.a-b, CBS 2496.46; No.98.a-e, CBS 14722.1; No.99.a-d, CBS 14722.3; No.100.a-c, CBS 14722.5; No.101, CBS 14722.9.



No.102.a.



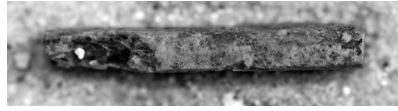
No.102.b.



No.102.c.



No.103.a.



No.103.b.



No.104.a.



No.104.b.

**Glass rods (Catalogue Nos. 105–110).**



No.105.a.



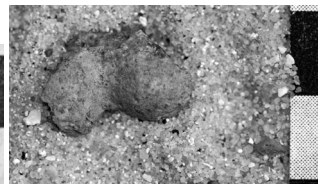
No.105.b.



No.105.c.



No.106.a.



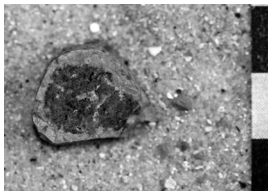
No.106.b.



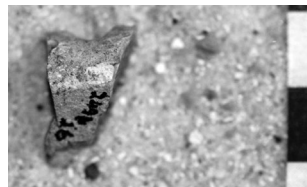
No.108.a.



No.108.b.



No.109.a.



No.109.b.



No.109.c.

**Plate P:** No.102.a-c, CBS 14722.10; No.103.a-b, CBS 14723.7; No.104, CBS 14728.1; No.105.a-c; No.106.a-b, CBS 2496.18; No.108.a-b, CBS 2496.25; No.109.a-c, CBS 2496.26.

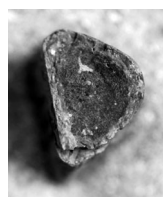




No.110.a.



No.110.b.



No.110.c.

**Various glass fragments (Catalogue Nos. 111–115).**



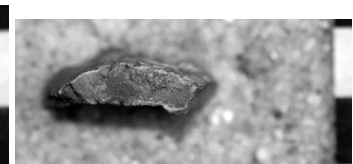
No.111.a.



No.111.b.



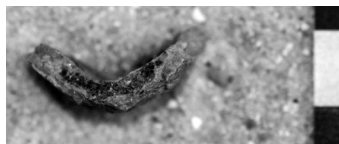
No.111.c.



No.111.d.



No.112.a.



No.112.b.



No.112.c.



No.113.a.



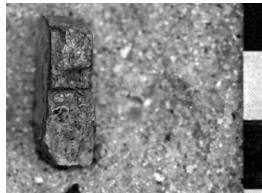
No.113.b.



No.113.c.



No.114.a.



No.114.b.



No.114.c.



No.115.a.



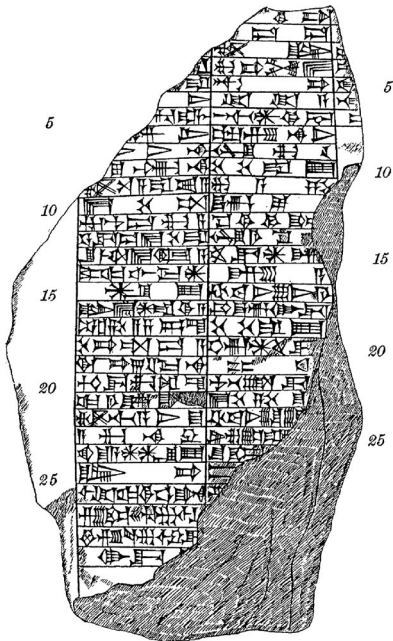
No.115.b.



No.115.c.

**Plate Q:** No.110.a-c, CBS 14722.2; No.111.a-d, CBS 2496.38; No.112.a-c, CBS 2496.39; No.113.a-c, CBS 2496.40; No.114.a-c, CBS 2496.41; No.115.a-c, CBS14728.

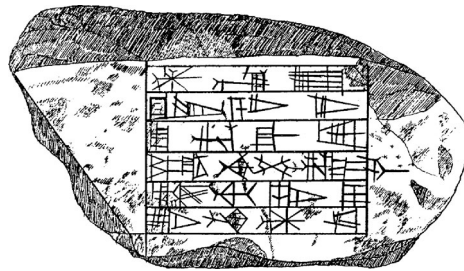
Stone Blocks (Catalogue No.s 116–120).



No.116: Inscription [after Hilprecht 1893: Pl.25, no.68].



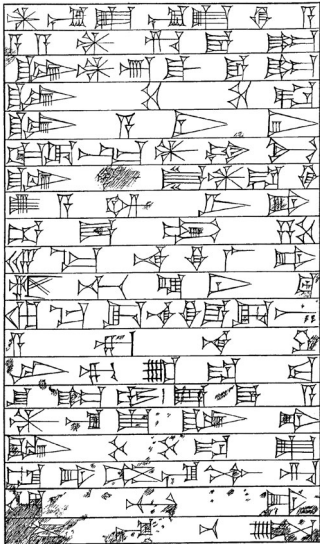
No.117.a (cast).



No.117.b: Inscription [after Hilprecht 1893: Pl.18, no.36].

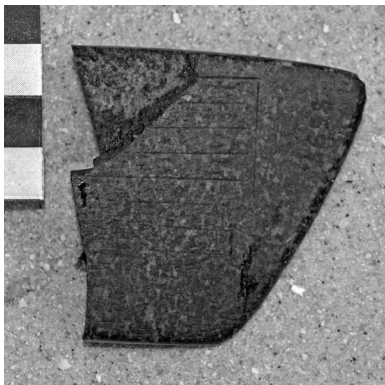


No.117.c (cast, side view).

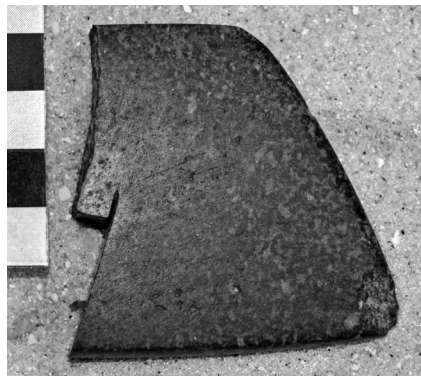


No.118: Inscription [after Hilprecht 1893: Pl.24, no.63].

**Stone axe head (Catalogue No. 121).**



No.121.a.



No.121.b.



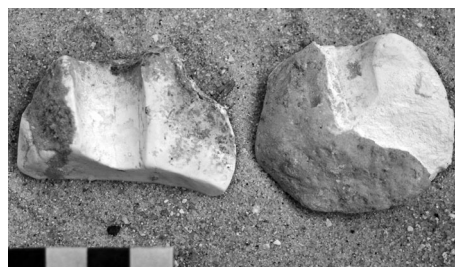
No.121.c.

**Mace heads (Catalogue Nos. 122–125) .**



No.122.a.

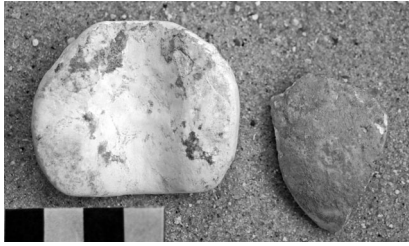
No.123.a.



No.122.b.

No.123.b.

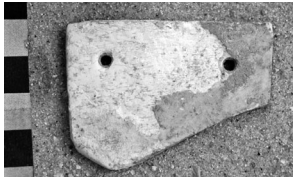




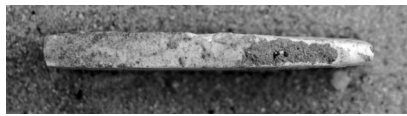
No. 124.

No. 125.

**Stone plaques (Catalogue Nos. 126–130).**



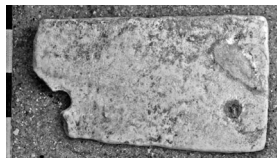
No. 126.a.



No. 126.b.



No. 127.a.



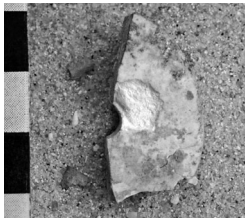
No. 127.b.



No. 128.a.



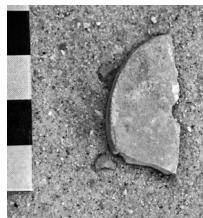
No. 128.b.



No. 129.a.

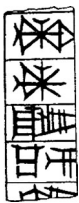


No. 129.b.



No. 129.c.

**Cylinder Seals (Catalogue Nos. 131–133).**



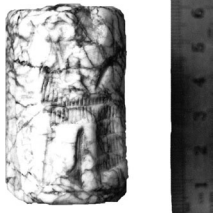
No. 131.a: Inscription  
[after Hilprecht 1893:  
Pl. 22, no. 50].



No. 131.b: Inscription  
[after Hilprecht 1893:  
Pl. 26, no. 74].

**Plate T:** No. 124, CBS 2498.3; No. 125, CBS 2498.4; No. 126.a–b, CBS 2498.5; No. 127.a–b, CBS 2498.6; No. 128.a–b, CBS 2498.7; No. 129.a–c, CBS 2498.8; No. 131.a–b, CBS 8669 + CBS 8684.





No. 132.a.



No. 132.b.



No. 133.a.



No. 133.b.

**Rings (stone or metal) (Catalogue Nos. 134–139).**

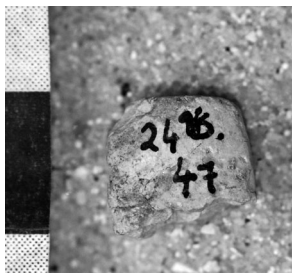


No. 134.a: Inscription  
[after Hilprecht 1893:  
Pl. 26, no. 66].



No. 134.b: Inscription  
[after Hilprecht 1893:  
Pl. 26, no. 67].

**Other (Catalogue Nos. 141–156).**



No. 141.a.



No. 141.b.

**ANALYSING THE RECENT PAST:  
THE ARCHAEOLOGY OF DEATH, PASTORALISM, POTS AND  
PIPES IN THE OTTOMAN JAZIRA AND BEYOND**

St John SIMPSON\*

**Introduction**

“Every hundred yards that we advanced, the scene became more striking. One long line of diminutive tents formed a temporary street of eating-houses; there were kibabubs, pillauf, fritters, pickled vegetables, soups, rolls stuffed with fine herbs, sausages, fried fish, bread of every quality, and cakes of all dimensions ... Here and there a flat tomb, fancifully covered with gold-embroidered handkerchiefs, was overspread with sweetmeats and preserved fruits; while in the midst of these rival establishments, groups of men were seated in a circle, wherever a little shade could be obtained, smoking their long pipes in silence, with their diminutive coffee-cups resting on the ground beside them.” (Pardoe 1854: 134–35).

This 19th century description of a major cemetery in Istanbul conjures an evocative image redolent of Orientalist European paintings of the Middle East. Nevertheless, within the context of this paper, it provides a highly appropriate combination of death rituals, colourful yet highly transient activities, and the far-reaching social impact that tobacco and coffee consumption had within the Ottoman empire.

Most human activities leave some traces in the archaeological record but their retrieval relies on a combination of technique, experience and interpretation. The most intensive techniques traditionally have been devoted to sites of early prehistoric periods where the lack of any other sources renders archaeology and analogy the only methods by which they might be understood. In the past few decades this situation has begun to change as archaeologists and historians have realised the potential of pooling techniques and comparing the written record with excavated data from historical sites. Nevertheless, few attempts have yet been made to apply this approach to post-medieval periods in the Middle East although the potential is great, not only in illustrating aspects of the complex Ottoman economy, but also in offering case-studies whose application might be extended more widely. The following observations are based on a combination of archaeological sources, many published here for the first time, which were themselves the accidental by-product of fieldwork directed primarily at earlier remains. The results should be viewed alongside the growing number of studies into the pre-modern social and economic fabric of the Middle East, and analyses of “the material culture of modernity” (Baram and Carroll eds 2000).

Despite the huge revival of interest in the socio-economic affairs of the Ottoman empire, most analyses have focused on the macro-economy, urban industries and long-distance trade, whereas relatively little attention has been paid to local or specialised crafts and craftsmen (McGowan 1981; Faroqhi 1984; 1995; 2005; Faroqhi and Deguilhem 2005). Anatolia, the Balkans and parts of Syro-Palestine have also received the brunt of academic attention, but very little research has been published on other parts of the empire such as northern Syria or Iraq. Furthermore, interest has tended to dwell on the 15th-17th centuries with little attention paid to the situation during the later centuries.

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Although detailed studies have been published on the provisioning of meat and bread in Jerusalem (Cohen 1989), the silk industry of Bursa and Lebanon (Faroqhi 1984), and on certain classes of object detailed in palace or private inheritance inventories (Samancı 2003; Establet and Pascual 2003), analyses of individual classes of object are much scarcer. Comparative analyses of textual and archaeological data-sets are rarer still (Baram and Carroll eds 2000; Gerelyes and Kovács eds 2003). Nevertheless, a number of focused studies have started to appear in recent years within Turkey, for instance on the copper industry of Tokat (Belli and Kayaoğlu 2002) and the revival of the glass industry in Istanbul (Küçükerman 1999). It is within this context of object-based interpretations of Ottoman material culture that this essay is set, and one which attempts to combine archaeological and written perspectives.

Archaeological studies of Ottoman material culture are few, and these tend to focus on a given class of artefact rather than a whole assemblage. Multi-site analyses or cross-category comparisons are rarer still for this period, although commonplace in other fields of archaeology. The present analysis explores to what extent such an approach has validity for the Ottoman period, and offers four related case studies. These are concerned with grave-goods, the distinction between sedentary and pastoral occupation, pottery production and distribution, and the use of smokers' pipes in distinguishing and seriating post-medieval sites. In each case the archaeological evidence suggests a very complex picture, and one which underlines the importance of further in-depth studies of Ottoman material culture, and how this relates to temporal and social fashions and patterns of production. In short, it cannot be assumed that even for a period as recent and well-documented as this that written sources alone provide all the answers. Some practices, for instance relating to mortuary behaviour, relate to deep-rooted local customs rather than strict religious orthodoxy. Grave-goods are regularly encountered in late Ottoman graves: although these are often items of personal adornment and associated with Bedouin cemeteries, other categories of object are also occasionally encountered. In each case, these finds challenge strict interpretations of what is normal Muslim behaviour and in some cases these graves are all that survive in the archaeological landscape for the local populations despite the very late period. Middle Eastern pastoral nomadism creates a romantic vision of Bedouin in many people's minds but identifying such groups again offers archaeological challenges. The author's excavation of a campsite in northern Iraq provides a case study of how one such community can be detected and interpreted through ethnographic analogy. The third case study looks at the range of available sources for Ottoman pottery, textual, ethnographic and archaeological. These illustrate the huge diversity of local styles and hint at the production and distribution of specialities as well as bulk goods. Archaeological evidence from northern Iraq is used to illustrate this issue in one little-known region corresponding to the Ottoman *vilayet* of Mosul. This evidence in turn suggests a higher density of rural occupation in this area than previously recognised. The fourth and final case study examines the evidence that the ubiquitous Ottoman smokers' pipes offer in detecting and dating sites, and appreciating sensitive temporal changes and patterns of social consumption across the Ottoman empire.

### 1. The archaeology of death: graves, coins and tokens

“Every soul shall taste death. We will prove you all with evil and good. To Us you shall return.” (*The Qur'an*: ‘The Prophets’ 21: 35).

Analyses of death ritual are an integral part of archaeological research regardless of period or place. The fascination is part morbid, but part driven by the regular accompaniment of items of everyday or imitated material culture with the deceased: from these a link is made with crafts in the land of

the living and, equally importantly from an archaeological perspective, a datable timeline. The analysis of human remains of recent periods, however, has been more sensitised through association with native communities or present religious faiths.

Within Islam death is an intensely personal yet very public affair. The moment of death is believed to be God's choice and beyond that lies a person's destiny. At the moment of death of a believer, the angels wrap the soul in a sweet-smelling shroud and escort it to the seventh heaven for recording before it is returned to the body in the grave for interrogation. An unbeliever's death was less pleasantly handled as the soul was extracted "like the dragging of an iron spit through moist wool, tearing the veins and sinews." The choices were heaven or hell. The heavenly perfumed paradise was proverbially filled with beautiful women, expensive clothing, luxury housing, alcohol and exotic food. Hell – as in Christianity – was a very unpleasant place indeed with the flesh perpetually renewed in order to be flayed, dismembered, boiled and burnt, and the only refreshment was boiling pus. No wonder that individuals were encouraged to lead a spiritual life, and there is very clear guidance on how a body should be interred in order to be readied for the soul's inquisition on the first night by Munkar and Nakir, the black-faced blue-eyed angels of death. Yet the Qur'an says nothing about funerals and Muslim beliefs about death are based on tradition developed after the death of Muhammad (Welch 1977; Halevi 2007). The procedures for treatment of the dead are prescribed in these later Islamic law manuals, and Book 40 of *The Revival of the Religious Sciences* by the 11th century Iranian scholar al-Ghazali deals exclusively with "The Remembrance of Death and the Afterlife" (al-Ghazali 1989).

Nevertheless, although Islam directly impinges on the ways in which a body is prepared for burial and what ceremonies should be observed, there is a remarkable diversity of responses across the Muslim world (Insoll 1999: 166–200). In some cases these reflect deeper-seated local traditions. Others reflect variation according to region, tribe, ethnic group, social status or gender. There are a growing amount of data recorded from Ottoman urban cemeteries within Anatolia and the Balkans, where a characteristic feature was the commemoration not only of the individual but also their profession through the addition of an elaborately carved white marble headstone (Veinstein ed. 1996). The provision of elaborate tombstones is normally considered a feature of urban rather than transhumant societies. However, an equally distinctive but highly localised tombstone tradition flourished in the Luristan region of western Iran during a period of political isolation in the 19th and early-20th centuries. In addition to the inscription, women were represented or symbolised on the headstone "obverse" by scenes of spinning, carpet-weaving, a cradle or travelling with a child, whereas the men were represented as warriors, hunters or pious Muslims; in both cases there was a "reverse" side which showed mourners or a riderless horse indicating the departing of the individual (Mortensen 1983). The late date of these markers suggests that the inspiration may lie in passing familiarity with urban practice elsewhere – the author has seen related tombstones in southeast Turkey and dated 18th and 19th century tombstones depicting armed horsemen or riderless horses occur in Azerbaijan (Efendi 1986: figs 83–101) – yet the "folk art" iconography is that of the illiterate nomad and the gender symbolism recalls that of provincial Roman tombstones.

In addition, there are a considerable number of archaeological reports particularly from Israel/Palestine, Jordan, Syria, and Iraq which provide excavated evidence for Muslim burial practices from villages and "Bedouin" cemeteries (Table 1). Comparison of these with 18th and 19th century European travellers' accounts, more recent anthropological observations and Muslim guidelines offer useful insights into the extent to which orthodox belief combines with local custom. There are, for instance, intriguing hints at the social importance of coffee-drinking extending beyond death as coffee sets are replicated by arrangements of stones above the grave or, according to one description, the physical inclusion of coffee equipment in the grave of the deceased.



Artefact	Function	Material	Sites in alphabetic order
Coins		<i>metal</i>	Balawat, T. Dor, T. el-Hesi, T. Hisban, el-Lejjun, T. Karrana, T. Mevorakh, Mt. Nebo, Qal'at al-Bahrain, Tal-e Bakun, Umm Qais, T. Yoqne'am
Tokens		<i>metal</i>	T. Chagar Bazar
Dress accessories	anklets	<i>copper alloy</i>	T. Deir Alla
		<i>iron</i>	T. Deir Alla
	beads	<i>silver</i>	T. el-Hesi
		<i>copper alloy</i>	T. el-Hesi
		<i>glass</i>	T. el-Hesi, T. Hisban, el-Lejjun, Kenan Tepe, T. Mevorakh, Mt. Nebo, T. Qiri, T. al-Raqai, T. Razuk, T. Songor, Umm Qais, T. Yelkhi, T. Yoqne'am
		<i>composition</i>	T. el-Hesi (?), T. Qiri, T. Songor
		<i>plastic</i>	El-Lejjun, T. Razuk
		<i>amber</i>	T. Iktanu, T. Mevorakh, T. Qiri, Umm Qais
		<i>bone</i>	T. el-Hesi, T. Razuk, Umm Qais
		<i>shell</i>	T. el-Hesi, T. Hisban, el-Lejjun, T. Qiri, T. Razuk, T. Songor, Umm Qais
		<i>coral</i>	T. Songor
		<i>wood</i>	T. Songor
		<i>carnelian/agate</i>	T. el-Hesi, T. Hisban, T. Mevorakh, T. Songor, Umm Qais
		<i>garnet</i>	T. Hisban
		<i>rock crystal</i>	T. Songor
		<i>soapstone</i>	T. Mevorakh
		<i>unidentified black stone</i>	T. Zeror
		<i>unidentified red stone</i>	T. Razuk
		<i>unidentified white stone</i>	T. Razuk
		<i>unidentified stone</i>	T. Razuk, T. Songor, Umm Qais
		<i>unidentified material</i>	El-Bawiti, T. el-Hesi, T. Jezreel, Mt. Nebo, T. Sh. 'Ahmed el-'Areyny, Umm Qais, T. Yoqne'am, T. Zeror
	bells	<i>silver</i>	T. Mevorakh
		<i>copper alloy</i>	T. Gubba, T. el-Hesi, el-Lejjun, T. Mevorakh, T. Songor
		<i>unidentified material</i>	T. Sh. 'Ahmed el-'Areyny
	pendants	<i>silver</i>	T. Mevorakh
		<i>copper alloy</i>	T. Hisban, T. Mevorakh
		<i>glass</i>	T. el-Hesi
		<i>composition</i>	Balawat
		<i>mother-of-pearl</i>	T. el-Hesi, T. Hisban
		<i>green stone</i>	T. Qiri
		<i>travertine</i>	T. el-Hesi
		<i>unidentified material</i>	T. Yoqne'am
	bangles	<i>copper alloy</i>	El-Bawiti, T. Deir Alla, T. el-Hesi, T. Hisban, el-Lejjun, T. Mevorakh, Pella, T. esh-Shari'a, T. Songor, Umm Qais, T. Yoqne'am, T. Zeror
		<i>iron</i>	Caesarea, T. Deir Alla, Gezer, T. el-Hesi, T. Hisban, el-Lejjun, T. Mevorakh, T. Songor, Umm Qais, T. Zeror
		<i>unidentified metal</i>	Umm Qais
		<i>amber glass</i>	T. el-Hesi
		<i>blue glass</i>	T. el-Hesi, T. Mevorakh, T. al-Raqai
		<i>coloured twisted or trailed glass</i>	T. Dan, Gezer, T. el-Hesi, T. Jemmeh, Jerusalem, Kenan Tepe, Mt. Nebo, T. Sh. 'Ahmed el-'Areyny

		<i>unidentified glass</i>	T. Deir Alla, T. Gubba, T. el-Hesi, el-Lejjun, Pella, Qal'at al-Bahrain, T. esh-Shari'a, Umm Qais, T. Yelkhi
		<i>plastic</i>	T. Razuk
		<i>leather studded with metal</i>	T. el-Hesi
		<i>leather studded with glass</i>	Umm Qais
		<i>beaded bracelets</i>	T. Razuk, T. Songor
		<i>unidentified material</i>	T. Sh. 'Ahmed el-'Areyny
	earrings	<i>copper alloy</i>	el-Bawiti, T. Deir Alla, T. Gubba, T. el-Hesi, Kenan Tepe, Pella (?), T. Songor
		<i>unidentified material</i>	Pella, T. Sh. 'Ahmed el-'Areyny, Umm Qais
	finger rings	<i>copper alloy</i>	el-Bawiti, T. el-Hesi, T. Hisban, el-Lejjun, Pella (?), T. al-Raqai, T. esh-Shari'a, T. Songor, Umm Qais, T. Zeror
		<i>iron</i>	T. el-Hesi
		<i>bone</i>	T. el-Hesi
		<i>unidentified material</i>	T. Sh. 'Ahmed el-'Areyny, Umm Qais
	hair rings	<i>copper alloy</i>	el-Bawiti
		<i>twisted glass</i>	T. Deir Alla
	headdresses		T. el-Hesi, el-Lejjun, Umm Qais
	toe rings	<i>copper alloy</i>	T. el-Hesi
		<i>iron</i>	T. el-Hesi
Combs			el-Lejjun
Mirrors		<i>copper alloy</i>	T. Songor
		<i>glass</i>	T. Mevorakh
		<i>unidentified material</i>	el-Lejjun
Pins		<i>metal</i>	T. el-Hesi, T. Hisban
Knives		<i>metal</i>	el-Lejjun
Glass vessels		<i>glass</i>	T. el-Hesi (?), T. Hisban, el-Lejjun, T. Sh. 'Ahmed el-'Areyny
Pottery vessels		<i>pottery</i>	T. Dor, Girnavaz, T. el-Hesi
Natural coloured stones		<i>stone</i>	T. Khirbet Salih
Prayer stones		<i>unbaked clay</i>	Bahrain, Tall-e Bakun

Table 1: Material culture represented in excavated medieval and later Islamic graves across the Middle East (from Simpson 1995*a*; additional data from Parker and Dodd *et al.* 2005; Porter 2001; Schmidt 1957; Steiner 1995; Walker 2001)

Despite the popular and archaeological fascination with death, comparatively little research has been carried out on how the archaeological data relate to Islamic belief. This partly reflects the fact that most commentators are non-Muslim but it also reflects strong ethical concerns over how to deal with this subject, particularly during archaeological fieldwork. Agatha Christie offers an early example of this from 1934 as the first test trenches excavated by her husband Max Mallowan at Tell Chagar Bazar in northeast Syria revealed “some intrusive Roman and Islamic burials” (Christie Mallowan 1983: 66). Agatha later admitted that we “always call them Roman to the men to spare any Moslem susceptibilities” (Christie Mallowan 1983: 135–36), but proof of their much later date was provided by the discovery the following year of

“a personal touch nearer our own times – a metal counter, with the name Hans Krauwinkel of Nuremberg, struck in about A.D. 1600, and which lay in an Islamic grave, showing that there was contact between this obscure region and Europe at that time” (Christie Mallowan 1983: 136–37).

This German token belongs to a well-known series used throughout western Europe for the purposes of reckoning on a board (*rechen Pfennig*). After the development of written accountancy in the 16th–17th centuries they were instead mainly used as gaming counters. They are numerous, very varied in type and have been found in a wide number of findspots: for instance, one was found during restoration work in 1951/52 within the timber joints of the front elevation of the Crown Inn at Chiddingfold near Guildford in southern England where it had been presumably left by one of the builders. The present token was struck in Nuremberg by Hans Krauwinckel II, son of Damianus and nephew of Hans I, who entered the family business with his brother Egidius. Following the death of Hans I, Egidius became head of the firm; *jetons* bearing the name Hans II appear two months later, dated 26 November 1586. During his career he struck a wide range of *jetons* and opened retail outlets in France and the Netherlands, but the death of the younger Hans in March 1635 brought to a close the dominance of the family business (Mitchiner 1988: 435). The means by which this token reached northeast Syria are unknown, yet one likely possibility is that it passed into circulation through an Ottoman port such as Tripoli whereupon it passed as a foreign coin.

A great variety of coins circulated in the Ottoman Empire (e.g. Inalcık ed. 1997: 945–85; Székely 2003). From 1477 the Ottoman monetary system was bimetallic as both silver (*akçe* and later *kurus*) and gold (*sultani*) coins were accepted as payment but the situation became increasingly complex as well-established local currency systems were allowed to continue in different parts of the empire. Thus, for example, the *akçe* or *sultani* system prevailed in western and central Anatolia and the Balkans, but European coins were used in the north-western provinces and North Africa, locally minted coins were used in Crimea and Yemen, a different denomination of silver (the *para*) was struck in Egypt, and Ottoman mints in Iraq and eastern Anatolia struck *dirhams* on a similar standard to that of Safavid silver *shahis*. During the 17th and early 18th centuries many of the mints were closed and as the *akçe* was devalued while demand for coin continued to rise, the Ottoman government increasingly relied on American silver, European coin and bills of exchange to balance its deficits. At the close of the first quarter of the 19th century, the English traveller James Silk Buckingham (1830: vol. II, 170–71) refers to payments and exports from Basra including “treasure in various coins from Europe” in return for imported Indian goods.

The wide fluctuation in silver content led to further erosion of confidence in locally minted coins. The situation in Palestine at the turn of the last century was described by the Reverend Wilson (1906: 298) who stated that shortages of local cash were compensated for by “the large amount of foreign money in circulation, especially the twenty-five franc pieces of France, Italy, Austria, Greece, etc., as well as some of the silver currency of those countries”. It also explains a feature of the local markets in southern Iraq which caused the East India Company Baghdad Resident Claudius James Rich to comment that “I have even been offered at Hillah English and Russian copper coins, common European seals of false carnelian, and a head of Frederick the Great in blue glass” (Rich 1839: [4], 181). Much later, during a visit to Yemen in 1937, Freya Stark (1983: 57–58) describes seeing a twelve year old girl wearing jewellery which included “a necklace of perforated gold beads ... with old Greek coins and a British pound among them: a necklace of big round gold beads below; a necklace of amber, a gold necklace rather like an order, with cases for charms and big coins ... the coins specially minted by a philanthropic society for the unemployed in Egypt”. Palestinian womens’ headdresses provide the most spectacular evidence for this recycling as they were typically adorned with gold and silver coins acquired at marriage but were used as a form of portable bank account which served both as a status symbol and a personal resource which could be used or added to when necessary. Two examples in the Pitt Rivers Museum and the British Museum are covered with hundreds of Ottoman silver *paras* dating between the reigns of Ahmad III (1703–1730) and Mahmud II (1808–1839), silver and copper coins from Selim II (1789–1807) to Muhammad V (1909–1918/19), ancient Greek and post-medieval Hungarian, Polish, Danish and Spanish gold coins, two 16th century

German brass reckoning counters and a Romanian two-*lei* piece dated 1924 (Wootton 1959; Weir 1989: 186–87).

Circulation patterns of coins and tokens within the rural landscape of Ottoman Syria are increasingly illustrated by archaeological data. 57 Ottoman period coins and tokens were recovered during excavations of the village of Suba, on the site of the Crusader castle of Belmont near Jerusalem. These included a Victoria penny (struck between 1860–1894), a halfpenny of Edward VII (dated 1907), a 16th or 17th century Nuremberg token which had been “pierced 6 times for use as [an] ear-ring”, a possible Austro-Hungarian coin, three coins of Mustafa III (1757–1774) and Selim III (1789–1807) of Egypt, two fake Maria Theresa dollars, and an Omani coin dated 1327 AH/1909–10 (Metcalf 2000: 82–83). Several Ottoman coins are also reported from excavations at Tel Yoqne’am in northern Israel, including a perforated silver *para* dated to the first year of the reign of Mustafa III. In addition, a perforated Nuremberg token struck by Hans Schultes III (1608–1612) was found within the northwest corner tower of a fortress built by Dahir al-‘Omar, the powerful mid-18th century ruler of Galilee: the excavated context suggests that it was a century and a half old when it was re-used as an item of personal adornment, although three residual or unstratified clay smokers’ pipes suggest there was some form of activity at the site during the 17th or early 18th centuries (Kool 2005; Meshorer 1996: 241; cf. Avissár *et al.* 2005: 83, fig. 4.1:4). Excavations at the village site of Zir’in – biblical Jezreel – produced a Russian coin and three *jetons* as well as 33 identifiable Ottoman coins (Moorhead 1997: 156), while investigations at al-Burj al-Ahmar, on the Sharon plain, produced an anonymous 16th century coin and a five-*para* coin of Egyptian type minted by Muhammad V (1909–1918/19) (Pringle *et al.* 1986: 176). Excavations at Apollonia revealed a concealed hoard containing two gold ducats and a silver coin minted in Venice in the early 15th century, as well as 78 bronze coins minted by Suleiman the Magnificent (1520–1566); some of the bronze coins were pierced presumably wearing and the excavators speculated that the hoard was therefore concealed by a woman (Roll 1992). Excavations on the summit of the citadel at Hama produced a token of the East India Company and two coins of Carol I of Romania (1839–1914) and Shah Husein of Persia (1694–1722) among a small assemblage of 13 17th century and later Ottoman coins and 27 unspecified 19th century coins (Hammershaimb 1969; Thomsen 1969). Further afield, investigations of an Ottoman village at Kaman-Kalehöyük in central Turkey produced a silver coin of the Polish king Sigismund III (1587–1632) and a pierced 17th century European token (Mikami and Omura 1991a: 67, pl. 3; 1991b: 98, pl. 4:3). Within Istanbul, the excavations of the uppermost levels of the Byzantine church of St Polyeuktos at Saraçhane produced 11 Ottoman coins ranging from Beyazid II (1481–1512) to Sultan Resad (1909–1918), an Austrian coin dated 1807, a three-*kopek* Russian coin dated 1899, and two fragmentary Nuremberg tokens (Hendy 1986: 373). Given these various sources, it is clear that some coins and tokens had very long periods of circulation: caution therefore should be paid to the dating of the graves at Tell Chagar Bazar on the basis of one reused token.

Nevertheless, Mallowan’s excavation reports add some further details on these late burials. Two test trenches were excavated during the last week of November 1934, namely on the summit (Trench A) and on the northwest side of the mound (Trench B). Trench A measured 4.5 × 3.5 m. across and was excavated to a depth of 3.5 m.

“At 1.5 m. below the surface six skeletons of the early Islamic period [were found], heads towards Mecca. The bones lay in soft sandy soil, and it seemed that originally the bodies had been buried in pits with mud brick vaulted roofs over them. Sand had trickled through the roofs onto the bodies and eventually the roofs had collapsed onto the skeletons. Owing to the soft sand and the fallen roofs it was difficult to discern the exact position of the bodies but they seem to have been in a sitting or leaning position. One of the bodies had



a parti-coloured Islamic glass bangle on the wrist, and a fragment of a similar glass bangle was also found in this area” (Mallowan 1934: 40).

The presence of multi-coloured glass bangles strongly suggests a Mamluk or later date as earlier examples are almost invariably monochrome (Spaer 1992). The discovery of bangles, whether glass or metal, in graves is part of a wider tradition of interring objects with the deceased (Simpson 1995a: 246, 251). At Tell el-Hesi the discovery of bracelets too large for the children with whom they were found suggests that some of the jewellery may have belonged to mourners rather than the deceased (Toombs 1985: 102–103), but unsurprisingly Western Muslim writers are generally silent on this whole subject (‘Abdul-Hameed 1994; Arefi 1987; Muslim Students’ Association 1977).

However objects are surprisingly common in Mamluk and Ottoman graves excavated across the Middle East and they were found in as many as *c.* 40% of graves in one area at Tell el-Hesi alone. These included coins, European tokens, jewellery and dress accessories (including beads, bells, pendants, finger rings, earrings, hair rings, toe rings, bangles, anklets and headdresses sometimes utilising perforated coins or unperforated metal discs), pins, wooden combs, glass or metal mirrors, knife blades, glass bottles, ceramics and natural coloured stones arranged around the head of the corpse (Eakins 1993; Toombs 1985; cf. Table 1).

The colour of a bead is frequently regarded as more important than the actual material itself - hence the substitution of red or blue glass or plastic for carnelian/agate and lapis lazuli or turquoise. Specific forms and types were also significant: circular or triangular shapes were considered powerful magic, and bells and reflective surfaces were seen as protection against evil influences. It may therefore be significant that triangular pendants, cowrie “Evil Eye crackers”, bells and mirrors all occur in Late Islamic graves. Whereas elaborate ethnographic styles of metal jewellery – let alone gold or silverwork – do not appear cheaper versions made of glass or plastic are more abundant, as are beads of bone, shell or mother-of-pearl. The deliberate substitution of cheap coins sewn onto burial hoods is recorded from the Bethlehem area where more elaborate dowry headdresses were typically worn by the women. These are clearly cases where economic reality influence funerary custom.

It has been suggested that grave-goods may reflect a combination of rapid burial and taboos over further contact with everyday items or personal adornment which were used or worn by the deceased (Walker 2001: 58). In any case it removed them from circulation. However, a tradition of women making close copies of actual jewellery in unbaked clay specifically for interment with their deceased relatives has been recorded from southern Iraq, the explanation being that “the real jewellery, being precious, is not interred with the dead but retained by the family” (Ochsenschlager 1974: 172–73). The 11th century writer al-Ghazali (1989: 74) repeats a story that “the living are in more need of new things than the dead”. Thus in Iran

“when a Shi’ah dies, he is most fortunate if he can have a necklace of clay beads around his neck, a clay ring on the forefinger of his right hand, an armlet of clay on each of his arms, and a little of the dust that is swept from the tomb should be bound in a cloth and gripped in his right hand, and it is well if the sheet, in which the body is wrapped for burial, should have the words of the Koran written upon it with this clay” (Donaldson 1933: 90).

In short the simple presence or absence of objects is highly unreliable in identifying Muslim graves. However, in a few cases we find specific evidence not only for identifying a grave as that of a Muslim but specifically that of a Shi’a, as pilgrims who have journeyed to Kerbela or Mashhad may be buried with clay “prayer stones” made in those cities. Examples of such finds in graves have been noted not only in Bahrain (Porter 2001: 202–203), but also at Tal-e Bakun in southern Iran where an 8th

century coin was found together with a 14th century clay disc “prayer stone” with a Qur’anic inscription (Schmidt 1957: 118: n. 10, 120: n. 17).<sup>1</sup>

Further late burials were encountered in Mallowan’s Trench TD which was excavated on the summit of the mound at Chagar Bazar. In this area the bodies were found interred to a depth of some 1.50 m. below the mound surface (Mallowan 1936: 6, fig. 29).<sup>2</sup> The depth of the graves in both areas suggests that they may have belonged to adult female burials as women are traditionally buried deeper than men across the Muslim world, the reason being a popular belief that the grave should shield the breasts and genitalia of the deceased when they rise after death (Simpson 1995a: 242).<sup>3</sup> The types of grave construction are not particularly remarkable yet they closely resemble burial traditions of similar date from Iraq. Excavations at the Eski Mosul (formerly Saddam) Dam Salvage Project site of Tell Abu Dhahir, situated on the Tigris some 85 kilometres northwest of Mosul, revealed a sequence of four different types of post-medieval grave. These consisted of simple earth-cut vertical shafts, shafts with undercut side-chambers blocked with a row of slanting stone slabs or mudbricks, cists lined and roofed with stone slabs, and cists constructed of mudbricks (Simpson 2007).

Isolated countryside cemeteries of these very late periods are usually attributed in the archaeological literature to bedouin. However, the concept of a “natural” place of rest is consistent with the strong Muslim tradition of symbolising paradise by the planting or depiction of plants at the graveside. In Istanbul, the vast extramural cemeteries of Pera and Eyup were instrumental in inspiring cemetery reforms in Europe (Johnson 2002), and in many other cases these cemeteries certainly belong to sedentary communities reusing deserted mounds as a convenient place of burial. Examples of this practice have been observed by the author in northern Iraq and Turkey, and also noted at Tell Yelkhi and Aiuni al-Kheshalat in the Hamrin basin of Iraq (Fiorina 1985: 74). These contrast with other cases in the Hamrin where old tells were avoided as places of burial “owing to a local belief that the tell was haunted” (Jasim 1985: vol. I, 16). Although Mallowan (1936: 6) reported “traces of Hellenistic, Roman and Islamic occupation” in trial trenches excavated some sixty metres from the base of the mound, the later date of the burials that he found in Areas A and TD suggests that these belonged to a precursor of the small village which existed on the edge of the mound at the time of his own excavations. Furthermore, the use of bricks in the grave construction supports the idea that these were associated with a sedentary rather than pastoralist community.

The visitation of graves was initially forbidden by the Prophet but soon rescinded. Al-Ghazali (1989: 111) states: “Pay visits to your dead, and give them your salutations, for in them there lies a lesson for you”, but kissing, rubbing or touching the tomb is strictly forbidden and regarded by some early Muslim authors as a Christian practice (e.g. al-Ghazali 1989: 114). The period of mourning is characterised by the wearing of dark, dull-coloured or old clothing and abstinence of favourite items such as sweets, reading, television, radio or sex (O’Shea 1999: 174–75).

“May a thunderous incontinent cloud drench the earth of your grave with a downpour of

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1 This reference presumably refers to the interment of an individual with an unfired clay “prayer-stone” of the type commonly used by Shi’a pilgrims to the shrines of Karbala, Najaf and Mashhad. A number of burials excavated in Bahrain at the Qala’at al-Bahrain and apparently at Umm al-Hassam were accompanied by such inscriptions (Porter 2001: 202–203; cf. also Simpson 1995a: 246–47) and the practice has been discussed at greater length by Frembgen (1988). In Israel the excavators of Tell Mevorakh found a perforated silver Crusader coin attributed to Amaury I, king of Jerusalem (r. 1162–1174) in one grave, whereas other burials in the same cemetery were interred within 18th century or later Gaza-ware jars (Simpson 1995a: 247: n. 142, 250). Finally, a grave excavated at Tell Razuk in the Hamrin basin of east-central Iraq contained a perforated Ottoman coin minted in 1325 AH/1907–1908 but the addition of four small plastic bracelets implies a date of at least fifty years later (Simpson 1995a: 247: n. 141, 251).

2 Associated grave-goods appear to have been absent in Trench TD although Mallowan attempted to distinguish between “a few burials of the Roman period” and “numerous Islamic burials”, one of which contained the token described above.

3 According to a press report in *The Independent* an Iranian woman aged 35 has been buried up to her armpits in a Tehran jail and stoned to death for acting in obscene films. While men are buried up to their waists for the punishment, women go deeper to stop the stones hitting their breasts. Escapees are allowed to go free”.

clarified fat;

And may your tomb be enlarged with a fully loaded hamper, brought by the hands of servants;

And may geese and rice be your friendly companions, protected from dirt and dust”

(Abu ‘Abd Allah al-Bunani = van Gelder 2000: 86).

This 9th century poem satirises the life and death of a glutton and is part of a very extensive Early Islamic food literature which ranges from cookery books to moralistic views on the effects of over-indulgence. Food is listed alongside sex as the two things without which life is not worth living, and its importance extends after death. It is not difficult to see comparisons with much earlier practices and there is a strong thread of popular belief throughout the Middle East which involves consuming special meals or taking food to the grave-side within a set cycle of days. Bread, figs, dried fruit, water, clothes and even financial offerings were offered as an act of charity on behalf of the soul of the dead, and special care was taken in some cases to take the favourite food of the deceased. In Afghanistan, salt is still taken to the graves of saints and martyrs, including those of Taliban fighters buried in Kandahar where it is later collected and consumed as a folk remedy for polio and other ailments (Fisk 2002). “Bedouin” graves in the Amman area were covered in “numerous propitiatory offerings and tokens in memory of the tenants of the graves” (Buckingham 1825: 122–23); specially baked bread offerings and water libations were offered at bedouin graves, a practice which still continues in Jordan (Musil 1928: 671–72; Lancaster and Lancaster 1993: 153–54). One 19th century author records that some Palestinian gravestones had scooped-out tops in order to collect rainwater for the departed souls who were said to be parched from the bitterness of death, and water pitchers were occasionally left beside the grave (Baldensperger 1893: 217).

The offering of gifts is closely tied to deep-seated human fears of “the other”. Burials excavated at Tell el-Hesi included that of a young woman who had been decapitated, possibly as a punishment for suspected adultery. At least one other individual at that site may have been buried alive, and the earliest instance of an alleged vampire within the Islamic world comes from the late-18th or early-19th century Ottoman cemetery at Mytilene where an isolated skeleton was found to have been secured with 20 cm. nails driven through its neck, pelvis and ankles (Taylor 2003: 247). Superstitions over haunted cemeteries are certainly well recorded among bedouin communities who regard these as “dwelling places for the souls of the dead” who begin to scream as soon as the burial party leave the grave-side, but as only camels can hear their cries, they plug their animals’ ears (Walker 2001: 57).

## **2. Pastoralism or sedentism? The case of Qara Dere in northern Iraq**

“The name of all this tract of land, over which we had passed today [between Mardin and Mosul], was Belled Chittea; but, after all my inquiries, I could learn no particular name for any of the villages which we had seen. Each of them, indeed, was small, and being inhabited only during the corn-harvest, was formed of as many tents as fixed dwellings. Though the people thus live in tents, in huts, and in houses, and the Arabic language has particular names for each of these kinds of dwelling, these distinctions are unknown here. In distinguishing the particular class of habitations, of which a settlement is formed, the Arabs call them, Beeoot Hadjar, Beeoot Khashab, and Beeoot Shahr; that is, houses of stone, houses of wood and reeds, and houses of hair: the tents of the true Bedouin Arabs being invariably made of dark hair-cloth, woven from the produce of their flocks in the camps.” (Buckingham 1827: 260)

This 19th century European traveller's record illustrates some of the challenges faced in the identification of and distinction between settlements occupied on a seasonal basis by different ethnic groups. These problems are compounded by the passage of time and uncertainty over the definition and dating of associated material culture. Furthermore, the archaeological identification of non-sedentarised populations is notoriously difficult. In the case of Luristan, Mortensen (1983: 27) observed that one method of tracking seasonal camp-sites was through the careful mapping of cemeteries, whereas the discovery of an intrusive blobbed green glass bangle fragment at the site of Tepe Farukhabad in southwest Iran led the excavator to comment that "Such artifacts are characteristic of recent nomad camps" (Wright ed. 1981: 160). However, as the previous section demonstrates, many excavators have been too quick in their assumption that graves or other remains belong to a transient rather than sedentary population. A different case-study in the possible distinction of these groups is offered below, based on the site of Qara Dere.

This site was located in northern Iraq at the head of a small narrow sheltered valley which once drained northwards into the river Tigris but is now submerged within the reservoir formed by the Eski Mosul (formerly Saddam) Dam. The evocative site name translates as "Black Valley", which at first glance is a somewhat surprising term as there are no local black rock outcrops or asphalt seeps which might have given rise to it. One possible explanation for this toponym is an emotional association with an event or tragedy.<sup>4</sup> Another is that its origin instead stems from human activity in recent centuries, specifically from the seasonal use of black tents erected over stone footings.

Qara Dere lay within the sector of this dam which was investigated by the British Archaeological Expedition to Iraq [BAEI] from 1982 to 1985, and under the overall direction of Dr M. Roaf. The most striking feature of the site was a series of low drystone walls forming a group of rectangular structures clustered at the head of the valley. Sketch plans and kite photographs suggested the existence of some fifteen different structures arranged in clusters, with several structures built end-to-end as mini-chains. Most were arranged parallel with the sides of the valley but at least one was constructed at right angles to connect with the structures on either side. Prior to excavation there were no indications as to the point of entry. These structures were originally slightly higher but they had been reduced through systematic re-use of the stone for construction, hence the drystone cairns dotted across the site. The date of these structures was unclear at first. The site was recorded as Late Assyrian on a map of archaeological sites compiled by the Iraqi State Organization of Antiquities and Heritage, and distributed to participants in the rescue project. During 1982/83 a limited surface collection was made at the site in an attempt to throw further light on its date. The material consisted of coarse handmade pottery and wheel-thrown plainwares with minimal comb-incised decoration. The single most diagnostic sherds were decorated with impressed figural or geometric stamps and recognised as being 6th or 7th century late Sasanian in date on the basis of general published parallels from Nineveh. The published preliminary report highlighted the first discovery of Sasanian-period remains within the Project although it was acknowledged that excavation was required to establish the connection between the pottery and the structures (Roaf 1983: 79–81, fig. 9). During the course of 1984/85 a number of additional pottery diagnostics were collected at the site by the author, which confirmed a substantial late Islamic horizon. However, these collections were neither systematic nor intensive, and the absence of certain types may be fortuitous.

In 1985 the opportunity arose to conduct limited excavations at the site before it was submerged. These proved that the main clusters of structures visible on the surface are considerably later in date than previously suspected, and the few associated finds indicate a late Islamic date. The results of these and other investigations are being prepared for final publication but in the meantime the following notes offer a rare excavated case for a pastoralist community of this period in Iraq (Simpson

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4 I am grateful to Ms Gonul Bozoglu for this suggestion.



forthcoming *a*).

Two adjacent structures were completely cleared of vegetation and form the basis for interpretation of the architecture. The walls were constructed of drystone rubble masonry. The rooms contained crude built installations in the corners and a clean trampled earth floor, perhaps originally covered with mats or rugs. There were no traces of plaster, mudbrick or *tauf*, either *in situ* or collapsed, which suggests that perishable or removable materials had been used for the superstructure. This implies that these buildings were seasonally occupied shelters rather than permanent dwellings. The later removal of stones for construction prevented any attempt to calculate original wall height based on extrapolation from the collapse.

The size and plan of these two structures resembles that of the larger number of unexcavated structures. The construction of standard-sized dwellings suggests a degree of egalitarianism. Ethnographic comparisons have been used in other studies to suggest a standard of 10 m<sup>2</sup> of roofed dwelling space per person (Naroll 1962; Kramer 1979; 1982: 5, 196). Similar structures, either single or arranged in similar “chains” and dating as early as the 4th millennium BC, have been found from the Golan to western Iran, and independently interpreted as the remains of transhumant settlement (Epstein 1998; Hole 1987: 44; 2004: 78–82). This form of architectural organisation is paralleled by tented encampments and villages where it can be demonstrated that contiguous units belong to members of a single extended family (e.g. Watson 1966: 11). Paired structures built end-to-end in the Golan were interpreted as “twin houses” belonging either to a father and son, or to two brothers (Epstein 1998: 7).

Traces of other seasonally occupied structures of this type have been recognised at a number of sites in the Eski Mosul Dam Salvage Project area. These include Khirbet Wadi Khatkhun, Khirbet Khatuniyeh (Curtis and Green 1997: 12–13, fig. 4, pl. III), Sehmuhla (Curtis and Green 1997: 13), Museifna (Nejim Abbu 1987), Tell Amran and Khirbet Jem Laklak (Ball, Simpson and Tucker 2003: 171, 175). Those at Khirbet Jem Laklak were one or two-room structures with a single separate entrance into each room; they were constructed of unshaped stones, usually one course wide and up to nine courses high in the centre where the wall originally supported a gabled roof. Associated finds were very scarce at all of these sites but all were attributed a late Islamic date, and the excavators of Museifna proposed that they belonged to the 18th century or later on the basis of associated smokers’ pipes. At Khatuniyeh, as at Qara Dere, it was observed that there was little sedimentation around the excavated remains, which consisted of two rectangular buildings measuring 8.5 and 20.5 m. in length and between 3–6 m. across. Internal features at that site included low partition walls and a bread oven, implying that these were not simply animal enclosures. Unconfirmed local reports stated that these particular structures belonged to a semi-nomadic family who had since moved to the Sinjar district, and at Sehmuhla they appear to have been used during spring.

However, close parallels for this style of pastoralist architecture can be found in highland Iraq (Solecki 1981: pl. III), and across western, southern and northeastern Iran where so-called “boulder-built villages” have been noted on archaeological surveys or noted by ethnographers since the 1930s (Schmidt 1940: 85, pls. 109, 116–17; Meldgaard, Mortensen and Thrane 1963: 107–108; Edelberg 1966/67; Demant Mortensen 1993: 86, 103–13, 118). These sites are particularly well documented from Luristan, where the winter dwellings or *zengas* were the most substantial. The lower parts of these structures were usually semi-subterranean and constructed with solid low stone walls, often no more than a metre or so in height, but occasionally higher on one side “where they serve as passive solar collectors to provide radiant heat during the night” (Edelberg 1966/67: 395, fig. 18; Hole 2004: 77). The upper parts of the residential structures were made of mud and bent branches, usually roofed with a thickly plastered, thatched and gabled construction of rafters laid at right angles to the ridge poles, which were supported by vertical posts with forked ends and either supported on flat stones or placed directly on the ground, rather than being set within post-holes (Jaunay 1997: 314).

Occasionally these structures were covered with a combination of pitched roofs and a black tent stretched over the central portion (Edelberg 1966/67: 382–83). These settlements were occupied by semi-nomadic transhumant pastoralists during the cold winter months, for instance from November to April in Luristan, and were typically situated in sheltered positions near the foot of the mountains. The deliberate part-sunken construction was a response to the cold weather and was designed to maximise insulation. The same feature has been noted among houses belonging to a 16th–17th century Ottoman village excavated on the summit of the high mound of Kaman-Kalehöyük on the central Anatolian plateau (Mikami and Omura 1991*b*: 89–90, figs 2–4), as well as in the Ottoman village excavated at Alişar höyük (von der Osten 1937: 193–98, fig. 217).

In western Iran during the spring (April/May) and autumn (October), the occupants shifted their flocks to new grazing grounds and occupied similar structures called *siah chador* which were entirely covered with black tent fabric, whereas during the summer months of May to September the flocks were moved to higher pastures. During the latter season the inhabitants occupied flimsier tent-covered structures or so-called *kula* where the walls consisted of four rows of parallel posts supporting walls made of matting (Edelberg 1966/67: 384–86). During these warmer months the winter structures were deliberately left open, probably to facilitate ventilation and fumigation prior to re-occupation in November.

The length, width and interior plans of these different seasonal dwellings were virtually indistinguishable, the crucial detail being that the colder the season the more substantial the architecture was required to withstand it (Feilberg 1952: 46–58; Edelberg 1966/67). Owing to the inclement weather, cooking was usually executed in ovens or hearths built within these structures whereas the norm during warmer months was to cook in the open air and reserve an interior hearth for making tea (Beck 1991: 121; Allgrove *et al.* 1976: 27). The dividing cross-wall observed in some of the structures at Qara Dere may reflect a division of the interior into male and female quarters, the former being reserved for the entertainment of guests and the latter for domestic activities (cf. Allgrove *et al.* 1976: 25–26). Animal enclosures appear generally to have been left open at the top, although thorny barricades were erected along the tops of drystone walls to form an obstacle to wolves and other predators (Feilberg 1952: 46–47; Edelberg 1966/67; Beck 1991: 79, 121, 129, figs. 15, 23; Demant Mortensen 1993: 103–13, 118; Horne 1993: 46–47). By contrast, in the Zagros region between Tabriz and Sulimaniya:

“the [Kurdish] villages are all built in the same style; of large unhewn stones, which have no binding whatever. They consist of two rooms only, having the floor and walls plastered with mud, and a roof / formed by cross beams of wood, covered with reeds, and over all, a thick layer of mud, mixed up with chopped straw. They are generally seated either upon the declivity of a mountain, or on the sloping sides of lesser hills and heights, whose summits are frequently crowned by a fortress, the paths leading to which not being discernible; indeed, their houses are, for the most part, concealed with great care and mystery. As they are buried in thickets, folded in the windings of a glen, scattered on the brow of a ravine, or the brink of a precipice, a stranger may travel through much of this romantic wilderness without discovering any traces of them.” (Mignan 1839: vol. I, 276–77)

These temporary settlements therefore tended to be deliberately sited in protected locations such as ravines and valleys, both as protection against the prevailing wind and to reduce their visibility to potential raiders. They also tended to be widely spaced in order to enhance grazing and fuel collection opportunities (Barth 1980: 25; Beck 1991: 78–79, fig. 15). A similar seasonal settlement pattern appears to have been widespread throughout northern Iraq during at least the 19th century judging by travellers’ accounts. Layard (1849: vol. I, 152) describes seeing Kurdish “villages

scattered on the declivities” of the valleys above Sheikh Adi in August 1846 “but their inhabitants had deserted them for rude huts, built of branches of trees, their summer habitations”. A similar observation was made a few years earlier by James Silk Buckingham (1827: 253, 259) in connection with his march from Mardin to Mosul one summer:

“The few houses seen were in shape like the long barns of English farm-yards, thatched with sloping roofs of straw. The people, who were all Koords, lived chiefly, however, in tents; so that these buildings were mostly uninhabited, and kept probably for storehouses of grain ... In the course of this march we saw many villages, both on our right and left, and went through five similar ones in the direct route, all of them small, and composed of pent-roofed dwellings of the long form before described. The people appeared generally to live in tents; and these long barns, as far as we could perceive, were more frequently used as places of shelter for cattle at night, than as the habitations of families.”

“Black tent” villages were scattered throughout the Jebel Sinjar area during a visit in September/October 1838 by one Dr F. Forbes (1839: 419); in eastern Azerbaijan traditional sunken structures were known as “Karadam” because of their dark roofs.

These observations are pertinent because there has been a tendency in some quarters to view the apparent absence of Ottoman settlements as evidence for a depopulated landscape. However, as these records demonstrate, it is crucial not only to note the season of original observation before making conclusions about the presence or absence of people in the landscape, but also to consider the relative position of roads used by travellers compared to the sheltered locations favoured by most pastoralists.

Anthropological studies in western Iran indicate that pastoral groups tend to divide into smaller herding units in order to weather more effectively the effects of the lean winter season: a Basseri winter herding unit typically only numbered between two and five tents (Barth 1980: 25), and Hole (2004: 73) observed that four or five tents were typical in Luristan. However, during the warmer months camps of up to twenty tents were common. The linear organisation of temporary and seasonal campsites appears to closely reflect the slope of the terrain with a conscious desire to maintain privacy by deliberately positioning entrances to face in different directions. Maintaining privacy may be significant in that generally each tent household is an independent domestic and economic unit (Barth 1980: 11).

As in the case of Qara Dere, associated finds at these sites appear to have been scarce or absent, yet a similarly late date is probable. Sadly, it remains uncertain as to precisely who the original inhabitants were, what their relationship was with fully settled Arab and Yezidi villages along this portion of river-valley, and why or exactly when they became abandoned. However, the available ethnoarchaeological data suggest that the late structures at Qara Dere were utilised as winter shelters for a pastoralist community.

The relative scarcity of surviving material culture at Qara Dere is worth comment as it is the author’s impression that sites of this type are poorer in terms of surviving material culture (pottery, clay pipes, beads, etc.) than other settlement types of this period in the region. The most likely explanation for this apparent contrast is a difference in patterns of consumption rather than refuse disposal. Ethnographic reports and travellers’ descriptions of pastoralist communities in northern Iraq and western Iran suggest that pottery vessels were rarely employed, the occasional exceptions being “a small ceramic stew pot with perforated loop handles” (Watson 1979: 263, 267, fig. 10:4), money-boxes or easily transportable narrow jars with handles (Demant Mortensen 1993: 242, 275). Layard (1849: vol. I, 96) describes how “the usual Arab meal” was instead served on “large wooden bowls and platters filled with boiled fragments of mutton swimming in melted butter, and sour milk”.

The material culture used by Kurdish winter-season inhabitants of Shanidar Cave therefore was probably typical of Qara Dere:

“They had locally made pottery jars of the type whose remains littered the route to the spring above the cave. They also resembled the pottery which we found in the upper layers in our excavations. The most conspicuous items in the cave were the big open copper pots (which were carried on the move either by the women or girls big enough to handle them), a circular convex piece of sheet metal used for baking the unleavened bread over an open fire, and storage boxes. Other kitchen items included the ever-present tea kettles (one for water, and one for the tea brew), cutting knives, metal (lately of aluminium and plastic) bowls, wooden and metal spoons and the tea things. Indicative of the care with which the drinking utensils are conserved is the fact that the tea-drinking materials were kept carefully protected when not used. Fire was made using flints and iron strike-a-light bars, although cigarette lighters were appearing on the market and one or two were owned by the men. Making up the rest of the inventory were the axes and brush cutters and sickles, plus some ropes made of woven animal hair, and the goatskin bags. These and the blankets and bedding made up the essential catalogue for a tidy home, which could be transported at a moment’s notice.” (Solecki 1979: 323)

A similar picture emerges from descriptions of typical Qashqa’i, Shirdashti or Lur family equipment. These consisted of several tinned copper cooking pots and large copper serving dishes, a frying pan, small metal or wooden mixing bowls, iron cooking trays and a copper or iron baking griddle, iron and wooden tripods, a wooden pestle and mortar, a tin flour-sieve, woven trays for gathering, draining and serving food, and a wooden bread board; brass serving trays, aluminium plates, brass and plastic water jugs; a samovar, a copper jug or (more recently) tin kettle, a china teapot and glasses; water and yoghurt skins; lidded baskets; a tin chest for tea, tobacco and cigarettes; and assorted bags of various sizes for herbs, spices, salt, rice, grain, other dry foodstuffs, clothing and bedding (Allgrove *et al.* 1976: 27, 30–31; Watson 1979: 263; Demant Mortensen 1993: 243–75). A similar range of items – again primarily metal and wood – were used by contemporary villagers in western Iran, the principal difference being the use of large clay chests rather than bags for storage (Watson 1979: 161–64), although even these are attested from *zemgas* in Luristan (cf. Demant Mortensen 1993: 107, fig. 6:40).

However, the absence or rarity of pottery need not necessarily reflect total abandonment. There are many well-documented cases of the re-use of ruins in Jordan and Palestine during the Ottoman period where datable material culture is either totally absent or, as discussed below, limited to a small number of broken clay pipe bowls. In some cases these reflect seasonal occupation by bedouin whose material culture is largely organic and thus largely “invisible” in the archaeological record in the Middle East where it really survive. In other instances, however, the presence of installations indicates that the settlement was more permanent. Yet, even in those cases, the villagers appear not to have used much pottery. The English traveller James Silk Buckingham (1786–1855) commented on this following his journey through the Hauran in 1816, and concluded that it was the result of inadequate clay resources:

“Even at the present day, indeed, the want of this is so general that there are no potters or potteries in the country, and scarcely a vessel of earthenware is anywhere to be seen. The large jars used in their houses for containing corn and other provisions are made of mud and chopped straw, simply dried in the sun; their small drinking cups for coffee are of chinaware brought from Damascus; their cooking utensils are all of iron or copper tinned



on the inside; and water, wherever we had yet had occasion to ask for it, was handed to us in round wooden vessels, about the size of an English gallon, such as is used in measuring corn, about the same size, shape, and material, and not round like a bowl; in every part of Syria and Egypt, however, the jars and water-pots are of red and yellow pottery of burnt clay.” (Buckingham 1825: 185–86)

Buckingham was partly right, yet there was one village at the foot of Mount Hermon in the southern Beqa’a which apparently supplied the needs of the entire Hauran and Golan regions. This was visited only six years previously by John Lewis Burckhardt (1784–1817). Known as Rashaiyah al-Fukhar, it consisted of about a hundred houses, a quarter occupied by Greeks and the remainder by Turks. According to Burckhardt (1822: 36):

“The inhabitants live by the manufacture of earthen pots, which they sell to the distance of four or five days journey around, especially in the Haouran and Djolan; they mould them in very elegant shapes, and paint them with a red-earth: almost every house has its pottery, and the ovens in which the pots are baked are common to all.”

The earthy pigment presumably refers to common red ochre, the large-scale extraction of which is recorded in early modern times from across the Middle East. Matson (1974: 345–46) re-visited the village in 1955 and 1964, and mentions that the clay was refined through soaking in pits dug into the hill-slope, and a multiple brush was used to decorate the finished wares. Within Palestine, the tradition of making handmade painted pottery was documented among female householders at Ramallah as late as 1914, but it was already in rapid decline owing to a combination of factors: large-scale well-digging reduced the need for transporting spring water in jars, empty petroleum cans were effectively recycled and the dramatic increase in long-distance trade ensured the ready availability of cheap container glass (Einsler 1914).

### **3. Pottery: some observations on production and circulation in the Ottoman Empire**

“It is extraordinary that such a widespread change in material culture has not attracted the attention of Islamic archaeologists, and it is perhaps time that they turned their attention away from the luxury glazed wares which comprise less than 5% of the ceramic repertoire, towards the vast uncharted seas of everyday wares.” (Johns 1998: 84)

Iznik style glazed pottery and tiles are one of the defining features of Ottoman art and design, and therefore justly feature prominently in general books, exhibition catalogues and museum displays of Islamic art. The apogee of production in the 16th century corresponds to a technical peak and consumption by the elite, but as court patronage dropped the potters are believed to have turned to mass production for a wider market. Nevertheless, according to Evliya Çelebi there were still some 300 potteries in Iznik in the 17th century, a large number and variety of kilns have been excavated there since systematic archaeological investigations commenced in 1964, and similar wares were also made in the nearby town of Kütahya (Aslanapa, Yetkin and Altun 1989; Findik 2001). By the late 17th and early 18th centuries, glazed ceramic production in Anatolia had reverted to Çanakkale and Kütahya, although views differ on the quality and appeal of these later products: Lane (1939) condemned the latter as “the poor man’s substitute for the fine porcelain figures that had by then gone out of fashion in polite society”, whereas “Çanakkale wares” were “true peasant art”. A strongly contrasting view was expressed by Casson (1938: 472–73): “Bad glaze, usually of the ‘marbled’

type common in the decadent Byzantine age badly applied, hopeless form and faulty firing combine to produce what are complete atrocities ... Simple Turkish peasants save up for years to adorn their mantlepieces with these strange abortions. At Canak-kalé the art of the ceramist can be said to be seen dying in the extreme agonies of technical collapse.”

Unlike Iznik and Kütahya, Çanakkale (literally “Pottery Fort”) did not manufacture tiles but instead concentrated on a range of everyday pottery and exotic tablewares partly aimed at export whereas others were sold to early tourists in search of Troy and the best-selling product today depicts a soldier in memory of Gallipolli (Tekkök 2004). The scale of Çanakkale’s exports during the 19th century is illustrated by the following figures, although massive fluctuation is evident as Cyprus and Greece were added to compensate for the dual loss of lucrative Egyptian and Rumanian markets the previous year (Table 2).

Destination	Value of annual exports
Turkey	6042 French francs
Cyprus	5231 French francs
Greece	2492 French francs
Rumania	25 French francs

Table 2: Destination and value of annual pottery exports from Çanakkale in 1890 (from Cuinet 1892: vol. III, 726–27)

“Çanakkale wares” have been characterised as “a vernacular pottery reflecting the spontaneous creativity of folk art in a diverse range of dishes, jars and vases of clumsy craftsmanship made of red clay” (Oney 2002). During the late 17th and 18th centuries, deep dishes with broad rims, measuring 22–23 cm. across, were typical and decorated with free brush strokes in brown, dark purple, blue and orange on a white slip beneath a transparent, yellow or brown lead glaze, with abstract dot and line designs, floral compositions, naive fish, bird or animal motifs or renderings of mosques and boats. These were supplemented in the 19th century by a wider range of forms painted in red, green, yellow, white and gold over dark yellow, brown or dark green glazes. These new types not only included deep or covered dishes, and dishes for fruit or sweetmeats, but also ewers with braided handles sometimes terminating in birds’ heads, jugs, flasks, jars, braziers, candle-sticks, lamps in the form of ships, baroque aquamaniles, vases decorated in barbotine with lizards, frogs, snakes, lions, camels, horses or human figures in low relief, and even horse-shaped vessels inspired by the Homeric stories of Troy. This pottery is referred to by Olivier (1801: vol. II, 28) as being mainly exported to Istanbul during the time of his visit in the 1790s but was also distributed as far as Egypt and Tunisia, and pieces have been found in Greece, Crete and the Aegean (Vroom 2003: 180–82). According to Cuinet (1892: vol. III, 725), this industry declined steadily after the 1860s yet thirty years later it still possessed twelve workshops with their own kilns, using local plastic clays, and each employing six people, including a foreman, two potters (who were paid the top rate), one person to prepare the clay, and two labourers (Table 3). More recently, kaolin-rich clays from Eceabat on the opposite side of the Dardanelles are used for the thrown pots, whereas stiff clays trucked in from Kınık near

Position	Daily salary
Potter	15 piastres
Foreman	14 piastres
Preparer of clay	10 piastres
Labourer	5 piastres

Table 3: Daily salaries of pottery workshop employees at Çanakkale in 1890 (from Cuinet 1892: vol. III, 726)

Bilecik and some 450 kilometres distant are preferred for making slabbed containers (Tekkök 2004).

Beyond these industries, very little attention has yet been paid to the range of other glazed, painted, plain or cooking wares circulating within the Ottoman empire. Many of these are usually assumed to be locally made, yet ethnoarchaeological evidence from Turkey and elsewhere points to a more complex pattern of different modes of production with circulation changing according to local socio-economic circumstances. In some cases pots were made by householders, either for their own personal use (Bakır 2004) or for exchange for cereals and other agricultural foodstuffs in the local markets (Ertuğ 2004; Güner 1988: 36). In recent years, wholesale purchases for cash have been documented with middlemen using trucks to transport the pots to more distant cities and temporary markets and fairs. The latter in particular may have a very long history and Faroqhi (1978) has drawn attention to different types of fairs operating in the Balkans during the Ottoman period (cf. also Vroom 2003: 256–57). During the 1980s in Erzurum Glassie (1993: 306–307) observed

“saddles from Tokat and Maras, carved wooden spoons from Konya, and a shop filled with the same happily splashed, colored earthenware I had found at Misir Carsisi in Istanbul. Dogan Cakmur said he ordered it from Bursa and thinks it was made in Bursa and Inegöl. The big unglazed jugs he sells were made in Bursa, while the flowerpots and water pitchers dripping with color were made between Inegöl and Bilecik in the mountain village of Kınık, and the many examples I found in Erzurum, some of them old, told me that trade across the length of Anatolia in fragile pottery preceded the smooth highways and big trucks of the present.”

Following a visit to Kütahya in 1669/70, Evliya Çelebi refers to bowls and plates being made by non-Muslim potters for a market wider than the town itself, and the occurrence of tiles in the Church of St. Lazarro in Venice and other Armenian churches in Cairo and Jerusalem confirm production for orders from distant Ottoman provinces and beyond. The possible existence of imitations also should not be excluded. Lane (1939: 237, no. xii: left) illustrates a covered jar of Kütahya ware type with the inscription “Sivas”, and just as the term Iznik “falsely homogenizes the ware, implying answers to unanswered questions and incidentally consolidating power in the court rather than the atelier” (Glassie 1993: 897), there is a suspiciously diverse range of wares currently described as “Çanakkale ware”:

“The attribution of all earthenware decorated with colored slips or glazes to Çanakkale is like the attribution of all the orderly red carpets of northwestern Anatolia to Bergama. Works from different places are assembled visually into a single category, named for a city. Even without the kind of field research that would provide questions of provenience with valid answers, increased information and more careful formal consideration will divide “Bergama” carpets into those made near Bergama and those made near Ezine, and before I went into the region, the colorful earthenware from northwestern Anatolia had been subdivided into two kinds: Çanakkale and Kınık.” (Glassie 1993: 411)

There is also evidence for wide-scale import of European tablewares into the Ottoman empire during the 18th and 19th centuries. These not only illustrate the growing influence of Western fashion over earlier preferences for Chinese or local Iznik and Kütahya wares, but also how specialised types of tableware came to replace earlier multi-functional forms. Large lidded plates, dessert bowls, coffee cups and ewers used to serve a Ramadan dessert known as *aşure* were produced for export by the porcelain factories of Meissen and Vienna from the mid-18th century onwards, other export wares were produced at Vincennes (Sèvres), and white porcelain Dresden ware plates and bowls

for serving fish, soup, salad and breakfast are among new acquisitions listed in a palace inventory for 1854 (Samancı 2003: 180, table 3). The court was one major consumer of these Western goods, and other inventories detail the growing popularity during the early 19th century of Dresden wares (tellingly referred to as *Saksonya*) and French porcelain (the equally appropriately termed *Fransizkâri* or *Pariskâri*), not just for own use but also as Ramadan gifts, as 40 large gilded bowls (*Saksonya altun kebir kase*), 25 smaller bowls of the same style (*Saksonya altun sagir kase*), and 5 bowls for mastic (*Pariskâri sakiz kases*) are listed as presents to high-ranking officials in 1825 (Samancı 2003: 179). These presents illustrate the trickle-down effect of court fashion into the private home. Imported European glassware and tableware recur in as many as 30% of private Turkish inheritance registers dated between 1705 and 1809 (Göçek 1996: 40, 103). These imports were not limited to Istanbul however: following his stay in Cairo between 1833 and 1835, Lane (1890: 289) refers to the import of “coffee-cups and various kinds of earthenware and glass (mostly from Germany)” into Egypt, and Cuinet (1896: 622) lists everyday pottery from France and other countries amounting to the equivalent of 2,000 and 12,000 francs respectively among the goods imported through the port of Jaffa in the 1880s. Yet earlier European imports into Palestine are indicated by the discovery of 16th–17th century North Italian glazed ware bowls with armorial, floral or marbled decoration during excavations of the Church of the Annunciation in Nazareth (Bagatti 1984: 187–92, fig. 69, pls 79–81) and other sites (for references cf. Vroom 2003: 171).

Within most towns and cities there appear to have been specialist pottery workshops, although the organisation and products remain little studied other than those of Gaza (Gatt 1885). Nevertheless, data collected by Cuinet (1892/94; 1896) offer some interesting insights (Table 4). There is a surprising absence of references here to pottery manufacture in some towns known to have had important industries in the decades before or after, notably Jerusalem, Baghdad and Mosul (see below). Nevertheless, these comments underline the significance of regional urban centres such as Aleppo, Diyarbakır, Erzurum, Eskişehir, Marash, Mush and Van, in addition to the well-known industries at Çanakkale and Kütahya (Table 5). Furthermore, they indicate the existence of important rural workshop traditions, for instance in the Ankara, Bitlis and Syrian vilayets, and high levels of demand for what are often implied or explicitly stated to be utilitarian wares.

Other travellers offer occasional passing reference to these and other industries: Buckingham (1825: 557) refers to “coarse pottery” produced at Antakya in the 1820s, and Warren’s (1876: 491–92, 496) list of trades in Jerusalem in ca 1869 gives a total of five workshops and eleven shops, all run by Muslims, with some additional details given on the sources, supply and treatment of the clays and how it was thrown and fired. In his description of traditional practices, another writer contrasted the domestic manufacture in some villages of “the huge jars which contain the supply of water for the household” with the wheel-thrown pottery workshops of Gaza, and stated that the latter were transported “in network sacks made of a coarse tough grass, and sent on camels and donkeys to all parts of Palestine” (Wilson 1906: 251–52). Following a visit to Beirut in 1797, another traveller recorded that “They also fabricate a kind of jars and jugs in earthen ware, which, from the peculiar nature of the clay in the adjacent country, are highly esteemed and carried to all parts of the coast” (Browne 1806: 434–35). Earlier still, Evliya Çelebi refers to two particularly fine sources of clay used by potters in Istanbul during his lifetime. One was known as “Ensarı Camuru”, and was found in the vicinity of Eyüp Ensarı on the Golden Horn: “pitchers are made every day of this mud. It has a pleasant smell like that of the earth on Mey Island. Whoever drinks pure water from pitchers made of this material feels that he is drinking the water of life ... The [other] material is the soft, sweetly scented mud found in a place called Sarıyer north of Kağıthane [at the northern end of the Golden Horn]. Pitchers and bowls made from this mud are presented to high dignitaries. They are very valuable” (quoted by Küçükerman 1999: 74). These or similar earthenware drinking cups (*bardak-i hak*) and pitchers (*ibrik-i hak*) are listed in 19th century palace inventories in Istanbul



Vilayet or district	Products or imports	Reference
Aleppo vilayet	30 pottery workshops in Aleppo sandjak and 7 in Marash sandjak	Cuinet 1892: vol. II, 156, 175
Ankara vilayet	workshops for everyday pottery exist in Germir village, 5 or 6 km east of Kayseri	Cuinet 1892: vol. I, 319
Archipelago vilayet	numerous glazed pottery workshops on Rhodes making so-called Lindos plates, jugs and tiles, and established in the 18th century with Persian prisoners of war; other workshops on Chios, Mytilene and Samos, with annual exports from Samos valued at 200 Turkish livres	Cuinet 1892: vol. I, 378–79, 416, 455, 507, 509
Bigha mutésarrifik	12 pottery workshops with their own kilns recorded at Çanakkale, not only producing colourful glazed wares but also everyday pottery, the products being exported to Cyprus, Egypt, Greece, Rumania and parts of Turkey	Cuinet 1892: vol. III, 725–27
Bitlis vilayet	the town of Mush and several of the surrounding villages specialise in making a variety of very skilfully made pottery wares which are exported throughout this region	Cuinet 1892: vol. II, 552, 583
Bursa vilayet	12 workshops making pottery and glazed items in Eskişehir; Kütahya grew in recent years from 5 to 15 workshops, with an increase from 30 to 600 employees	Cuinet 1892: vol. IV, 99–101, 210
Castamouni vilayet	provides the entire region with cheap and everyday pottery	Cuinet 1892: vol. IV, 441
Crete vilayet	pottery imported from Marseilles and Savone	Cuinet 1892: vol. I, 562
Diyarbakır vilayet	10 pottery workshops in the city of Diyarbakır	Cuinet 1892: vol. II, 436, 460
Erzurum vilayet	7 pottery workshops in the city of Erzurum	Cuinet 1892: vol. I, 185
Sivas vilayet	pottery was one of the main industries of Tokat sandjak, where 6 workshops contained 200 workmen and produced common ware jars, vases and other vessels for local use; the large jars were used by peasants to store wine and other liquids	Cuinet 1892: vol. I, 651–53, 721
Syria vilayet	hamlets specialising in pottery production, including smooth fine white wares of Damascus, Hasbeya and Racheya, and fine amphorae (Cuinet 1896: 364); the market-town of Racheya el-Fokhar [Rashaiya al-Fukhar], the centre of the caza of the same name, possessed a large number of pottery workshops whose wares were in great demand in Syria and elsewhere	Cuinet 1896: 424
Jerusalem mutésarrifik	the area of Gaza was very well-known for its pottery production	Cuinet 1896: 616
Trabzon vilayet	95,990 kg of pottery imported to Kérassunde [Giresun] district ( <i>kaza</i> ) in 1890; potteries listed in Samsun sandjak	Cuinet 1892: vol. I, 72–73, 93
Van vilayet	Van itself contained 60 pottery workshops which at the time of his survey produced 300,000 pieces with a total value of 1,500 Turkish livres, of which 24,000 pieces were exported	Cuinet 1892: vol. II, 675–76

Table 4: Pottery producing centres recorded within the Ottoman empire in 1890/91 (from Cuinet 1892/94; 1896)

(Samancı 2003: 178). In the 17th century, another pottery manufacturing centre existed on the lower Golden Horn in the Jewish quarter of Balat (Mantran 1962: carte 11).

It should not be difficult in future to link these records with material displayed in regional ethnographic museums and observations by Güner (1988), Glassie (1993) and others on traditional forms of pottery. Cautious use might also be made of contemporary 19th century European depictions, at least in those cases where it can be demonstrated that the artist in question resided in the Middle East for some time: for instance, reasonably detailed illustrations of Ballas jars, flasks, dishes and

City	Number of pottery workshops
Van	60
Aleppo	30
Kütahya	15
Çanakkale	12
Eskişehir	12
Diyarbakır	10
Erzurum	7
Marash	7
Tokat	6

Table 5: Numbers of urban Ottoman pottery workshops recorded in 1890/91 (from Cuinet 1892/94; 1896)

large decorated storage jars with pairs of handles were made in Egypt by Léon Cogniet, Charles Landelle, Félix-Auguste Clément and Elisabeth Jerichau-Baumann between 1832 and 1876 (Lemaire 2001: 109, 136–37; von Folsach 1996: 88–89, 128–29, cats 71–72). Casson's (1938; 1951) distinction between the distinctive green glazed wares of Chalkis, the white slip-painted tomato red glazed bowls of Samos, the dark unglazed chafing dishes of Siphnos, the white slip-painted mugs, bowls and jugs of Skyros decorated with fish and flowers, and the scroll decorated or blue painted stamnoi and vases produced at Ayassou on Lesbos, illustrate the diversity hinted at in Cuinet's description of Aegean pottery products, and Vroom (2003: 182–86) has already documented some of these and other variants from rural sites on the Boeotia survey in central Greece. Closer study of old city plans or gazetteers doubtless will also enable the location of concentrations of pottery workshops, as illustrated by modern street name references to *çömlek* ("pottery") inside one corner of the old walled city of Diyarbakır.

Additional research into Topkapı kitchen and private inheritance inventories have thrown detailed light on the names and types of utensil used in the kitchen, their value and the demand for tablewares created by a shift from eating on trays arranged on the floor to eating while seated at the table (Estabtel and Pascual 2003; Samancı 2003). Among points of interest for archaeologists are references to the adoption during the 19th century of new specialised forms of tableware suitable for serving fish, salads, soups or potatoes, yet how many kitchen utensils even within Topkapı were still made of copper or wood. By contrast, Faroqhi (2005: 156) has commented on how little is known of everyday pottery and apart from Hayes' (1992) pioneering study of the coarse wares and glass excavated in the upper levels at Saraçhane in Istanbul, there has been little attempt to analyse these types of finds from excavated urban Ottoman contexts. Excavations on the Anatolian plateau have yielded some information on types of pottery use in late Ottoman villages, as sherds of "Çanakkale ware" bowls (sometimes referred to as "Avanos ware") were found at Alişar höyük for instance (Schmidt 1937: 114–15, fig. 178; von der Osten 1937: 204; Riefstahl 1937: 205, 207, fig. 228, no. 3122).

Nevertheless, there is a growing amount of data available from landscape surveys in parts of the Near East and Greece (notably Vroom 1996; 2003; Walker 2005), as well as ethnoarchaeological investigations in Turkey and elsewhere (Bakir 2004; Bresenham 1985; Crane 1988; Ertuğ 2004; Glassie 1993; Güner 1988; London 1990; Mershen 1985; Steele 1971; Tekkök 2004; Weir 1975), and excavations at rural sites such as Khirbet Faris (McQuitty *et al.* 1997), Suba (Grey 2000a) and Tell Ti'innik (Ziadeh 1995a; 1995b; 1999; 2000). The situation in Bilad al-Sham has received comparatively more attention than any other region, and the data synthesised most recently by Schick (1998) and Milwright (2000). These suggest the import of drip-glazed Çanakkale and related glazed wares through ports such as Akko, where a large quantity are reported from excavation (Baram 2002: 22). Open bowls of this ware which were either decorated with simple horizontal lines on the rim

or with dripped decoration on the interior have also been found a short distance inland, for instance at a mid-late 19th century village site of Horvat 'Eleq at the southern end of Mount Carmel (Boas 2000: 554–56, pl. III: 1–6). The late date of this site provides important proof for the late survival of these simple types of “Çanakkale ware” (cf. also Glassie 1993: 871). The pottery assemblage at this site also included slip-painted and monochrome glazed bowls, European porcelain plates and bowls, “Kütahya ware” and European porcelain coffee cups, Gaza-ware jugs and jars, handmade basins, burnished cooking pots, and glazed frying pans (Boas 2000: 547–56). “Kütahya ware” coffee cups also circulated deeper into the Palestinian and Boeotian countrysides, judging by other finds from Aphek, al-Burj al-Ahmar, Suba, Zir'in and the Boeotia Survey (Kochavi 1977; Pringle *et al.* 1986: 157–58, fig. 51; Knowles 2000: 114–16, fig. 7.8; Grey 1994; Vroom 1996; 2003: 178–79); they are also represented from Aqaba Castle and sites surveyed in the Southwest Province of Saudi Arabia (Pringle forthcoming). However, on the Karak plateau plain handmade cups appear to have been used instead, perhaps because of the relative remoteness of this region (McQuitty *et al.* 1997: 189, fig. 21), and an independent tradition of making small glazed coffee cups with a white kaolin body developed at Hays in Yemen in the 16th century (Keall 2001). The results clearly illustrate the local responses to the huge social impact of coffee and how, along with the smoking of tobacco, “these modern commodities became part of the Middle Eastern cultural landscape” (Baram 2000: 154).

Most late and post-medieval assemblages from Syro-Palestine, Iraq, southern Iran, southeast Arabia and the Maghreb include local varieties of handmade decorated pottery, which have been variously termed “Hand-Made Geometrically Painted Ware”, “pseudo-prehistoric ware”, “Julfar ware” or “Kabyle ware” (Whitcomb 1991; Johns 1998; Bazzana, Elhraiiki and Montmessin 2003; Kennet 2004: 53–56; Priestman 2005: 218–24, 226–30, pls. 47–59). Most of these are decorated with painted geometric designs, which are sometimes reminiscent of woven textiles or basketry but in other cases may have been influenced by the styles of earlier pottery found on abandoned archaeological sites. These wares appear in the latter half of the 12th century in Bilad al-Sham and continued with local variations and varying frequency throughout the Ottoman period. The fact that this pottery is found at Jerusalem, Hama, Aleppo and Raqqa indicates that it circulated within towns as well as the countryside, although it is reportedly absent from excavations in Beirut (van der Steen 1997).

The northern and eastern limits of this regional painted pottery tradition have not yet been closely defined although it is significant that it is absent from medieval sites investigated within the Keban and Ataturk Dam projects on the Turkish stretch of the Euphrates valley (e.g. cf. Redford 1998). In northern Iraq the equivalent pottery was decorated with incision, and this tradition is best documented from the late Ottoman period. Archaeological assemblages with pottery of this type have been published from Hatara Saghir (Simpson 1997), Gundi Shkaft (Solecki 1957: 167), and Shanidar Cave (Solecki 1952), and have been recorded by the author from several other sites in northern Iraq. Large pots in a closely related tradition are still recorded as being made in parts of southeast Turkey, including Dara and Uslu (Ertuğ 2004). Others are reported from the Hauran and the Ajlun region of northern Jordan where they were apparently made by peasant women during slack agricultural periods (Kalter 1992: 112). The function of these later pots was for storage, often of grain or flour, although edible oil, cheeses and pickled vegetables were kept in similar vessels at Aşvan and Bedyal (Weinstein 1973: 272; Macfadyen 1947: 47), and such jars at Dara were reportedly used for storing water (Dönmez and Brice 1953: 90). When the village of Tell Abu Dhahir was abandoned in advance of the construction of the Eski Mosul dam on the upper Tigris, a few pots of this type were noted in the deserted houses. As this tradition is so recent it may be possible in future to ascribe functional names to particular forms and some of these vessel types have specialised functions. This is a feature which is normally associated with developed societies, and is a useful reminder that the villagers who made and used these wares were not as crude as their pottery might indicate. Furthermore, the combination of motifs on the Handmade Painted ware appears to have

been governed by factors beyond chance or the simple copying of motifs on pottery of earlier periods. It would be instructive in future to apply this to the equivalent incised wares of northern Iraq, to see where the physical limits of these different traditions lie, and to explore the possible reasons for this distribution.

In southern Iraq the late Islamic handmade wares have been given the anachronistic term of “bedouin pottery”, and were characterised by “hand-made, low-fired unglazed basins and jugs with large, irregular grit inclusions” (Adams 1981: 240). Complete forms of this type were recovered as a by-product of excavations of earlier period sites at Tell Fara (ancient Shuruppak) and Tell Khazna (Kish), and include shallow trays, spouted pots and small juglets. They have typically been found on survey associated with large bowls coated on the interior with blue glaze which “tends to be thin and rough to the touch and to flake away exposing an underlying fabric that is pinkish and granular”, plus occasionally other vessels with a “green glaze and a grayish white lead glaze that usually has a curdled or pitted appearance” (Adams 1981: 240). The co-existence of handmade pottery with other types of pottery has been noted elsewhere, such as at Khirbet Faris in Jordan where the presence of “cream wares” contradicted previous assumptions that this was a purely urban ware (McQuitty *et al.* 1997: 188–89), and reinforces the hypothesis that they were speciality products rather than wares of necessity.

Another tradition is recorded from Iraqi Kurdistan, and is first recorded in 1936 from the small Christian village of Bedyal, some eighty kilometres northwest of the Assyrian Christian centre of Diyana (Macfadyen 1947). Apparently only one shape was made, namely a spouted water jug with a flat base, rounded body, tall flaring neck, one or two handles with low pointed thumb-stop knobs on the top of each, applied knobs around the base of the handles, and a low ridge immediately below the shoulder-neck junction. These were made by hand by several women using dark red clay “scraped from clefts and small local deposits in the country rock of massive Cretaceous limestone”. They were fired in a clamp made of dung-cakes and decorated after firing with rows of spots or blobs arranged between vertical or curving stripes. In 1954, Matson (1983: 622–23, figs 224–26) confirmed that this pottery, as well as children’s toys decorated in the same manner, was not only made in Diyana but also in the village of Havdian, on the western edge of the Diyana plain. These were described as being made from dung tempered clay, fired with dung fuel and decorated immediately after firing with a stick or crayon of bitumen. Two years later, three new vessels of this type were purchased in Diyana by members of an Oxford University expedition to Kurdistan (Galloway 1958); they are registered in the Pitt-Rivers Museum in Oxford. They consist of a jug with one handle and a thumb-stop knob on the top, a pot with two handles, and a spouted jug with a single handle. All are handmade, slightly lopsided, have sagging bases, lightly burnished surfaces, and are fired to a light reddish brown colour (pinkish on the interior) with partial fire clouding on the exterior. The lustrous black decoration was made by dabbing a stick of pigment onto the surface and pulling downwards to form a stripe, with the spotted decoration added afterwards.

Sherds of this ware have now been recognised in archaeological investigations at Gird Banahilk, a prehistoric site less than a mile from Diyana, Shanidar Cave and Sidekan in the Kurdish mountains, and Khirbet Deir Situn on the left bank of the Tigris north of Mosul. How long this tradition has existed is not known but the archaeological finds imply a century or more, and thus at least a late Ottoman village tradition. Many, if not all, of these sites are Kurdish and Christian, but it would be unwise to assume this pottery was exclusively used by a single ethnic group or religious community. Indeed, it might be added that a related tradition has been recorded in the village of Dölek, located south of Trabzon in northern Turkey, where the women decorate medium to large sized flat-based jars with spiraled or “Tree of Life” designs which also resemble motifs traditionally found on felt rugs (Güner 1988: 18–19). The cross over between media of motifs such as these is another potential avenue of research. Some are likely to be the deliberate or subconscious effect of domestic



crafts undertaken by women in a close shared environment, whereas others might even be regarded as the equivalent of a regional brand, such as the popularity of cypress tree motifs on Palestinian pipes and embroidery (Simpson 2008), or the similar motifs found on embroideries and slip-painted wares of the Aegean island of Skyros (Casson 1938: 471).

Although the use of bitumen reflects a resource local to this oil-rich region, the mode of manufacture by women was probably once rather more widespread. Matson (1974: 345) refers to a dying tradition of handmade pottery in Lebanon, where two years previously in Chirine he witnessed two eighty-year old women making frying-pans and jars, burnishing them with pebbles and lightly firing them in a hearth. In 1999, the author was fortunate to observe the crushing of calcite temper with a rotary quern and the coil-building of small oval dishes by the last of three or more generations of women potters in the village of Assia, located in the Lebanese mountains high above Byblos. Several other interesting points emerge. Firstly, as with many other domestic crafts such as weaving, basketry, mat-making or broom making, pottery production was a seasonal affair, with the clays being dug in the spring when the ground is moist and the building and firing of pottery carried out in the dry summer and autumn months. In this case this tradition of household manufacture was limited to the summer period when the families moved up from the coast: similar seasonal migration has been noted previously in the Tripoli region, the reasons being a combination of trade, the greater coolness afforded by the mountains in summer and their value as sanatoria during periods of epidemic (Rahme 1998). A similar mode of domestic production has been documented in the north-east Anatolian village of Yiğittası, and doubtless these are simply rare survivals of a much more common pattern in antiquity (Bakir 2004). Finally, like many crafts, specialised rural and domestic pottery production can be traced back a century or so according to family memories, thus within the late Ottoman period, but establishing earlier antecedents must in future rely on archaeology.

Tinned copper cooking pots were the most desirable form of cooking pot because the metal produced an even heat and they retained financial value as they could be recycled. For this reason they feature in Ottoman inheritance inventories and are often listed among the man's possessions (Establet & Pascual 2003: 191–92). However, there was also a strong continuing tradition for the use of handmade burnished cooking pots, often tempered with calcite. Crowfoot (1932) records these being made in Palestine at Kufr Lebbaḍ near Tulkarem, and at Jib near Ramallah: "This burnishing is a very slow process; to get a really good shine, a woman will work at a pot for the best part of a day". These seem to have almost totally replaced the earlier wheel-thrown "brittle wares" used at medieval and earlier sites, although the survival of a late "brittle ware" in Syria as late as the 19th century is suggested by finds from the monastery of Deir Mar Musa (Taraqji 1998: 79, 92, fig. 9, pls 88–89). The manufacture of cooking pots, either on the wheel or by hand, is a specialised craft as it usually involves knowledge of appropriate fireclays and matching temper. Such pots are widely traded as demand is wider than the skills base or the availability of materials. This pattern still continues in Turkey, and the Bilecik region between Eskişehir and Bursa is one of the main regional centres for the manufacture of deep hole-mouth pots used for preparing and serving vegetable, meat or fish casseroles or flat-based oval trays with short vertical walls used to bake fish (both known in Turkish as *güveç*). The fact that these were highly valued in the late Ottoman kitchen is indicated by references to *güveç-i Bursa* being used for the slow cooking of vegetable dishes at Topkapı itself during the 19th century (Samancı 2003: 178). These casseroles are now trucked across the country (Güner 1988: 40–44), and since the Turkish occupation of north Cyprus in 1974 are shipped across to serve local demand where they are sold together with local plainwares made in Lefkoşa and near Girne. Prior to the partition of the Cyprus the local potters used to manufacture different varieties of brick-red handled cooking pots with lids (London 1990: 33, 72, figs 19, 88–89). The switch is therefore a direct consequence of a political event, and in Cyprus the present distribution of such pottery may therefore be regarded as an indicator of ethnicity. Although food ingredients may be

shared, their combination and method of serving are sensitive cultural indicators, and confirm the old adage that “you are what you eat.” McQuitty (1984) has documented how different late Islamic communities use different types of oven but further research into variations in the type of cooking ware may also throw light on inter-communal variations.

Plainwares thrown on the wheel and impressed with pattern-wheel rouletting are also characteristic of late Islamic sites in Iraq. They have been employed as a “type fossil” for so-called Middle-Later Islamic villages located on surface survey in the north Jazira (Wilkinson and Tucker 1995: 122, fig. 79: 7–9, Type 92) and were found on five sites in the Eski Mosul Dam Salvage Project, namely Hatara Saghir, Jigan, Khirbet Deir Situn, Kharabok and Qara Dere (Simpson 1997: 101, fig. 2: 6). A single sherd is reported from Gundi Shkaft in Kurdistan (Solecki 1957: 167), another fragment was excavated in a late phase context at Ana on the middle Euphrates (Northedge 1988: 112–13, fig. 51: 8), and other sherds are present among museum collections where they are registered as being from Tekrit, Nineveh and Nimrud. Very similar decorated plainwares have also been found as far east as Iran, for instance on the surface of a ruined Safavid settlement at Andjilavand near Saveh (Kleiss 1993: 260, 265, abb. K1). The association with independently dated pipes at Hatara Saghir suggest that it existed in the 18th-19th centuries, yet the fact that sherds were included with archaeological material registered in the museum in the 19th century implies that the excavators did not recognise this type as being contemporary (cf. Simpson 1997: 112–13). This type of pottery is no longer made although notch-rouletting was still used to decorate water containers in the 1980s.

The archaeological and contemporary written sources highlighted above indicate a wide diversity of plain or decorated pottery wares being produced in urban and village workshops across the Ottoman empire. In many cases these were traded or exchanged over relatively long distances. Although Cuinet (1892/94: vol. IV, 351) reports that pottery formed only 0.02% of goods transported across the Ottoman railway network in 1893, it is significant that it is recorded at all and an even larger quantity must have been transported by pack-animal and boat. The large handmade jars were intended for the storage of dry foods, whereas glazed jars are reportedly used for keeping oil, fat, cheese or butter (Simpson 1997: 95); other types of vessel were intended as water pourers for use either at the table or for personal hygiene, and certain types of cooking ware were speciality products for baking or stewing. Some vessels were decorated with designs which appear to have been borrowed from other media, thus may be regarded as symbols of local identity, but certain types of undecorated plainwares and cooking pots were considered equally recognisable of local workshop traditions and valued for the properties of their clay and/or temper. Some types of glazed bowls were used to serve *leben* but larger bowls were used for serving communal meals. These probably represent the tail-end of a very long Middle Eastern tradition which, according to Ottoman sources, only began to change in Istanbul during the reign of Mahmud II (r. 1808–1839) with the gradual adoption of the European fashion for eating from individual plates at the table (Samancı 2003). This in turn triggered a demand for plates which was met by the large-scale import of European porcelains. Another instance of social fashion affecting patterns of consumption and supply is provided by the widespread popularity of coffee drinking, with archaeological finds of coffee cups deep into the countryside and desert margins. This phenomenon may be viewed alongside the increasing popularity of smoking tobacco from the 18th century onwards (Simpson 2002), and brings us to the last case-study examined in this essay.

#### 4. Pipes

“Large sums are lavished by Turks of all ranks upon pipes; they attach as much importance to the possession of a fine assortment, as Europeans to that of choice pictures or plate.” (White 1845: vol. II, 129)

19th century European travellers' accounts and Orientalist paintings offer vivid and romantic illustrations of the popularity and elaborate social ritual afforded to pipe smoking across the Middle East. However, until the 1970s archaeological remains of pipes were usually ignored as too trivial or too late to be considered worthy of recording, or alternatively were attributed to the Mamluk period and, as this pre-dated the 16th century introduction of New World tobacco, were assumed to be evidence for widespread smoking of narcotics. This unwitting conspiracy was implicit of a drug-dependent Arab population followed by collapse and abandonment, yet the myth of an empty Ottoman landscape is challenged repeatedly by the historical records and some of the archaeological case-studies discussed above.

In 1971 Rosenthal effectively debunked any notion that cannabis or opium were ingested in any form other than as edible pellets, ingredients in food or through burning on open braziers, and it is now accepted that no pipes are earlier than the late 16th century and most date from the second half of the 17th century and later. Although relatively little research has been published on the Ottoman written sources, the history of the introduction of smoking tobacco, its ensuing popularity, and the responses this drew from political and religious authorities, have been the subject of a number of papers (e.g. Birnbaum 1956; Simpson 1995*b*; 2000*a*; van der Lingen 2003; Grehan 2006). These suggest that smoking was known in the Ottoman Court as early as 1576, Yemen by 1590/91 if not earlier, and Egypt by 1600/03, after which it spread like wildfire despite strong official and religious disapproval. European and Turkish sailors are a common denominator to its early popularity, endemic smoking in the army is recorded from the reign of Murad IV (1623–1640), and urban coffee-houses were popular social smoking venues by the same period. The exact means and route by which smoking came to be introduced into the Ottoman empire is more complex however. Doubtless there were multiple introductions, as the written sources suggest, but the concept of using long-stemmed pipes with a separate bowl and mouthpiece was distinct from the short-stemmed single-piece white clay pipes favoured in England and Holland. It may have been Portuguese rather than English or Dutch traders who were therefore responsible for introducing this type from North America, not only into the Ottoman empire but also into Morocco and West Africa (Shaw 1960; Keall 1992*a*; 1992*b*; 1993).

However, it was not until Rebecca Robinson's detailed analyses of pipes from Athens and Corinth, illustrated with the rich comparative sources of paintings, engravings and European travellers' accounts of the 17th, 18th and 19th centuries, that it became clear that the archaeological finds must date from a considerably later period than previously recognised (Robinson 1983; 1985). Together with a preliminary study of pipes from excavations at Saraçhane in Istanbul (Hayes 1980; 1992), these established the first outline typology for Ottoman pipes and the basis for most subsequent archaeological studies. Nevertheless, the longevity of particular "types" of pipe is more difficult to assess and doubtless some continued for longer than others. As with any artefact analysis, the definition of a particular "type" also requires close scrutiny and the potential pitfalls of circular argument over dating should be reiterated. It is no longer adequate to simply compare general colour or shape, and with the publication of more detailed analyses over a wider region it will be necessary to begin constructing more refined typologies. Pipes have now been presented in archaeological reports from almost all regions of the Ottoman empire: in addition to the groups mentioned above from Istanbul and Greece, assemblages have been published from Mytilene (Humphrey 1990), Iraq (Gargies 1987) and Egypt (French 2001), but the largest number come from the southern Levant, particularly salvage excavations in Beirut (Bartl 2003; van der Lingen 2003), and a large number of sites in Israel/Palestine (e.g. Avissár 1996; Boas 2000; Simpson 1990*b*; 2000*b*; 2002; 2008). Independently, researchers in eastern Europe have added important new data on the typological development of local pipe-making industries, particularly in Bulgaria, and the heavy influence these Turkish pipes had on the fashions of neighbouring Hungary and Croatia (Stančeva 1972; cf. Tomka 2000; 2003; Brusić 1986/87; Haider, Orgona and Ridovics eds 2000: 25–32; Tomka 2003). On

the basis of these finds, several trends are evident.

Pipes generally appear to be rather rare prior to the second half of the 17th century. Thereafter, the first datable examples are made of smooth pale grey, white or light brown clay, and tend to have small bowl capacities and shank openings which presumably correspond to the relatively high price of the imported tobacco. They also typically have stepped ring shank-ends, restrained rouletted decoration on the shank and the bowls are usually decorated with small elaborate stamps. The typically uniform pale appearance and the lack of cores implies that they were consistently fired in lightly reducing kiln conditions, although a small number of dark grey or black examples are attested. The occurrence of cypress-tree motifs on a group of the early pipes which have as yet only been recognised from sites in Palestine may be noteworthy as the same motif recurs in Palestinian embroidery (Simpson 2008).

During the 18th century there appears to be a shift towards larger and more rounded bowls which were usually coated with a lightly burnished red slip. The increase in capacity is linked to a reduction in price and wider availability of tobacco, which began to be very widely cultivated across the Ottoman Empire. This pipe tradition continues throughout the 19th century but by the 1840s lily-shaped bowls with highly burnished red slip appear to be the commonest form. There are some curious similarities between 18th and 19th century Ottoman pipe bowls and those found in Mali and other parts of West Africa (e.g. Daget and Ligiers 1962): closer analysis of these and their chronology, and the varieties of pipe found along the trans-Saharan trade routes, might throw some light on the degree and direction of influence. In contrast, the scarcity of recognisable 20th century types of pipe in the Middle East probably reflects the popular switch to cigarettes which began as early as the turn of the 19th and 20th centuries in rural areas of Palestine (Wilson 1906: 127).

At Athens, Corinth, Saraçhane and Mytilene it was noted that many of the excavated pipes carried small impressed maker's marks, although they appear to be less common in the southern Levant. As many as seventy-five pipe-maker's names are now attested in all, some of which are dated to the year. The names are almost all Turkish but a few others are also recorded, including Borgest, B. Fuchez, Marruis, Nevres, Peretev, which suggest export pipes. Turkish pipes were widely copied in eastern Europe and southern Russia, and even the Turkish word for a pipe (*lüle*) entered the local vocabulary of these areas (Albanian *llulla*, Bulgarian *lula-ta* and Serbo-Croat *lula*). In several cases the pipe-makers' names hint at their origin: "Belgradi", "Edirneli Süleyman Usta" and "Hasan Istanbul Hasan" suggest connections with Belgrade, Edirne and Istanbul respectively.

Future research into Ottoman census records (*Nüfus* registers), Shari'a court records, price lists and craft guilds (*Tawa'if*) should provide a wealth of further details on these and other pipe-makers. In most cases, however, these individuals are assumed to be based in Istanbul where the greatest number operated from within the Tophane quarter on Galata, where other crafts recorded from the 17th century and later included carpenters, tanners, tube-makers and candle-makers (Mantran 1962: carte 11). The importance of the pipe-making industry is still evident in the street names of this quarter of the city, including Lüleci Hendek Arasta ["Pipe-makers' Hollow"] which is said to have had as many as 60 workshops. Maker's marks stamped directly onto the pipes themselves also name workshops in Beykoz and Yalova; Hamdi Efendi is known to have worked at Alaça Hammam at 56 Marpuççular Yokuşu, a narrow street crammed with tobacconists according to an 1874 account, and the last Istanbuli pipe-maker closed his workshop in 1928. The tools of this individual, Master Ömer, are preserved in the Istanbul Municipal Museum and would merit detailed publication (Bakla 1985; 1993). Although the 19th century workshops in the Tophane district of Istanbul have received some attention by Turkish scholars (Kocabaş 1962; Bakla 1993), at least nine other Turkish towns were also involved in pipe-making, namely Avanos, Diyarbakir, Edirne, Iznik, Kayseri, (the appropriately named) Lüleburgaz, Mardin, Siirt and possibly Sivas (cf. Cuinet 1892: vol. II, 439, 463, 506, 552; Bakla 1985; 1993: 28, 35–36; Simpson 1990a: 7). In the case of Diyarbakir, "a hundred and fifty



makers of ornamented pipe stems only, besides those who make the clay balls [bowls], amber mouth-pieces” were noted by one traveller in 1816 (Buckingham 1827: vol. I, 380), and the location of this industry is indicated by the survival of street names in the north-west part of the city. In addition, pipe-making is recorded from Jerusalem, Jaffa and Nazareth in the 19th century (Simpson 2008), as well as Sofia and Rusçuk in the European provinces, Baghdad and Mosul in Iraq, and Asyut and Qena in upper Egypt. From this, it may be deduced that pipe-makers catering for the heavy demand were concentrated in many, if not all, of the major urban centres across the Ottoman empire by the 19th century. Potters and pipe-makers occasionally appear to have been one and the same individuals. During the second half of the 19th century there is evidence for a well-developed industry in the Tophane district of Istanbul and in Asyut which specialised in producing sets of highly ornate pipes, charcoal braziers for water-pipe smokers, coffee cups and saucers, trays, lidded sugar bowls, pitchers, vases and hemispherical bowls with the same burnished red slip and stamped and gilded decoration (Bakla 1993). The names of some of the craftsmen responsible are also known (Table 6).

Al Hosny
Lulici Husayn Istanbul
Ibrahim
Kazim
Hajji Mehmet Cons[tantino]ple

Table 6: Late Ottoman pipe-makers’ names also present on tablewares

In other cases local potters doubtless helped satisfy consumption through the manufacture of pipes as a sideline. Coarsely made hand-modelled pipes found at Mudaybi’ and Khirbat al-Nakhl in southern Jordan may fall into this category and have been suggested as possible evidence for local manufacture to compensate for difficulties in gaining fine clay pipes made in Palestine or Syria (Milwright 2000: 200).

In a small number of cases glaze was used as an alternative to coloured slip. Clay pipes decorated with transparent yellow or green glaze formed 1.5% of the pipes recovered from the Kerameikos at Athens (Robinson 1983: 273, pl. 52, no. 3) and 5% of the pipes excavated at Corinth (Robinson 1985: 172–73, pl. 47, nos 6–9): these were suggested to be the sideline of a pottery workshop, although the original whereabouts of this is not known. Green glazed pipes believed to be of local Haysi manufacture are reported from Zabid in Yemen (Keall 1992*a*). In addition, clay pipes splashed with a transparent glaze fired to a yellowish colour on a light brownish clay body have been reported from a number of sites in Israel/Palestine and southern Lebanon, and doubtless again were produced as a potters’ sideline. The fact that one example from Suba was also decorated with cypress-tree stamps strengthens the possibility of these being local products as this stamp motif has thus far only been noted on pipes from the southern Levant. A comparative petrographic analysis with utilitarian glazed wares of the same period might be very instructive, for instance of those glazed wares believed to have been produced at Rashaiya al-Fukhar in the southern Beqa’a valley. However, in the case of most late-19th century pipes, the clay fabrics are very fine and appear to represent the selection and/or levigation of specific clays for the bodies and slips. The stages of production have been documented most closely in the case of Istanbul where the pipe-makers relied on a local pipe-clay source in the Ökmeydani district but also imported fine clay slip over considerably longer distances, including sources near Van, Aydin and Beirut (White 1845: vol. II, 149; Seetzen 1854: vol. II, 22; Bakla 1993: 45). The clay was moistened, mixed and refined in wooden containers or large jars before being wedged and, if necessary, stained with red ochre. Small balls, each sufficient to make a single pipe bowl, were formed and weighed; these were placed inside separate two-piece moulds, any excess clay being shaved off and re-used, and a narrow boxwood borer inserted to make the

necessary aperture for the pipe stem. Pipes were frequently slipped and polished with felt at this stage. After partial drying in the sun, the bowls were decorated and finished by hand, the tell-tale mould seams smoothed over and then burnished.

There is very little evidence for post-firing treatments. The decoration instead relied on a varying combination of moulding, stamping, rouletting, incising and occasionally gilding. The use of gilt appears to be a characteristic of the Tophane pipes: although it is regarded today among collectors as a sign of relatively high value, one European contemporary commented that “The price depends upon the purity of the clay, and upon the carving and gilding. The lower orders use the cheapest, of which immense quantities are exported into the provinces. Higher personages use a better kind, but never those which are gilt” (White 1845: II, 150). The use of gilding does not appear to have been recognised on any pipes recovered from archaeological contexts in the southern Levant, implying that it was not used (or used very sparingly) by the pipe-makers in this region, and that Tophane pipes did not circulate widely (or at least outside the cities) in this region. Some pipes were traded, and the manufacture of export pipes for the Persian market is attested (Bakla 1993: 37). The discovery of a late 17th century shipwreck off the Dalmatian coast near the island of Bisaga confirms the Mediterranean export of Ottoman pipes as the cargo is estimated as including several thousand pipe bowls (Brusić 1986/87). However, it appears that greater attention was generally paid to the trade of tobacco, wooden pipe-stems and the costly mouth-pieces rather than the pipe bowls themselves, as these were increasingly manufactured within regional centres. The limited geographical distribution of certain forms of pipe and particular types of decoration supports this hypothesis. For instance, groups published from Istanbul and Greece contain pipes with pronounced disc bases that are scarce in other regions (cf. Robinson 1985), so-called “poppy head pipes” appear to be particularly common in northern Iraq and eastern Turkey (Matney 1997), and polychrome glazed pipes are characteristically Iranian (Armero 1989: 71). Within Israel/Palestine itself, as noted above, there are a number of recurrent types that have not yet been recognised from other regions of the Ottoman Empire. It is therefore likely that some, if not all, of these belong to local pipe workshops.

In addition to those pipe bowls made of clay, contemporary sources refer to individuals consuming tobacco through pipes carved from wood or, as in extreme cases in southern Iraq (as in parts of east Africa or Central Asia) as “earth pipes” along channels in the ground, but in neither case can these uses be detected archaeologically. The archaeological disappearance of wooden pipes may be particularly significant in understanding the scarcity of late 16th or early 17th century pipes, as one of the earliest references to Turkish pipes states that they were made of “reeds that have joyned unto them great heads of wood to contayne” the tobacco (Sandys 1615: 66), and Robinson (1985: 160, 175, pls 48–49, nos C17–19) has noted that the highly burnished mahogany-like finish of three 18th century pipes from Corinth is strongly reminiscent of polished wood. In addition, during the 19th century, if not before, several bedouin tribes are recorded as carving pipe bowls from soft local stone and small numbers of such bowls, usually described as chalk, limestone or softstone, have now been recorded from sites in Israel/Palestine, southern Jordan, eastern Syria and Iraq. The distribution of these carved stone pipes along the desert fringes suggests that they may represent north Arabian imports although a similar tradition is also recorded from Sinai and Egypt (Simpson forthcoming *b*).

In many cases, it is only the presence of pipes or other diagnostic items such as bullet cartridges, bangles or buttons that prove activity at a site during the Ottoman period. One example of this is the Roman Decapolis city of Abila in northern Jordan which was surveyed and excavated from 1980 onwards by an American expedition directed by W. H. Mare. Light occupation at the site lasted into the Mamluk period but it appears to have been abandoned thereafter. However, several clay pipes were found: one was illustrated in a preliminary report, has a decorated swollen shank-end and a rounded bowl, and is probably 18th or early 19th century (Mare 1991: 30, fig. 6: 10). In addition,

European travellers' observations indicate that during the 19th century, part of the site was lightly cultivated by members of the powerful semi-nomadic Bani Sakhr tribe. During the 1860s and 1870s this tribe (presumably like many others) appears to have developed a regular pattern of returning to the same camping and grazing grounds each spring to lightly cultivate the surrounding area and sell the produce to merchant-farmers in the nearest towns. It is significant for the interpretation of this and other sites that the preferred campsites were close to ancient ruined sites where there were wells, cisterns, caves and ruined buildings which not only offered water but also concealed cool storage of foodstuffs and shelter of livestock at night (Wineland 2001; cf. Rogan 1999: 83–89; Lewis 1987: 126–43). Furthermore, ethnoarchaeological analyses of the reuse of rock-cut tombs at Petra by the sedentarised Bedul tribe suggests that these were particularly popular refuges and living-quarters during the winter months, whereas other caves were used as occasional work areas, temporary or permanent storage, or as pens (Bienkowski and Chlebik 1991; McKenzie 1991). The long-term investigations of the site of Tell Hesban in central Jordan, provide a similar archaeological instance of this. 19th century travellers' accounts refer to tented Arab encampments at the site whereas archaeological evidence for this period has been recovered from several areas of the site, including a cave used as an underground store, with a clay pipe among the reported finds (Wimmer 1978: 150–51). Many other instances of this type of Ottoman-period reuse of earlier caves and cave-tombs have been excavated in Israel, for instance at Khirbet el-'Alya near Tell Beth Shemesh and Horbat Hanut, both in the central region (Dagan 1998; Beck 1999); another cave excavated at Bir Ma'in was found to have been reused in this period by charcoal-burners (Gibson and Lass 2000).

By contrast, excavations on the site of the Crusader castle of Belmont, west of Jerusalem, provide quantifiable evidence for the range and frequency of pipes used in a small late Ottoman village as the ruined architectural shell was incorporated within the village of Suba. The excavations focused on the summit of the site and revealed that the inner ward of the castle originally formed a shady square within the heart of the village. Several of the adjoining buildings were partially excavated, including a mosque on the west side and two houses on the south side. A total of 444 pipes, all fragmentary, were recovered although the published report was based on the sample of 377 which was available for study. Many of the fragments were recovered from rubble and a typological approach was therefore followed in the final publication (Simpson 2000*b*). However, a total of 152 fragments were recovered from phased Ottoman contexts and provide the basis for the following observations (Table 7).

Context type	Context	Context description	Frequency of pipes	Catalogue numbers (bold) or Field Numbers
Construction	108.6	foundation	2	<b>63, 197</b>
	110.10	Wall	1	<b>38</b>
	115.4	channel	3	FN 361–63
	119.5	Wall	1	<b>112</b>
	503.2	bench	1	<b>137</b>
Floors and surfaces	101.8	surface	2	FN 313–14
	106.21	surface	1	FN 308
	108.5	surface	1	FN 226
	115.3	Floor	2	<b>42</b> , FN 88
	118.18	surface	3	186
	120.9	Floor	3	<b>49, 106</b> , FN 349
	123.5	surface	4	<b>23, 122</b>
	124.4	surface	2	FN 315–16
	502.21	surface	2	<b>67</b> , FN 322
	502.33	surface	1	FN 323

	502.34	Floor	2	<b>9, 61</b>
	503.21	surface	1	<b>20</b>
Occupation layers	105.16	Layer	9	<b>15, 32, 68–69, 160</b> , FN 7, 47, 217, 350
	105.32	Layer	4	FN 145–48
	108.4	ash lens	2	FN 223–24
	111.13	Layer	1	FN 134
	112.5	Layer	1	<b>145</b>
	115.2	Layer	1	FN 378
	118.12	Layer	1	FN 233
	118.13	Layer	2	<b>195</b> , FN 301
	122.6	Layer	1	FN 354
	126.3	Layer	1	<b>191</b>
	126.5	Layer	3	<b>3, 62, 72</b>
	301.3	Layer	2	FN 341–42
	502.24	Layer	1	<b>97</b>
	502.27	Layer	3	<b>102, 150</b> , FN 311
	503.24	Layer	4	<b>162</b> , FN 297–99
Pits	102.8	Pit	2	<b>134</b> , FN 93
	105.20	pit-fill	2	<b>56, 84–85, 178</b> , FN 104–105, 282–83
	110.20	Pit	2	FN 241–42
	112.9	Pit	1	FN 386
	113.28	Pit	2	<b>25</b>
	114.2	pit-fill	1	<b>45</b>
	306.2	pit-fill	3	<b>4, 80, 146</b>
Rubble	107.3	rubble	1	FN 347
	108.3	rubble	1	<b>109</b>
	108.7	rubble	2	<b>12</b> , FN 401
	110.22	rubble	3	<b>18, 28</b> , FN 352
	111.5	rubble	1	<b>155</b>
	112.10	rubble	1	FN 343
	116.4	rubble	2	<b>126, 165</b>
	117.1	rubble	9	<b>40, 48, 84–85, 95</b> , FN 159–60, 243–44
	119.3	rubble	6	<b>187</b> , FN 49, 51–54
	123.2	rubble	13	<b>16, 161, 192</b> , FN 24–27, 264–65, 269–72
	124.2	rubble	8	<b>6, 108, 157</b> , FN 37–40, 260
	302.5	rubble	2	<b>2, 190</b>
	308.3	rubble	1	<b>101</b>
	502.16	rubble	1	FN 369
	502.22	rubble	3	<b>53, 111</b> , FN 312
	502.42	rubble	1	<b>78</b>
	504.6	rubble	2	<b>96</b> , FN 309
	504.9	rubble	3	<b>103, 113</b>

Table 7: Clay pipes from Ottoman phased contexts at Suba, with distribution according to context type (bold numbers refer to published cat. nos in Simpson 2000*b*; FN refer to additional fragments recorded in site records)

These sherd counts indicate that almost a quarter of the fragments were found within occupation layers, with an additional 11.8% retrieved from cut features and 15.7% from floors and surfaces; the remainder were recovered either from within structural contexts (5.2%), which are likely to include residual pieces, or from within rubble (43.4%). The spatial distribution suggests a particular concentration of fragments in one area of the village square whereas surprisingly few fragments



were recovered from interior contexts. This distribution suggests that they were either deliberately deposited outside when broken or that their distribution at least partly reflects the place where smokers would congregate after work.

Although there are a growing number of reports on pipes from archaeological assemblages, many were not systematically recovered and it would be wrong to draw conclusions over the relative frequency of certain types on the basis of publications alone. In some cases the low level of recovery and/or high degree of sorting is evident from the disproportionately high number of decorated and/or semi-complete pieces. Wightman (1989: 74) hints at this in his publication of the excavations at the Damascus Gate of Jerusalem: the “red-polished chibouks were mass-produced in moulds, so their forms exhibit little variation” but only a single semi-complete plain example was illustrated in the report, whereas small fragments of such pipes dominate other assemblages. The excavations of the village of Suba, nestled inside the ruined shell of the Crusader castle of Belmont, offered an exception as the pottery processing yielded a large number of additional small fragments. Many of these belonged to the rims of red-slipped burnished pipe bowls, which constituted over 80% of the total of the assemblage. This breakage pattern suggested that the most vulnerable part of the pipes were their rims which were easily chipped if the pipe bowl was knocked on a hard surface when clearing the dottle inside. The same reason probably explains the chipping often noted along the rims of the shank ends, although as they were invariably thicker-walled they are usually semi-intact. Another reason for discard was probably a heavy accumulation of dottle inside the pipe bore at the bowl/stem junction, which was a characteristic of a large number of the pipes (Simpson 2000*b*). Future organic residue analysis of these carbonised remains might eventually give some information on the prevalent strains of tobacco consumed at different sites at different periods. In the meantime a preliminary attempt was made to apply forensic sprays to the excavated pipes in an attempt to detect possible use of cannabis. The results should be pursued under laboratory conditions but the initial study only yielded possible positive results in two cases. As might be expected, tobacco was the main stimulant and illustrates the comment by one 19th century visitor to Palestine that the village houses were “dense with tobacco smoke” (Rogers 1863: 209).

Water-pipes are rare in most archaeological assemblages. Only single fragments survive among the finds excavated at Suba, Zir'in, the Damascus Gate refuse tips in Jerusalem or Aqaba Castle, where they numbered between 0.5% and 1.6% of the total number of pipe fragments (Simpson 2000*b*; 2002; 2008; forthcoming *b*). Furthermore, no fragments of the distinctive glass, metal, pottery or coconut bases have yet been recognised from archaeological contexts. This scarcity may reflect the relatively higher price of imported Persian *tumbac* over the locally cultivated varieties of tobacco, particularly in the countryside from where most of the site assemblages derive. However, it is instructive to note that water-pipe fragments appear to have been rather commoner in deposits excavated in parts of Beirut as they constituted 11.4% of the total from excavations in the Beirut Souks and as many as half of the fragments published from the Place Debbas excavations (van der Lingen 2003: 135; Bartl 2003). One reasonable conclusion might be that the water-pipes represented by some 19th century European artists were props designed to conjure an Orientalist image rather than being an accurate reflection of the local rural material culture. However, water-pipes - then as now - probably had specific circulation patterns. They offered a long cool smoke for the comfortable seated individual and, like the very long stemmed pipes, they are redolent of comfort and status. As such, both were most appropriate for moments of leisure, receptions and coffee-houses, whereas rigid-stemmed hand-held pipes could be used throughout the day. This distinction may have implications for breakage and discard. Greater concentrations of water-pipe fragments, gilded Tophane pipes and coffee-cups, may be expected in the vicinity of coffee-houses or wealthier residences whereas cheaper clay pipes will have a wider distribution.

At Suba and Beirut Souks it was noted that many of the pipe bowl bases were heavily abraded.

This suggests that they had been originally attached to very long stemmed pipes which were rested on the ground while they were smoked (Simpson 2000*b*: 158; van der Lingen 2003: 135). This inference raises two further implications. Firstly, these pipe stems presumably measured two metres or more in length, and therefore must have resembled the archetypal long-stemmed variety illustrated by European artists. These stems were normally made of cherry (a preferred winter type) or jasmine (a summer type) as these woods were believed to absorb the nicotine as well as flavour the taste, but ebony, maple, myrtle, wild fig, apricot, plum, rose, mastic tree, carob, balsam and cheaper painted and varnished woods joined in sections were also employed. Whereas most stems were manufactured from plants reared in special orchards, cherry stem rough-outs were imported wholesale from Persia and Central Asia, straightened, veneered, polished, and finally bored at the moment of sale. High-quality jasmine stems were produced in Ortaköy on the Bosphorus but cheaper varieties were imported from Bursa and Trabzon. Costlier stems other than cherry-wood were sheathed in silk or muslin, secured at intervals with gold or silver thread and occasionally decorated with pearls or covered in transparent pink gauze; the original intention of this was that the smoker could cool the smoke during the hot part of the day by dampening the cloth-covered stem. Fragmentary reed stems have been reported from Idfa in upper Egypt (White 2004: 17, figs 12–14), and doubtless under the right conditions of preservation more will be recovered in future investigations. The identification of the woods of these archaeological specimens will provide quantifiable evidence for the circulation of different forms of stem.

Secondly, European writers and artists of the 18th and 19th centuries refer to or illustrate long-stemmed pipes being rested on small gold, gilt, brass or enamelled trays (Turkish *tassa*), whereas the wear patterns noted above suggest that these pipes were in regular contact with the ground. The obvious conclusion is that although these trays may have been used to prevent contact of the hot bowl with floor-coverings within the homes of the wealthier-to-do, they were not such a regular sight amongst the villages. As such, these differences offer a small hint at the varying levels of affluence and display across pipe-smoking society.

The present state of research into Ottoman pipes therefore raises many interesting possibilities and future avenues of investigation. Typology is an essential building block of archaeology but it is a means to an end. The basic typological development of Ottoman pipes is established but there is still much to be learnt about regional developments before we can better understand workshop outputs and circulation patterns. The huge potential of written Ottoman sources remains untapped, and future petrographic, neutron activation and chemical residue analyses offer exciting opportunities for fingerprinting clays and testing the uses of pipes. The identification and excavation of workshops would undoubtedly reveal much evidence of the production stages. The excavation of one or more dated military installations or coffee-houses should likewise offer important independent archaeological evidence for the date and scale of pipe smoking amongst the Ottoman army and general populace. The fact that these questions can now be raised shows how far the subject has already come, and how clay pipes have moved on from being regarded either as detritus or as collector's items to sensitive indicators of Ottoman craft, trade and social status (Baram 2000).

## Conclusion

“The 15th through early 19th centuries in Jordan have generally been considered a period of ‘decline’: after a couple of centuries of intense settlement, investment in agriculture, and overall prosperity, villages are abandoned, banditry is widespread, and the economic foundations of the Jordanian provinces crumble.” (Walker 2005: 67)

This influential model of regional economic decline, bitter conflict between villagers and bedouin, and the collapse of centralised authority has been increasingly challenged in recent years, and a more cautious approach advocated by Johns (1992; 1998), Walker (2005) and others. The same applies to northern Mesopotamia where Hütteroth (1990: 179) has drawn attention to the contradiction between the evidence of the 16th century Ottoman *Tahrir Defterler* and the common perception that “from late medieval to modern times ... the destruction of the Mongol invasions was more or less responsible for the state of decay described by so many Europeans who travelled there during the 19th century.”

Landscapes with good agricultural potential are rarely empty yet the archaeological criteria for recognising and dating human activity, either sedentary or pastoral, are still being defined for this period. The fact that even passing 19th century European travellers noted a complex seasonal and ethnic mix of subsistence patterns and dwelling types underlines the scale of the challenge. Closer definition and distinction of diagnostic categories of material culture are therefore crucial in recognising and charting these patterns. The so-called Ayyubid-Mamluk handmade geometric painted pottery tradition is now generally acknowledged as having continued longer than previously recognised (Johns 1998; Ziadeh 1995*a*), and the presence of smokers’ pipes should offer another dating tool as the use of these post-dates the introduction of New World tobacco in the late 16th century (Simpson 1990*b*). However, these are not the only categories of material culture which might be used to distinguish human activity during these periods. In addition to pipes, polychrome trailed glass bangles were among the principal finds recovered from an Ottoman village excavated at the central Anatolian site of Alişar höyük (von der Osten, and Schmidt 1930: 232, 236, fig. 207; von der Osten 1937: 193–212, 319, 340, fig. 266). Although often mistakenly attributed to the Roman period in Turkish museum displays, Spaer (1992) has outlined a useful typology for these glass bangles, and Shindo’s (1996) careful quantification of fragments found at the northern Red Sea ports of Raya and at-Tur illustrates the potential for distinguishing chronological and regional patterns. Finally, a small number have been recovered from Ottoman and later domestic contexts at Suba near Jerusalem, and Horvat ‘Eleq in the Carmel range, where the stratigraphic evidence confirmed that the moulded types belonged to the Mandate period (Grey 2000*b*: 129–30; Boas 2000: 565–67, 580, pl. IX).

It might also be noted that glass bangles tend to be produced in the same workshops as beads. Closer analysis of this second category should offer social information and patterns of trade as there are easily recognisable differences between imported European “trade” beads, the chunky furnace-wound types made in Near Eastern glasshouses, and the drawn glass micro-beads which are a hallmark of Indian Ocean/south-east Asian trade and sites along the Persian Gulf (Baram 2000; Arkell 1937; Francis 1990). Several examples of the last variety were found in Ottoman or later village contexts at Suba and Horvat ‘Eleq, where they were described as “embroidery beads” (Grey 2000*c*: 143–45, nos 21–24; Boas 2000: 580, pl. IX.47), whereas a wider range of types are reported from “Bedouin” graves at Tell el-Hesi and Tall Hisban (Eakins 1993; Toombs 1985; Walker 2001: 59–61). Buckingham passed through the port of Basra, at the head of the Persian Gulf, at the close of the first quarter of the 19th century. Among the Indian imports he lists beads (although whether these were micro-beads or of semi-precious stone he does not say), and among the exports he mentions Mediterranean coral imported overland via Aleppo (Buckingham 1830: vol. II, 170–71). According to Cuinet (1892/94: vol. I, 400–401), the island of Karpathos was the centre of this coral industry at the end of the 19th century. European beads are listed by Lane (1890: 289–90) among the principal Egyptian imports during the time of his residency in Cairo between 1833 and 1835, whereas beads of unspecified origin are given among the country’s exports to “Sennár [south of Khartoum] and the neighbouring countries.” The second category probably refers to Middle Eastern furnace-wound glass beads of the so-called Hebron type: following a visit to Darfur in the 1790s, Browne (1806:

347–48) refers to the Egyptian export to that region of beads made of coral, cornelian, “false cornelian” and agate, Venetian beads, and “Coarse glass beads, made at Jerusalem, called *Hersh* and *Munjur*”; the occurrence here of such beads of so-called Hebron type has been documented by Arkell (1937). New types of container were also imported from European glasshouses, and useful comparison might be made between finds from archaeological assemblages and the products of traditional workshops documented from Alexandria, Hebron, Armanaz or Damascus (cf. Gaulmier 1936; Sode 1996; Simpson 1999).

Material culture is a powerful indicator of changing patterns of fashion and function, trade and production. The categories discussed here were highly desirable and were easily transported but were of no intrinsic value and were easily breakable: these pipes, pots, bangles and beads therefore are ideal ingredients for detailed and comparative archaeological analysis. Although these are trivial categories within the much broader economic picture of local and long-distance trade and exchange (compare Faroqhi 1984; Eldem 1999), they offer datable proof of human activity in a wide range of archaeological contexts, and illustrate some of the difficulties in determining or distinguishing between types of human activity and intensities of occupation.

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## THE SUBSISTENCE AND THE PLANT USE IN TELL GHANEM AL-ALI: EARLY BRONZE AGE SYRIA

Chie AKASHI\*

### 1. Introduction

The Early Bronze Age (EB), equivalent to the 3rd millennium BC, indicates a dramatic change in settlement pattern and material culture within the Middle Euphrates area. The number of settlement sites increased dramatically at the beginning of the EB, but many of them were (temporarily) abandoned or declined at the end of EB. It is also known that this decline was not general throughout Syria, and some large cities survived well into the Middle Bronze Age (MB) (Schwartz 2007). Many studies have focused on how much of the increased aridity there was around 4200 cal.BP (Weiss et al. 1993) had been affected, or what kind of human factors had been concerned with this phenomenon (e.g., Schwartz and Miller 2007, Riehl 2010). In this paper, I will present the preliminary archaeobotanical results obtained from a recent excavation undertaken in Tell Ghanem al-Ali in ar-Raqqa district in Syria. This region has few excavated sites to date for there was no salvage works accompanied by dam constructions.

Tell Ghanem al-Ali (TGA) is located in the lower river terrace of the Euphrates, 50 km east from the modern city of ar-Raqqa (Fig. 1). The area between ar-Raqqa and Deir ez-Zor is a semi-arid land area with less than 200 mm of rainfall per year. A Syro-Japanese team started preliminary excavation sounding in 2007 and discovered some EB layers (Hasegawa 2010). The occupation of this site began in the Late Chalcolithic period / the beginning of the EB, and generally ended during the Early Bronze Age IVa. The original size of the site was approximately 12 ha in total, although unfortunately the southern and northern parts of the tell have been partially destroyed.

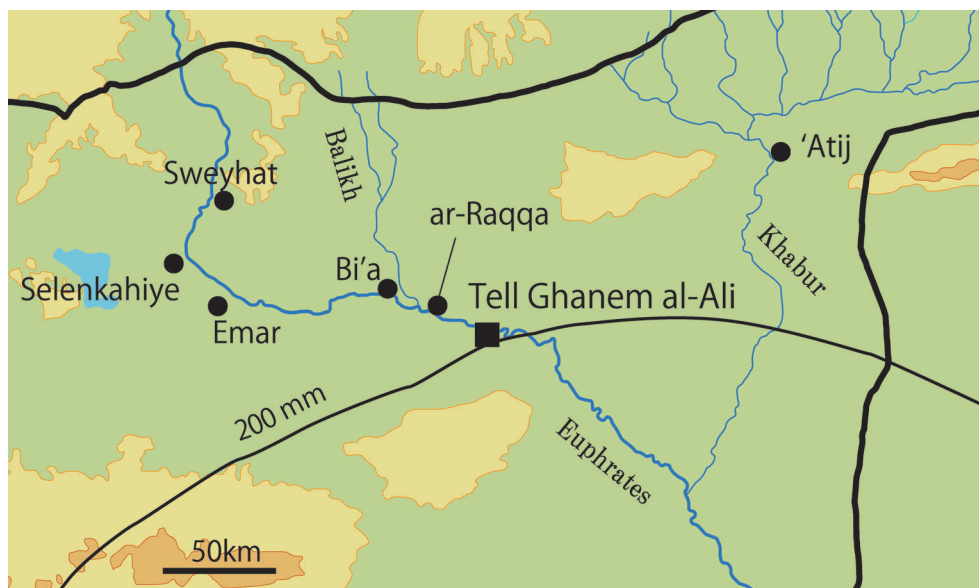


Fig. 1 EB sites mentioned in this paper

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The largest EB site in the ar-Raqqa area is Tell Bi'a, and is situated at the junction between the Euphrates and the Balikh River. This location is considered to be the regional centre. Two contemporary sites of medium size are located 5–6 km east and west of TGA: Tell Mughla as-Saghir and Tell Hamadin. A settlement survey indicates that middle sized EB sites are situated at regular intervals along the river east of ar-Raqqa (Nishiaki 2010), so it seems probable at this stage to identify TGA as one of those settlements.

## 2. Methodology

Archaeological soil samples were taken mainly from Square 1, 2, 7 and 8 but this paper deals only with results obtained from Square 2 (Fig. 2). Square 2 is a step-trench (4 m × 27 m) dug on the northern slope. During the excavations three phases through 3rd millennium BC were identified by the team. There is a presumable hiatus between the oldest Phase 1 and Phase 2. The structures of Phase 3 were discovered just 50 cm below the surface soil.

The soil samples that were taken were identified as cultural fill, hearths, pot contents and ashy layers. The author collected charred remains by water-flotation with 0.3 mm mesh. The observations through the use of a microscope was undertaken in a laboratory facility at Waseda University in Tokyo.

## 3. Results

A total of 36 soil samples (328 litres) yielded some 20,000 identifiable plant items covering a range of 60 species.

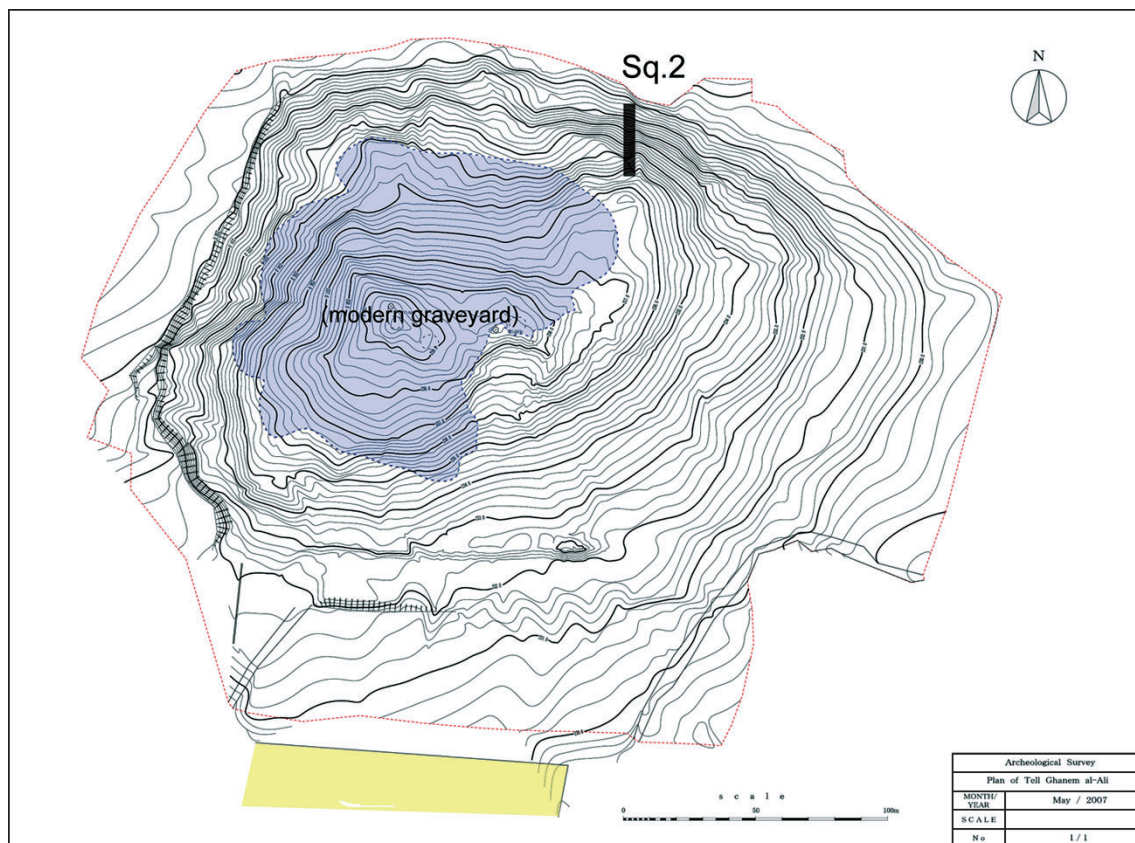


Fig. 2 Tell Ghanem al-Ali

### 3.1. Edible Plants (Fig. 3, Tab. 2)

Most predominant crop remains were barley through the three phases, and it occupies 66% of whole food plants. Both grains and chaff of barley are mostly of the two-row hulled type. Wheat grains were scarce, although the number of the spikelet bases reached nearly one third of barley rachis. The most common legume is lentil, followed by grass pea and bitter vetch, but its quantity is negligible compared to barley. Grape is the only fruit in TGA and their pips are numerous in Phase 3.

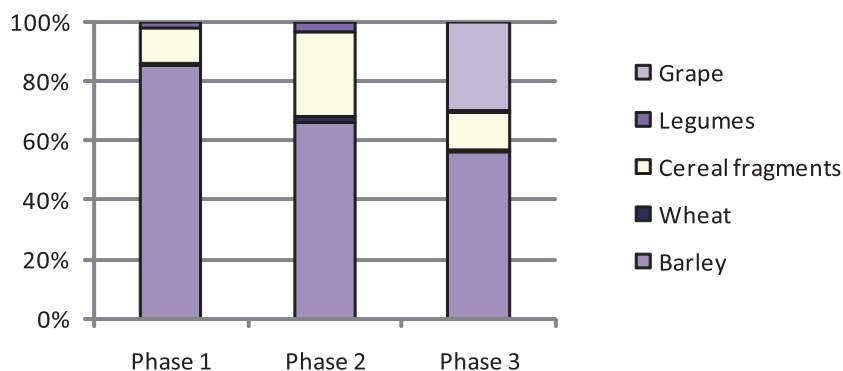


Fig. 3 Edible Plants from TGA (Sq.2)

### 3.2. Wild Species (Tab. 2)

Chenopodiaceae, like *Atriplex* sp. and *Suaeda* sp., was the most dominant among wild species, followed by Gramineae (*Lolium* sp., *Bromus* sp., *Aegilops* sp., *Phalaris* sp.) and Leguminosae (Trifoliae and *Prosopis* sp.). Other species are: *Aizoon* sp., *Galium* sp., *Malva* sp., *Silene* sp., *Ziziphora* sp., Boraginaceae and Polygonaceae and so on.

The most prominent characteristic of the weed plant assemblage is the large quantity of Chenopodiaceae. Especially *Atriplex* sp. and *Suaeda* sp. appear in great abundance (1102 and 3734 items each). The composition of wild taxa of Phase 1 has several differences from Phases 2 and 3, but this can be due to the small number of samples.

## 4. Discussions

Food plants are similar to contemporary sites in the Middle Euphrates. No stored grains were recovered, but it is safe to assume through the evidence that barley cultivation was the staple food in TGA, just as in the other EB sites in the Middle Euphrates. Wheat is not as tolerant to the arid environment as barley therefore environmental conditions may have limited its cultivation to a small scale. The importance of legumes is not clear from the archaeobotanical data. The second dominant food crop is grape and appears in large numbers in Phase 3. Grape is the most common fruit found in many EB sites and it seems that its cultivation was widespread within the Middle Euphrates area. Probably grape was one of the crop assemblage in TGA as well. Food assemblage does not generally change from Phase 1 to Phase 3 except for grape.

Among the wild taxa, the abundance of Chenopodiaceae characterizes the plant assemblage of TGA. The large amounts of Chenopodiaceae has also been reported in Tell Selenkahiye (van Zeist *et al.* 1985/86 ) and Tell 'Atij (McCorriston 1995), and TGA is the third example of this discovery. An interpretation of this abundance of Chenopodiaceae has not been made, but their concentration indicates its exploitation because chenopod seeds appear in only small numbers in the other sites (Tab. 1).

Chenopodiaceae is typical of the draft- and saline-tolerant species and some of them are known as a useful fodder for dry regions (Otal *et al.* 2010). Besides, small, hard-coated seeds like chenopods



Tab. 1 Number of Chenopodiaceae found in Syrian EB sites (Riehl 2010, Miller 1997, van Zeist *et al.* 1985/86, McCorrison 1995)

	TGA	Emar(EB)	Sweyhat	Selenkahye	Atij
Atriplex	1102	1	2	0	929
Suaeda	3734	2	0	4586	0
Other Chenopodiaceae	1716	7	8	36	9
total wild taxa	12247	1659	24663	16409	5825

Tab. 2 Plant remains from Sq.2 of TGA

	Square 2			
	Phase 1	Phase 2	Phase 3	total
num. of samples	6	19	11	36
soil amount (L)	55	175	98.4	328.4
charred amount (ml)	118	188	256	562
Barley	1168	1407	1421	3996
Wheat	15	33	4	52
Cereal fragments	166	612	319	1097
Legumes	25	62	26	113
Grape	0	6	748	754
Barley (chaff)	189	172	364	725
Wheat (chaff)	89	4	105	198
<i>Atriplex</i>	32	598	472	1102
<i>Suaeda</i>	2560	817	357	3734
Chenopodiaceae	616	725	375	1716
<i>Aegilops</i>	15	13	20	48
<i>Bromus</i>	173	85	80	338
<i>Lolium</i>	166	120	57	343
<i>Phalaris</i>	1	23	25	49
Graminaceae	234	446	224	904
<i>Aizoon</i>	10	323	204	537
<i>Heliotropium</i>	6	131	5	142
Boraginaceae	139	81	29	249
<i>Astragalus/Trigonella</i>	47	644	672	1363
<i>Prosopis</i>	4	38	534	576
<i>Malva</i>	3	126	21	150
<i>Silene</i>	2	1	2	5
<i>Vaccaria</i>	0	2	0	2
Caryophyllaceae	3	14	13	30
<i>Ziziphora</i>	14	74	4	92
Lamiaceae	5	4	0	9
Polygonaceae	8	44	235	287
<i>Galium</i>	5	83	10	98
Othres	56	169	248	473
total.	5751	6857	6574	19182

survive in good preservation even after digestion (Anderson and Ertug-Yaras 1998). It is likely that these two taxa were important fodder for sheep and goats, and their remains are derived from dung

fuel. There is hardly any original vegetation around TGA now due to intensive cultivation and grazing, therefore it is difficult to reconstruct their distribution exactly. But considering their general habitats, they were probably grown in damp, saline soil on the river terrace or along big wadis on the plateau. The presence of *Aizoon* sp., another halophytic species, also suggests there was a saline land not far from the settlement.

Because many soil samples are from secondary deposition, only a few of them allowed reconstructing the human activities associated with the seed assemblages. But grasses are typical field weeds and *Prosopis* sp. is quite likely to come from dung fuel. Small-seeded Trifoliae may be either field weeds or steppe plants. Boraginaceae remains were found mineralized. Because a few of the boraginaceous fruits contained charred contents, at least some of them are not contaminated by modern habitation.

## 5. Conclusion

The preliminary analysis of the plant remains from TGA revealed that the agricultural produce was heavily dependent upon the barley in this marginal existence area. Grape was probably cultivated locally at least in the Phase 3. The remarkable characteristic is the large quantity of Chenopodiaceae found and this indicates its considerable utilization by the inhabitants within this area. The analysis and interpretation of site findings obtained from excavations at TGA are still continuing at present and it clear that further analysis will enable us to gain a clearer understanding of the local economy during the early Bronze Age period.

## Acknowledgements

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## NOTES D'ARCHÉOLOGIE LEVANTINE

### XXXII. TRAVAUX ARCHÉOLOGIQUES À TELL SEFINET NOUH<sup>1)</sup>

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Eva ISHAQ\*\*

#### I. Introduction

Tell Sefinet Nouh est localisé dans la plaine de Homs au sud de la ville de Hamidiyeh et à environ 5 kilomètres et demi au nord de Tell Nebi Mend-Qadesh (Fig. 1). Il est situé à un kilomètre à l'ouest de l'Oronte et dépend du centre administratif de la région d'al-Qouseir.

Le site a une forme quadrangulaire régulière (Fig. 2) de 480 m de long (axe est-ouest) et de 390 m de large (nord-sud). Il est entouré d'un système défensif composé d'une digue issue de l'accumulation de plusieurs couches de terre (Fig. 3). À l'intérieur, la surface du site est pratiquement plate. Aucune porte d'accès n'est visible, à part deux dépressions au milieu du rempart est et en face au milieu du rempart ouest.

Il a fait l'objet de plusieurs prospections<sup>2)</sup> par des historiens et des archéologues visant à identifier la ville de Qadesh et surtout la célèbre bataille entre les armées hittite de Mouwatalli II (1295–1272) et égyptienne de Ramsès II (1279–1213)<sup>3)</sup>.

Notons que Maurice Tallon a réalisé plusieurs expéditions dans la région de Homs et a notamment analysé les installations dont le système de fortification est comparable à celui de Mishrifeh<sup>4)</sup>. L'étude menée par S. Ronzevalle du site de Mishrifeh<sup>5)</sup> a poussé le père Tallon à étudier plusieurs agglomérations entourées d'un système de fortification composé principalement de digues. C'est ainsi qu'il a présenté dans plusieurs articles les deux sites de Tell Sefinet Nouh<sup>6)</sup> et Tell es-Sour<sup>7)</sup>. Il a tenté de donner une vision générale de ces types d'agglomérations et surtout de lier leur existence à la partie occidentale de la lisière de la steppe.

D'une manière générale, l'identification de la ville de Qadesh a traditionnellement été faite avec le site de Tell Nebi Mend<sup>8)</sup>. Nous sommes sûr cependant que le site de Tell Sefinet Nouh a joué un rôle essentiel dans la stratégie militaire de l'armée hittite attaquant par derrière le premier corps d'armée égyptien<sup>9)</sup>.

Les travaux de terrain ont été réalisés en 1981 et 1982 par le service des Antiquités de Homs, sous la direction de Majid Moussli<sup>10)</sup>. Ils ont permis la publication de trois rapports préliminaires

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\*\* DGAM – Damas

1) Nos remerciements les plus sincères vont à Georges Mouamar, Oussama Ayyache et Eveline Sim'an.

2) Gautier 1895, Rougé de 1896, Jirku 1933, Kuschke 1979, Moussli 1986–1987, Moussli 1989–1990 et Wartke 2008. En plus notons plusieurs travaux dans la région environnante: Jirku 1965, Moussli 1981–1982a, Moussli 1981–1982b et Moussli 1984.

3) Bataille dans la plaine autour de Tell Nebi Mend en l'an V du règne de Ramsès II.

4) Pour ce site, *cf.* particulièrement l'organisation urbaine de la ville au Bronze moyen Al-Maqdissi 2008a: p. 5–6 et Al-Maqdissi 2008b: pp. 9–10.

5) Ronzevalle 1914–1921.

6) Tallon 1956: pp. 59–61/pl. X.

7) Tallon 1957.

8) Pour ce site, *cf.* Pézard 1921–1922, Pézard 1922, Pézard 1931, Abdulhak 1951, Parr 1978–1979, Parr 1983, Mathias et Parr 1989, Bourke 1993, Parr 1998 et Millard 2010.

9) Sur cette bataille, *cf.* Cavillier 2002.

10) *Cf.* Moussli 1985, Moussli 1986–1987 et Moussli 1989–1990.

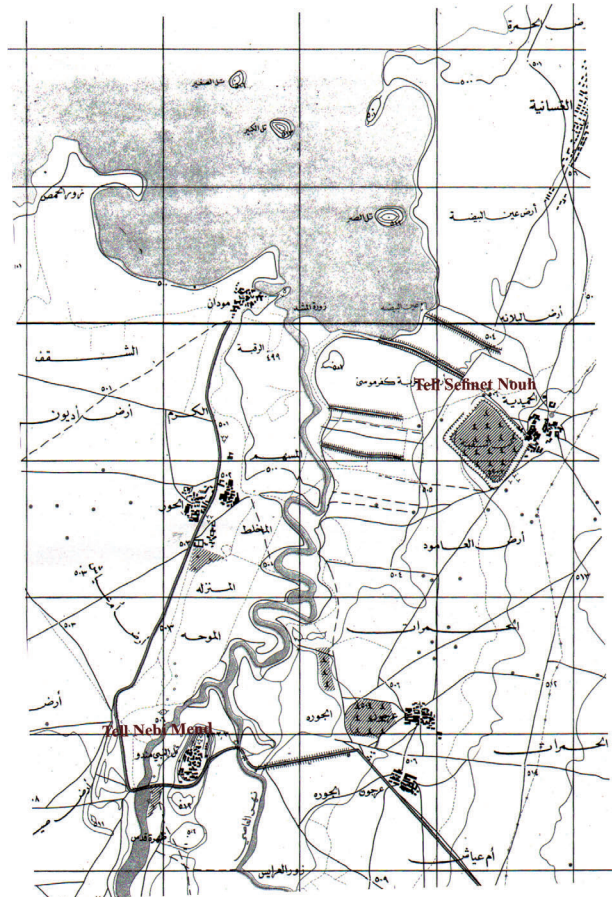


ayant livré une première tentative de datation et une documentation graphique importante. Les trois sondages effectués dans deux chantiers<sup>11)</sup> du site attestent d'une occupation au Bronze récent (niveau III) représentée par un bâtiment en brique crue avec des fondations en pierre et des sols plâtrés ou en terre battue<sup>12)</sup>. Des structures moins imposantes au Fer II (niveau II)<sup>13)</sup> lui ont succédé.

## II. Analyse des données

Durant la campagne de prospections autour de Mishirfeh-Qatna, réalisée en 2010, nous avons ramassé des séries de tessons qui établissent la présence d'une occupation en relation avec les phases suivantes :

- **Sefinet Nouh 0:** Surface actuelle du site avec des installations de type agricole en relation avec des systèmes hydrauliques
- **Sefinet Nouh I:** Tessons datés du Fer III, marqués par la présence de grandes jattes à surface jaunâtre décorées de légères cannelures (Fig. 4-2).
- **Sefinet Nouh II:** Tesson du Fer II avec des fragments du type *Red Slip* et des éléments de jarres araméennes (Fig. 5)



**Fig. 1** Carte générale avec la localisation de Tell Sefinet Nouh par rapport à Tell Nebi Mend (Archives IFPO-Damas).



**Fig. 2** Photographie par satellite du Tell Sefinet Nouh (Archives Google).



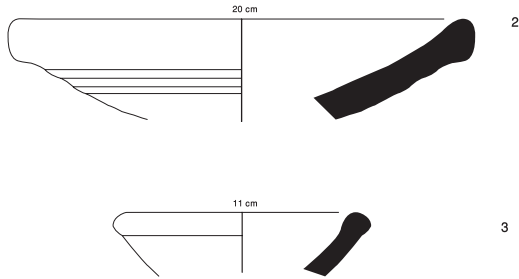
**Fig. 3** Tell Sefinet Nouh, photographie du rempart sud avec le fossé (Mission archéologique syrienne de Mishirfeh).

11) Pour la localisation des trois sondages, cf. Moussli 1989–1990: p. 301/fig.110.

12) Pour ce bâtiment, cf. Moussli 1986–1987: pp. 75 et 79 et Moussli 1989–1990: pp. 303–307.

13) Pour ce niveau, cf. Moussli 1986–1987: pp. 74–75. Moussli 1989–1990: pp. 301–303.

Tell Sefinet Nouh  
2010



**Fig. 4** Tell Sefinet Nouh, tessons du Fer III (Mission archéologique syrienne de Mishirfeh).



**Fig. 5** Tell Sefinet Nouh, bords de jarres du Stockage du Fer II (Mission archéologique syrienne de Mishirfeh).



**Fig. 6** Tell Sefinet Nouh, fragment d'un vase chypriote du Bronze récent II (Mission archéologique syrienne de Mishirfeh).

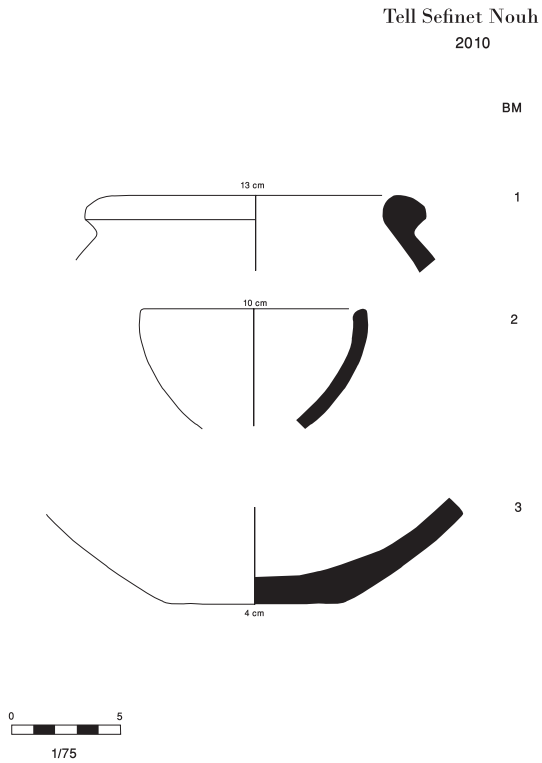


**Fig. 7** Tell Sefinet Nouh, deux tessons du Bronze moyen II (Mission archéologique syrienne de Mishirfeh).

- **Sefinet Nouh III:** Tessons typiques du Bronze récent II avec un fragment d'un vase chypriote du type *White Slip II* (Fig. 6) et plusieurs formes marquées par des pâtes assez grossières mélangées avec de gros dégraissants<sup>14)</sup>.
- **Sefinet Nouh IV:** Tessons du Bronze moyen II marqués par une surface peignée par des bandes horizontales (Fig. 7), plusieurs fragments caractérisés par des pâtes fines à surface lisse (Fig. 8-2) ou des jarres de dimension moyenne avec des bords en bourrelet (Fig. 8-1) et des fonds

14) Matériel typique de la production céramologique trouvée à Mishirfeh par les fouilles de l'équipe syrienne, cf. Al-Maqdissi 2003: p. 1513 et Al-Maqdissi 2009: pp. 1229–1231.





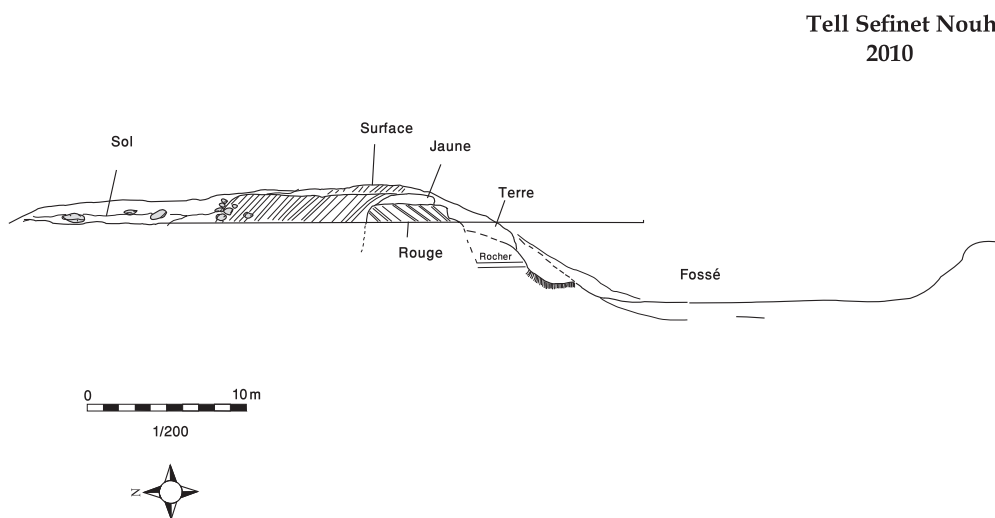
**Fig. 8** Tell Sefinet Nouh, tessons du Bronze moyen II (Mission archéologique syrienne de Mishirfeh).



**Fig. 9** Tell Sefinet Nouh, ouverture taillée dans le rocher de la poterne avant le dégagement (Mission archéologique syrienne de Mishirfeh).



**Fig. 10** Tell Sefinet Nouh, intérieur de la poterne avec au fond le sondage réalisé (Mission archéologique syrienne de Mishirfeh).



**Fig. 11** Tell Sefinet Nouh, coupe schématique du rempart sud (Mission archéologique syrienne de Mishirfeh).

presque plats (Fig. 8-3).

- **Sefinet Nouh V**: Tessons à surface grossière qui pourraient dater du Bronze ancien ou même du IV<sup>ème</sup> millénaire av. J.-C.

Au cours de ce travail, nous avons repéré une tranchée qui coupe la digue sud du site et qui donne une stratification importante (Fig. 2). Une petite prospection au pied de l'angle sud-est du système défensif a révélé la présence d'une ouverture taillée dans le rocher positionnée au pied du fossé (Fig. 9).

Une première évaluation a conduit à examiner en détail cette ouverture et à comprendre sa nature. En effet, l'étude a prouvé la présence d'une poterne taillée dans la roche que l'on a pu suivre sur plus de 30 mètres de profondeur (Fig. 10). Elle dessine en coupe un trapèze de 1,72 m de hauteur avec une base large de 1,20 m. La partie supérieure ne dépasse pas un mètre.

Cette découverte a été mise en relation avec la coupe schématique de l'ensemble du système défensif (Fig. 11). Ce système est composé d'une digue conservée actuellement sur environ 7 à 10 mètres de hauteur, précédée d'un fossé taillé dans la roche calcaire de plus de 35 mètres de large et d'une profondeur variant de 3 à 4 mètres.

L'étude de l'accumulation de la digue donne une idée de la nature de sa construction. Sur le rocher, s'est déposé un noyau de terre rouge tassée avec des poches en terre calcaire inclinées vers l'extérieur, recouvert par un second noyau de terre jaunâtre (Fig. 12). Un dernier niveau se compose de terre rouge tassée avec des inclusions de terre calcaire dessinant des couches inclinées vers l'intérieur.

De l'autre côté le fossé a bien été taillé dans le rocher et la poterne a été aménagée à environ 3,5 mètres à partir de la base rocheuse. L'ouverture visible à l'extérieur était cachée à l'origine par une grosse pierre de 1,60 × 1,80 mètre et de 30 à 40 centimètres d'épaisseur, trouvée au pied du fossé.

Un sondage effectué à l'intérieur de la poterne a révélé la présence de tessons<sup>15)</sup> remontant au milieu du II<sup>ème</sup> millénaire av. J.-C. (Fig. 13), ce qui permet de proposer une datation de la fin du Bronze moyen II. Cette indication chronologique est fondamentale car elle offre la possibilité d'envisager une construction du système défensif ou bien de son existence à cette période.



**Fig. 12** Tell Sefinet Nouh, second noyau d'accumulation de terre jaunâtre de la digue du rempart sud (Mission archéologique syrienne de Mishirfeh).



**Fig. 13** Tell Sefinet Nouh, Tessons du milieu du II<sup>ème</sup> millénaire av. J.-C., trouvés dans le sondage réalisé au pied de la poterne (Mission archéologique syrienne de Mishirfeh).

15) Il s'agit d'un matériel typique de la production céramologique de la région de Homs: bord d'un plat à surface rougeâtre et bord d'un bol et un tesson à surface jaunâtre fine avec le départ d'une anse.

### III. Conclusion

Des poternes issues de fouilles préclassiques en Syrie et en Anatolie existent au Bronze récent à Ras Shamra-Ougarit<sup>16)</sup>, à Bogazköy-Hattusha et à Alishar<sup>17)</sup>. Dans ces trois cas, vu la nature du système défensif, les poternes ont été construites en pierre et aménagées au pied des remparts. L'exemple de Tell Sefinet Nouh est le premier à être taillé dans le rocher.

La présence des poternes dans les systèmes défensifs sert à établir une liaison avec l'extérieur et à permettre uniquement le passage des hommes. Ces systèmes sont caractéristiques du Bronze récent et ici nous pouvons proposer une datation légèrement plus ancienne<sup>18)</sup>.

Ainsi, les villes de la première moitié du II<sup>ème</sup> millénaire de plan quadrangulaire restent à étudier ; elles devraient livrer plus d'informations sur les systèmes de fortifications installés par les Amorites, qui ont connu plusieurs étapes de développement durant la phase cananéenne.

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16) Lagarce 1984: pp. 170–173 et Yon 1997: pp. 41–43.

17) Naumann 1971: pp. 124–128 et 302–304.

18) Notons à ce propos que le rempart ouest du site de Mishirfeh-Qatna a révélé la présence d'un tunnel de sape au pied de la digue en terre, qui n'appartient pas au type décrit dans cette note. Il s'agit plutôt d'un tunnel aménagé pour permettre aux soldats à l'extérieur du rempart de s'infiltrer à l'intérieur de la cité et créer un effet de surprise.



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## V. ABBREVIATIONS

**AAAS** = Annales Archéologiques Arabes Syriennes.

**AfO** = Archiv für Orientforschung.

**CRAI** = Comptes rendus de l'Académie des Inscriptions et Belles-Lettres.

**EVO** = Egitto e Vicino Oriente.

**GAIFAPO** = Guide archéologique de l'Institut Français d'Archéologie du Proche-Orient.

**MFO** = Mélanges de la Faculté Orientale.

**MUSJ** = Mélanges de l'Université Saint Joseph.

**NÉAO** = Notes et Études d'Archéologie Orientale.

**ZDMG** = Zeitschrift der Deutschen Morgenländischen Gesellschaft.

**ZDPF** = Zeitschrift der Deutschen Palästina-Vereins.



## PRELIMINARY REPORTS OF THE SYRIA-JAPAN ARCHAEOLOGICAL JOINT RESEARCH IN THE REGION OF AR-RAQQA, SYRIA, 2010

### INTRODUCTION

Michel AL-MAQDISSI\*  
Katsuhiko OHNUMA\*\*

The Syria-Japan Archaeological Joint Research in the Bishri Region has conducted fifteen times of field works as below ever since the start of the field works in the region of Ar-Raqqa in February of 2007.

The 1<sup>st</sup> season of field works: February 15 to March 3, 2007

The 2<sup>nd</sup> season of field works: May 6 to 30, 2007

The 3<sup>rd</sup> season of field works: August 1 to 29, 2007

The 4<sup>th</sup> season of field works: November 8 to December 12, 2007

The 5<sup>th</sup> season of field works: March 3 to April 5, 2008

The 6<sup>th</sup> season of field works: April 25 to June 6, 2008

The 7<sup>th</sup> season of field works: October 10 to December 2, 2008

The 8<sup>th</sup> season of field works: February 23 to April 3, 2009

The 9<sup>th</sup> season of field works: April 28 to June 12, 2009

The 10<sup>th</sup> season of field works: August 1 to September 9, 2009

The 11<sup>th</sup> season of field works: October 11 to 25, 2009

The 12<sup>th</sup> season of field works: November 17 to 21, 2009

The 13<sup>th</sup> season of field works: December 24 to 30, 2009

The 14<sup>th</sup> season of field works: March 19 to 30, 2010

The 15<sup>th</sup> season of field works: October 13 to November 17, 2010

Composed of 18 research teams specialized in natural and cultural sciences, this multi-disciplinary Syria-Japan Archaeological Joint Research worked in the region of Ar-Raqqa and in Japan, in order to clarify how ancient pastoral nomadic tribes contributed to the formation of agriculture-based urban societies along the Middle Euphrates, North-East Syria.

The members who participated in the fifteen times of the joint works are as below:

Syrian Party: Michel Al-Maqdissi (Supervisor), Anas Al-Khabour (Director), Shaker Al-Shbib (Director), Mohamad Sarhan (Director), Ahmed Sultan (Director), Ayham Al-Fahry, Mahmmod Al-Hassan, Ibrahim Musa, Mohamad Ali Jajan, Mohamad Ibrahim, Aed Issa and Ibrahim Khalil.

Japanese Party: Katsuhiko Ohnuma (Supervisor and Director), Hiroyuki Sato, Masanobu Tachibana, Yoshihiro Nishiaki, Tomoyasu Kiuchi, Hiroto Nakata, Seiji Kadowaki, Masashi Abe, Kazuya Shimogama, Osamu Kondo, Kenji Nagai, Yuichi Hayakawa, Sumio Fujii, Takuro Adachi, Kae Suzuki, Kazuyoshi Nagaya, Hitoshi Endo, Kyohei Inoue, Akira Tsuneki, Atsunori Hasegawa, Morito Iizuka, Hirotoshi Numoto, Shogo Kume, Isamu Ono, Izumi Yoda, Harumi Horioka, Haider Urebi, Mitsuo

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Hoshino, Tsuyoshi Tanaka, Toshio Nakamura, Hidekazu Yoshida, Takeshi Saito, Kazuhiro Tsukada, Yusuke Katsurada, Yoshiyuki Aoki, Suguru Oho, Ken-ichi Tanno, Lubna Omar, Chie Akashi, Yasuyoshi Okada, Sumiyo Tsujimura, Naoko Fukami, Ryuichi Yoshitake, Yo Negishi, Panagiotis Tokmakidis, Shouko Ueda, Natsuko Fujikawa, Kiyomi Mori, Saeko Miyashita, Hitoshi Hasegawa, Tomoya Goto, Shu Takahama, Toshio Hayashi, Ryuji Matsubara, Toshiki Yagyu, Masayuki Akahori, Hidemitsu Kuroki, Kenichiro Takao, Teruaki Moriyama, Yoshihiko Nakano and Hidemi Ishida.

In November of 2009, we held an international symposium entitled “Formation of Tribal Communities: Integrated Research in the Middle Euphrates, Syria” in Tokyo.

This symposium was exercised in the hope that we Japanese researchers, as newcomers into the history of the Bronze Age of the Middle Euphrates, could obtain valuable information to widen and deepen knowledge in the research field concerned.

As we had expected, the symposium was very successful with full of important information and practical suggestions presented by the scholars who joined the symposium, highly experienced in the research of the Bronze Age history of the Middle Euphrates.

Field works in the region currently being continued convince us that the research to follow will lead to the clarification of unknown aspects of how agriculture-based urban societies along the Middle Euphrates were formed with pastoral nomadic tribes.

The reports presented here in *Al-Rāfidān* are the working reports of the 14<sup>th</sup> and 15<sup>th</sup> field seasons in the forms of their submission to the Syrian Directorate General of Antiquities and Musems (see Al-Maqdissi, Ohnuma, Al-Khabour, *et al.* (2008, 2009, 2010) for the working reports of the 1<sup>st</sup> to 13<sup>th</sup> field seasons).

Also presented is the **Appendix** consisted of three reports, that were unfortunately missed from Archaeological Research in the Bishri Region: Report of the Eighth Working Season (Preliminary Reports of the Syria-Japan Archaeological Joint Research in the Region of Ar-Raqqā, Syria, 2009, *Al-Rāfidān* XXXI: 97–207, 2010).

We like to express our sincerest gratitude to Dr. Bassam Jamous, Director General of the Syrian Directorate General of Antiquities and Musems, who warm-heartedly understands this joint research and is always cooperating with us towards the success of the joint research.

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**ARCHAEOLOGICAL RESEARCH IN THE BISHRI REGION**  
— **REPORT OF THE FOURTEENTH WORKING SEASON** —

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March 30, 2010

**Introduction**

The Syria-Japan Archaeological Joint Research in the Bishri Region aims to contribute to better understanding of the development of communities in this region, particularly focusing on the issues of the interaction between pastoral nomads and settled agriculturalists. The project consists of multi-disciplinary research teams in archaeology, physical and cultural anthropology, history, biology, and geology, in an attempt to obtain a wide range of scientific evidence for past and present local communities and their surrounding environments. For this purpose, the project has conducted a series of fieldwork at several locations, concurrently with the analyses of collected materials.

The 14th working season of the Syria-Japan Archaeological Joint Mission to the Bishri Region was carried out from March 19 to 30, 2010. The members of the joint mission from the Syrian and Japanese parties were as follows:

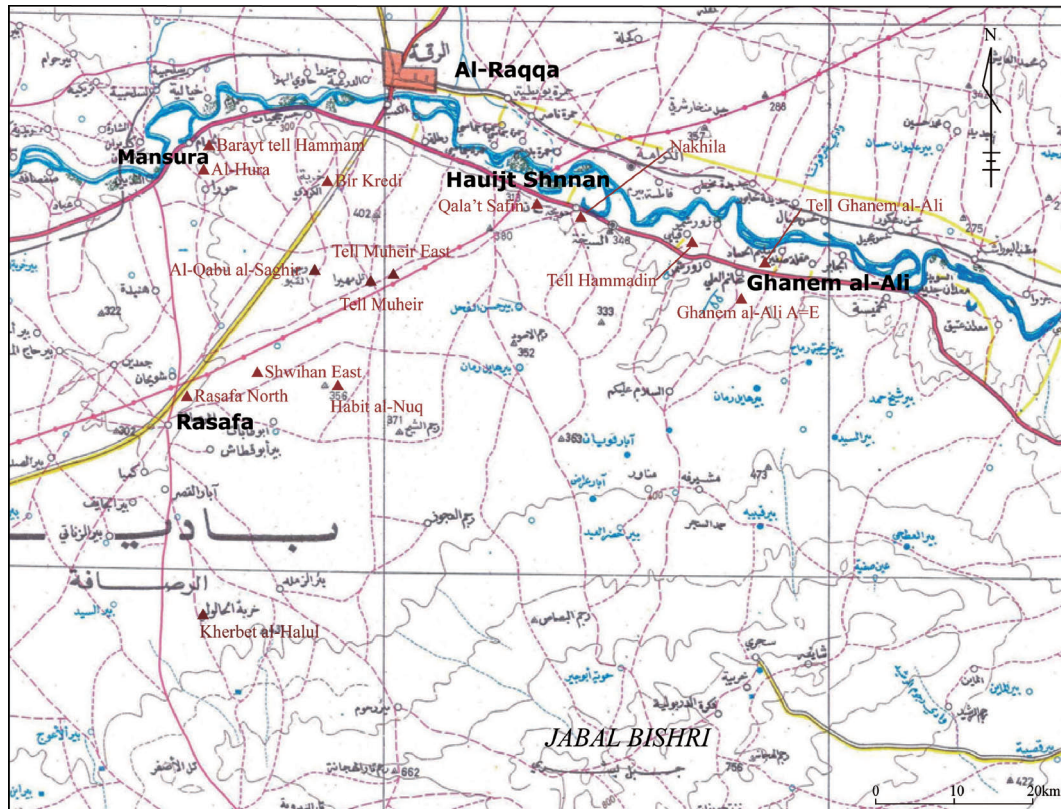
Syrian party: Ahmed Sultan (Director), Mohammad Sarhan, Aed Issa, and Ruba Dib.

Japanese party: Katsuhiko Ohnuma (Director), Takuro Adachi, Chie Akashi, Sumio Fujii, Atsunori Hasegawa, Yu'ichi Hayakawa, Seiji Kadowaki, Osamu Kondo, Kenji Nagai, Hiroto Nakata, Yoshihiro Nishiaki, Kazuya Shimogama, Kae Suzuki.

The project was undertaken with generous supports from Dr. Bassam Jamous, the Director General of the Syrian Directorate General of Antiquities and Museums, and Dr. Michel Al-Maqdissi, the Director of Archaeological Excavations and Research at the Syrian Directorate General of Antiquities and Museums (the Syrian Supervising Adviser for this joint mission). Their warm-hearted cooperation, essential to the success of this field season, is deeply appreciated.

The research of this season comprised the following field and laboratory work: 1) the study of pottery collections excavated from Tell Ghanem al-Ali, 2) the study of human and animal skeletal remains excavated from Rujum Hedaja 1, Wadi Shabbout Area 1, Wadi Daba 1, and Tell Ghanem al-Ali, 3) the archaeological surveys around Tell Ghanem al-Ali, and 4) the excavations of a newly discovered Neolithic settlement on the northern flank of Jabal Bishri.





Map 1 Area including the sites researched by the 14th Syria-Japan Archaeological Joint Mission to the Bishri Region in March, 2010.

## 1. Pottery study of Tell Ghanem al-Ali

Atsunori HASEGAWA (Doctoral student, University of Tsukuba, Japan)

Tell Ghanem al-Ali is located 50 km east of the city of Raqqah and 2.5 km south from Euphrates. It is located on the river terrace of Euphrates and it measures about 290 m (west to east) and about 250 m (north to south) and 10 m in height. To confirm the chronological sequence of Tell Ghanem al-Ali, we set Square 2 on the northern slope of the site. The 4 (east-west) × 26 (north-south) m trench has already been dug, and it reached northern foot of the mound. We identified eight building levels. At the last season in 2009, we reached the virgin soil below the 8th building level.

In this season, I concentrated to make the database of pottery found from Square 2. I began to draw and take pictures of rim and base fragments of pottery unearthed from the building levels 4 and 5 of Square 2 (Figs. 1 and 2). The fabric of them usually included sand but sometimes included sparse mica. And the color was generally pale yellow. According to the shape, almost all of them were identified with a kind of Plain Simple Ware. Unfortunately, Euphrates Fine Ware was not confirmed in this time. In this time, it is too short to analyze the pottery, and the study of pottery found from Tell Ghanem al-Ali was just beginning. So, we have to continue to study.



Fig. 1 Pottery shard found from building level 4, Square 2.



Fig. 2 Pottery shard found from building level 5, Square 2.

## 2. Human skeletal remains from Bishri region, excavated during 2009 seasons

Osamu KONDO (Professor, The University of Tokyo, Japan)

During the Syria-Japan Archaeological Joint Research Project in the Bishri Region, considerable amount of human skeletal remains have been uncovered from several sites. Among them, those found from burial cairns of Rujum Hedaja 1 during 2007–08 seasons have been already reported (Nakano 2009). I have conducted anthropological observation on the rest of the human skeletal remains mainly from 2009 season's excavation. Those are composed of four different sites, Rujum Hedaja 1 (RH1), Wadi Shabbout Area 1 (WS1), Wadi Daba 1 (WD1), and Tell Ghanem al-Ali (TGA).

Due to the shortage of research time compared to the amount of the material, the study strategy was focused on the following several lines of targets.

- 1: Age distribution, which is roughly estimated on the simple criteria of adult and child. The “child” includes those from fetus to juvenile, the latter of which are assessed with having separated epiphyses or epiphysial lines indicating the growing limb bones. The “adult” criterion includes those stop growing after puberty.
- 2: Individual number per burial (single or multiple), which is counted based on the minimum number of individuals (MNI) per excavation unit. Because I could not proceed in full MNI counting which needs sorting and refitting the fragmented bones, the “single” or “multiple” information will be reasonable.
- 3: Preserved portion of the skeleton, which is interested because most of the burials are assumed to be suffered from grave robbing by later inhabitants.
- 4: Human induced markings on the bone, which includes “cut mark” or “punched mark” normally found on edible animal bones, and several kinds of damage scars in reburial or grave robbing.
- 5: Human dentition, its morphology helps to infer the population affinity, and its microwear texture indicates a polarity of dietary resources or diet-related activity.

Preliminary results are presented for the above themes of 1 and 2.

Table 1 summarizes the age distribution presented for each sites. When we compare the frequency of RH1 and that of WS1, both of which possess reasonable number of identified individuals, RH1 site produces a higher percentage of “child” age class compared to that in WS1. Concerning the “single/multiple” burial patterns, we find the higher percentage of the multiple burial patterns in RH1 in contrast to the more single burial types in WS1.

Table 1 Age distribution (adult/child percentage).

	adult	child
RH1	34 (57.6%)	25 (42.4%)
WS1	21 (84%)	4 (16%)
WD1	4	0
TGA	0	3

Table 2 Frequencies of single/multiple burials.

	single	multiple
RH1	18 (52.9%)	16 (47.1%)
WS1	15 (75%)	5 (25%)
WD1	4	0
TGA	1	1



Fig. 1 Cut marks on animal bone (right humerus RH1 BC117-105).  
Cut marks are in the distal end, bite (gnawing) marks of rodents are seen in the left.



Fig. 2 Shallow markings on the human femoral shaft (right femur RH1 BC117-105).  
Marks are just on the white-colored periostitis inflammation.

The themes 3 to 5 should be considered after scrutinizing the collected data and analyzing the crown dimensions and microwear observation on the dentition. We can observe sharp “cut marks” on several animal bone shafts associated with the human burials (Fig. 1 from RH1 site). Similar marks are found in one human femoral fragment, although these seem to be shallower (Fig. 2 from RH1). Because of the lack of spiral fracture patterns on all the human bone samples, similar human activity against animal bones and human bones would be implausible. We should discuss the similarity or dissimilarity in markings on the bones after scrutinizing SEM observations.

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### 3. Archaeological Survey around Tell Ghanem al-‘Ali (IV)

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#### Aims of the survey

As part of the on-going Syro-Japanese field project in the Bishri region, we conducted the fourth season of archaeological surveys around Tell Ghanem al-‘Ali, a main site of investigations in this project. The objectives of our survey are built on the results of earlier archaeological investigations in the middle Euphrates, which indicate the contrasting land-use patterns between the Euphrates lowlands and the Bishri Plateau (Nishiaki 2010b). The former area is currently exploited as agricultural fields and distributed with tell sites that probably accommodated settled communities, including those of the Early Bronze Age, such as at Tell Ghanem al-‘Ali, Tell Hammadin, and Tell Mugla as-Saghir (Kohlmeyer 1984; al-Maqdissi and Ohnuma 2008 and 2009). On the other hand, the northern edge of the Bishri Plateau, overlooking the Euphrates lowlands, contains areas densely distributed with Bronze Age tombs (Falb et al. 2005; Ohnuma and al-Khabour 2008a: 136; Ohnuma and al-Khabour 2008b: 185–7).

Our survey investigates the areas around Tell Ghanem al-‘Ali, mainly targeting the northern edge of the Bishri Plateau, where the steppe environment on the plateau meets the green lowland along the Euphrates. By recording the locations of various human occupations and identifying their dates and natures of the sites, the surveys are aimed at 1) establishing the long-term occupational history since the late Pleistocene to middle Holocene as historical backgrounds of the Bronze Age occupations in this area, 2) clarifying the settlement patterns and the land-use during the Bronze Age, and 3) finding archaeological evidence regarding the relationship between agriculture-based communities and pastoral nomads during the Bronze Age.

#### Field and laboratory work of this season

The survey areas are within a circle of 10 km radius around Tell Ghanem al-‘Ali (Fig. 1). The western border is at the protruding terrace in Jibli, while the east end is around Wadi Beilune. In



the three previous seasons in 2008 and 2009, we conducted pedestrian surveys along more than twenty wadis that dissect the northern fringe of the plateau (Nishiaki et al. 2009, in this volume; Nishiaki and Abe 2010). These wadis are tributary valleys of the Euphrates, and most of them are only a few kilometers in length. However, Wadi Kharar, located between Tell Ghanem al-‘Ali and Tell Hammadin, stretches over 20 km and retains well-developed terraces. We recorded the locations of survey paths and sites and collected artifacts following the methods described in Nishiaki et al. (2009: 146–7). The work of this season was carried out from February 28 to March 17, 2010.

The work of this season involved the field walking and the mapping of some sites that were discovered in our previous seasons (Nishiaki et al. 2009, in this volume; Nishiaki and Abe 2010). The mapped areas include the sites in Jezla (Areas 23H and 23J), a rectangular basin near Tell Mugla as-Saghir (Area 26E), and burial cairns in Wadi Beilune (Area 30). The field walking mainly covered the southern parts of the survey area. In these areas, most wadis at the northern edge of the plateau have their upstream ends, and only a few wadis reach in this region, creating gently undulating terrains, which are currently surrounded by steppe environments with sporadic sand dunes. We selected four areas (Areas 9, 24, 27, and 28) that are almost equally spaced out in the southern survey field (Fig. 1). The survey in these areas is intended not only to find the archaeological evidence for the past land-use in these areas but also to clarify the southern extension of the Bronze Age tombs that are densely distributed near the northern end of the plateau. In the selected areas, we surveyed along the paths with the north-south orientation. The paths follow wadis when they are present in the sampled areas (e.g., Areas 9M, 9N, 28C-H, and 28M). If not, we walked towards south or followed roadways to navigate us (e.g., Areas 24AG, 24AH, 27BD, 27BE, and 28N-R). In addition, a wadi located east to Wadi Beilune was also surveyed (Area 29).

### **Preliminary results of the surveys**

#### **1) South to Tell Hammadin (Area 9)**

This area was divided into five paths, two of which (9J and 9N) in the north are located on the hills besides the wadi basin to their west. Near these paths, burial cairns were found to be distributed along the edge of the hill (Fig. 2). The cairns are constructed with sediments and gypsum stones, measuring usually ca. 4–5 m in diameter and ca. 0.5 m in height. Stone chambers, constructed with gypsum stones, are revealed at many of the looted tombs. Some of the cairns appear to be surrounded with lines of gypsum stones that extend over more than 10 m. The pottery sherds collected near the looted cairns include Black Euphrates Fine Ware, indicating their contemporaneity with cairns at Wadi Beilune (Fig. 3).

South to the hills distributed with cairns are Areas 9K and 9M, where we transcended shallow wadi channels and low banks. No clear burials were discovered except for sparse scatters of chipped stones of the Palaeolithic and Bronze Age periods. Further south is Area 9L, which is located at the tributary of Wadi Kharar. The density of artifacts was very low in this area despite the better availability of water at present.

#### **2) South to Jezla (Area 24)**

Two paths (24AG and 24AH), a few kilometers in length together, are located south to the upstream end of the Wadi Jezla East basin (Fig. 1). The paths cut across low banks and shallow channels with little vegetation. The area has gravel deposits exposed on the surface and is partly covered with sand dunes. Although no mound tombs or cairns were detected, the area was sparsely distributed with chipped stones that include Middle and Late/Epipalaeolithic artifacts as well as probably Bronze Age flakes.



### 3) South to Tell Ghanem al-'Ali (Area 28)

We started to survey this area along Wadi Abu Hamed, which borders the southern end of the Bronze Age tomb field that was formerly investigated by the German mission (Falb et al. 2005). Some mound tombs that were detected along the survey paths (28C and 28 G) are likely to be part of this site.

On the other hand, a new discovery is the concentrations of chipped stones at the low bank of Wadi Abu Hamed (Areas 28D-F) (Fig. 4). The density of lithic concentration is the greatest at Area 28E (50 m × 70 m), where we sampled the surface remains within a 2 × 2 m square (Area 28F). The lithic scatter at Area 28D is less dense and spreads out widely over ca. 200 m in length. The surface remains here are likely to have been dispersed by wadi channel. The chipped stone artifacts from these spots mainly consist of flakes with water-rolled cortex, showing techno-morphological characteristics similar to those from Tell Ghanem al-'Ali (Nishiaki 2010a).

We continued the survey further south to the Abu Hamed tombs to record their southern extent. A few mound tombs were found to be located in isolation at Area 28O. Besides the low mound tombs was located a few Bronze Age pottery sherds and a concentration of chipped stones, which are similar to those from Area 28E/F in techno-morphological traits. This spot appears to be the southern end of the Bronze Age tomb distribution in the south to Tell Ghanem al-'Ali. Interestingly, this southern limit of the Bronze Age tombs appears to apply to the western side of Wadi Kharar, i.e., south to Tell Hammadin (Areas 10S and 10R).

In addition, the surface collections along the survey paths include Mousterian chipped stones and microliths, suggesting the Middle and Late/Epipalaeolithic occupations in the area. We also recovered some diagnostic Neolithic chipped-stone tools.

### 4) East to Wadi Beilune (Area 29)

A wadi east to Wadi Beilune is located at the eastern end of the survey area and also borders the eastern side of the cairn field in Beilune. The wadi is relatively long (ca. 5 km) and associated with a spring at the midstream. Because of these conditions, this wadi is often used as an itinerant route for grazing. However, the wadi is steeply cut and not associated with broad terraces. This may explain that no clear sites were detected, although the recovery of Neolithic arrowheads suggests that the wadi was occasionally visited by the past hunters.

### 5) Cairn field in Beilune (Areas 27 and 30)

Our surveys in the 2009 season discovered the area densely distributed with burial cairns near Wadi Beilune (Fig. 5) (Nishiaki et al. in this volume). We also tentatively dated the cairns to the Early Bronze Age on the basis of the pottery sherds scattered near the burials due to looting. However, its exact location and the extent were still unclear in the 2009 season. As a result of the continued surveys in this area, we found that the cairn field is located on the flat-topped hill at the midstream of Wadi Beilune (Fig. 1). The south of the flat area is bordered by higher hills, while the northern end is marked by a cliff created by the erosion of the wadi. The area thus has a panoramic view towards the basin in the lower stream. Cairns are situated on such a plateau that extends over ca. 2 km [E-W] and ca. 1 km [N-S] between Wadi Beilune and the wadi located to its east.

The plan shape of the cairns varies from round to oval. The round cairns often measure ca. 4–5 m in diameter, and their height ranges from nearly flat to ca. 0.5 m. The oval cairns are usually associated with multiple chambers and often tall, up to 1.5 m in height. Some of the large cairns are located near the border of the cairn field. For example, the southwestern corner of the cairn field is marked by a large cairn (16 m [E-W] × 6.5 m [N-S] × 1.2 m [Height]), sitting on top of the hill (Fig. 6). This cairn has at least three stone chambers, constructed with gypsum stones, which are revealed by looting. Other forms include cairns with rectangular stone structures that consist of 10–20 m lines of gypsum stones (Fig. 7).

The survey of the two paths (Areas 27BD and 27BE), set south to Beilune, allowed us to clarify the southern limit of the cairn field. The southern border of the cairn fields is marked by the hills that overlook the basin of Wadi Beilune. The southern areas beyond the hills are similar to those in Area 24, with shallow wadis and low banks, gently ascending towards the Bishri mountains in the south. The areas are devoid of mound tombs or cairns, although we collected a number of Middle Palaeolithic artifacts with some Late/Epipalaeolithic, Neolithic, and Bronze Age chipped stones.

### **Topographic mapping of the selected areas**

#### 1) Rectangular basin near Tell Mugla as-Saghir (Area 26)

The survey of this area in the 2009 season led to the discovery of a rectangular basin opening to the northern edge of the Bishri Plateau above Tell Mugla as-Saghir. Because the eastern and southern slopes were fringed by many Bronze Age shaft tombs, the rectangular shape of the basin is not the product of modern construction work. The unique plan shape and a flat bottom, coupled with the absence of a major channel that would have created the basin, led us to consider the possibility that the prehistoric earth-work was involved in the creation of this depression (Nishiaki 2000b). In this season, we created a topographic map of this unique basin to examine its formation processes.

#### 2) Small mound at Wadi Jezla West (Area 23)

This area was surveyed in the 2008 season, and a small mound (Area 23H) was then discovered on the west bank of the wadi near the fortress of the historical period (Nishiaki et al. 2009). Because the surface collections at the mound included pottery sherds and groundstones in addition to chipped stones, we suggested that this mound may be a small tell that accommodated long-term occupations. In this season, we created a topographic map of this area to examine the geomorphological settings and the exact shape of this mound.

#### 3) Cairn field in Wadi Beilune

In order to estimate the total number and the density of the cairns in Wadi Beilune, we conducted a topographic mapping and plotted the locations of cairns in the selected area (ca. 400 m [E–W] × 800 m [N–S]) that was demarcated by wadis. More than 350 burial cairns were counted in this sampled area.

### **Summary**

The fieldwork of this season was designed to examine the southern parts of the survey area as well as to investigate the issues that were raised in the previous surveys. As a result of the completion of the planned survey paths and the topographic mapping, the distribution of the Bronze Age tombs was clarified in the areas south to Tell Hammadin, Tell Ghanem al-‘Ali, Jezla, and Wadi Beilune. The decrease in the number of tombs towards south can support our earlier idea that Bronze Age tombs on the northern edge of the Bishri Plateau tend to cluster around the settlement sites on tells (i.e., Tell Hammadin, Tell Ghanem al-‘Ali, Tell Jezla, and Tell Mugla as-Saghir) (Nishiaki 2010b). Given such a spatial association of tombs with settlement sites, it would not be unreasonable to suggest the connections between the inhabitants of the tells and the people buried in the tombs.

However, this does not exclude the possibility that a large number (possibly thousands) of tombs on the plateau included those of pastoral nomads. This question can be pursued through the investigation of the cairns. In addition to the cairn field that was discovered in the 2009 season, we found another area distributed with burial cairns on the southern hills surrounding the wadi basin above Tell Hammadin (Areas 9J and 9N). Interestingly, the cairns are located south to the concentrations of earth-mound tombs in the wadi basin near Tell Hammadin. The cairns tend to be situated at the periphery of the flat-topped hills above the wadi basin, somewhat similar to the settings of the cairns

in Wadi Beilune. These preliminary observations on the distributional patterns and the settings of cairns, however, still need to be verified through further investigations.

By the end of this season, the number of discovered sites amounted to nearly 120. In addition, we also collected surface remains along ca. 180 survey paths. We are currently undertaking the analyses of the surface collections from these spots in order to clarify the long-term occupational history since the late Pleistocene and the settlement/land-use patterns during the Bronze Age communities in the middle Euphrates region.

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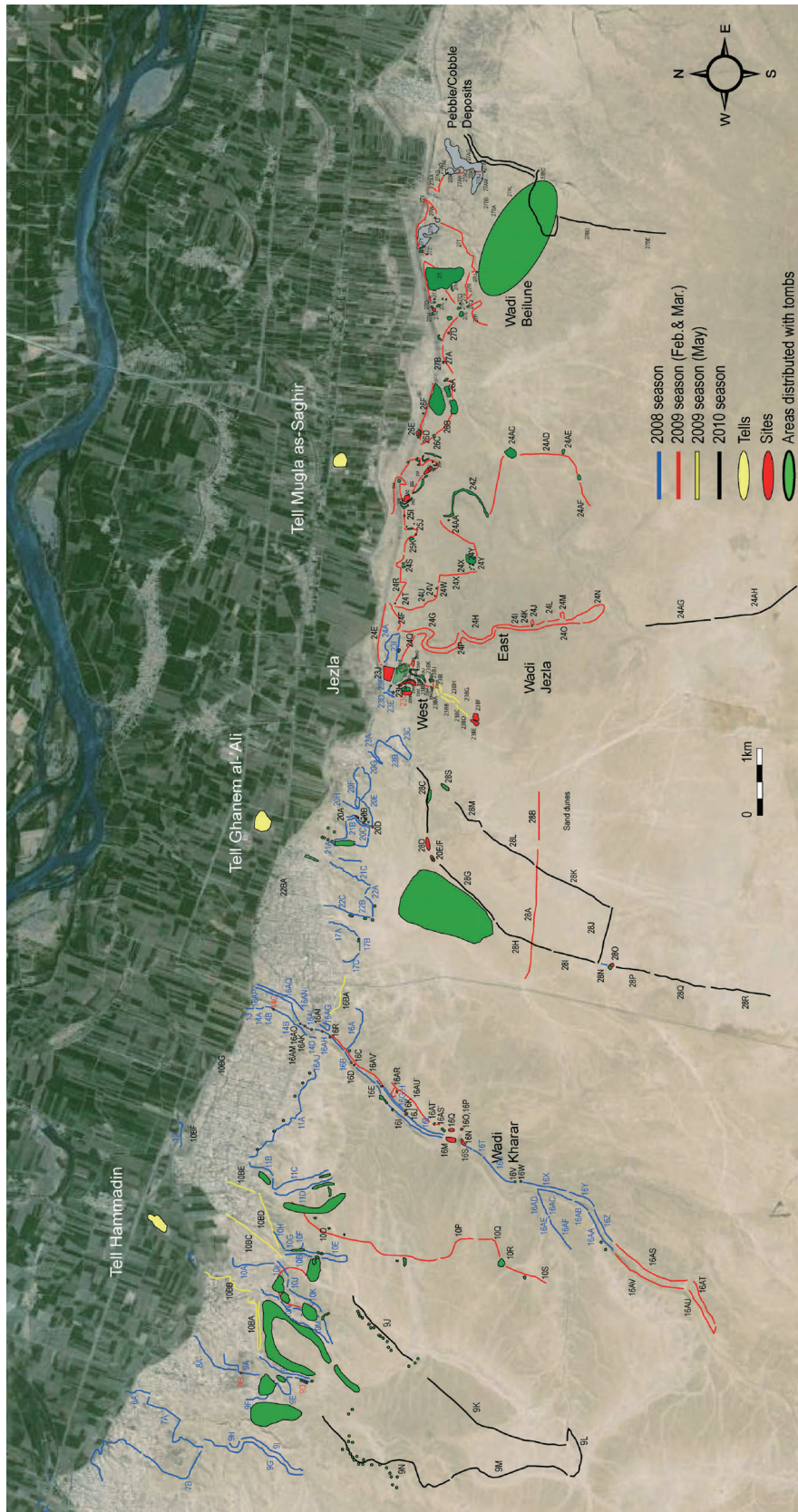


Fig. 1 Satellite image of the survey area, showing the survey paths and sites.



Fig. 2 Burial cairns on the hilltop besides the wadi basin (top left) above Tell Hammadin, looking north.



Fig. 3 Sherds similar to Black Euphrates Fine Ware collected near one of the looted cairns above Tell Hammadin (Area 9J).





Fig. 4 Concentration of Bronze Age chipped-stones in Wadi Abu Hamed (Area 28E/F). The square is a  $2 \times 2$  m sampling area.



Fig. 5 Cairn field on the broad hill in the midstream of Wadi Beilune, looking north.

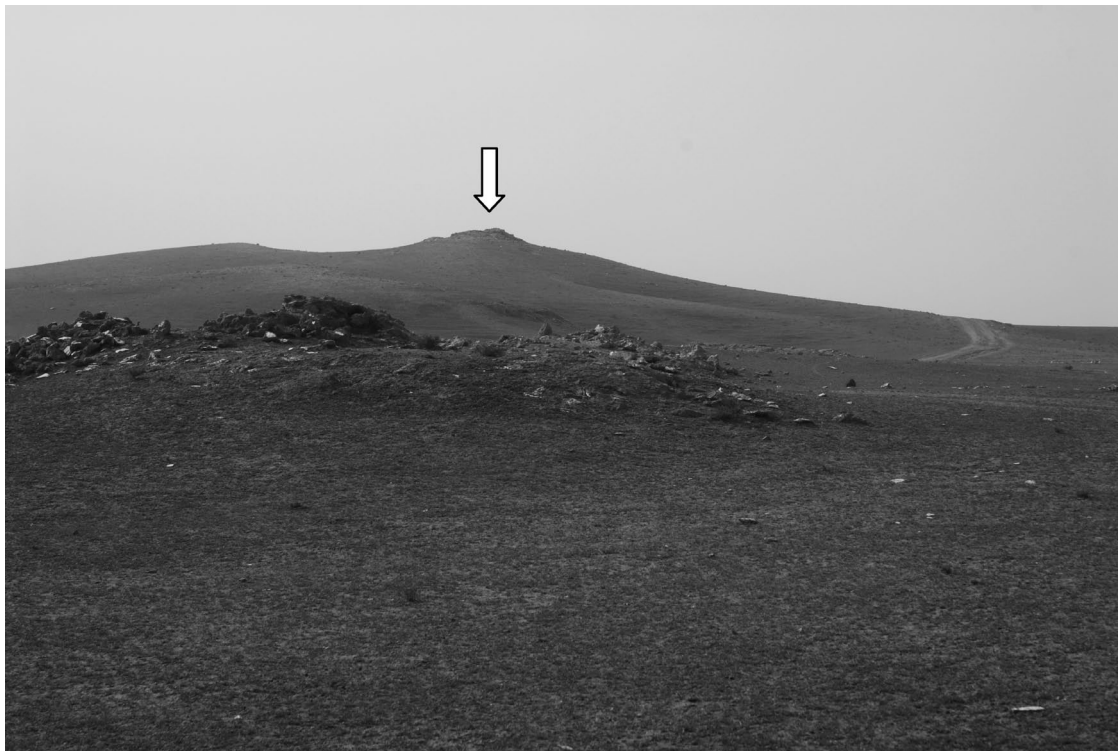


Fig. 6 A large cairn on top of the hill near the southwestern corner of the cairn field (Wadi Beilune).



Fig. 7 Cairn surrounded by rectangular structures (Wadi Beilune), looking west.



#### 4. Wadi al-Hajana 1: A Preliminary Report of the 2010 Excavation Season

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##### 1. Research Objective

Our research project was originally organized to specify archaeological footprints of Bronze Age pastoral nomads in the Bishri region and, in so doing, shed new light on the traditional issue of *Mar-tu/Amurru*, an ancient Semitic population that Sumerian and Akkadian cuneiform texts refer to as having been based on the peripheral hilly terrain. For this objective, we have conducted a series of archaeological investigations since the first field season in May of 2007. As a result, it turned out that our research field or the northwestern flank of Mt. Bishri included hundreds of MBI burial cairns and a large number of small features attached to them (Fujii 2008, 2009; Fujii and Adachi 2009, 2010; Fujii et al. 2009a, 2009b). Available evidence suggests that they represent a communal cemetery for a large pastoral population who migrated around the Mari Kingdom in the first half of the 2nd millennium B.C. Given this, it follows that we succeeded in catching a glimpse of the real picture of pastoral *Martu/Amurru* in their homeland.

The next issue is to reassess the archaeological implications of the Bishri MBI cairn culture within a local chronological framework. However, little is known about the general occupational history of the Bishri region, since it has been poorly investigated due to logistic difficulties and seemingly poor archaeological potential. For this reason, the unique cairn culture still remains isolated in terms of archaeological contexts. Our new project was designed to improve this situation. The first field season, conducted for about two weeks from May 13 through May 25 in 2010, focused on a small Neolithic site of Wadi al-Hajana 1. The following is a brief summary of the investigation result at the unique site.

##### 2. Site and Site-setting

The site of Wadi al-Hajana 1 is located ca. 5 km SSW of Bir Rahum, a small village along a local paved road traversing the northwestern flank of Mt. Bishri (Fig. 1). It lies in a foothill below the western ridgeline of Mt. Bishri, belonging to the Raqqa prefecture as an administrative area (Fig. 2). Being located on a facing-north mid slope of the foothill, the site commands a distant view of a gently undulating hilly terrain around Bir Rahum and an extensive fluvial plain further beyond.

The site was found for the first time in the course of our general survey in 2009 and tentatively registered as BS-0951 according to our site registration system. What attracted our attention first were flint artifacts, especially Naviform core-and-blade components, scattered throughout the site. In addition, a few intermittent, curvilinear wall alignments were confirmed at the northeastern corner of the site. Both findings raised our expectation that the site might be a small Neolithic settlement thus far unknown in the Bishri region. This is the reason why we decided to embark on a full-fledged investigation in this season.

The site is located on a triangular gentle slope that is sandwiched between two small gullies flowing down northwards from the foothill ca. 600 m in elevation (Fig. 3). The site itself is ca. 530–540 m in elevation and ca. 500 square meters in total area, covering the lower and upper terraces of the slope. The two gullies converge at the northern end of the lower terrace and, then, meander through a fluvial plain for ca. 500 m to join the main stream of Wadi al-Hajana. Limestone bedrock layers are exposed throughout the channel, forming small-scale natural dams and pools. The upper reaches, on the other hand, ascend steep slopes and extend further southward eroding the original ridgeline

of the foothill. These two topographical conditions – the advantage in water use and the convenience of local communication – provide a key to understanding the site location.

The local climate is very arid and no natural perennial water source is available around the site. Thus the vegetation is poor, being limited to thorny shrubs dotted on wadi beds and their surrounding slopes. (It should be added, however, that small niches of annual herbaceous plants are dotted along well-watered gullies.) Such harsh environmental conditions have long hampered the establishment of sedentary settlements. The only exception is Bir Rahum referred to above, but even this small village was founded merely a few decades ago. This is not to say, however, that the Neolithic Bishri region was also entirely deserted. Our new finding is suggestive of sporadic land use probably taking advantage of less harsh climatic conditions in the earlier half of the Neolithic Age.

### 3. Research Method

To begin with, we produced a contour map every 1 m with the site being placed in its center (Fig. 4). Since no reliable benchmark was available around the site, we set up an arbitrary level point at the northwestern part of the site, near the two operation areas described below. A simple barometer indicated a value of ca. 530 m for the elevation of the tentative benchmark. The investigation took place based on a 5 m by 5 m grid and locus system with the northwestern corner of the contour map being the coordinate origin.

We set up the following two major operation areas at the densest part of the flint distribution. Area I was arranged at the lower terrace and consisted of a total of fifty-six squares or an area of 35 m by 40 m (Fig. 5). Five test trenches, 2.5 m by 5 m in area respectively, were opened within the area at regular intervals to search evidence for structural remains. In addition, two trenches were set up to the north of the area. Area II, on the other hand, occupied the upper terrace and covered a total of forty-two squares or an area of 35 m by 30 m (Fig. 6). Six test trenches were laid out within the area and two additional trenches were placed between the two operation areas.

A dozen experienced local workers from Bir Rahum took charge of digging under the supervision of several qualified persons including the authors. Excavated soil from the test trenches were not sieved due to time constraints and the scarcity of finds, but lower fill and floor deposits of Structure A mentioned below was brought into 3 mm mesh dry-sieving or water floatation.

### 4. Surface Finds

In advance of the excavation, we conducted an intensive surface survey at the two operation areas and the four additional squares. The surveyed area totaled 2,550 square meters, which was equivalent to approximately half of the supposed whole range of the site. The surface finds contained flint artifacts only; neither pottery sherds nor metal products were included. The only exception was an old ten Syrian-pound coin found at Area II. This result probably means that the land use around the site centered on the stone age, and that the subsequent use was limited to sporadic pasturing as it is today. As a matter of fact, no settlement sites have thus far been confirmed in our research field.

The collected flint artifacts totaled 7,419 pieces (2,473 from Area I and 4,946 from Area II), a value enough to be identified as a flint production site. Most of them used light to dark gray, slightly mat, fine-textured flint and were produced on the basis of the Naviform core-and-blade technique. There is little doubt that the surface collection falls, as a whole, into the PPNB period. (The few exceptions to this were finds from several squares around Structure A, which included a small number of Khiamian components derived probably from the feature.) The finds concentrated on the eastern slope of the two terraces, being scarce in the western half. This is probably because the slope was protected from the predominant westerly wind.

Two flint concentrations were found along the eastern slope. First, the southeastern corner of Area I produced a total of 928 samples, which was equivalent to 37.5% of the Area I finds or



12.5% of the grand total. Second, the northeastern corner of Area II yielded 3,023 samples (= 61.1% of the Area II finds or 40.7% of the grand total). Since the two additional trenches between the two operation areas produced a total of only 70 artifacts, both concentrations are thought to form two separate units.

Our examination focused on the two units. As for the contents, cores and debitage class samples were predominant (> 95%). They included Naviform cores (Fig. 7), crest blades and other core trimming elements, unmodified blades and flakes, snapped blades, and chips/chunks. In addition, single-platform blade/flake cores, single-platform bladelet cores, and unmodified bladelets occurred in a small number. In contrast, retouched tools were very scarce, being limited to a few dozen samples. The tool kit included retouched flakes, retouched blades, burins, drills, endscrapers, notches, and splintered pieces (Fig. 8). A truncated blade, a round scraper, a chisel, and an adze also occurred, but no points were included. Overall, the tools were *ad hoc* in nature, being characterized by less elaborate secondary retouch.

The predominance of cores and debitage classes and the scarcity of retouched tools clearly indicate that the site served as a flint knapping station. The occurrence of eight hammerstones also supports the view. However, the following two things deserve attention. First, both raw material (i.e. flint nodules) and primary elements (i.e. cortical blades and flakes) were very scarce considering the predominance of core and debitage class samples. Second, unmodified blades as tool blanks were also in a minority despite the frequency of naviform cores. Both observations suggest that initial core reduction took place near a yet-to-be-identified flint outcrop, and that blade blanks were brought back to a mother settlement for performing secondary retouch. In this sense, the site may be defined as a second-stage flint knapping station.

It is still unknown what phase of the PPNB the flint assemblage represents, since no diagnostic elements such as points were included in the collection. To make the matters worse, no charcoal remains for radiometric dating were recovered from the trench excavations mentioned below. Further scrutiny is needed for answering the key issue.

## 5. Test Trenches

The fifteen test trenches produced a total of 961 flint artifacts. As with the surface collection, a few trenches related to the two units produced the vast majority of the finds. Understandably, they were similar in both raw material and techno-typology to the surface finds, except that the finds from Trench T-18 included a few Khiamian components probably derived from Structure A nearby.

Neither hearths nor pits, to say nothing of structural remains, were confirmed at the trenches. The same was true with faunal/floral remains, although this might be partly due to weathering and slope erosion under the harsh environment. Whatever the case, the absence of small features strongly suggests that the PPNB flint artisans stayed at the site only for a short time. Our tentative perspective is that the site functioned as a temporary flint knapping station for producing blade blanks.

## 6. Structure A

As mentioned above, our previous survey located a few intermittent, curvilinear wall alignments at the northeastern corner of the site, on a flat terrain beside the eastern gully. Though only slightly exposed on the present ground surface, they appeared to form a single, oblong feature (Structure A). Setting up a 7 m by 7 m excavation area extending over four abutting squares, we scrutinized them. Understandably, we assumed a close correlation between Structure A and the PPNB surface collection, but the assumption proved to be wrong. As described below, excavated finds were suggestive of a Khiamian date for the structure.

Structure A was a roughly round, semi-subterranean feature dug from the upper surface of Layer 2 or the contemporary ground surface, measuring ca. 4.5 m in diameter and ca. 0.3–0.5 m in floor

depth (Figs. 9, 10). It was fringed with a single row and course of undressed or partly dressed limestone upright slabs, which slightly protruded from the contemporary ground surface. (It follows that our previous survey barely noticed their tops.) It seemingly appeared to be a two-roomed structure divided with a partition wall, but the scrutiny showed that this is an accumulated picture of the following three construction phases. To begin with, **Phase 1** or the original form of Structure A leaves its traces at the southern wall, where larger, more standardized construction material are used and any two adjacent slabs are tightly joined without a remarkable gap. Evidence for **Phase 2** comes from several fallen slabs found *in situ* between the southern wall and the partition-like wall. In view of their homogeneous size and morphology, they are thought to be remnants of the second wall that intervened between Phase 1 and Phase 3 mentioned below. **Phase 3** or the final state of Structure A is represented by the northern wall and the partition-like wall, both of which were connected to each other and formed together a small, oblong feature. In contrast to Phase 1, they were constructed with smaller, less standardized construction material. The construction technique was also inferior in quality, leaving gaps throughout the wall.

No clear evidence for an entrance was found. However, smaller slabs were used at the western corner, possibly suggesting that as with the structure itself, the entrance was also located along the eastern gully, in the leeward of the strong westerly or northwesterly predominant wind. Small features incorporated into the structure were limited to a large hearth found at the northwestern corner. This feature, ca. 1.2 m in diameter and ca. 0.2 m deep, was encompassed with upright stones and contained a large amount of black ash and soot-covered limestone rubble ca. 10 cm long. Seeing that a few construction materials overhanging its eastern edge bears no traces of heating, it is conceivable that the hearth came into disuse in Phase 3. Despite the dry sieving and the water flotation, neither charred seeds nor burned animal bones were recovered from the hearth contents. The function of this unique feature is still unknown, but it is interesting to note that it has much in common with *foyers creusés en cuvette* common in the Khiamian layers at Tell Mureybet (Evin and Stordeur 2008; Molist 2008).

What characterizes Structure A is the repeated collapse and reconstruction. Seeing that the evidence for collapse focused on the southern half higher in elevation, and that any new component shifted northward, it appears that strong lateral soil pressure and/or seasonal floods of the neighboring gully were responsible for the phenomenon. Efforts toward the repeated reconstruction chance to demonstrate that inhabitants visited the site on a seasonal basis. Of interest is the fact that the structure not only reduced in overall dimensions but also declined in quality on every reconstruction. This may be an indication that the visitors gradually became smaller in group size and even more mobile in behavior pattern. It is intriguing to hypothesize that both episodes went hand-in-hand with the end of the Khiamian culture.

## 7. Small Finds from Structure A

Here again, small finds were limited to chipped flint artifacts. The only exception was a small pierced shell product, which was recovered from the floor deposits (*loc.* 518) of Phase 1. The excavated flints totaled 3,258 pieces: 1,299 from Phase 1, 297 from Phase 2, 1,511 from Phase 3, and 151 from the other loci.

Unexpectedly, the assemblage included several dozen el-Khiam type points (Fig. 12). In contrast, neither Byblos- nor Amuq-type points, to say nothing of Jericho-type samples, were included. Also of significance was the fact that single-platform cores predominated (Fig. 11). There is no doubt that the flint assemblage (and consequently Structure A) belonged to the Khiamian period. The scarcity of microlithic components, especially the total absence of lunates, suggests that the assemblage falls into its final stage. It is indisputable that Structure A has nothing to do with the PPNB surface finds. However, as with the PPNB surface collection, the Khiamian flint assemblage from Structure A is also characterized by the predominance of cores and debitage class samples, the relative paucity of

retouched tools, and the substantial absence of flint nodules and primary elements. It follows that the Khiamian flint artisans also used the site as an intermediate flint knapping station between flint outcrops and a mother settlement.

The tool kit included Khiam-type points, drills, and retouched/used blades and flakes as major tool classes. In addition, sidescrapers, endscrapers, adzes, heavy-duty digging tools, and burins also occurred only in a limited number. Most of them were finely retouched, differing widely from the PPNB *ad hoc* tools described above. The Khiamian flint artisans possibly incorporated the production of several tool classes, especially points and drills, into their primary activities at the site. It is conceivable that their stay was less temporary in nature than the PPNB flint artisans', a likely assumption in view of the repeated reconstruction of the semi-subterranean structure. It is questionable, however, whether the stay was prolonged to such an extent that full-fledged subsistence activities were required, first because brand-new products were predominant among the tool kit, and second because no faunal/floral remains were retrieved despite the dry sieving and the water flotation of a few dozen litters of floor and hearth deposits.

## 8. Summary

The investigation at Wadi Hajana 1 showed that the Bishri land use history dates back to the Khiamian period. Suggestive in this regard is the existence of a similar site in the Bal'as Mountains northwest of Palmyra (Abbès 2008). Both findings suggest that the Neolithization in Syria involved the inland arid areas from the very beginning, although available evidence suggests that the site of Wadi Hajana 1 functioned as a more or less temporary flint knapping station in both the Khiamian and the PPNB period. Such precursory land use, though limited to flint exploitation, may have paved the way to the prosperity of the MBA cairn culture after several millennia. However, a large gap still intervenes between the two. The next field season, scheduled in the spring of 2011, is to address the issue.

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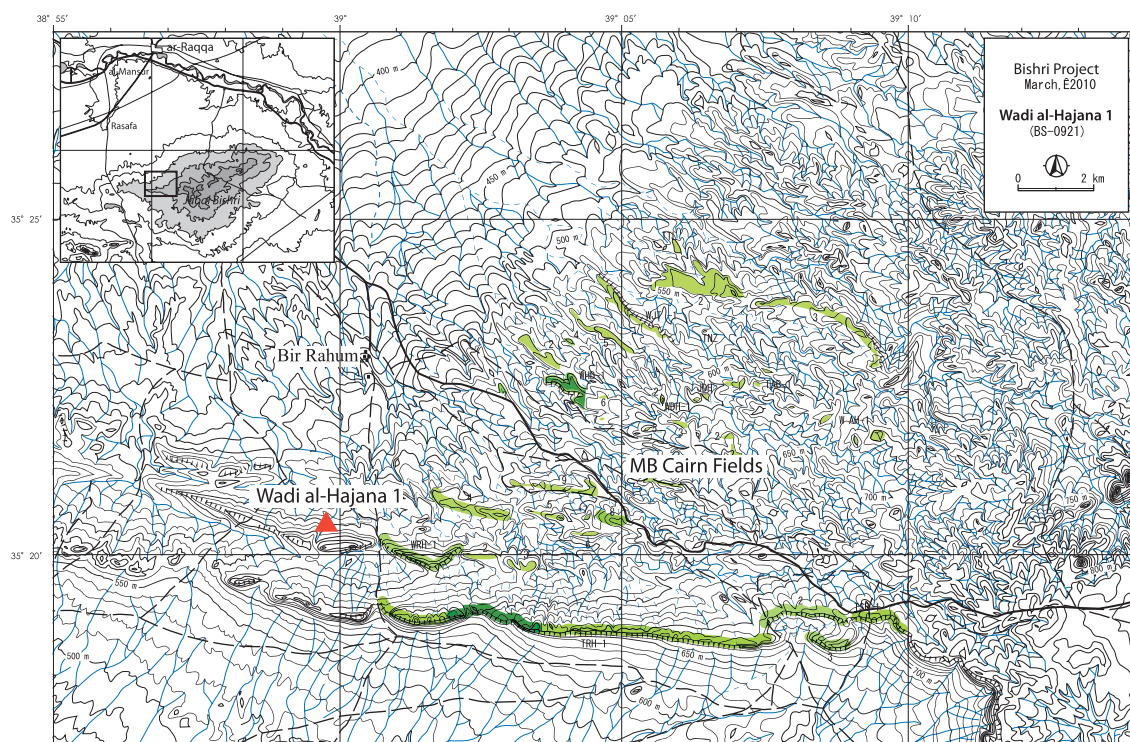


Fig. 1 Wadi al-Hajana 1: site location.





Fig. 2 Wadi al-Hajana 1: distant view (looking S).



Fig. 3 Wadi al-Hajana 1: general view (looking S).

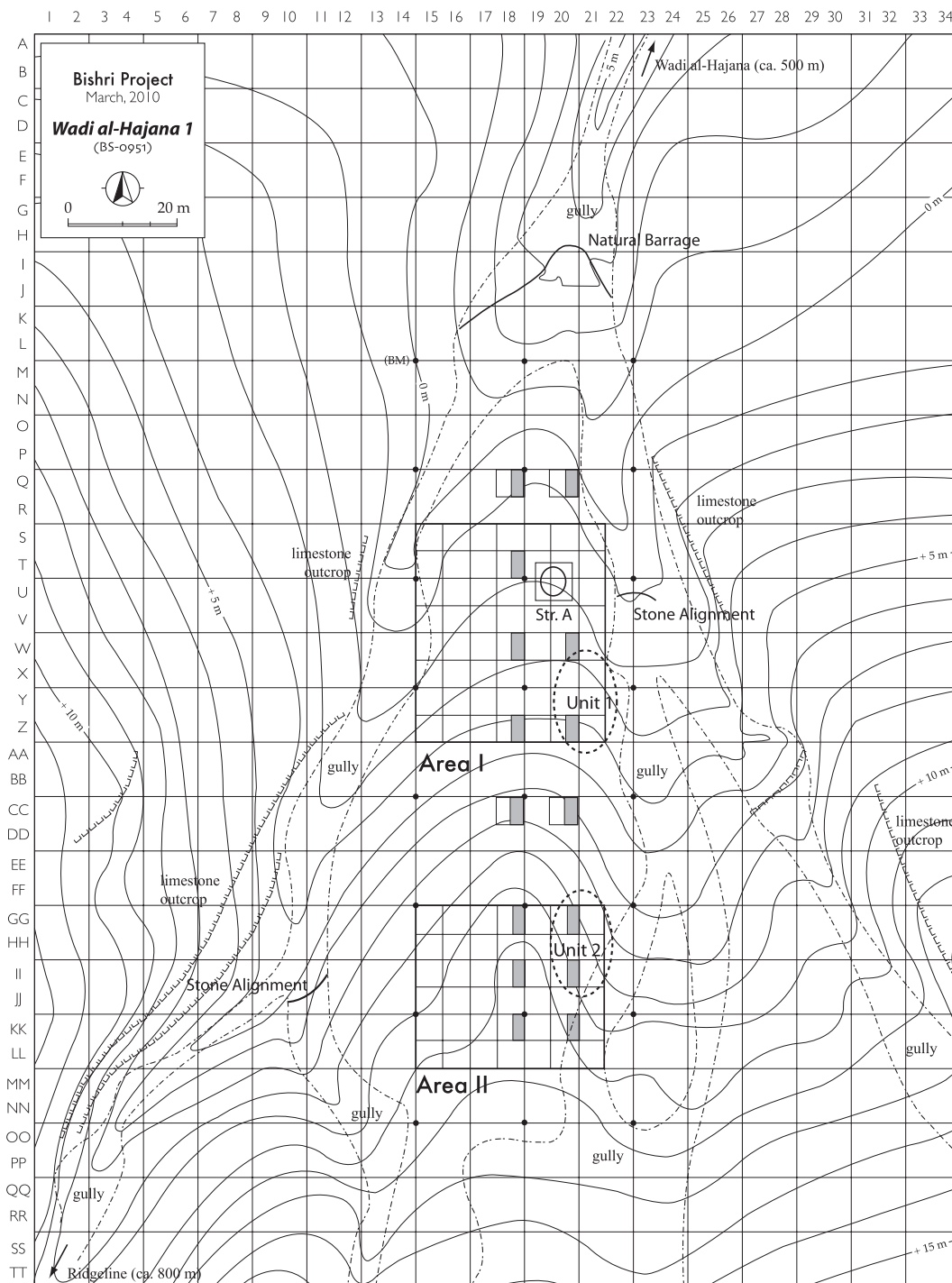


Fig. 4 Wadi al-Hajana 1: site plan and operation areas.





Fig. 5 Area I: general view (looking N).



Fig. 6 Area II: general view (looking NW).



Fig. 7 Surface collection: Naviform cores.



Fig. 8 Surface collection: tool class samples.



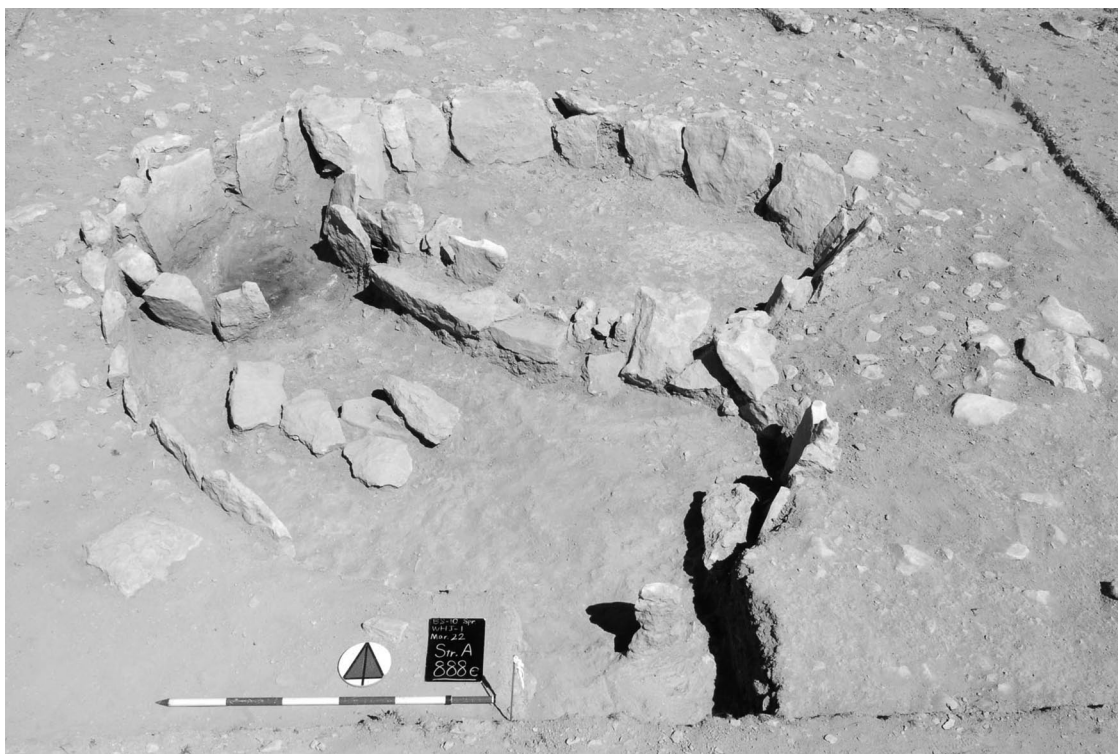


Fig. 9 Structure A: general view (looking N).



Fig. 10 Structure A: general view (looking E).



Fig. 11 Finds from Structure A : cores.



Fig. 12 Finds from Structure A: el-Khiam type points.



## تقرير أولي عن أعمال البعثة السورية – اليابانية المشتركة العاملة في منطقة البشري

الموسم الرابع عشر خلال الفترة الممتدة من 19 ولغاية 30 آذار 2010

كاتسو هسكو أونوما

مدير الجانب الياباني ( جامعة كوكوشيكان ، طوكيو ، اليابان )

أحمد سلطان

مدير الجانب السوري ( المديرية العامة للآثار والمتاحف ، دمشق ، سورية )

**مقدمة :** يهدف هذا البحث المشترك في منطقة البشري إلى متابعة التحقق في تطور المجتمعات البشرية خلال عصور ما قبل التاريخ وحتى عصر البرونز ، مع التركيز على فهم العلاقة بين المجتمعات الرعوية (المتنقلة) والمجتمعات الزراعية (المستقرة) .

بضم هذا المشروع مجموعة من الفرق المتعددة الاختصاصات في مجال البحث الأثري من أثريين ، جيولوجيين ، انتروبولوجيين ، بيولوجيين ... ، مما يساهم في توفير فكرة واضحة عن مجتمعات الماضي والحاضر لهذه المنطقة ،



(الشكل 1) خريطة جغرافية توضح انتشار مناطق البحث

تركز البحث في هذا الموسم على القيام بأعمال ميدانية توزعت ما بين منطقة المدافن الحلقية (tumulus) وبين المسح الأثري المتمركز على الحافة الجبلية المطلة على حوض الفرات الأوسط ، بالإضافة إلى القيام بدراسة تحليلية لمجموعة المكتشفات الفخارية والعظمية من منطقة البحث :

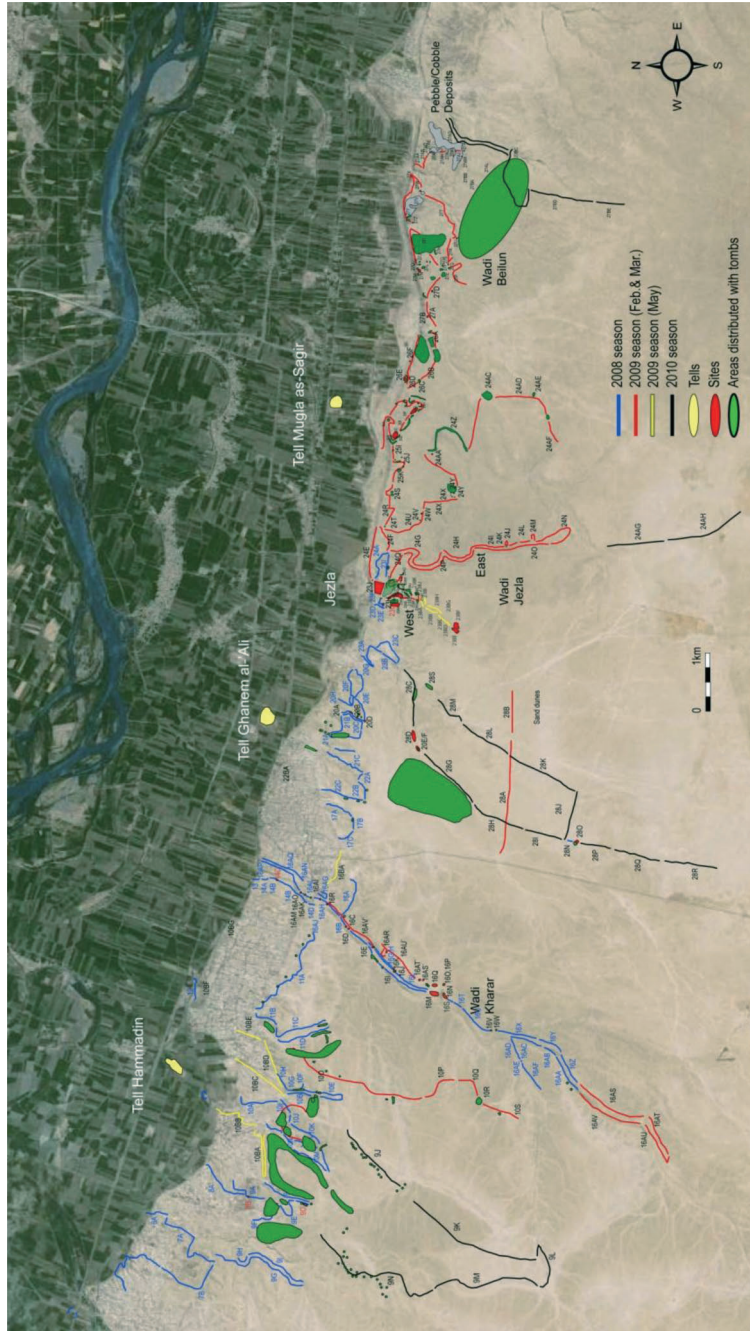
**أولاً: مسح أثري لمواقع عصور ما قبل التاريخ ( البليستوسن والهولوسين ) حول موقع تل غانم العلي :**

يوشيهيرو نيشياكي ( بروفيسور جامعة طوكيو )

يدخل عمل هذا الفريق ضمن الأبحاث الأثرية المنفذة في المنطقة الممتدة بين جبال البشري وحوض الفرات الأوسط ، أعمال مسح هذا الموسم تركزت في الهضبة الجنوبية المطلة على تل غانم العلي والتي تمتد جنوباً باتجاه منطقة البشري ، بهدف التحقق والبحث في مراحل الاستيطان التاريخي والممتد من عصر البليستوسن المتأخر وحتى منتصف عصر الهولوسين كخلفية تاريخية لمستوطنات عصر البرونز في المنطقة ، وكذلك أيضاً البحث في الدلائل الأثرية فيما يتعلق في العلاقة بين المجتمعات الزراعية المستقرة وبين المجتمعات الرعوية المتنقلة في المنطقة خلال عصر البرونز

**الأعمال الميدانية :** تتركز أعمال الفريق بشكل عام ضمن المنطقة الجنوبية المرتفعة المطلة على تل غانم العلي وعلى طول 10 كم باتجاه شرق غرب .والممتدة من منطقة الجبلي في الغرب وحتى وادي بيلون في الشرق والتي يمتد خلالها مجموعة من الوديان القديمة والتي يصل عددها إلى حوالي 20 ، والتي كانت روافد قديمة لنهر الفرات، حيث يعتبر وادي الخرار أحد أهم هذه الوديان وأكبرها والذي تم إجراء دراسات أثرية ضمنه في مواسم سابقة ، إذ يقع ضمن المنطقة الممتدة بين تل حمادين في الغرب وتل غانم العلي في الشرق ، وقد تركز العمل خلال هذا الموسم على تنفيذ مسح ميداني تركز وبشكل رئيسي في الجزء الجنوبي من منطقة البحث بالإضافة إلى وضع خرائط طبوغرافية لبعض المواقع والنقاط الأثرية والتي كان قد تم الكشف عنها في مواسم سابقة (جزلة-تل مقلة صغير-مدافن حلقية tumuli في وادي بيلون) .





(الشكل 2) صورة فضائية توضح منطقة البحث والأماكن التي تم مسحها بالنسبة للمواقع

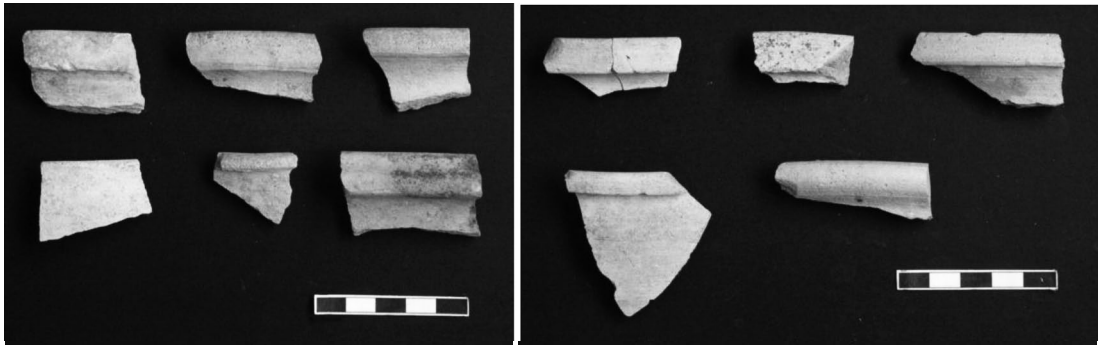
وكننتيجة لأعمال هذا الموسم تبين بأن الامتداد الموزع لمدافن عصر البرونز كانت تنتشر في منطقة الجنوب من تل حمادين ، تل غانم العلي ، تل جزلة ، وادي بيلون . عند الحافة الشمالية المرتفعة و المظلة على مجموعة هذه التلال الأثرية ، ويتناقص مقدار هذه المدافن كلما اتجهنا باتجاه الجنوب ، مما يدعم فكرة أن مجموع المدافن المنتشرة على الحافة الشمالية المرتفعة لجبل البشري والتي تؤرخ إلى عصر البرونز تنتمي إلى مجموعات استوطنت فوق هذه التلال ( حمادين ، غانم العلي ، مقلة ، ... ) وبالتالي هذا ما قدم ترابط واضح لهذه المدافن مع مجموعة المواقع المستوطنة والمنشرة على امتداد حوض الفرات الأوسط .



(الشكل 3) مدافن حلقيّة (tumuli) موزعة فوق مناطق مرتفعة في وادي بيلون

### دراسة المنتجات الفخارية في تل غانم العلي

يقع تل غانم العلي على مسافة 50 كم شرق مدينة الرقة وحوالي 2.5 كم جنوب مجرى نهر الفرات ، هذا الموقع كان قد تم فيه تنفيذ اسبار اختباريه في منطقتين من التل بهدف التعرف على طبيعة التوضع الطبقي للتل ، حيث أنه وخلال أعمال السبر في المواسم السابقة تم الكشف عن كميات من العينات الفخارية التي كانت ضمن سويات التل والتي تم دراسة جزء من هذه العينات خلال هذا الموسم من خلال القيام برسم الكسر التي تحوي أجزاء من شفة أو قاعدة الأنية الفخارية ومن ثم يتم تصويرها وتوثيقها ،



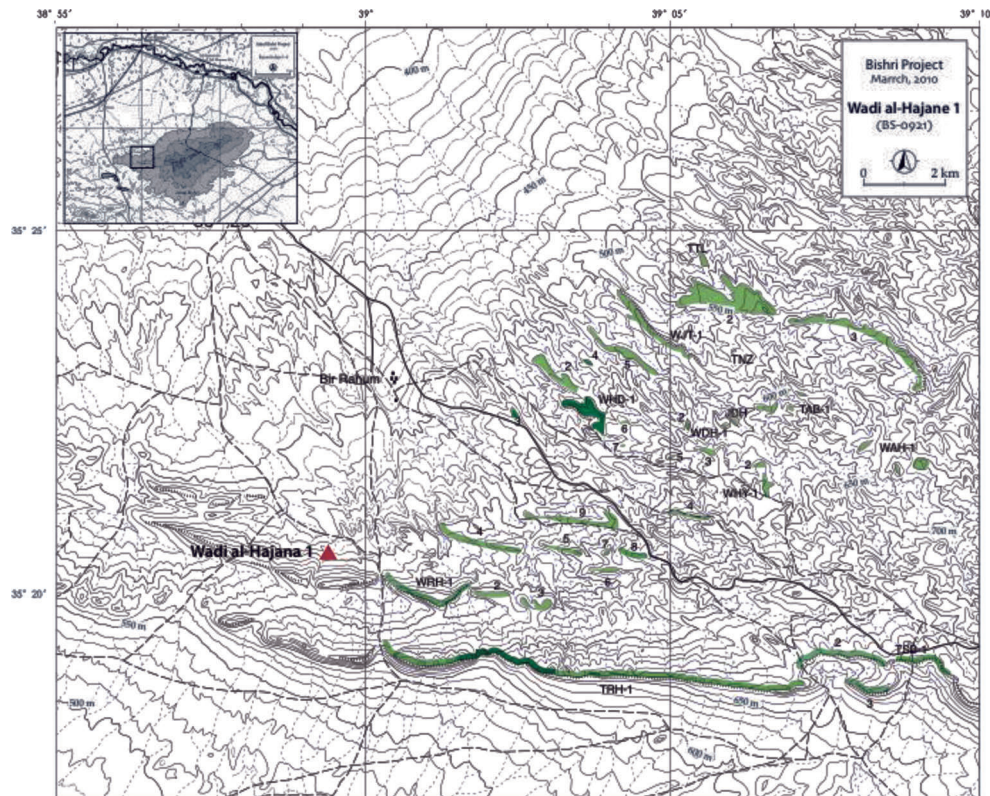
(الشكل 4) مجموعة من الكسر الفخارية من المربع 2 ضمن تل غانم العلي



وقد بينت دراسات هذا الموسم أن عجينة هذه العينات الفخارية عادة ما تحتوي على رمل ، أما اللون فقد كان بشكل عام مائلاً إلى اللون الأصفر الداكن ، و بناء على أشكال هذه الأواني يمكن القول وبشكل عام بأن مجموعة العينات الفخارية تنتمي في معظمها إلى نوع من المنتجات الفخارية البسيطة ( Plain Simple Ware ) إذ لم يتم تأكيد وجود عينات من منتجات الفرات في دراسة هذا الموسم

### دراسة أثرية لموقع وادي هجان في منطقة البشري

يمتد وادي هجان على بعد 5 كم جنوب غربي منطقة بير رحوم وهي عبارة عن منطقة حدود إدارية بين الرقة ومنطقة حمص ، هذا الموقع كان قد تم الكشف عنه خلال أعمال المسح موسم 2009 . وما لفت الانتباه في هذا الموقع هو كميات من الأدوات الصوانية المنتشرة في هذه المنطقة ( نواة ، 122 تنصلة ) وبناء على هذه الأدوات الصوانية المتنوعة يمكن تأريخ هذا الموقع واعتباره مستوطنة نيوليتية صغيرة ، وهذا ما يساهم في تقديم فكرة عن تاريخ الاستيطان في هذا المنطقة ، وهو السبب الرئيسي في تحديد هذه المنطقة كمركز للأبحاث الأثرية لهذا المشروع



(الشكل 5) خريطة عامة توضع موقع وادي هجان بالنسبة لمنطقة البحث

في موسم العمل هذا تم تحديد خمسة مربعات اختباريه بقياس  $5 \times 2.5$  م في محاولة لإيجاد أدلة أثرية بشكل أوضح تساهم في توضيح ماهية الموقع ، حيث تم الكشف خلال هذا السبر على مجموعة من الأدوات الصوانية بالإضافة إلى بعض الكسر الفخارية والتي تؤرخ في مجملها إلى فترة النيوليت الفخاري .

وكنتيجة للأبحاث الميدانية المنفذة لهذا الموسم يمكن القول وبشكل عام بأن منطقة البشري قد استخدمت لفترات تاريخية قديمة امتدت منذ عصر النيوليت ما قبل الفخار .



(الشكل6) صورة من جهة الجنوب توضح امتداد وادي هجان



(الشكل7) مجموعة من الأدوات الصوانية المتناثرة فوق سطح الموقع



**ARCHAEOLOGICAL RESEARCH IN THE BISHRI REGION**  
**— REPORT OF THE FIFTEENTH WORKING SEASON —**

Katsuhiko OHNUMA

Director of the Japanese Archaeological Mission to Bishri  
(Kokushikan University, Tokyo, JAPAN)

Ahmed SULTAN

Director of the Syrian Archaeological Mission to Bishri  
(Directorate General of Antiquities and Museums, Damascus, SYRIA)

November 17, 2010

The 15th field season of the Syria-Japan Archaeological Joint Mission to the Bishri Region started on October 13, 2010 and was completed on November 17, 2010. Dr. Bassam Jamous, the Director General of the Syrian Directorate General of Antiquities and Museums, and Dr. Michel Al-Maqdissi, the Director of Archaeological Excavations and Research at the Syrian Directorate General of Antiquities and Museums, kindly helped us towards the completion of this season's works. We express our sincerest gratitude to them for their heart-warming cooperation.

The members of this season's joint mission were as follows.

Syrian party: Ahmed Sultan (Director), Aed Issa, Mohammed Jajan, Heba Alali and Ruba Deeb.

Japanese party: Katsuhiko Ohnuma (Director), Shogo Kume, Atsunori Hasegawa, Chie Akashi, Morito Iizuka and Isamu Ono.

In this field season, we carried out a series of sondage (trench excavations) at the site of Tell Ghanem Al-Ali and the grave complex at the Wadi Daba area near the site of Tell Ghanem Al-Ali (Fig. 1). Outlines of these works are described in the following sections.

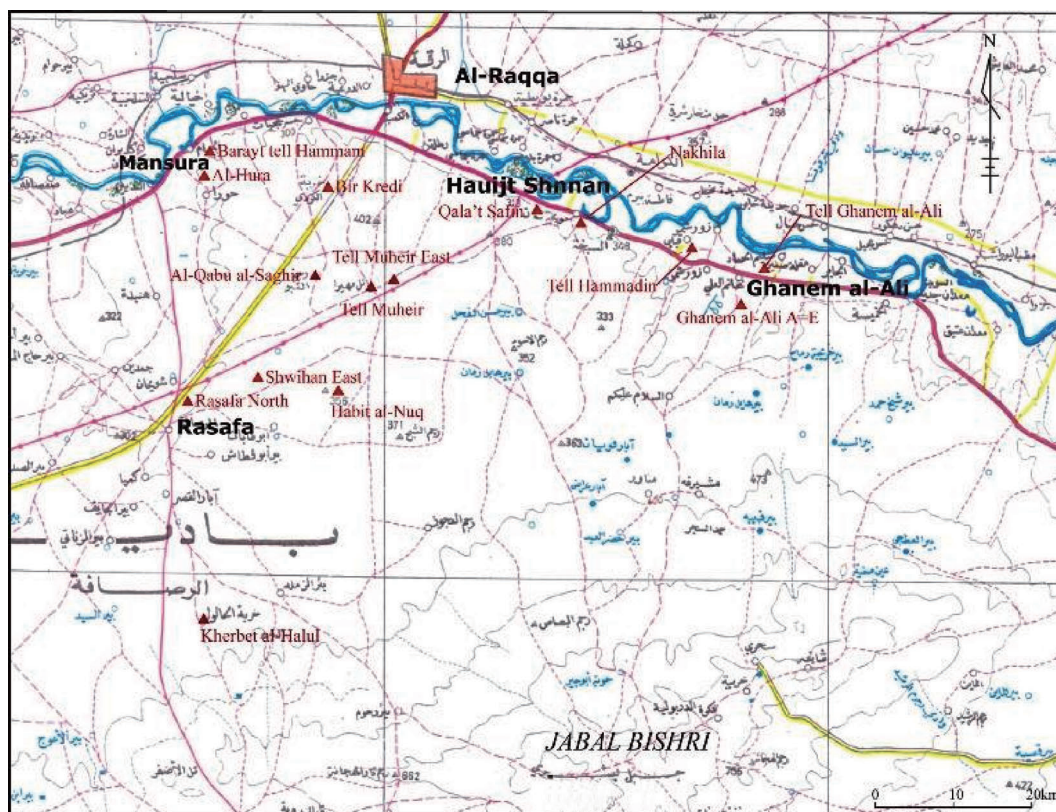


Fig. 1 Map showing the location of the site of Tell Ghanem Al-Ali.

## I Sondage in Square 6 of the Site of Tell Ghanem Al-Ali

Katsuhiko OHNUMA (Professor, Kokushikan University)

In this field season, sondage was continued in Square 6 of the site of Tell Ghanem Al-Ali (Fig. I-1). The 9<sup>th</sup> and 10<sup>th</sup> field seasons in May of 2009 and August to September of 2009 respectively undertook sondage works in this square, in the view that the archaeological sequence in Square 6 was indispensable for understanding the duration of the site exploitation at Tell Ghanem Al-Ali in the Bronze Age, and for telling its intra-site functional variability. As the results, we revealed a Middle Bronze Age pit grave in the 9<sup>th</sup> field season and Early Bronze Age building levels in the 10<sup>th</sup> field season.

And, the sondage work in this field season has confirmed the stratigraphy of Square 6 from the surface soil down to the floor of Building Level 2b, having modified the stratigraphical observation in the 10<sup>th</sup> field season in September, 2009.

Described below are the features of layers and building levels clarified in this field season.

Layer 1: Surface soil, sloping downwards into the north direction in the thickness of 10 to 15 cm.

Layer 2: Pit grave dated to the end of the Middle Bronze Age I (personal communication with Dr. Michel Al-Maqdissi in August, 2009). This pit grave was made with downward cutting into the underlying Building Level 1. The pit itself was not shaped circle in outline but was the shape of irregular meandering circle, suggesting that it was not made systematically (Fig. I-2).

Pit: At the north-west corner of the square, we unearthed a pit filled with ash and charcoal fragments. Greyish-blue in colour, this pit contains a small quantity of potsherds and small gravels (Fig. I-3).



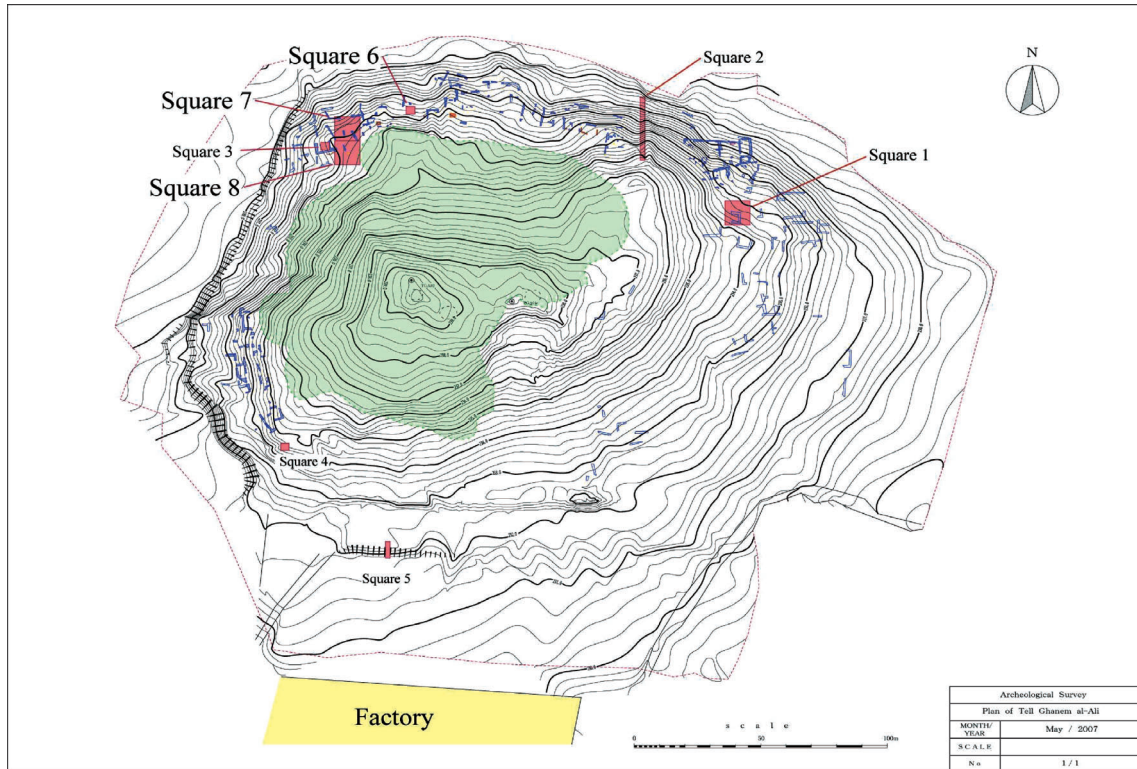


Fig. I-1 Overall plan of Tell Ghanem Al-Ali showing the location of Square 6.



Fig. I-2 Middle Bronze Age pit-grave seen from north (9<sup>th</sup> field season in May of 2009).

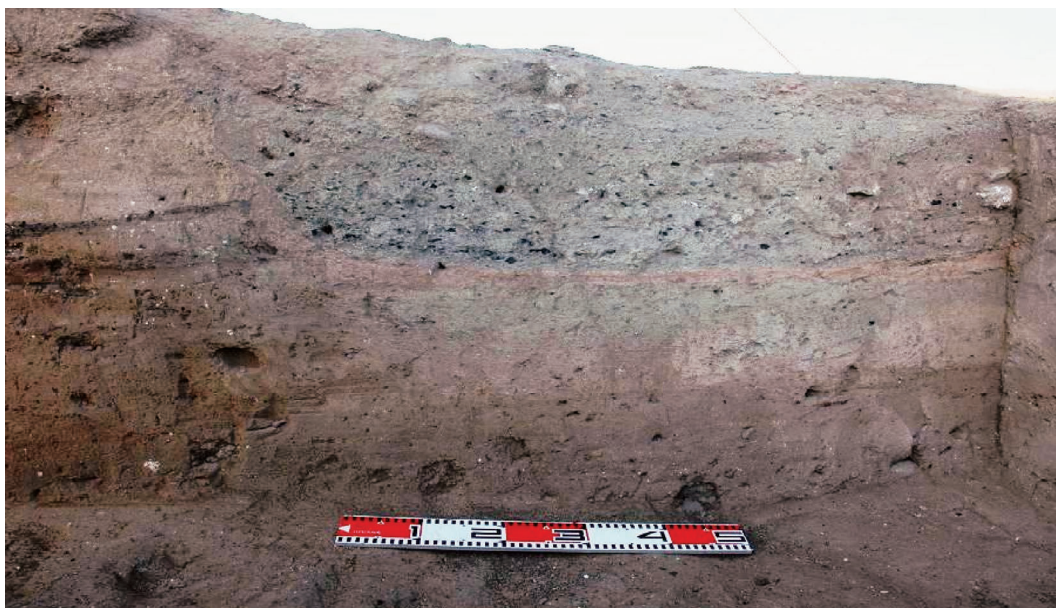


Fig. I-3 Pit seen at the western section of Square 6.

According to the western section of the square, this pit was made after Building Level 1. This pit is dated to the Early Bronze Age Phase III/IVa, on the basis of features of potsherds from it.

Building Level 1: Horizontal thin layers, some 40 cm at the thickest accumulation, altogether forming Building Level 1. These thin layers, brownish or yellowish in colour, are neither very hardened nor bearing continuous ash, and yielded potsherds of the Early Bronze Age Phase III/IVa. In addition, lithic artifacts such as cortical flakes and chips were unearthed in a small quantity. The reason why we collectively call these thin layers Building Level 1 is that a part of a wall, piled with stones and mud-bricks and directed into the north to south and the east to west, is remaining in association with these thin layers at the south-west corner of the square.

Building Level 1 was partly cut at the time when the Middle Bronze Age pit grave described above was constructed. The floor of Building Level 1, some 10 cm beneath the bottom of the pit grave, was made with cutting and leveling of a mud brick wall which had more or less existed. Thin *gyus* plaster and rather continuous ash covered this floor. The floor is very hard, and the surface lines of the mud brick wall run in the northwest to southeast and the eastnorth to westsouth directions (Fig. I-4).

Building Level 2a: Under the floor of Building Level 1 with *gyus* plaster and ash described above, a layer with potsherds and cortical flakes/chips of lithic artifacts dated to the Early Bronze Age Phase III/IVa was unearthed in the accumulation of some 20 cm at the thickest. This layer can be defined as Building Level 2a, for it is associated with a floor and the mud brick/stone wall, later cut and leveled for the floor of Building Level 1. The fact that two of the cortical flakes unearthed from this layer are conjoined together also supports this layer to have been a single building level. The floor is very hard and bears thin *gyus* plaster and rather continuous ash (Fig. I-5). The wall runs into the northwest to southeast and the eastnorth to westsouth directions, differently from the wall of Building Level 1 running into the north to south and the east to west directions.

Building Level 2b: In this field season, only the level under the floor of Building Level 2a was excavated. We define this excavated accumulation to be Building Level 2b. Building Level 2b, 30 to 50 cm in accumulation, yielded potsherds and cortical flakes/chips of lithic artifacts, though not in a large quantity. The potsherds unearthed from this level are also dated to the Early Bronze Age Phase III/IVa.





Fig. I-4 Floor of Building Level 1 with *gyps* plaster and surface lines of the mud brick wall which was levelled at the time of the floor making, seen from north (10<sup>th</sup> field season in August to September of 2009).



Fig. I-5 Wall and floor of Building Level 2a seen from north (10<sup>th</sup> field season in August to September of 2009).



Fig. I-6 Wall and floor of Building Level 2b seen from north.



Fig. I-7 Wall and floor of Building Level 2b seen from west.

The wall of Building Level 2b was continuously used for the overlying Building Level 2a, thus running into the northwest to southeast and the eastnorth to westsouth directions. The floor is greysh-brown in colour and is very hard with small gravels and potsherds laid horizontally, but it bears neither *gyus* plaster nor continuous ash (Figs. I-6 and I-7).

As discribed above, the sondage work in Square 6 in this field season has revealed the stratigraphy in Square 6 more clearly and has modified the stratigraphical observation in the previous two field seasons in 2009.

Through a series of research we have undertaken in the past four years in the region covering Tell Ghanem Al-Ali, Wadi Shabout and Bishri Desert plateau, we reached a hypothesis that the site of Tell Ghanem Al-Ali was at its height in the Early Bronze Age and that it was diminished in later period in the Middle Bronze Age, with sporadic huts and simple pit graves alone constructed on it.

This supposition is supported by the archaeological sequence in Square 6 of Tell Ghanem Al-Ali, in which we may see processes how the Early Bronze Age village gradually became diminished and later re-used for different purposes in the Middle Bronze Age.

## II Sondage at Tell Ghanem Al-Ali, Squares 7 and 8

Atsunori HASEGAWA (Postdoctoral fellow, Japan Society for the Promotion of Science)

Tell Ghanem al-Ali gave us a unique opportunity to study town planning during the last stages of its occupation. We were able to notice a considerable number of building remains through surface observation and survey. To understand the layout of the town we surveyed the surface of Tell Ghanem al-Ali, and recorded a lot of building outlines during the 2008 and 2009 seasons. The survey area covered the north east part of the mound.

The surface survey indicated that many building remains were concentrated in the northwest and the east part of the mound. We investigated Square 1, which is located on the east part of the mound during the 2008 season. Multi-roomed buildings were found and some walls showed signs of re-use and reconstruction.

In the northwest part of the mound, we dug a small trench, Square 3 in the 2008 season. We found a thick plastered floor in Square 3. No plaster flooring was found in Square 1, and the results of sondage in Square 3 were interesting and seemed to indicate a difference in structure and function of dwellings between Square 1 and Square 3. However, Square 3 in its entirety was too small to reveal the plans and structures of building remains in the northwestern part of the mound. Therefore, we set new trenches, named Squares 7 and 8, in the northwest part of the mound near Square 3. Both of them measure 10 (east-west) × 10 (north-south) m (Fig. I-1). During this field season we uncovered two building levels.

### Square 7

#### Building level 1

After removing the surface layer, we encountered a stone structure in the southern half of Square 7. It consisted of three stone walls (Fig. II-1). The main wall is 70 cm in width and runs east-northeast. At least, four rooms divided by a wall were identified. They are supposed to have been a part of multi-roomed building.

The room located at the southern end of Square 7 is well preserved and extends to the south. In other words, almost of all the main rooms are in Square 8.

On the other hand, the other rooms were found in a fragmentary condition. The walls that run north-northwest were not preserved completely, and the northern part of the walls had disappeared. So, the size and plan of these rooms are unclear. Compared with the stone walls found in Square 1, these are ca. 40 cm in height and lower than the wall in Square 1. It is possible that these form the foundation of mud-bricks walls. At the northern end of Square 7, another stone wall was uncovered just below the surface. It runs parallel with the main wall at the southern part of Square 7, but the bottom level of the wall is lower in height. It seems that it is a part of the structure of Building Level 1. However its relationship with rooms of the southern part is uncertain. Unfortunately, we could



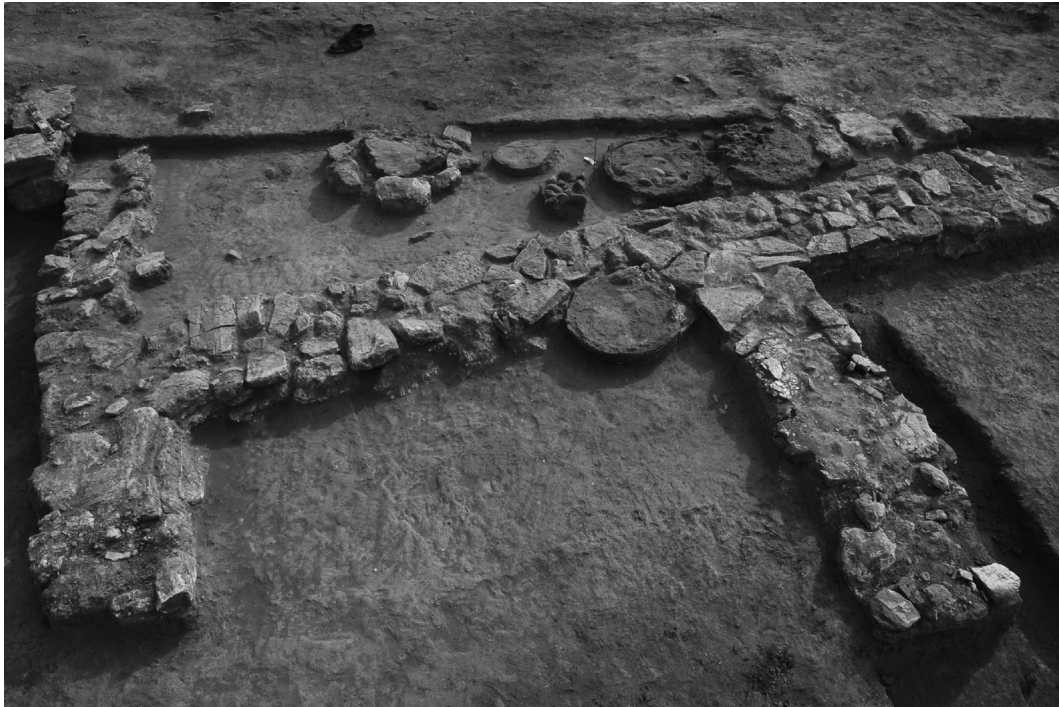


Fig. II-1 Building Level 1 of Square 7, from the north.

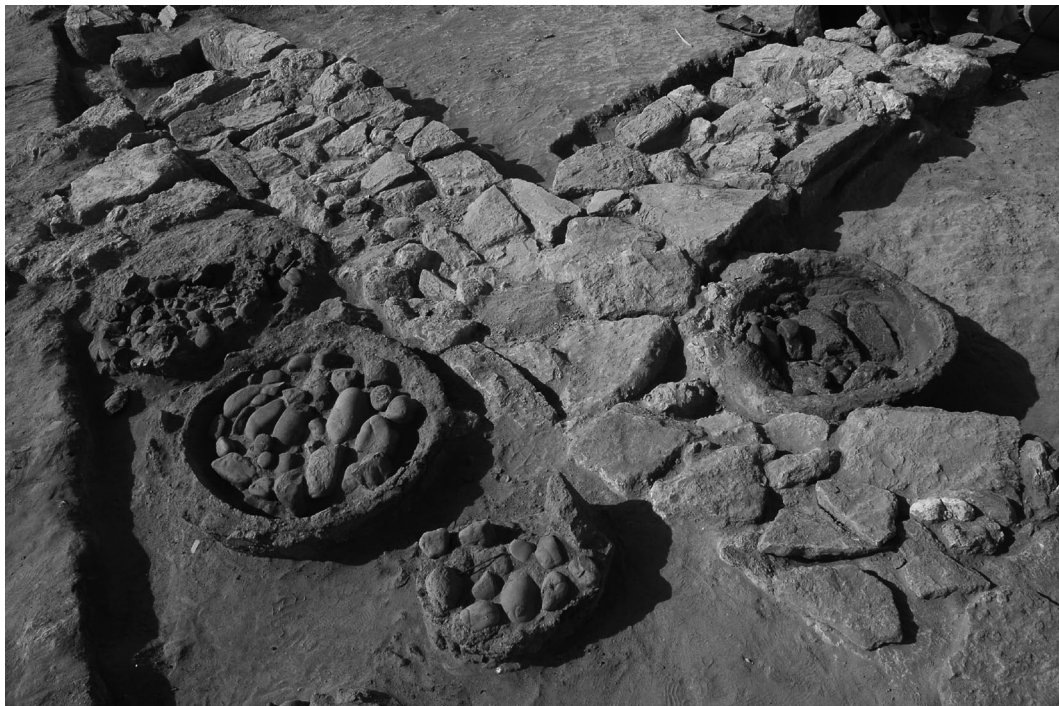


Fig. II-2 Fire instruments found at the main room and built inside the main wall of Square 7, from the southeast.

not identify plastered flooring such as that found in Building Level 1, Square 3.

Five fire features were found. Three of them are in the main room, one is in a corner and the others are located in the eastern edge of Square 7 (Fig. II-2). They are ca. 70 cm in diameter. They



have thin walls constructed of clay, ca. 6 cm thick. Only the lower parts remain and they are ca. 20 cm in height (Fig. II-3). Pebbles were found at the bottom of these features. It seems that they served as floors or foundations (Fig. II-4). They contained white ash, soil and burnt soil and gray ash including many charcoal fragments which surrounded them. Their structures seem to be similar to the baker's ovens that are still used in villages now. They are called *tannor*. The fire feature located on the corner of the main wall was built inside the wall (Fig. II-5). It should be noted that the stones used in the floor were not part of the structure of the main wall (Fig. II-6). In other words, the fire feature was built later than the main wall. Five fire features found in Square 7 have almost the same structure and their bottom levels are almost the same. It seems, therefore, that they were used nearly at the same time.

#### Building level 2

No buildings were identified at the same level, where we found structures in building level 1, in the northern half of Square 7. So, we dug further than Building Level 1. About 60 cm below Building Level 1, part of a multi-roomed building, consisting of six or more square or rectangular rooms, were identified. They are divided by mud-brick walls which are ca. 40 cm in width. The axis of the building is orientated north-northwest to south-southeast. This field season we investigated the eastern part of the multi-roomed building, which was in a poor state of preservation. Three rooms

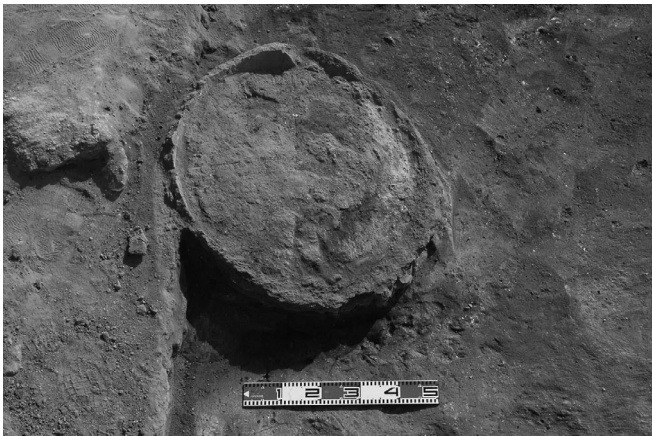


Fig. II-3 Fire instrument found at the eastern edge of Square 7, from the north.

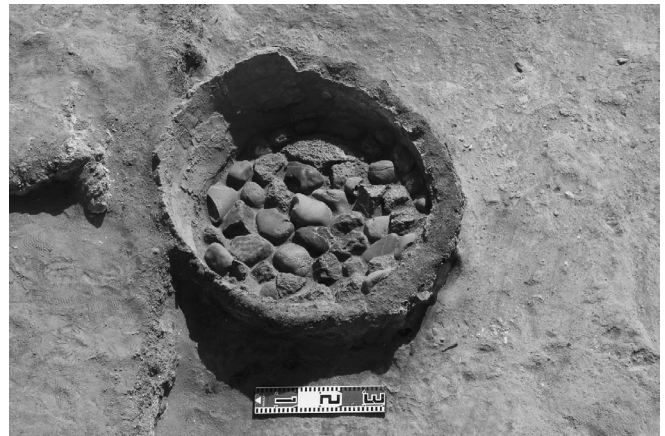


Fig. II-4 Pebble floor of the fire instrument, from the north.



Fig. II-5 Fire instrument built inside the wall, from the north.

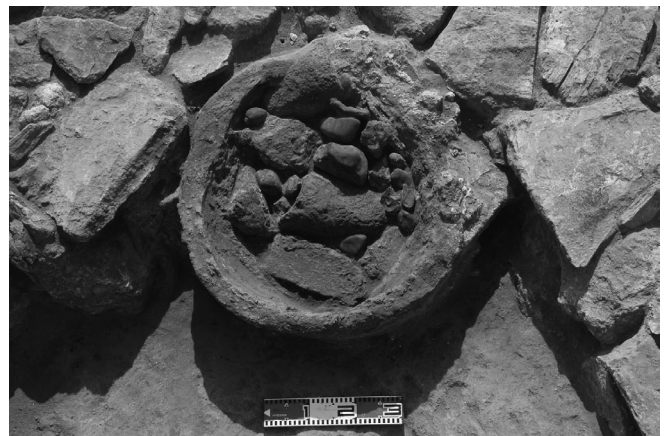


Fig. II-6 Saddle quern re-used as foundation, from the north east.



Fig. II-7 Eastern half of Building Level 2, from the north.



Fig. II-8 Western half of Building Level 2, from the north.

were identified in the eastern part of the building. We discovered stone foundations under the mud-brick walls (Fig. II-7). Not so many materials were found inside the room. A regular square room, measuring 2.4 m × 2.4 m, was located in the center of the western part of the building (Fig. II-8). The investigation of building level 2 is not complete, and we are planning to continue this investigation during the next field season.

### Square 8

Square 8 is located to the immediate south of Square 7. We dug down ca. 15 cm below the surface during this field season, and some building remains were unearthed. The main structure was a rectangular building, which was part of the multi-roomed building found at Building Level 1 of Square 1. The long axis of the building is orientated north-northwest to south-southeast. The building, measuring 5 m × 9 m, has two rooms divided by a mud-brick wall extending east-northeast to west-southwest (Fig. II-13). The wall is basically constructed of stones. However, it seems that the walls were partly constructed with mud-bricks. The northern room of the building is the same as the main room identified in Square 7. There was a shallow pit ca. 3 m in diameter containing ash and many charcoal fragments inside the northern room (Fig. II-9). After removing the ash layer, we unearthed a cluster of stones in the center of the pit. We also unearthed at least three plaster basins made from gypsum. These were attached to the southern wall of the northern room (Fig. II-10). They have an irregular square shape, measuring ca. 80 cm × 60 cm and ca. 10 cm in depth (Fig. II-11). Some gypsum plaster, remaining in the floor-like feature, were also identified in a fragmentary condition around



Fig. II-9 Ash pit of Square 8, from the south.



Fig. II-10 A cluster of stones, from the north.





Fig. II-11 Plaster basin, from the north.



Fig. II-12 Plaster basin, from the north.

the cluster of stones. One gypsum basin was located between the stone cluster and the mud-brick wall (Fig. II-12). Their position indicates that they belong to a series of structures. It is possible that the northern room was a kind of workshop which utilized both fire and water. We could not sufficiently investigate these remains and clarify their function and the building details are still in question. We need to continue our research in the next field season. The northern room seems to have had an entrance at the western side, as the western wall came to an end before being attached to the northern wall. We found a big jar, missing its upper part, at the southwestern corner of the southern room. The entrance of the southern room seems to have existed in the southern wall. We ceased digging at the level that the walls of the southern room were revealed. So, the inside detail of the southern room is still unclear. We also need to continue our research not only in the northern part of the square but in the whole of Square 8.

Almost all of the buildings found in both Building Levels 1 and 2 are multi-roomed houses consisting of several rectangular rooms. According to the surface survey results in 2008 and 2009, these types of houses were the main dwelling structures at Tell Ghanem al-Ali. The axes of the buildings found at both levels are orientated in the same direction, that is, roughly north-northwest. However, the main materials used in construction of the buildings are quite different. The walls of Building Level 1 are constructed of gypsum stones and solidly built. On the other hand, mud-bricks are used to build the houses at Building Level 2, and these mud-bricks walls have stone foundations which are thinner than the walls of Building Level 1.

The room that extends over two squares has three fire features, which seem to have been *tannor*, a cluster of stones located on the bottom of the big ash pit, and three gypsum basins. It is possible that the room was related to a kind of workshop, such as a bake-house for example.

Almost all of the potsherds unearthed from both squares are Plain Simple Wares. A few fragments of Black Euphrates Ware were unearthed from Building Level 1. Therefore, Building Level 1 belongs to the third phase of Tell Ghanem al-Ali. This chronological framework was established on the basis of the results from Square 2. It is possible that the buildings unearthed in this field season were used as dwellings during the Early Bronze Age III to the early part of the Early Bronze Age IVa period.

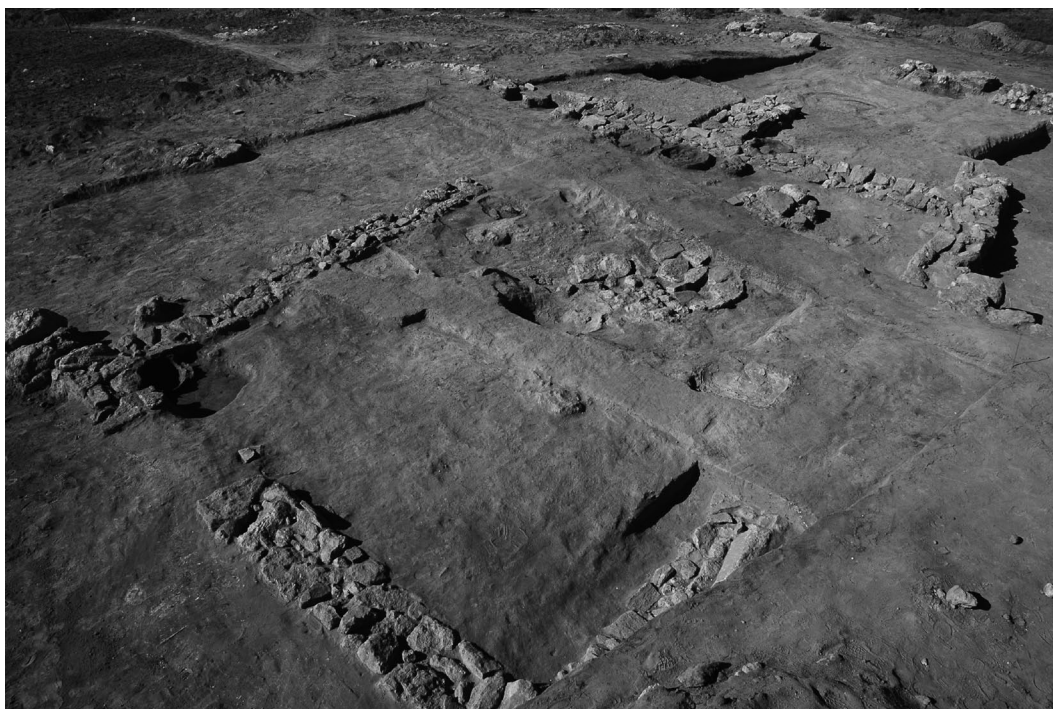


Fig. II-13 Overall view of Building Level 1 of Squares 8 and 7, from the southeast.

### III Sondage at Early Bronze Age Cemetery near Tell Ghanem Al-Ali

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Chie AKASHI (Ph.D. student, Waseda University)

#### Introduction

The fifth field season focused on Early Bronze Age (EBA) mortuary practices around Tell Ghanem al-'Ali was conducted from 17th October to 1st November, 2010. Major aims of the last four seasons of the investigations in 2008 and 2009 were to demonstrate an overview of EBA mortuary variability in the area through cleaning and survey of various types of plundered graves, since the seriously damaged graves merely provided us obscure mortuary evidence. However, the last 2009 autumn season produced a well-preserved shaft and chamber grave at the Wadi Daba (WD) burial area situated in the modern village of Ghanem al'-Ali, some 650 m southwest from the archaeological site of Tell Ghanem al'-Ali. The discovery enabled us to set new goals of the second stage of our investigations since this season. They include collection of concrete archaeological, palaeoanthropological, or other empirical data, in an attempt to understand social relationship between the living and the dead in the third millennium BC Euphrates Valley.

#### Research area

Wadi Daba burial area is located at slopes of Wadi Daba or the Euphrates terrace in the modern village of Ghanem al'-Ali. Three clusters of EBA shaft graves have thus far been documented. Since the last season, a cluster named WD-Area 1-Unit C (WD1C) has been sounded (Fig. III-1) in an area of  $4 \times 10$  m main square with  $1 \times 5$  m sub-square.



In this season, three graves/looter's pits indentified in the last season were first excavated. At the same instance, the  $1 \times 5$  m sub-square was enlarged into  $3.5 \times 10$  m in order to confirm spread of graves (Fig. III-2). Because two new graves/looter's pits were successfully indentified in the new square, one of the pits was also excavated. As a result, four entrance shafts were opened in this season (Fig. III-3).

## Graves and finds

### *Grave WD1C-2*

Destroyed by a large (c. 1.6 m in diameter) looter's pit, the rectangular entrance shaft of the grave measures c.  $1.5 \times 1.2$  m in length and width, and c. 0.9 m in deep. A different extremely large (c. 3.0 m in diameter and c. 2.8 m in deep) looter's pit has also cut the southern half of the burial chamber. The oval chamber measures c. 2.8 m in length and 0.9 m in deep (Fig. III-4). The orientation of the grave indicates the NE-SW direction. Due to the serious disturbances by looters, no *in situ* materials were obtained. However, many complete and semi-complete ceramics and other small finds were salvaged, including small bottles and a short-necked jar of so-called Black Euphrates Banded Ware (Fig. III-5: left) or a pair of bronze pins with mushroom-shaped head (Fig. III-5: right). Concentrations of disturbed human skeletal remains were also attested.

A 0.2 m wide ditch have been laid out at the bottom of the entrance shaft, connecting two small holes excavated into both sidewalls of the shaft (Fig. III-4). The ditch and holes were apparently drainage system associated with infant burials, which located around the main burial as described below. However, purposes of the drainage system still remain unclear.

### *Grave WD1C-2-3*

Adjacent to Grave WD1C-2, an undisturbed small shaft and chamber grave was attested. Because the grave was first found as part of drainage associated with Grave WD1C-2, the entrance shaft has not yet been excavated. Yet, surface observations have confirmed the small entrance shaft of the grave. The burial chamber measures c.  $0.7 \times 0.7$  m in length and width, and c. 0.5 m in height. The entrance to the chamber was sealed with two gypsum flat slabs. The orientation of the grave indicates the NE-SW direction. A c. 0.15 m wide ditch was found across the bottom of the chamber. The ditch leads to Grave WD1C-2 through the small hole (c.  $0.3 \times 0.2$  m) described above (Fig. III-6). It appears that the ditch also lead to Grave WD1C-3 (see below) through another hole dug into the opposite side of the chamber, but the channel have not yet been clearly confirmed.

In the burial chamber, an infant has been laid out in the flexed position on the side. Grave goods include a bowl with rounded rim, a corrugated goblet (Fig. III-6), a spouted jar, and a shell ring.

### *Grave WD1C-3*

The rectangular entrance shaft of the grave measures c.  $1.4 \times 1.1$  m in length and width, and c. 3.1 m in deep, although a looter's pit (c.  $1.8 \times 1.7$  m) destroys the top of the shaft. The orientation of the grave indicates the NE-SW direction. A c. 0.2 m narrow step found from c. 0.4 m below the top might be a foothold. Very few artefacts were recovered from the shaft, but a pendant made of lapis lazuli (Fig. III-7) was collected. A slope has been set at the bottom of the shaft, leading to the burial chamber. Two undressed gypsum stones laid on the end of the slope were perhaps used as a step. Interestingly, the entrance to the chamber was re-sealed by the looter(s), using some eight gypsum slabs.

The semi-square burial chamber measures c.  $2.2 \times 2.1$  m in length and width, and c. 1.0 m in height. Because of serious disturbance by the looter(s), only some five semi-complete ceramic vessels were recovered from the southern corner of the chamber, including a bottle of Black Euphrates Banded Ware and a cooking pot as well as jars of plain simple ware. One of the jars was filled with fragmented

elements of human remains (Fig. III-8). Small amount of beads made of faience and fragmented bronze pins were also collected.

An alternative oval burial chamber was also found from immediately below the top of the entrance shaft (Fig. III-9). The undisturbed niche-like burial chamber measures c.  $1.2 \times 0.8$  m in length and width, and c. 0.8 m in height. A child has been laid out in the flexed position on the side (Fig. III-10). Offering ceramic vessels consist of a bowl with convex wall, spouted and short-necked jars, two lids, and a miniature jar of plain simple ware. Other grave goods include beads, a ring and a pendant with a flower-like motif made of shell or faience (Fig. III-11). The massive use of 'jewellery' as offering materials may indicate that the deceased was a female individual. Curiously, a c. 0.15 m wide ditch was also found across the bottom of the chamber. As has been described above, the ditch leads to Grave WD1C-2-3. The ditch additionally leads to the southeastern wall of the shaft of Grave WD1C-4 (see below) at the opposite side of the burial chamber.

#### *Grave WD1C-4*

Destroyed by three looter's pits, the rectangular entrance shaft of the grave measures c.  $2.4 \times 1.3$  m in length and width, and c. 2.2 m in deep. Stratigraphic observations of the section wall of the excavation square suggest one of the pits were perhaps excavated in antiquity. Four complete ceramic vessels consist of small bowls were recovered from the earlier pit.

The grave contains two lateral burial chambers (Fig. III-12). One was dug into the southwestern wall of the shaft, while the other was excavated into the northwestern wall. Both of the burial chambers have not yet been excavated because of limited time of this season, but preliminary observations of the chambers suggest that the looters seriously damaged the burials.

Excavated into the southwestern wall of the entrance shaft, an additional niche-like burial chamber comparable with the example of Grave WD1C-3 was also found from c. 0.8 below the top of the shaft (Fig. III-12). The rectangular chamber measures c.  $1.1 \times 1.0$  in length and width, and c. 0.7 m in deep. The small chamber produced seven complete ceramic vessels, including cups with convex wall, spouted and short-necked jars, and a miniature jar of plain simple ware. Two terra-cotta wheels and undressed gypsum stones were also recovered. However, the scattered nature of the finds suggests that the chamber was disturbed in antiquity or a multi-stage burial practice was performed. More or less complete but disarticulated human remains (Fig. III-13) may support the latter view.

#### *Grave WD1C-5*

The rectangular entrance shaft of the grave measures c.  $1.8 \times 1.3$  m in length and width, and c. 1.3 m in deep. A looter's pit (c.  $1.6 \times 1.4$  m) destroys the top of the shaft like other graves. The orientation of the grave indicates the NE-SW direction. A c. 0.6 m long steep slope leads to the entrance to the burial chamber. The height of the slope measures some 1.0 m. At the end of the slope, a c. 0.15 m wide ditch has been excavated (Fig. III-14). The ditch was apparently associated with a drain outlet attached to Grave WD1C-5-6 (see below).

The oval burial chamber measures c.  $1.9 \times 1.1$  m in length and width, and c. 0.9 m in height. The chamber produced a few complete and semi-complete ceramics vessels, including long-necked and spouted jars and a bowl with rounded rim. A shell bead and fragmented bronze pins and rings were also collected.

#### *Grave WD1C-5-6*

Like Grave WD1C-2-3 described above, the grave was first found as part of drainage associated with Grave WD1C-5. The burial chamber measures c.  $1.6 \times 0.9$  m in length and width, and c. 0.9 m in height. The entrance shaft has not yet been confirmed, but two small holes identified from the interior wall of the chamber might be the entrance shaft and looter's pit. The orientation of the

grave indicates the NE-SW direction. A c.  $0.6 \times 0.4$  m small hole dug into the northwestern sidewall leads to the entrance shaft of Grave WD1C-5. Purposes of the small entrance are still unknown. No ditch was found at the bottom of the burial chamber, but a small drain outlet (0.1 m in diameter) dug into the northwestern bottom also leads to the entrance shaft of Grave WD1C-5. The small outlet was apparently associated with the ditch discovered from WD1C-5.

Despite apparent disturbance in modern or antiquity, eight complete and semi-complete ceramic vessels found from the chamber include a bottle and a short-necked jar of Black Euphrates Banded Ware (Fig. III-15). A few human remains were obtained from the chamber, but fragmented elements of cranial bones (of perhaps a child) were recovered from inside a ceramic vessel. Fragments of bronze pins and rings were also collected.

### **Concluding remarks**

Soundings at Wadi Daba burial area have yielded mortuary evidence of the limited period of Early Middle Euphrates (EME) 4 or 2450–2300 BC, as has been seen from uncovered ceramic vessels including specimens of Black Euphrates Banded Ware (Fig. III-16). Unfortunately, discovered five larger burial chambers in this season have been damaged by looter's activities. However, well-preserved smaller burial chambers produced significant dataset for further analysis, allowing us to consider the nature of mortuary practices in the EBA communities of the middle Euphrates Valley. At the moment, the following preliminary observations were obtained. First, intra-site variability of shaft and chamber graves in size, shape, and number of burial chambers is evident, suggesting that domestic grave construction was most probably conducted. Second, a multi-stage burial practice was apparently performed, as is the case of WD1C-4. Whether fragmented elements of human bones from inside the pots at lower chamber of WD1C-3 and WD1C-5-6 was secondary burials, or other factors like looter's activities remains to be determined. Third, infants/children and adults were apparently interred in different manners. For example, smaller shaft and chamber graves (Graves WD1C-2-3 and perhaps WD1C-5-6) or niche-like burial chambers (upper chamber of Grave WD1C-3) have been used for burials of infants/children, although it is not clear whether only adults were interred in the disturbed larger burial chambers. Last, smaller infants/children burial chambers contain drainage at the bottom, connecting them to adjacent graves. The function of these structures is still uncertain.

### **Acknowledgements**

We sincere thank to Syrian and Japanese researchers who helped our investigations, especially Heba Alali, Ruba Deeb, Tomoya Goto, Abudallah al-Hamid, Aed Issa, and Mohammed Jajan.



Fig. III-1 Research area (satellite images after *Google Earth* and *Quickbird*).

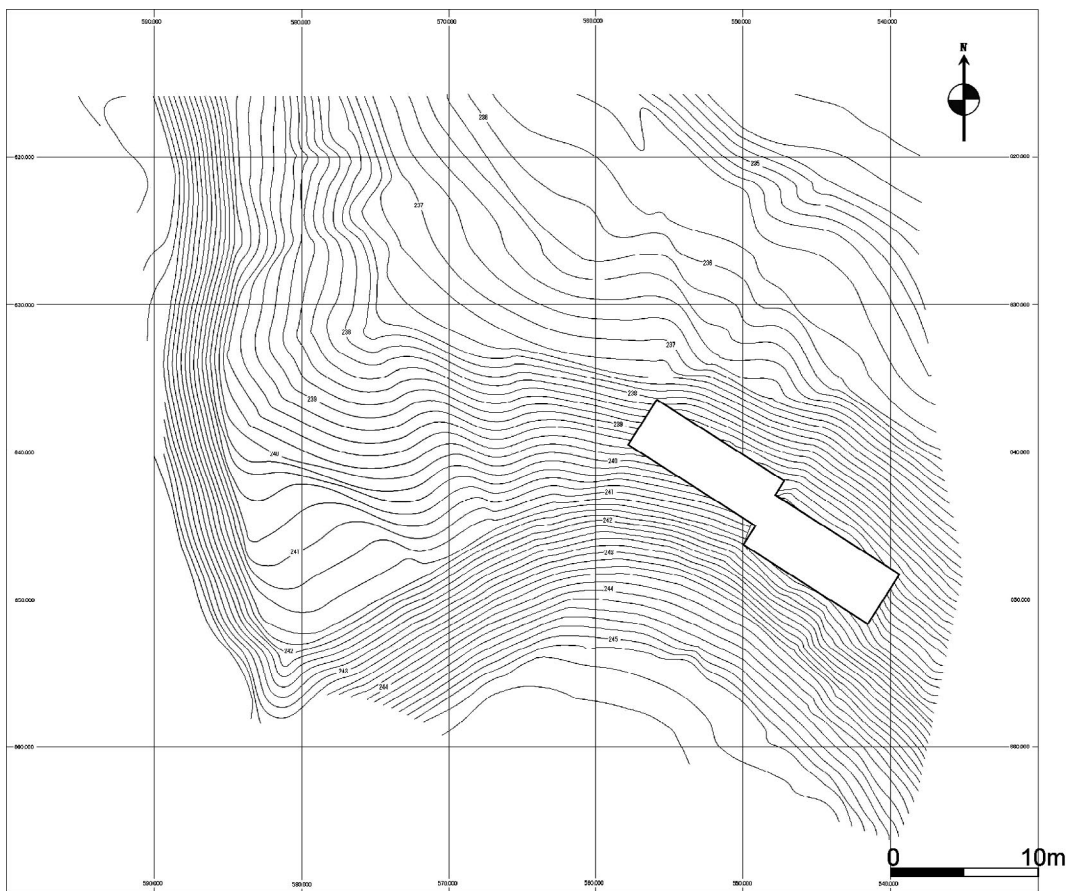


Fig. III-2 Topographic map of WD1C and location of the sounding square.



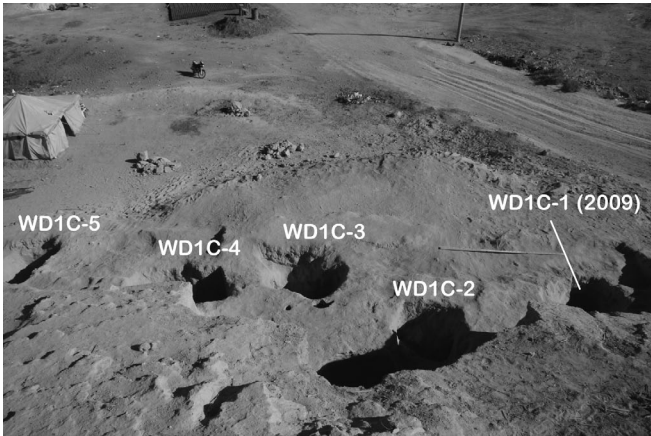


Fig. III-3 Spread of investigated entrance shafts at WD1C, looking NE.



Fig. III-4 Grave WD1C-2, looking SW.



Fig. III-5 A Jar and bottles of Black Euphrates Banded Ware (left) and a pair of bronze pins (right) from Grave WD1C-2.

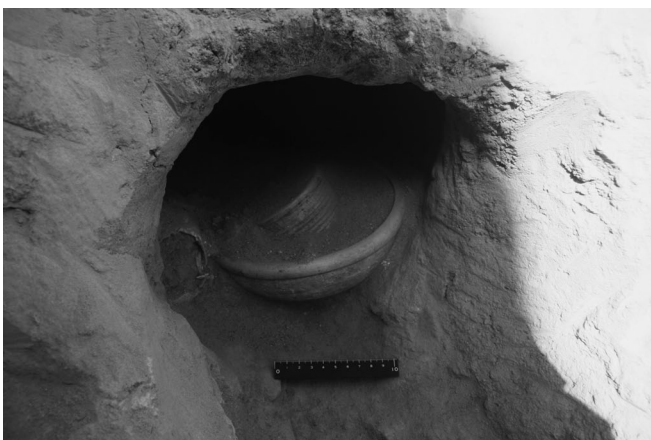


Fig. III-6 Small hole between WD1C-2 and WD1C-2-3. An infant skull and complete vessels were located at the entrance, looking NW.

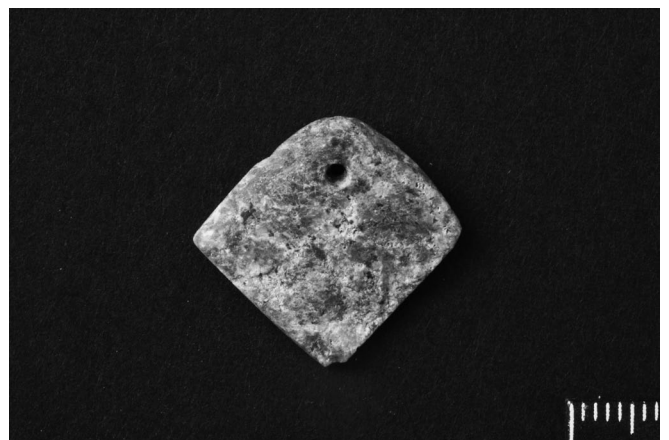


Fig. III-7 Lapis lazuli pendant.



Fig. III-8 Fragmented human remains.



Fig. III-9 Two burial chambers of Grave WD1C-3, looking SW.



Fig. III-10 Recovered human remains from niche-like chamber of Grave WD1C-3, looking SW.



Fig. III-11 Pendant with a flower-like motif from WD1C-3.



Fig. III-12 Two lateral chambers and a niche-like chamber of Grave WD1C-4, looking SW.



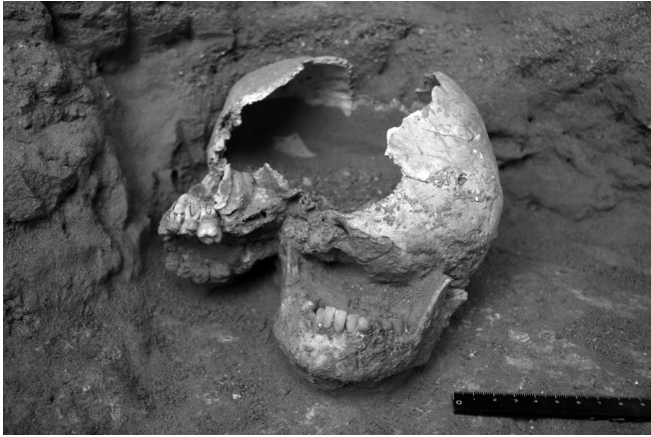


Fig. III-13 Disarticulated human skull from niche-like burial chamber of Grave WD1C-4.



Fig. III-14 Uncovered ditch and the entrance to the burial chamber of WD1C-5. A small entrance to Grave WD1C-5-6 and a drain outlet are shown at right in the photo, looking SW.



Fig. III-15 Complete and semi-complete ceramic vessels in the burial chamber of WD1C-5-6, looking NW.



Fig. III-16 Discovered complete ceramic vessels during the 2010 season (Scale: 30 cm).

#### IV Archaeobotanical Research

Chie AKASHI (Doctoral Student at Graduate school of letters, arts and sciences, Waseda University/D.C. Research Fellow, Japan Society for the Promotion of Science)

Archaeobotanical investigation was carried out from October 23 to November 2 at Tell Ghanem al-Ali, and eight soil samples (70 litres) from Square 7 and seven (53 litres) from Square 8 were processed with water-flotation. Many of the samples have been secured in *tannor* or around *tannor*, and it was observed that they were rich in charred remains. Heavy fractions like bones and pottery sherds were also collected through the flotation work. Most of the macro-remains are wood fragments, probably used as fuel.

From graves of Wadi Daba'a, eleven samples had been taken during the last field season, and

three more samples were secured this year. In total, 57 litres of soil were processed, but they produced only a few charred remains.

In addition to the charred remains, I tried to find impressions of plants on pottery sherds and on wall fragments of the *tannor* discovered from TGA. Plant impressions sometimes contain more information than charred seeds, if they are fresh and well-preserved. Silicone was used to get the replicas of the impressions. Some look like cereal chaff, but need observation with SEM for their identification. Those charred remains and replicas will be examined under a microscope in Japan for further analysis.

I also surveyed the current vegetation in Wadi Shabout and Wadi Harrar. Most predominant shrub was Chenopodiaceae, like *Anabasis* and *Noaea*. Chenopodiaceae is most abundant species among wild taxa in macro-remains of TGA as well. So, seeds of several Chenopodiaceae were collected as comparative materials.



## قرير أول

ت ي عن أعمال البعثة السورية – اليابانية المشتركة العاملة في منطقة البشري

الموسم الرابع عشر خلال الفترة الممتدة من 19 ولغاية 30 آذار 2010

كاتسو هسكو أونوما

مدير الجانب الياباني ( جامعة كوكوشيكان ، طوكيو ، اليابان )Roughly

أحمد سلطان

مدير الجانب السوري ( المديرية العامة للآثار والمتاحف ، دمشق ، سورية )

باشرت البعثة السورية اليابانية المشتركة أعمالها الميدانية لهذا الموسم بتاريخ 13 تشرين الأول واستمرت لغاية 17 تشرين الثاني من عام 2010 .

بداية نود أن نوجه الشكر العميق للدكتور بسام جاموس المدير العام للآثار والمتاحف والدكتور ميشيل مقدسي مدير التنقيب والبحث العلمي في المديرية العامة للآثار والمتاحف والمشرف المستشار لهذا البحث الأثري لما قدّماه من دعم في سبيل إنجاز هذا الموسم .

الجانب السوري : أحمد سلطان (مديراً) ، محمد جاجان ، ربا ديب ، هبة العلي ، عايد العيسى .

الجانب الياباني : كاتسو هيكو أونوما (مديراً) ، شوغو كومي ، اتسونوري هاسيكاوا ، شي أكاشي ، موريتو أيزيكا ، إسامو أونو

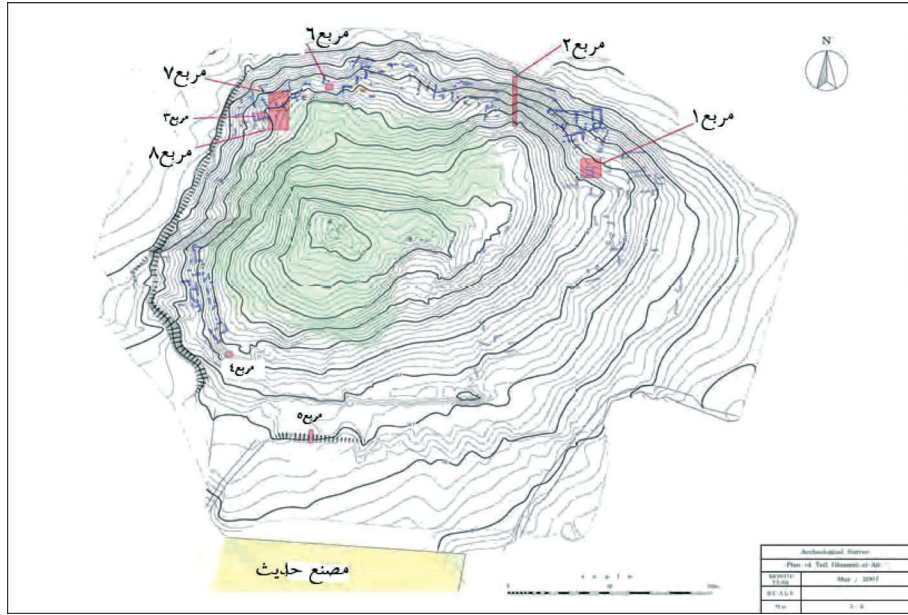
تركزت أعمال هذا الموسم وبشكل رئيسي على استكمال تنفيذ مجموعة من الأسبار الأختبارية في موقع تل غانم العلي ومنطقة مدافن وادي الضبع المجاورة لتل غانم العلي

أولاً : تل غانم العلي (القطاع 6)

(كاتسو هيكو أونوما ، جامعة كوكوشيكان ، طوكيو)

يقع هذا القطاع في الجهة الشمالية من التل الأثري ، والذي تم بدأ العمل فيه خلال أعمال الموسم التاسع والموسم العاشر عام 2009 ، والذي تم الكشف ضمنه على حفرة لمدفن يؤرخ إلى عصر البرونز الوسيط ضمن أعمال الموسم التاسع ، وفي

## الموسم العاشر تم الكشف عن سووية لمجموعة من الكتل المعمارية التي تؤرخ إلى عصر البرونز القديم

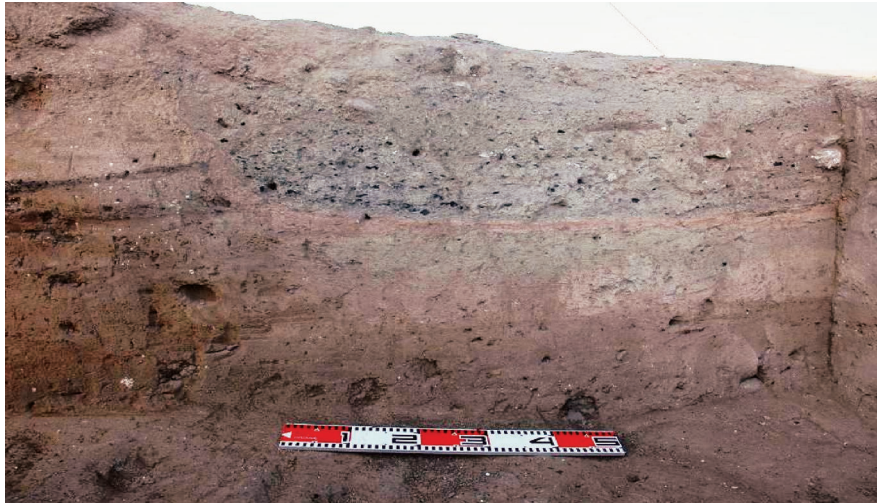


(الشكل 1) خريطة طبوغرافية لتل غانم العلي توضح توزيع مربعات السبر في التل

وبناء على نتائج أعمال هذا الموسم يمكن وصف السويات المعمارية التي تم الوصول إليها في المربع 6 على النحو التالي :

السوية الأولى : عبارة عن طبقة من التربة السطحية المنحدرة باتجاه الشمال والتي كانت بسماكة تراوحت بين 10 إلى 15 سم

السوية الثانية : تمثلت هذه السوية من خلال حفرة تحتوي على قبر يؤرخ إلى نهاية عصر البرونز الوسيط ، كما تم الكشف عند الزاوية الشمالية الغربية من المربع على جزء من حفرة صغيرة من الرماد والتي احتوت على كمية من المواد المتفحمة



(الشكل 2) الزاوية الشمالية الغربية من المربع 6 والتي احتوت على حفرة من الرماد

وبناء على دراسة المقطع الغربي للمربع ، تبين بأن هذه الحفرة كانت قد تكونت مباشرة تحت السوية الأولى للمربع ، وعلى ذلك يمكن تأريخ هذه الحفرة من خلال الكسر الفخارية التي تم العثور عليها ضمنها إلى عصر البرونز القديم المتأخر .III/IVa

وقد ظهرت الكتل المعمارية الأولى ضمن هذا المربع على عمق 40سم عبارة عن قطع من مادة اللبن مرصوفة على صف واحد مشكلة احد الجدران الرئيسية لهذه السوية، قطعت أجزاء من هذا الجدار بواسطة حفرة القبر العائد لفترة البرونز الوسيط

أما الكتل المعمارية الثانية h ضمن هذا المربع فقد ظهرت مباشرة تحت أرضية السوية المعمارية الأولى ، وكانت عبارة عن جدران من اللبن مدعمة بأساسات حجرية باتجاه شمال غرب إلى جنوب شرق وجنوب شرق إلى جنوب غرب حيث تختلف عن اتجاه الكتل المعمارية في السوية الأولى والتي كانت باتجاه الجنوب إلى الشمال ومن الشرق إلى الغرب

الكتل المعمارية الثانية b والتي ظهرت من خلال طبقة بسماكة تراوحت بين 30 إلى 50سم والتي تم الكشف ضمنها على مجموعة من الكسر الفخارية التي أرخت هذه الطبقة إلى فترة البرونز القديم المتأخر ، كما توضح أيضا ضمن هذه الطبقة أن هناك استمرارا للجدار المكتشف ضمن سوية العمارة الثانية h كانت أرضية هذه الطبقة ذات لون بني غامق



( الشكل 3 ) جدار وأرضية البناء b2 من جهة الجنوب

يمكن القول وبشكل عام بأن أعمال السبر التي تم تنفيذها في هذا الموسم ضمن المربع 6 قد قدمت معلومات أوسع و أوضح للتسلسل الطبقي لهذا المربع والتي يمكن أن تساهم وبشكل كبير في عملية التأريخ للتل بشكل عام .

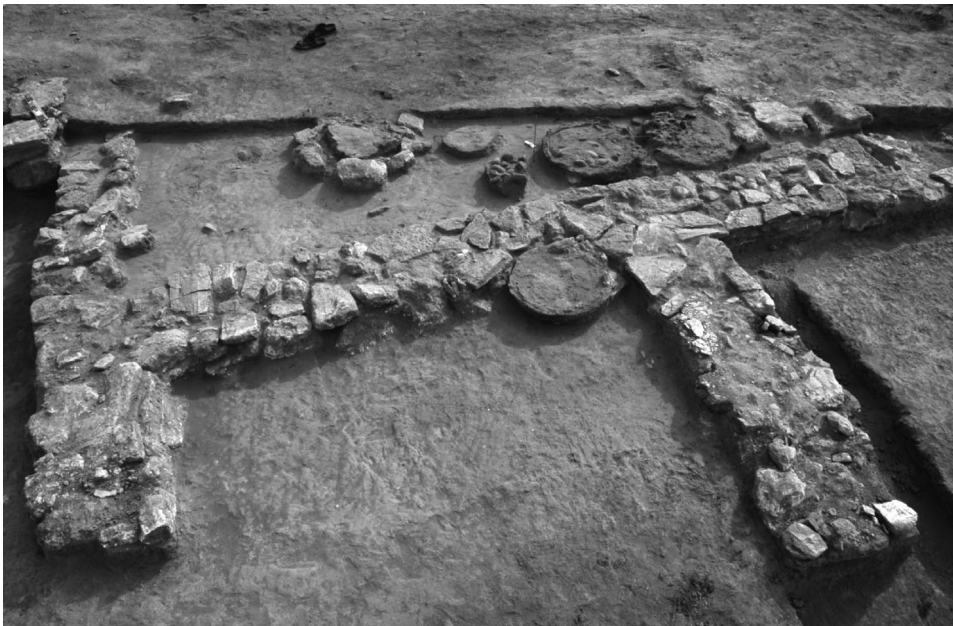
### ثانياً : تل غانم العلي ( القطاع 7-8 )

(اتسونوري هسيكاوا : طالب دكتوراه جامعة واسيدة)

لقد قدم تل غانم العلي معطيات جديدة وفريدة من نوعها في مجال دراسة التخطيط المعماري وبشكل خاص خلال المرحلة الأولى من فترة استيطان التل وذلك من خلال الكشف على مجموعة من الكتل المعمارية والتي تنسب إلى مراحل زمنية مختلفة

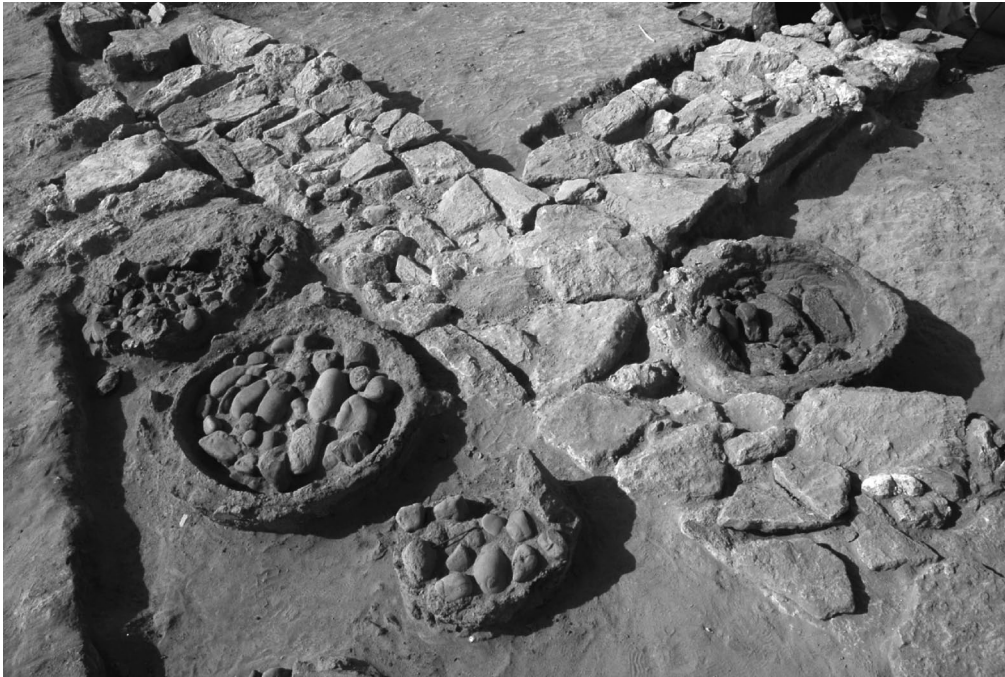
وبناء على نتائج أعمال البحث الأثري الذي تم تنفيذه خلال المواسم السابقة ، تبين بأن معظم الأساسات والكتل المعمارية تتركز في الجزء الشمالي الغربي من التل الأثري ، والتي تم تنفيذ سبر (مربع 3) في موسم 2008 بهدف دراسة مخطط العمارة الموزعة ضمن هذه المنطقة ، حيث أن هذا السبر لم يكن كافياً لفهم طبيعة التركيب المعماري ضمنها وعلى ذلك تم تنفيذ سبرين جديدين في هذه المنطقة ( المربع 7، المربع 8 )

المربع رقم 7 : السوية الأولى :فبعد إزالة الطبقة السطحية من المربع تم الكشف على مجموعة من الكتل المعمارية المتوضعة في النصف الجنوبي من المربع ، والمؤلفة من ثلاثة





جدران حجرية ، وقد بلغ عرض الجدار الرئيسي حوالي 70سم باتجاه شرق- جنوب شرق يقطعه أربع غرف واضحة المعالم . كما تم العثور ضمن هذا المربع على خمسة تنانير، ثلاثة منها ضمن الغرفة الرئيسية وواحد في زاوية الجدران وواحد عند الحافة الشرقية من المربع ، مجموع هذه التنانير أخذت الشكل الدائري بقطر 70سم وقد بدأ واضحاً استخدام مادة الطين وبسماكة 6سم في تشكيل هذه التنانير ، حيث ظهرت مغطاة بطبقة من الرماد الأبيض الذي يتخلله كمية من المواد المتفحمة حيث فرشت أرضية هذه التنانير بالحصى وبناء على ذلك يبدو أنها مشابهة تماماً لأفران تصنيع الخبز المستخدمة حديثاً في المنطقة .



(الشكل 5) مجموعة من التنانير التي تم العثور عليها في المربع 7

**السوية الثانية:** ظهرت هذه السوية من خلال الكشف على مجموعة من العناصر المعمارية التي شكلت حوالي خمسة غرف مربعة الشكل ، حيث تم تقطيع هذه الغرف بمجموعة من الجدران المشكلة من اللبن بعرض 40سم ، وقد كان محور هذه العمارة باتجاه شمالي وشمالي غربي -جنوبي وجنوبي شرقي ،

**المربع رقم 8:** والذي يتوضع إلى الجنوب من المربع رقم 7 ، بداية تم الحفر على عمق 15سم من سطح الأرض حيث بدت تظهر بقايا لعناصر معمارية والتي تمثلت بمجموعة من الجدران التي كان المحور الأطول فيها باتجاه شمالي وشمالي غربي حيث بدأ أن هذا المحور يقطعه جدار من اللبن باتجاه شرقي - شمالي شرقي



( الشكل 6 ) منظر عام للأعمال المنفذة ضمن السوية الأولى من المربعين 7 و 8

معظم العينات والكسر الفخارية التي تم العثور عليها من هذين المربعين من المنتجات الفخارية ذات النموذج البسيط ، وقد تم العثور علي بعض الكسر الفخارية من منتجات الفرات ضمن السوية الأولى من هذا القطاع وبناء على ذلك يمكن القول وبشكل عام بأن مجموعة الكتل المعمارية العائدة للسوية الأولى تنسب إلى المرحلة الثالثة من تل غانم العلي ، والتي تم اعتمادها من خلال أعمال السبر المنفذة في المربع 2، حيث تم وضح تسلسل طبقي واضح لمراحل استيطان التل بشكل كامل .

### ثالثاً : اسبار اختباريه لمدافن البرونز القديم المجاورة لتل غانم العلي

( شوغو كومي : جامعة كوكوشيكان ، أحمد سلطان : المديرية العامة للآثار والمتاحف ، اسامو أونو : جامعة كوكوشيكان ، ربا ديب : جامعة دمشق ، هبة العلي : جامعة حلب )

تركزت أعمال هذا الموسم ضمن مدافن البرونز القديم الواقعة حوالي 650م إلى الجنوب من تل غانم العلي



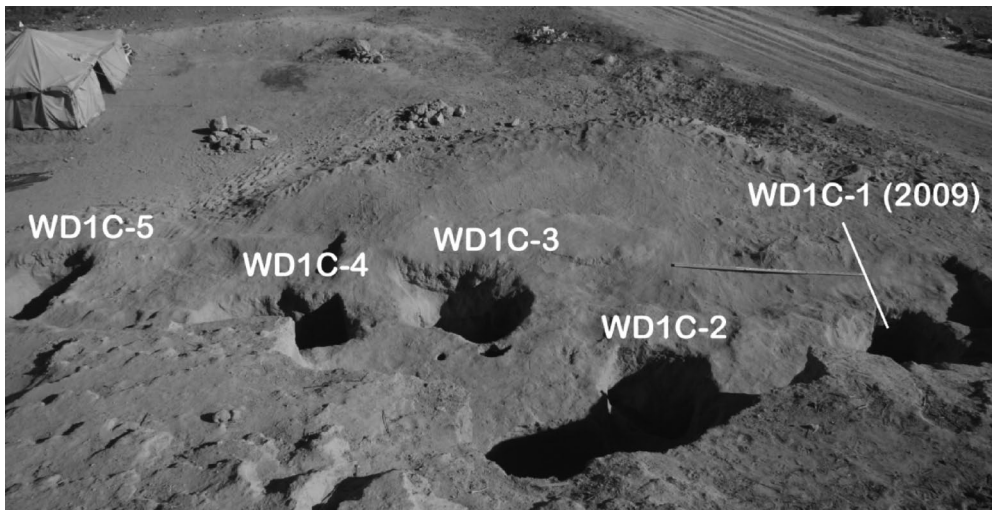


(الشكل 7) صورة فضائية تظهر منطقة البحث في وادي الضبع

في موسم العمل هذا تم التركيز على تنفيذ مجموعة من الاسبار الأثرية ضمن ثلاثة مدافن بئرية كانت قد تعرضت للنهب بشكل مسبق من قبل لصوص الآثار في منطقة وادي ضبع الذي المجاور لقرية تل غانم العلي .

ثلاثة مدافن بئرية (shaft tombs) كان قد تم إجراء أبحاث فيها ضمن هذه المنطقة في أعمال الموسم الماضي والتي تم الكشف فيها عن مجموعة من الأواني الفخارية المؤرخة إلى عصر البرونز القديم المتأخر .

في موسم العمل هذا تابع الفريق أعماله ضمن هذه المدافن إضافة إلى مدافن جديدة مجاورة



(الشكل 8) نظرة عامة على مجموعة المدافن البئرية التي تم العمل فيها لهذا الموسم

منطقة البحث هذه تم ترميزها بـ WD اختصار لوادي ضبع , وبناء على ذلك فقد أخذ كل مدفن من هذه المدافن رقم خاص إلى جانب رمز المنطقة

المدفن WD1C-2 حيث بلغ قطره 1.6م وقد تعرض للنهب والسرقة ويتألف من ثلاث حفرات للدفن ، وقد بلغ عمقه 90سم وكان المدفن باتجاه شمال شرق- جنوب غرب تم الكشف ضمن هذا المدفن على مجموعة من الأواني الفخارية الكاملة ينسب البعض منها إلى منتجات الفرات الأسود، بالإضافة إلى العثور على مسمارين برونزيين



المدفن WD1C-2-3 وهو مجاور للمدفن السابق ويتألف من حجرة للدفن بقياس 70×70سم وارتفاع 50سم ، المدخل إلى هذا المدفن لم يكن مفتوح من قبل مما يدل على عدم تعرضه للنهب تم العثور ضمنه على هيكل عظمي لطفل صغير وبجانبه أواني فخارية تنوعت ما بين زبدية وجرار بالإضافة إلى خاتم صدفى



(الشكل 9) مجموعة الأواني الفخارية المكتشفة من مدافن وادي ضبع هذا الموسم



لقد قدمت الدراسات والأبحاث الأثرية التي تم تنفيذها في منطقة مدافن وادي ضبع دلائل أثرية هامة تمثلت في التعرف على أشكال وطرائق الدفن في منطقة حوض الفرات الأوسط خلال عصر البرونز القديم حوالي 2300-2450 ق.م

#### رابعاً: التحليل النباتي

( شي أكاشي : جامعة واسيدة )

خلال أعمال هذا الموسم تم القيام بتحليل ثمان عينات ترابية من المربع رقم 7 وكذلك سبعة عينات أخرى من المربع رقم 8 ، حيث تعتمد عملية التحليل على استخدام طريقة الطوافة ، وخلال هذه العملية تم الكشف عن العديد من العينات النباتية والخشبية الصغيرة بالإضافة إلى العديد من الكسر العظمية والفخارية ، أخذت معظم العينات من منطقة التنانير المكتشفة ضمن المربع 8 و7 في تل غانم العلي.

كما أخذت ثلاث عينات من مدافن وادي الضبع وتم تحليلها أيضاً والتي عثر فيها على بقايا نباتية . معظم العينات المأخوذة من الموقع تتم دراستها وتحليلها بشكل علمي في مخابر جامعة واسيدة في اليابان من أجل التوصل إلى تأريخ دقيق للمنطقة بشكل عام .

## APPENDIX

### ARCHAEOLOGICAL RESEARCH IN THE BISHRI REGION — REPORT OF THE EIGHTH WORKING SEASON —

(To be added on Page 111 of *Archaeological Research in the Bishri Region: Report of the Eighth Working Season* (Preliminary Reports of the Syria-Japan Archaeological Joint Research in the Region of Ar-Raqqa, Syria, 2009, *Al-Rāfidān* XXXI: 97–207, 2010))

#### 3. SONDAGE AND SURFACE RESEARCH AT TELL GHANEM AL-ALI

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 Atsunori HASEGAWA (Ph.D. student, University of Tsukuba, JAPAN)  
 Ahmed SULTAN (Department of Antiquities and Museums, Raqqa, SYRIA)

##### Introduction

This season's work at Tell Ghanem al-Ali mainly consisted of two operations; Sondage of Square 2, and surface survey in the eastern half of the mound. The purpose of the former operation was to determine a local chronology of the Early Bronze Age layers. We began this operation at the beginning of our research at Tell Ghanem al-Ali, and at last, we reached virgin soil this season. Now, we have recovered material that establishes a good sequence from the EBIII to EBIV. The result of this sounding also indicates that almost all of the cultural deposits, except the modern cemetery on top of the mound, belonged to the EB period. Therefore, we recognize again that Tell Ghanem al-Ali played an important role in the emergence of Semitic nomads, which appeared during the late third and the early second millennia bc. The aim of the latter operation was to understand the town layout through surface observation. We began this operation in the northern part of the mound last season, and continued in the eastern part of the mound this season. The result of this research indicates that the townscape of the EB period at Tell Ghanem al-Ali was not planned and that the town was constructed in a relatively haphazard manner.

##### Surface research in the eastern half of the mound

From the beginning of our first visit to Tell Ghanem al-Ali, we noticed that a considerable number of buildings could be detected by surface observation. It seems that this condition gave us a unique opportunity to study town planning of the last stages of occupation, probably the EB III–IV period, without the need for excavation. Therefore, we started this operation on the northern slope of the mound during our 7<sup>th</sup> season. The surface layer was removed and then each structure was cleaned and recorded. However, removing the surface layer sometimes disturbed the building outlines. Therefore, we decided to record the building outlines directly using a total station system. The whole mound surface was divided into 100 m × 100 m squares along the four cardinal points, centering on the Bench Mark (0, 0). In this season, building traces in the areas of the eastern four 100 m × 100 m squares were surveyed. We temporarily named them Area A to D (Fig. 1). Most of the buildings, except those in the northern half of Area A, which had been surveyed in the previous season, were traced.

As the summit of the mound is covered with the modern graves of Ghanem al-Ali villagers (green-colored area in Fig. 1), Bronze Age buildings couldn't be observed in the southwest of Area A and the northwest of Area C. Therefore, EB buildings were most evident in the southeast of Area A and the southwest of Area B, especially south of Square 1. However, we did detect some building traces here and there in all areas (Fig. 2). Let us introduce the most recognizable buildings.

**Str.901** A rectangular plan building, measuring  $6 \times 5$  m, located just south of Square 1 in Area A. The long axis of the building is orientated WNW-ESE. Beside the north wall, a parallel wall runs in the same direction. A series of five *tannors* were built into this parallel wall at its northern side (Figs. 3, 4). Another large *tannor* was also installed near this series. Therefore, it seems that this building was not merely a kitchen, but a bakehouse. The potsherds collected in and around Str.901 belong to the EB III – EBIVA varieties (Fig. 5).

**Str.902, Str.903** These rectangular rooms, measuring  $6.5 \times 4.5$  m and  $5 \times 4$  m each, were supposed to be part of a large multi-roomed building, which is located c. 10 m south of Str.901 (Figs. 6, 7, 8). The building probably consists of five rectangular rooms and a courtyard. It seems that this kind of building was one of the main house types in the EB period at Tell Ghanem al-Ali. Most of the potsherds collected from this building belong to the EBIII-EBVIA varieties. However, a small ring-based jar (Fig. 9), having a MB profile, was also collected from the room north of Str.903. This is rare evidence indicating the existence of a MB cultural layer at Tell Ghanem al-Ali.

**Str.905** This is another type of large building, consisting of a series of small square rooms in two rows (Fig. 10). It is located in the northwest of Area C. One of the rooms of this building measures  $4 \times 4$  m. As the next room includes a *tannor*, the building was for used for domestic purposes. Potsherds from this building belong to the EB varieties (Fig. 11).

**Str.907** A multi-roomed building, consisting of five or more rectangular rooms in a row, located in the southeast of Area B (Fig. 12). Its external form, measures 20 m long from east to west and 5.5 m wide from north to south. Some EB potsherds were collected from this building.

**Str.909** This is the sole circular structure detected by our surface survey (Fig. 13). It consists of a cluster of limestone measuring 2.5 m in diameter. It seems to have been a grave cover. A broken clay animal figurine was collected from this structure (Fig. 14).

**Str.912** It is one of the largest buildings detected from the surface. It is located in Area D, measuring  $18 \text{ m} \times 14 \text{ m}$  (Fig. 15). It consists of five or six rooms with a large courtyard.

**Str.913** It is a multiple-roomed rectangular building, located in Area B, near the foot of the mound.

It is notable that almost all of the potsherds collected from the surface survey at Tell Ghanem al-Ali are EB varieties, especially those from the BIII and EBIVA periods. Though we collected EBIVB and MB potsherds, their number is limited. We did not collect potsherds from any later periods, such as the Iron Age or Byzantine period. This evidence indicates that almost all of the building traces observable from the surface of the mound belong to the late EB periods.

Almost all of the buildings detected by surface survey are multi-roomed houses consisting of a series of rectangular small rooms. Therefore, we can conclude that these types of houses were the main dwelling structures at that time. The axes of the houses are orientated almost east to west, especially in the southeast of Area A. Some buildings in peripheral areas, such as Areas B and D, point WSW.

The differences between these two building groups were probably caused by time or building characteristics. We identified many *tannors* fixed to the outer house walls, and they indicate the domestic nature of the buildings. No public buildings were identified by our surface survey.

Although the building traces were not always clearly detectable, they show us a general settlement plan at least in the last phases of EB occupation. On the whole, we could not identify straight streets or well-defined blocks. Many vacant plots came to a dead end bounded by building walls. Though there were some rough similarities in building layout, such as direction and structure, the late EB people at Ghanem al-Ali built their houses one after another without any town planning.

## Sondage of Square 2

To confirm the chronological sequence of Tell Ghanem al-Ali, we set Square 2 on the northern slope of the site in the first season, 2007. The 4 (east-west) × 26 (north-south) m trench had been excavated previously, and it extended to the northern foot of the mound. We dug this trench in six stages, and identified seven building levels (Fig. 16). This season, we continued the operation and mainly dug the lowest, 6th stage, because we wished to reveal the earliest cultural deposits at Tell Ghanem al-Ali. The excavation lasted for two weeks from March 8 to 21, 2009. Though the excavation period was very short, the 7<sup>th</sup> and 8<sup>th</sup> building levels were uncovered. Then, at last, we reached virgin soil at below the 8<sup>th</sup> building level.

### Level 7

The sixth stage was located in the northern end of Square 2. The three rooms divided by walls, which we reported last season, were removed. The walls were constructed by piling mud-bricks, measuring ca. 30 × 60 cm. Each wall was ca. 60 cm wide and ran north-west and south-east (Fig. 17). In contrast to the walls of level 6, they did not have stone foundations. This is to say, mud-bricks were piled directly on the ground. At the south-west part of the room, which is located in the south part of the sixth stage, a pit was found. It measured 60 cm in diameter and 50 cm in depth.

### Level 8

Three rooms were identified at about 40 cm below level 7 (Fig. 18). The walls extended north and south. In a similar way to the building walls of level 7, walls were constructed by using mud-brick. The size of mud-bricks was also similar. However, the arrangement of mud-bricks was different. In level 7, mud-bricks were placed side by side longitudinally, and the wall was 60 cm wide. By contrast, in level 8, they were placed transversally and the wall was 30 cm wide.

This wall did not have a stone foundation either. A quern and Canaanean blade were found in the room. It is notable that traces of bitumen were visible on the edge of this blade (Fig. 19).

### Below level 8

After removing the structure of building on level 8, we excavated further. Below the building on level 8, a thick ash layer, including a lot of charcoal, extended in a layer ca. 40 cm thick. In this layer, a badly broken hearth was discovered. Except for this, we did not find any structures.

Below the ash layer, we encountered a brown soil layer. This layer included a few potsherd fragments of and charcoal. There were not any structures in this layer. The next layer consisted of more dark colored soil. It was a homogeneous wet silt-like soil. No potsherds and no other remains were recovered. It is certain that this layer was the virgin soil of Tell Ghanem al-Ali (Fig. 20). The altitude of virgin soil in Square 2 is ca. 226.80 m. It was found at a depth of 3.4 m from the mound surface at the north end of Square 2. We dug until a depth of 3.6 to verify this virgin soil layer.

During the four seasons' excavations at Square 2, we accomplished our main objective. We do not have a definite chronology at present because pottery classification is ongoing. However, we can indicate that Tell Ghanem al-Ali lacks cultural deposits prior to the Early Bronze Age, because we did not collect any diagnostic potsherds older than those of the EB periods. According to the results obtained from our work, we can safely say that Tell Ghanem al-Ali has the cultural deposits from the middle of third millennium to the beginning of second millennium. In other word, this site flourished during the Early Bronze Age. Therefore, Tell Ghanem al-Ali provides a unique environment for the study of emergence of nomadic people.

### Notable Object

We collected a clay figurine from the mound surface during the last season (Fig. 21). Together



with the excavated specimens, we have many clay figurines. Most of them were typical figurines as the Euphrates EB specimens. However, this specimen is unique. It should be noticed that a similar figurine was found at Abu Hamed (Falb et. al. 2005, Abb.41). Abu Hamed is an EB cemetery, located at the edge of Bishri Plateau, south of Tell Ghanem al-Ali. Discovery of this same peculiar type clay figurine at two sites indicates a strong relationship between them. Tell Ghanem al-Ali was a settlement and Abu Hamed was a cemetery, and these types of figurines are important materials when considering the people buried at Abu Hamed.

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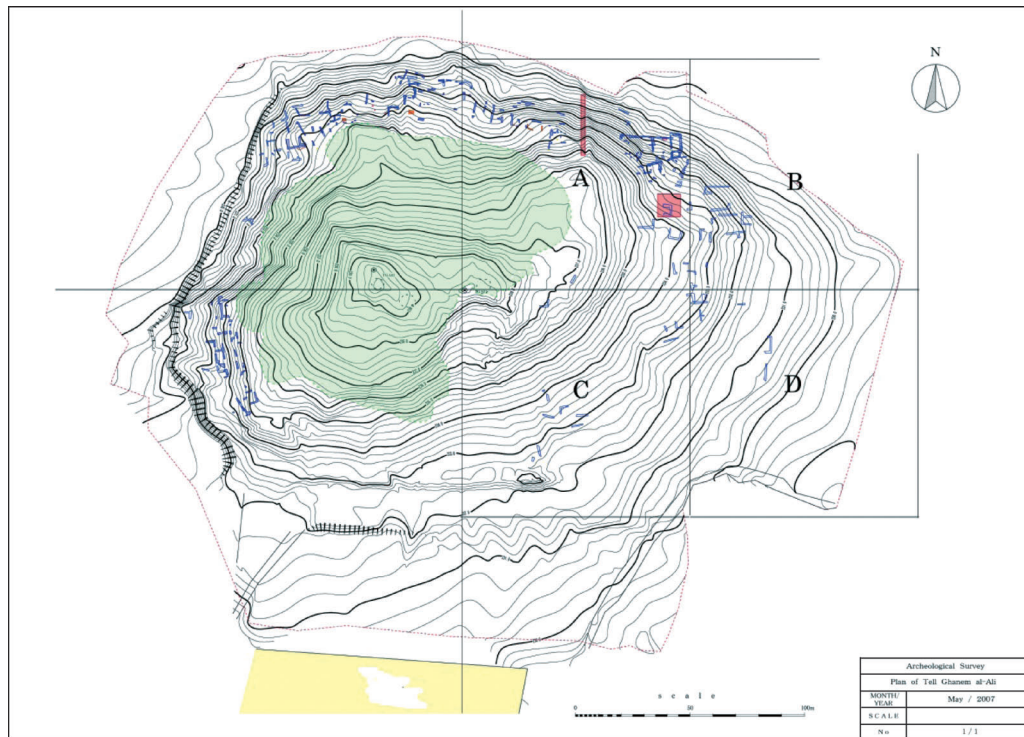


Fig. 1 Map of Tell Ghanem al-Ali and the areas of surface research.



Fig. 2 Result from surface research.



Fig. 3 Str.901.

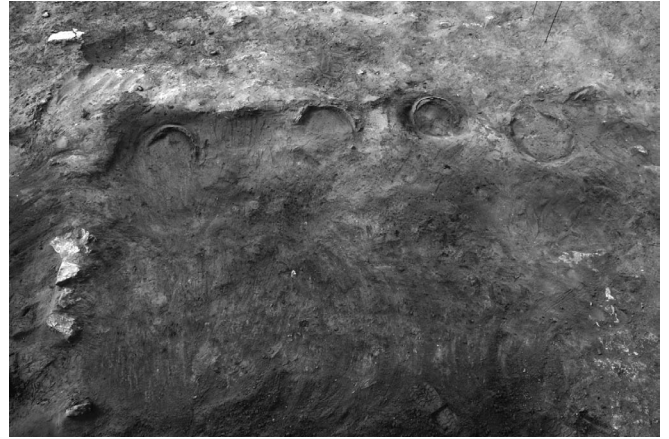


Fig. 4 Str.901 north, a series of *tannors*.



Fig. 5 Potsherds from Str.901.

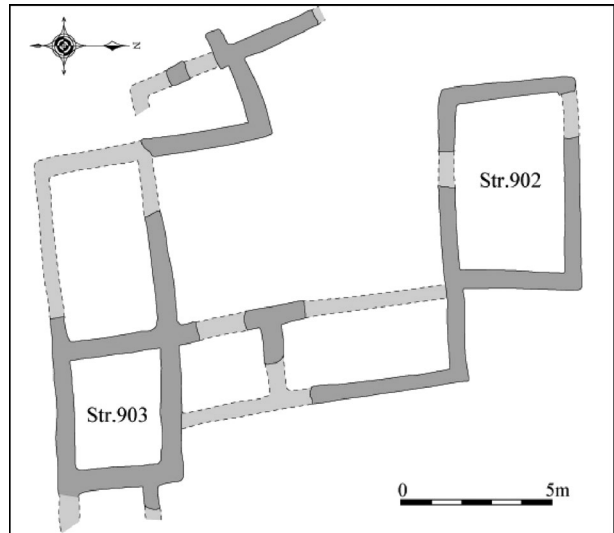


Fig. 6 Plan of the building including Str.902 and 903.

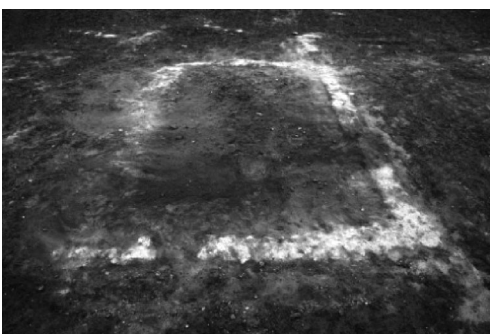


Fig. 7 Str.902.

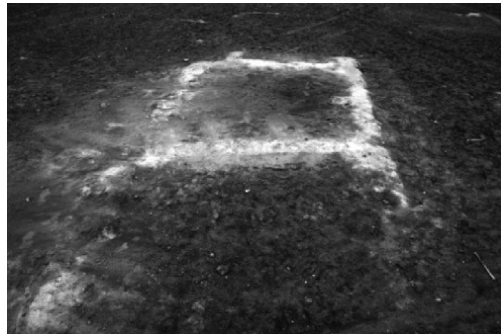


Fig. 8 Str.903.



Fig. 9 MB small jar.





Fig. 10 Str.905.

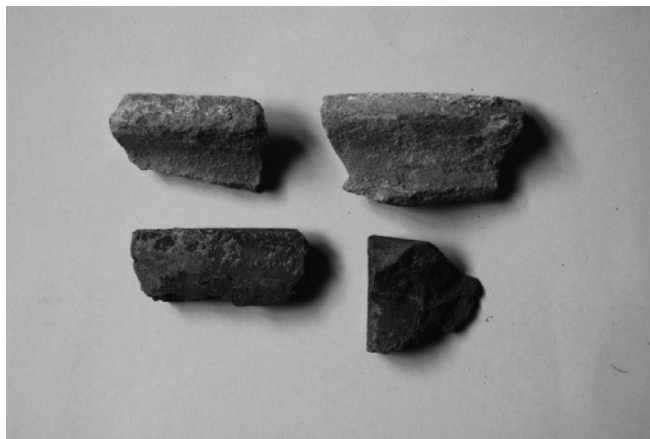


Fig. 11 Pottery from Str.905.



Fig. 12 Str.907.



Fig. 13 Str.909.



Fig. 14 Clay animal figurine from Str.909.

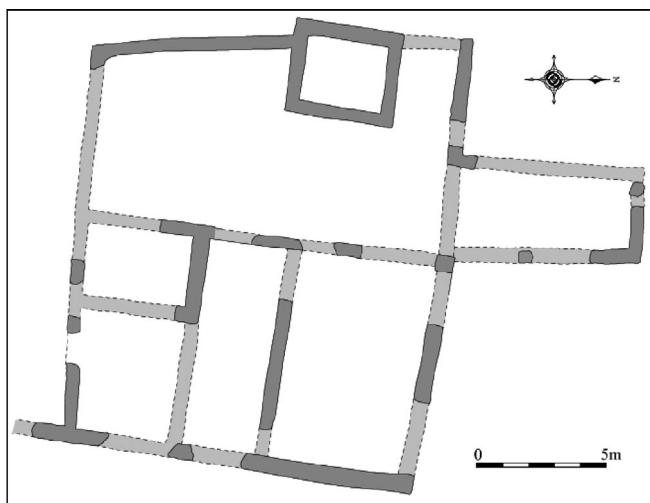


Fig. 15 Plan of Str.912.



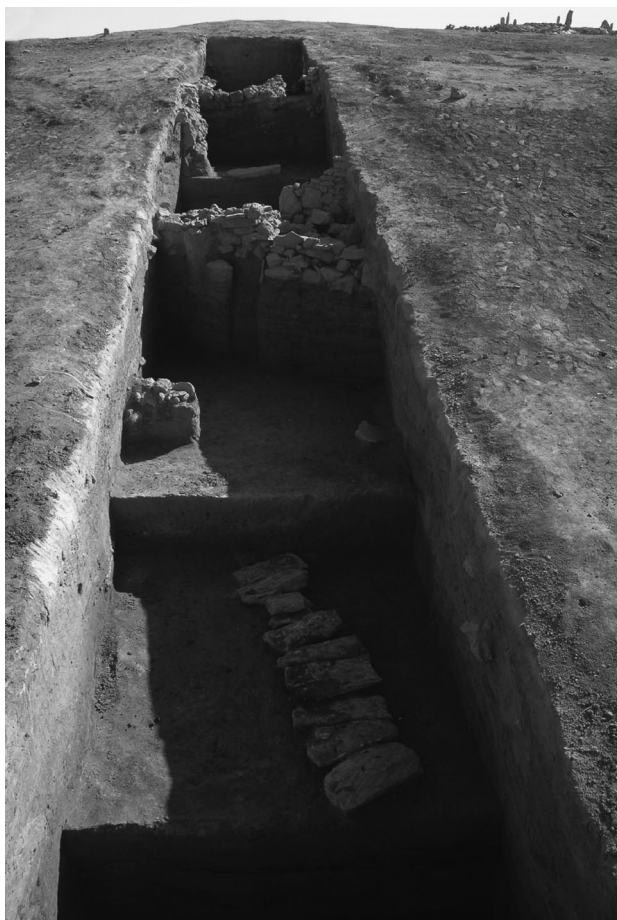


Fig. 16 Square 2, from the north.

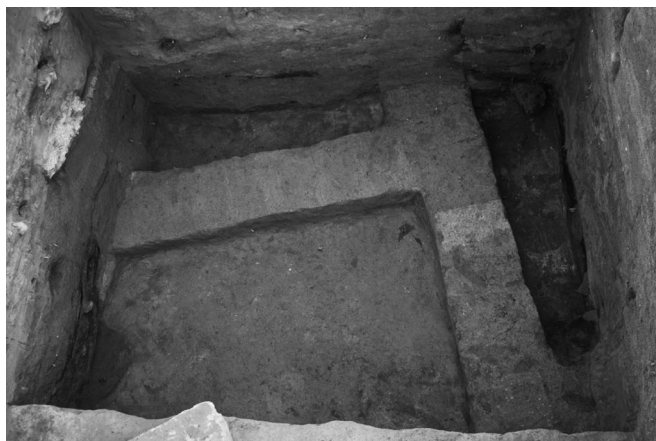


Fig. 17 Three rooms, level 7, from the south.



Fig. 18 Three rooms, level 8, from the south.



Fig. 19 Cannanean blade.



Fig. 20 West section showing the virgin soil.



Fig. 21 Clay figurine.

#### 4. Archaeological Survey around Tell Ghanem al-‘Ali (II)

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#### Introduction

The eighth working season in the Bishri region involved an archaeological survey (February 23 to March 10, 2009) that covered an area with a radius of 10 km around Tell Ghanem al-‘Ali, a main site for excavations in this project. With this area as the target, the survey aimed at an intensive reconnaissance of archaeological sites in order to obtain insights into settlement and land-use patterns in the past. The initial season of our survey, which was in the spring of 2008, resulted in (1) the collection of artifacts of a wide chronological range—from the Paleolithic to the Islamic period, (2) the discovery of occupational sites in the Paleolithic period and the Early-Middle Bronze Age, and (3) the recording of the distribution of Bronze Age tombs at the northern fringes of the Bishri Plateau.

While building on these previous results, the eighth season focused on unexplored areas in order to discover more archaeological sites.

Earlier archaeological investigations in the middle Euphrates indicate that the lowlands along the Euphrates were the central loci of tell-based communities, including Early Bronze Age (EBA) settlements such as Tell Ghanem al-‘Ali and Tell Hammadin (Kohlmeyer 1984, al-Maqdissi and Ohnuma 2008). On the other hand, the northern edges of the Bishri Plateau, which overlook the Euphrates lowlands, contain areas that are densely distributed with tombs and appear to have belonged to EBA communities that were based at the tell settlements (Falb et al. 2005, Ohnuma and al-Khabour 2008a: 136, Ohnuma and al-Khabour 2008b: 185–187). Drawing on these earlier insights into the contrasting use of the Euphrates lowlands and uplands during the EBA, our survey aims to examine land-use patterns during this time period by recording the locations and nature of settlements, activity areas, and tombs in this region. The survey also aims to uncover a wide range of archaeological sites since the Paleolithic period in order to provide basic information on the long-term population history. This in turn should facilitate a better understanding of the historical background of the EBA communities in this region.

### 1. Survey area

The survey area is a circular one with a radius of 10 km around Tell Ghanem al-‘Ali (Fig. 1). This area encompasses green agricultural fields in the lowlands of the Euphrates, its river terraces, and the steppe environment at the northern edges of the Bishri Plateau. Focusing on the southern bank of the river, our survey mainly examined the transitional area ascending from the Euphrates lowlands to the Bishri Plateau. The northern fringes of the plateau are incised by a series of wadis that are tributary valleys of the Euphrates. While these wadis usually stretch over at most a few kilometers, Wadi Kharar, which is located between Tell Ghanem al-‘Ali and Tell Hammadin, stands out for its length (ca. 20 km) and well-developed terraces. We surveyed the plateau primarily by walking along these wadis and in the areas between the wadis.

In the last season, we surveyed the western and central parts of the survey area. The western end, which was used as a modern cemetery, is a protruding terrace located in the village of Jibli, while the eastern border is at Jezla. By focusing on the areas that were not explored in the last season, this season aimed to investigate four locations with different surrounding environments. The first was the area further east of Jezla: there are four main wadis between Wadi Jezla East and Wadi Beilune at the eastern end. The second target was the southern extension (upper reach) of Wadi Kharar. The third was Tell Mugla as-Saghir, which is located in the Euphrates lowland, ca. 5 km to the east of Tell Ghanem al-‘Ali. The former survey in this area (Kohlmeyer 1984) dates Mugla as-Saghir to the Bronze Age, and its occupational period may overlap with that at Ghanem al-‘Ali. The fourth location was the area further south (ca. 5–6 km) on the plateau. This area gently slopes down toward the north; it has a few, shallow wadi channels that are covered with very sparse vegetation.

### 2. Objectives of this season

The survey of these new areas allowed us to test some of our insights from the last season. For example, the results of the last survey indicate that Paleolithic occupations are relatively well preserved on the terraces of Wadi Kharar; however, we could find only dispersed, probably re-deposited, remains of Paleolithic occupations in other areas. In addition, we encountered only a few artifacts that date to the Neolithic or Chalcolithic period in the last survey. We could identify three site types from the Bronze Age: long-term occupations, temporary camps, and tombs. The first type includes tell sites such as Tell Ghanem al-‘Ali in the Euphrates lowland and a small tell that our last survey discovered at the location of 23H in Wadi Jezla West. The temporary camps only consist of chipped-stone clusters without architecture or pottery that would usually provide chronological evidence.



However, the patterns in the selection of raw material and the core reduction technology at these sites and Tell Ghanem al-‘Ali are rather similar. This suggests their chronological proximity. These temporary camps from the Bronze Age were probably abandoned as a result of some activities that were performed periodically on the plateau at some distance from the sedentary settlements. However, the exact nature of the activities that were performed at these camps remains to be investigated. The third site type, tombs, was most frequently encountered in the last survey, indicating their dense distribution at the edge of the plateau. This view was already proposed by previous studies at Abu Hamed, Jezla, and Tell Shabout (Falb et al. 2005; Ohnuma and al-Khabour 2008a: 136; Ohnuma and al-Khabour 2008b: 185–187). However, our last survey revealed a dense distribution of mound tombs in two distinct areas on the plateau around Tell Ghanem al-‘Ali and Tell Hammadin (few tombs were found in Wadi Kharar, which separates the two tells). This suggested that tombs tend to be concentrated particularly in the areas close to the tell settlements in the Euphrates lowland. Thus, one of the main purposes of this season was to test whether the above site types and the patterns of their spatial distribution are observable in the area around Tell Mugla as-Saghir that is roughly contemporaneous with Tell Ghanem al-‘Ali and Tell Hammadin.

### 3. Survey methods

To achieve an intensive reconnaissance of archaeological sites, our survey was primarily conducted by walking. We navigated the area using high-resolution satellite images and a compass. This allowed us to record the locations of survey paths and discovered sites. The surveyed wadis and areas were assigned numbers (nos. 1 to 28). We named the survey paths and discovered sites within each area by attaching an alphabet. Thus, survey paths and sites are identified as the combination of an area number and alphabet, such as 20A and 16K.

A survey path fundamentally corresponds to a single topographic unit, such as a terrace or wadi. The identification of archaeological sites was primarily based on the density of artifacts, as apart from tomb mounds and cairns, we rarely encountered features on the ground surface. We collected artifacts from the survey paths and archaeological sites. At the archaeological sites, we measured the extent of artifact distribution and general topography around the sites. When we encountered mound tombs, the extent of their distribution was sketched on hard copies of high-resolution satellite images.

### 4. Sites and finds

Employing the above methods, we conducted our survey from February 23 to March 7 and recorded 85 sites and 61 survey paths. The discovered sites mainly consist of tombs and sites from which artifact scatters were recovered. The former site type usually dates to the Early to Middle Bronze Age, while the dates of the latter type range from the Middle Paleolithic to the Bronze Age. We shall now provide an areawise description of the discovered sites and finds.

#### 4.1. Tell Mugla as-Saghir

This tell was originally reported in Kohlmeyer (1984). The site is located in the Euphrates lowland, ca. 5 km to the east of Tell Ghanem al-‘Ali. It measures 110 m [N-S] × 120 m [E-W] × 6 m [Height] (Fig. 2). The tell is currently covered with modern graves; many pottery shards and lithics lie scattered on the surface. This collection of artifacts indicates that the tell was mainly occupied during the EBA; however, the recovery of a Neolithic arrowhead also suggests the presence of Neolithic occupation at or near the site. We also noted several alignments of gypsum stones that are exposed on the surface (Fig. 3). Some of them seem to represent foundations of rectangular building structures. On the whole, like Tell Ghanem al-‘Ali and Tell Hammadin, the tell appears to have functioned as a sedentary settlement during the EBA. Given the apparently regular distance (ca. 5–6 km) between the three sites, it is possible that their occupational periods overlapped at some point.



## 4.2. On the plateau above Tell Mugla as-Saghir (Areas 24, 25, 26, and 27)

### Bronze Age Tombs

We surveyed the edge of the Bishri Plateau, which overlooks Tell Mugla as-Saghir, in order to investigate prehistoric land-use patterns from the Paleolithic period to the Bronze Age. The area was divided into four spatial units (Areas 24, 25, 26, and 27 from west to east) according to the major wadis. Area 24 mainly covers the drainage of Wadi Jezla East, while Area 27 corresponds to Wadi Beilune.

The lower part of Wadi Jezla East is deeply incised and flanked by steep slopes. There were very few finds in the lower part. On the other hand, surface finds became more frequent in the upper parts of the wadi. Although we found a rain of chipped stones that apparently date to the Middle Paleolithic, there was no clear concentration. Area 24I refers to a site on the eastern bank from where a small scattering of Middle Paleolithic artifacts was recovered (Fig. 4). The scarcity of Bronze Age tombs in the areas adjacent to Wadi Jezla East, which contrasts with their dense distribution in Jezla (a few hundred meters to the west), is truly remarkable.

We noted that the number of Bronze Age tombs increased again as we moved eastward to Area 25, where hundreds of shaft tombs were densely distributed on the low bank (4–5 m in height) that stretches over several hundred meters around a drainage basin (Areas 25D and 24Z, Fig. 5). Most of the tombs have been plundered and are scattered with pottery shards that date to the EBA (Fig. 6). Shaft tombs were also found in Area 26E, which is a large rectangular depression measuring 160 m [E–W] × 63 m [N–S] × 10 m [Depth] (Fig. 7). The depression opens to the northern edge of the plateau. Given its rectangular shape and the absence of a water channel in the basin, the depression could have been formed through the construction of prehistoric earthworks. Because the southern and eastern slopes of this basin are covered with shaft tombs, the rectangular basin may have been created to imitate the low banks that naturally occur in the neighboring areas and were used as locations for shaft tombs. In addition, the recovery of apparently Bronze Age chipped stones within the rectangular basin suggests that other activities were also performed there, although their exact nature is still unknown.

To the east—namely, in Areas 26 and 27—the dense distribution of shaft tombs in the above areas is suddenly replaced by mound tombs with stone chambers (Fig. 8). The western side of the wadi (Areas 26A and 26F) contains more than one hundred mound tombs that are ca. 2–3 m in diameter and 1 m in height. The distribution of mound tombs with stone chambers continues eastward with sporadic concentration near the northern fringes of the plateau or on hilltops (Areas 27F–M, Q–U, and Y). The number of mound tombs suddenly decreases in the areas along Wadi Beilune, which seems to represent a break in their distribution. On the eastern side of Wadi Beilune, we suddenly encountered numerous cairns over a wide area on a plateau (ca. 1 km [N–S] × 0.5 km [E–W]) (Area 27AL, Fig. 9). More than 100 cairns are distributed over this area. They are built with gypsum rocks and contain stone chambers. Some cairns form large mounds (up to 35 × 10 × 2 m at Area AI) containing several stone chambers that are linearly placed. Most of them have been plundered. Using the pottery shards that were scattered around the mounds, we dated the cairns to the Early Bronze Age (Fig. 11). However, we found that some of the cairns with low mounds have not been plundered (Fig. 10). Thus, it seems that this cairn field has suffered less looting as compared to other burial areas such as Abu Hamed and Shabout, which are more accessible from modern roads. The unprecedentedly large scale coupled with the fairly good preservation can make this cairn field rather important for the study of Bronze Age burial customs in this region as well as in wider areas.

### Flint sources and Knapping sites

The area north of the cairn field (Area 27AL) is densely covered with river pebbles/cobbles (Areas 27V and 27AG). Such areas stretch over hundreds of meters on both the eastern and western sides of Wadi Beilune (Fig. 12). This was unexpected as the area is located on top of the Bishri Plateau,

which is tens of meters above the Euphrates river. The area was visited by the geologist team in the Bishri mission. They noted that the deposit of pebbles is at least ten meters thick, and suggested that it was probably created by the Euphrates in ancient times. The area is also archaeologically significant as it yielded a number of flint cobbles, some of which measure 10–20 cm. Such flint cobbles must have been important raw materials for chipped stone tools in the past. In fact, many chipped stones collected in the survey area retain a cortex of rolled cobbles; however, such cobbles are rarely available in wadi bottoms because Tertiary gypsum beds form the Bishri Plateau. Thus, this gravel area was possibly exploited as a local source for flint.

We found five locations where split cobbles and flakes were strewn over an area 5–10 m in diameter (Areas 27W, AD, AE, AF, and AM). As these locations contain more split cobbles than flakes or cores, we initially suspected that they may have been created naturally. In fact, Areas 27W and 27AD are located near a stream at the foot of gravel hills, and Areas 27 AE and 27 AM are situated on the wadi terrace at the foot of the hill (Fig. 13). However, we encountered a similar distribution of split cobbles with flakes and cores on top of the gravel hill (27AF). This spot also contained a hammerstone that was lying next to a split flint cobble (Fig. 14). In addition, most flakes from these locations and their surrounding areas have a cortex on their side and/or striking platform. The high proportion of cortical flakes in debitage is also observable in the assemblage from Tell Ghanem al-‘Ali and lithic scatters that appear to represent Bronze Age temporary sites (e.g., 20A).

Another example of temporary occupation was discovered at Area 24AA (Fig. 15), which is adjacent to the linear concentration of shaft tombs in Area 24Z, to the south of Tell Mugla as-Saghir. This area is ca. 4 km to the west of the cobble deposits at Wadi Beilune. In Area 24AA, chipped stones are densely distributed over a stretch of 30 × 20 m. We collected 167 pieces from a 1 × 1 m square at the center of the area where the stones were concentrated. The sample includes 11 cores and 135 cortical flakes (over 80% of the total) that are made of flint cobbles (Fig. 16). Because such a large amount of flint cobbles is not available in nearby wadi bottoms, they were probably extracted from the sources at Wadi Beilune.

#### Land Use prior to the Bronze Age

In addition to the Bronze Age sites, Middle Paleolithic artifacts were also frequently collected (Fig. 17). Although no clear concentration of these finds was discovered, they suggest that this area has a long history of settlement. We encountered Mousterian artifacts more often in the areas close to the pebble/cobble deposits near Wadi Beilune, and some of the collected lithics retain a cortex of rolled cobble. This suggests that the flint sources at Wadi Beilune already existed by the Middle Paleolithic period and could have been used in the subsequent periods.

### **4.3. Wadi Kharar**

In the survey of the southern part of Wadi Kharar, we collected some blades that date to the Pre-Pottery Neolithic B period (Areas 16AV and 16AU) as well as some Mousterian artifacts (Area 16AR) from the survey paths. However, no clear evidence of occupational sites was discovered in this part of the wadi.

In the last season, we found more substantial traces of Paleolithic occupations in the lower part of the wadi, particularly at the spot where a spring is located (Areas 16M–Q). Apparently, Paleolithic inhabitants were attracted to water sources such as the spring and the Euphrates river. In order to obtain greater insight into the land-use patterns of these Paleolithic hunter-gatherers, we revisited some sites for the systematic collection of surface finds. We selected some sites near the spring and its downstream area (Areas 16 I–K, 16M–Q, 16R) in order to collect surface finds from a 10 × 10 m square. During this work, two additional sites (Areas 16AR and AT’) were discovered. While Area 16AR appears to contain lithics from several different time periods (including the Middle Paleolithic), Area AT’ contained a clear concentration of lithics over a stretch of 16 × 13 m. The collection of

surface finds from a  $3 \times 3$  m square comprised 311 pieces, including a wide range of debitage and some retouched tools. Owing to the recovery of geometric microliths, it may be possible to date this site to the Middle Epipaleolithic (Fig. 18).

#### 4.4. Wadi Jezla West

We also returned to Wadi Jezla West in order to conduct systematic sampling of the surface finds from Areas 23H and 23J. Area 23H is a small mound on the western terrace of the wadi, while Area 23J is an area inside the large Islamic stone building (ca.  $150 \times 100$  m) on the plateau. In the last season, we found Bronze Age pottery shards and lithics in both the areas. To perform a more controlled recovery of artifacts, we collected surface finds from two  $10 \times 10$  m squares at Area 23H and from a  $3 \times 3$  m square at Area 23J. In addition, we prepared a detailed record on the distribution of Bronze Age tombs that are spread over this area (Ohnuma and al-Khabour 2008a: 136).

Further upstream from the wadi, we collected Epipaleolithic artifacts from the western terrace. Area 23AB is located 8.5 m above the wadi bottom, while Area 23AR is 2.5 m higher than the former terrace. Although the lithic scatter is sparse, the recovery of geometric microliths and a microburin shows that Epipaleolithic occupation is not restricted to Wadi Kharar; rather, other areas were also inhabited during that time.

#### 4.5. Other areas

##### Abu Hamed and Tell Hammadin

In addition to Jezla, we checked the exact locations of some other Bronze Age cemeteries in the survey area (Fig. 1). One of them is Abu Hamed, an area that was excavated by the German mission (Falb et al. 2005). We also returned to the plateau near Tell Hammadin in order to revise the distribution map of Bronze Age tombs in the area. We confirmed that the scale of this burial ground, which was almost comparable to that of Abu Hamed and the cairn field near Wadi Beilune, was larger than we had expected.

##### Southern area in the steppe

As our survey focused on the transitional area from the lowland to the Bishri Plateau, the southern steppe on the plateau was largely unexplored. In order to test whether any sites are distributed in this steppe environment, we walked through the areas 5–6 km south of the northern end of the plateau (Areas 10O–S, 28A and 28B, and 24AD and 24AF).

Although no clear concentration of artifacts was discovered, we continued finding a sparse distribution of chipped stones from various time periods, including the Paleolithic, Neolithic, and the Bronze Age. This suggested the use of these southern areas over a long period of time. We also encountered some Bronze Age mound tombs in such isolated locations (Fig. 19). These discoveries raise questions about who was buried and for what purpose. One possibility is that the mounds served as landmarks for indicating a claim over a territory; however, further collection of data and study of comparable archaeological and ethnographic examples is necessary to examine this issue.

#### Concluding remarks

The second season of the survey intensively explored the northern edge of the plateau, conducted systematic sampling at Wadi Kharar and Jezla, and examined some of the southern part of the survey area. This helped us develop our database of archaeological sites in the survey area for examining prehistoric land-use patterns. Regarding the Bronze Age, our data show that a spatial unit consisting of a tell settlement with grave areas in the vicinity is common in Tell Mugla as-Saghir, Ghanem al-'Ali, Hammadin, and Jezla, although there is some break in the distribution of tombs between the settlements. Such spatial patterns in sites indicate that the inhabitants of the sedentary settlements

in the Euphrates lowland were responsible for the creation and maintenance of the neighboring tomb areas on the plateau.

The discovery of flint sources and knapping areas near Wadi Beilune in this season also clarified another aspect of Bronze Age land use. These sources were used over a long period of time, from the Middle Paleolithic to the Bronze Age. This long-term use suggests that the plateau was not only used as a cemetery but was also used for performing other activities, including the acquisition of raw material for flint tools. We also found a number of chipped stones that appear to date to the Bronze Age in various locations on the plateau. This may indicate that the production and use of chipped stones were practiced on the plateau. However, the nature of the activities that were performed by using these tools is still unclear.

In the areas near flint sources at Wadi Beilune, we mostly found Middle Paleolithic and Bronze Age lithics. These findings may reflect long-term patterns in the exploitation of flint sources. For example, the occasional finds of Neolithic artifacts are usually made of flint that is available further south in the El Kowm basin. However, this may also be a result of our inability to identify Neolithic lithic technology that used flint cobbles in this region. To solve this problem, it would be useful to find and excavate Neolithic occupations in this area and collect samples from dated deposits. One possible location is Tell Mugla as-Saghir, from where a Neolithic arrowhead was recovered.

Further research is necessary to shed greater light on prehistoric land use in the middle Euphrates. We plan to continue analyzing the collected finds in order to determine the dates of discovered sites and to examine a wide range of issues, including the nature of occupations, functions of sites, technology of tool production, and burial customs.

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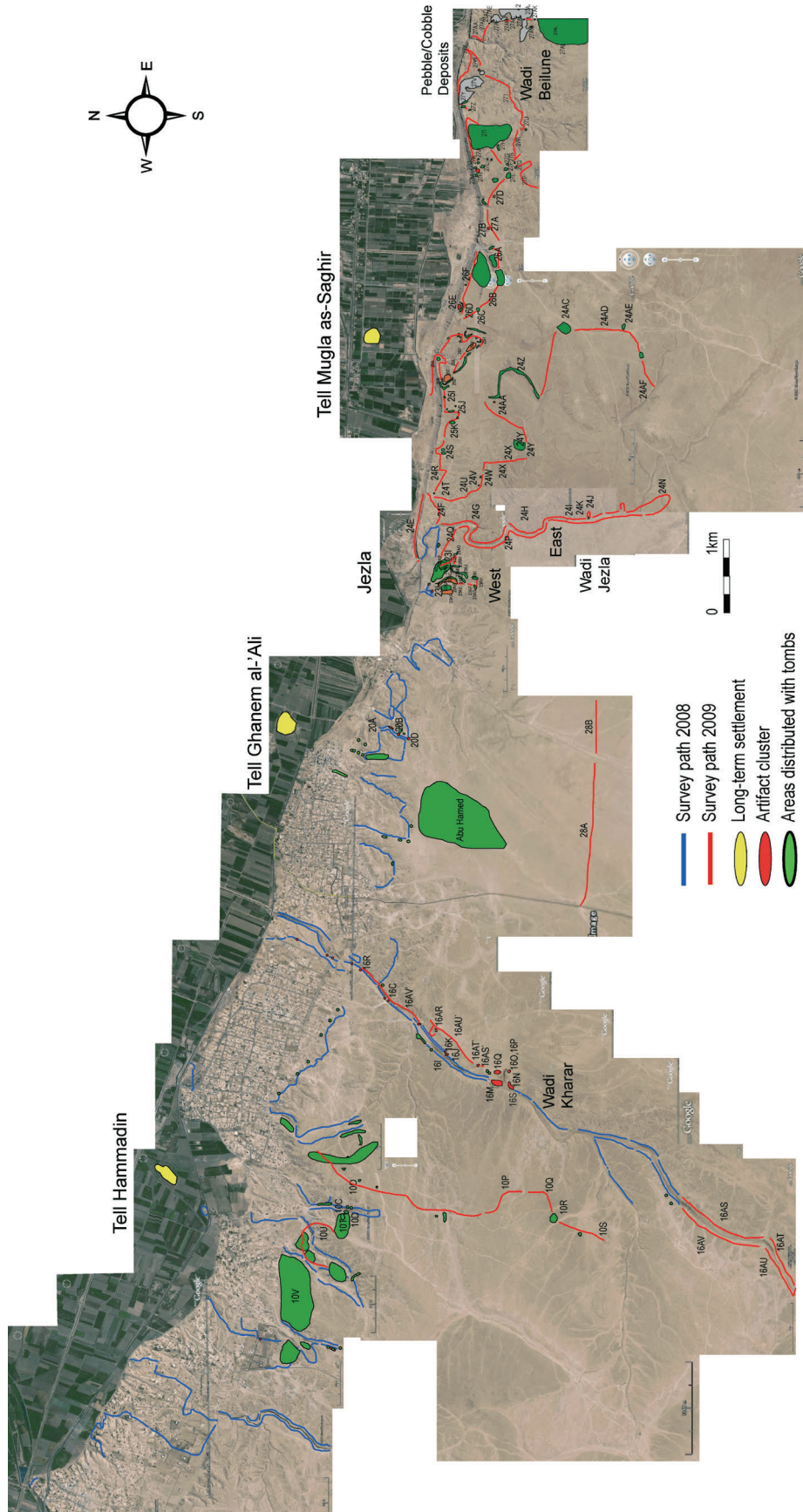


Fig. 1 Satellite image of the survey area, showing the survey paths and discovered sites.



Fig. 2 Tell Mugla as-Saghir, looking south. The tell is densely covered with modern graves. The survey of the plateau behind the tell discovered the dense distribution of Bronze Age tombs.



Fig. 3 Rectangular stone foundations exposed on the surface at Tell Mugla as-Saghir.





Fig. 4 Area 24I in Wadi Jezla East. Middle Palaeolithic artifacts were recovered on the slope of the eastern bank of the wadi.



Fig. 5 Cluster of shaft tombs on the plateau above Tell Mugla as-Saghir, looking west. Early Bronze Age pottery sherds were scattered besides the graves.



Fig. 6 Pottery sherds collected on the surface near shaft tombs in Area 24Z.



Fig. 7 Rectangular depression at the northern edge of the plateau, looking west. The eastern and southern slopes are densely distributed with shaft tombs (Area 26E).





Fig. 8 Mound tombs in Areas 26A and 26F on the western side of the wadi.



Fig. 9 Overview of the cairn field (Area 27AL) near Wadi Beilune, looking south.



Fig. 10 A series of intact cairns, linearly distributed over ca. 60 m in length, looking north (Area 27AL).

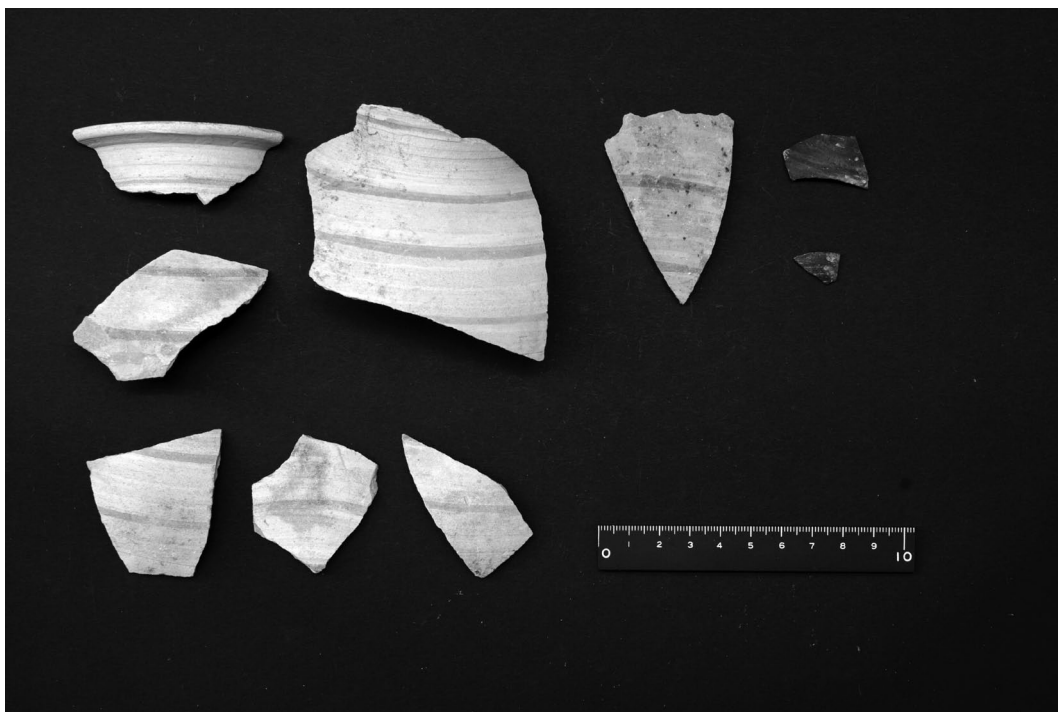


Fig. 11 Fragments of Euphrates Fine Ware and Black Euphrates Fine Ware, collected besides the looted cairns in Area 27AL.





Fig. 12 Pebble/cobble deposits at the lower part of Wadi Beilune (Area 27 V), looking northwest.

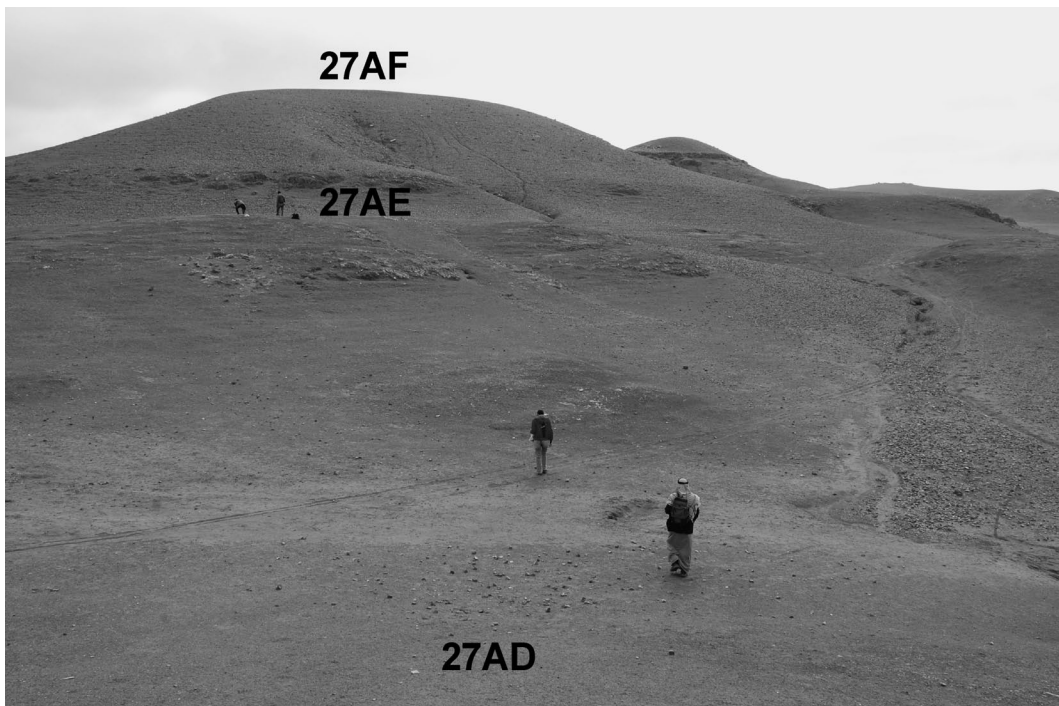


Fig. 13 Flint knapping areas near the cobble deposits (27AD, AE, and AF), looking south.





Fig. 14 Close view of the knapping area (27AF), where a number of split cobbles, cores, and flakes were distributed. The scale in the middle is 15 cm.



Fig. 15 Concentration of chipped stones (24AA) besides the Bronze Age shaft tombs (24Z), looking east. The lithic cluster is located at the foot of the gentle slope (ca. 4.5 m in height).





Fig. 16 Cores and a possible hammerstone collected from a 1 × 1 m square in Area 24AA.

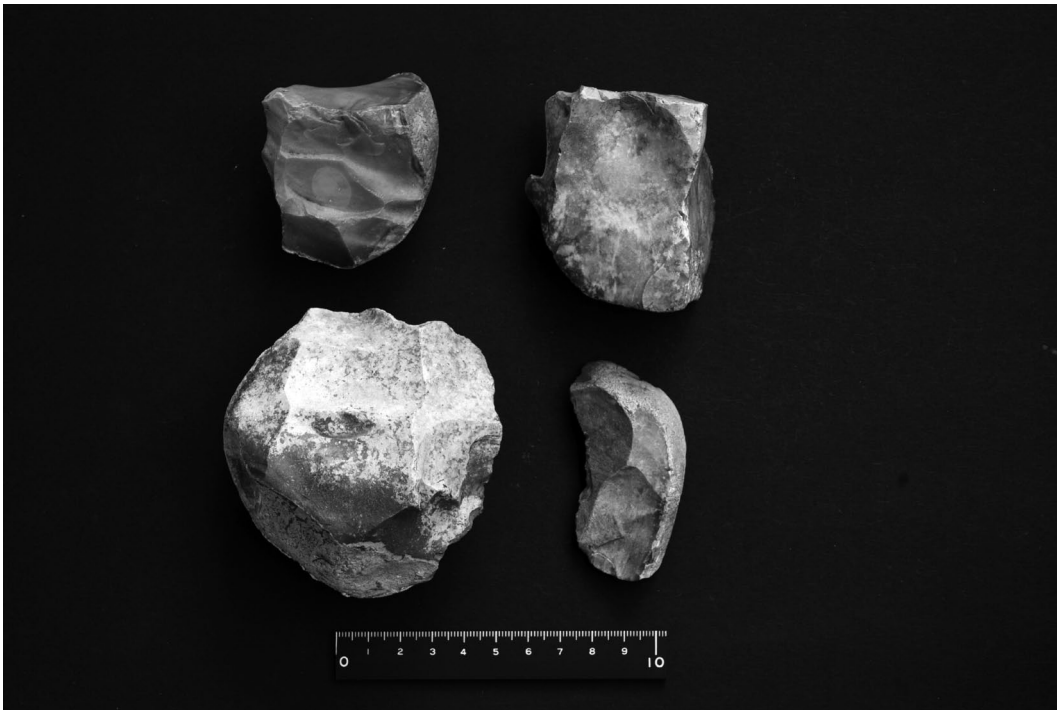


Fig. 17 Cores and a core-edge flake collected in Area 27AJ. The lower two pieces are diagnostic of the Middle Palaeolithic period. The both retain cortex of rolled cobbles.



Fig. 18 Epipalaeolithic chipped stones from 16AT'. The site is located at the edge of the plateau near the spring on Wadi Kharar.



Fig. 19 Southern area in the steppe (Area 10S, ca. 5 km south to the northern end of the Bishri Plateau). At the centre is an isolated Bronze Age mound tomb.

## 5. Geological and Geographical Field Survey in the Eighth Working Season

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Tsuyoshi TANAKA (Professor, Nagoya University, JAPAN)  
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### Introduction

In this working season, we concentrated the sample collections (1) for  $^{14}\text{C}$  dating, (2) for pollen analyses and (3) for chemical analyses. Samples for  $^{14}\text{C}$  dating and pollen analyses were collected mainly from the Square-2 trench at Tell Ghanem al-Ali and from the upstream of the Wadi el-Kharar, and samples for chemical analyses were from the asphalt deposit in the depth of the Bishri Mountains. Possibility of boring for collecting the sediment samples to a depth of 5 meters was also examined.

### Collection of Charcoal Samples for $^{14}\text{C}$ Dating

At the site:

By the latest excavation of the Square-2 trench at Tell Ghanem al-Ali site conducted by archaeologists in March 2009, several dark-coloured layers consist of charcoal and fired carbonaceous soil were clearly recognized. For laboratory study on radiocarbon dating of these layers, we have collected systematically more than thirty samples that consist mainly of charcoal and fired carbonaceous soil additionally, from the uppermost to the deepest sediment layers excavated so far (Fig. 1).

At the lowest terrace of the Euphrates:

In order to elucidate the age of formation of the base sediment on which Tell Ghanem al-Ali site is situated, we have already conducted the survey of terraces formed by the Euphrates during the



Fig. 1 Western side wall of the 4<sup>th</sup> level, Square-2 trench. Dark-coloured layers are charcoal and fired carbonaceous soil intercalated in the brownish-coloured silt/sand layers. Width of the picture is ca. 1.5 m.



previous surveys. This time, we have collected a few sediment samples from the outcrops of the lowest terraces exposed along Euphrates. The samples are used for laboratory study on radiocarbon dating as well as for pollen analysis to elucidate the period and palaeo-environment during the lowest terrace formation.

**Collection of Sediment Samples for Pollen Analyses**

We investigated the geology and topography around Palaeolithic period sites. The sites are located around the spring, 16 M-Q (Kadowaki et al., 2008), upstream of the Wadi el-Kharar. In and around Tell Ghanem al-Ali, the <sup>14</sup>C ages of the sediments are younger than 5,000 y. B. P. (Nakamura et al., in prep.). It is important to examine the Palaeolithic sites to reconstruct the long environmental history in this area. The age of the stone tools of the sites is Late Palaeolithic to the first half of the Epipalaeolithic period, i.e., ca. 20,000 y. B. P.

We encountered the modern wells of which walls show good geologic sections near the spring (Figs. 2 and 3). The wells are on the hilly area along the Wadi el-Kharar (Fig. 4). Gypsum beds are cropped out in the wadi and hilly area, and most of surface of the gypsum beds are covered by younger sandy sediments (Fig. 5) of presumably late Pleistocene and Holocene.

Contrast of the water permeability between gypsum and younger, loose sandy sediments probably

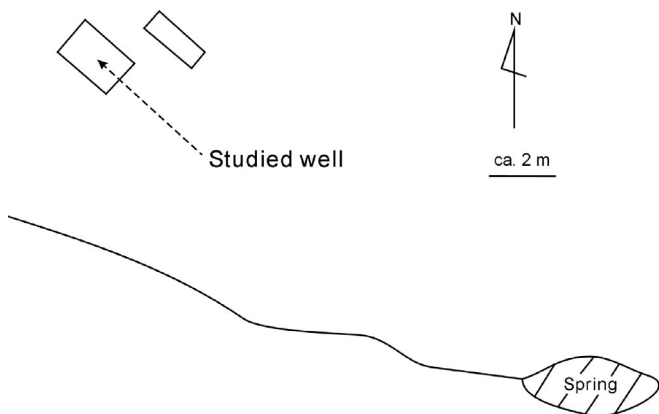


Fig. 2 Rough sketch map of modern wells and spring.



Fig. 3 Walls of studied well.

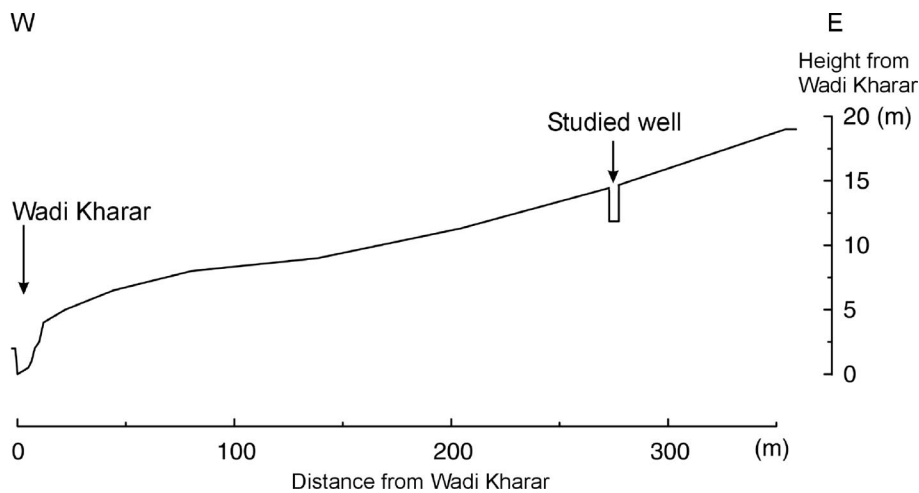


Fig. 4 Topographic profile from Wadi Kharar to studied well.





Fig. 5 Gypsum beds (stratified rocks) and younger sandy sediments (massive brown part).

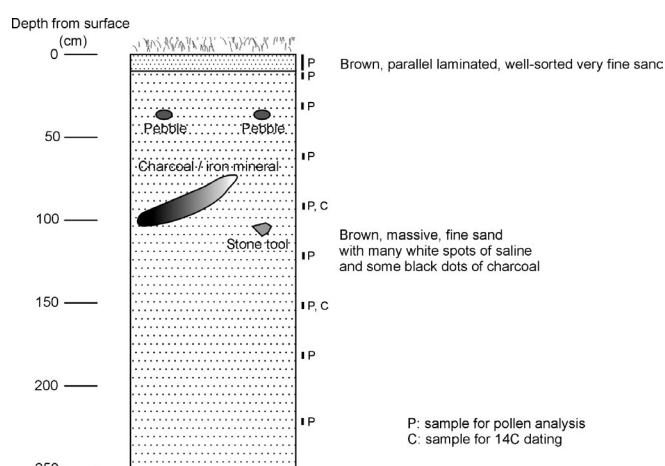


Fig. 6 Geologic profile of northwestern wall of the well.



Fig. 7 Sandy sediments of wall of the well (sickle 30 cm long).



Fig. 8 Stone tool (ca. 3 cm width) in the wall (105 cm depth).

controls groundwater level. Top horizon of the gypsum beds could stop water sinking down, making the spring which Palaeolithic men utilized.

Southern well (140 × 200 cm wide, 260 cm depth) was investigated. The geologic profile of northwestern wall of the well is shown in Fig. 6. The sediments are sandy (Fig. 7), and consist of two parts. The upper part (0–10 cm depth) is likely to be modern sediments, and the lower part is older sediments. A stone tool was found in the lower part (Fig. 8). We took nine samples for pollen and other microfossil analysis. Two charcoal samples for <sup>14</sup>C dating are also taken (Fig. 6).

### Collection of Natural Asphalt Samples for Chemical Analyses

Two blocks of asphalt (bitumen) were found with archaeological materials in Tell Ghanem al-Ali. The asphalt has been used as a waterproofing agent and/or adhesive material of archaeological pottery. It is interesting to know where these asphalts were collected and transported from.

One of the possible methods to discriminate the asphalt from various places is to compare its organic compound. Asphalt contains various organic compounds with straight chain and cyclic chain. The

isotope ratios of  $^{13}\text{C}/^{12}\text{C}$  of the compound also differ from sample to sample. These are effective methods to discriminate the asphalt.

We collected the natural asphalt samples from two areas in the area. The one place is asphalt mine in the Bishri Mountains. This mine situates far from Euphrates, but produces asphalt with good quality. We sampled three asphalt (T09030901~3) from natural stream bed (Fig. 9). We also surveyed work faces of the asphalt mine in detail as shown in Fig. 10. The asphalt constitutes three layers. The top layer is about 1 m thickness and the 2<sup>nd</sup> layer has a thickness about 3 m. The 3<sup>rd</sup> layer is the thickest and the bottom of the layer is not clear. Muddy sandstone or mudstone cover these three asphalt layers. The mudstone may worked as a cap rock. We sampled asphalt at the mining outcrop from top to bottom layers (T09030904~07).

The other sampling place is in 3<sup>rd</sup> terrace at Zor Shammar, 5 km west of Tell Ghanem al-Ali. The asphalt formation is small and has about 50 cm thickness. The asphalt had permeated into gravel bed. One asphalt sample (T09030908) was collected from there. These naturally occurring asphalts and two asphalt samples from Tell Ghanem al-Ali will be examined their organic compound, elemental compositions and isotopic ratio at Nagoya University, as soon as the samples will be posted.



Fig. 9 Natural asphalt outcrop in the stream bed.

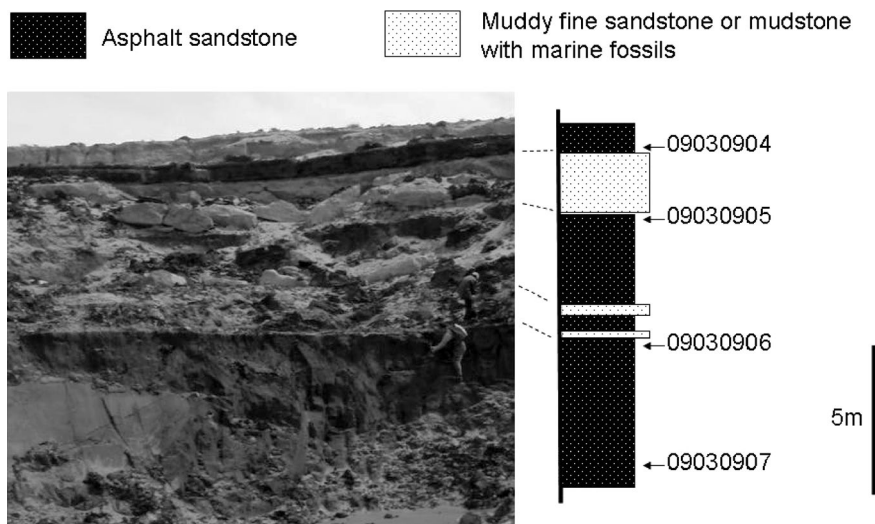


Fig. 10 Work faces of the asphalt mine and its columnar section.

### Reference

Kadowaki, S., S. Kume and Y. Nishiaki  
 2008 Prehistoric Survey around the Site of Ghanem Al-Ali: 5<sup>th</sup> Research in the Bishri Region (in Japanese), *Newsletter* No. 11 of the Research Project Formation of Tribal Communities in the Bishri Mountains, Middle Euphrates, pp. 3–6.



**CÉRAMIQUES ISLAMIQUES AU BILÂD AL-CHÂM:  
ÉTUDES DE CONTEXTES DE L'ÉPOQUE  
OMEYYADE À L'ÉPOQUE OTTOMANE**





# CÉRAMIQUES ISLAMIQUES AU BILĀD AL-CHĀM: ÉTUDES DE CONTEXTES DE L'ÉPOQUE OMEYYADE À L'ÉPOQUE OTTOMANE

## INTRODUCTION

Véronique FRANÇOIS\*

Dans le cadre du *Céramopôle*, un programme de recherche transversal de la Maison Méditerranéenne des Sciences de l'Homme (MMSH) dirigé par trois archéologues — un préhistorien, M. Bailly (Laboratoire Méditerranéen de Préhistoire Europe Afrique-UMR6636) ; un antiquisant, M. Bonifay (Centre Camille Julian-UMR6573) et une médiéviste, V. François (Laboratoire d'Archéologie Médiévale Méditerranéenne-UMR6572) — une table ronde consacrée aux céramiques islamiques au Bilād al-Chām s'est tenue à Aix-en-Provence les 6 et 7 mai 2010. Elle s'inscrit dans les objectifs de ce programme.

Le *Céramopôle* (<http://ceramopole.mmsh.univ-aix.fr>) a une triple vocation : 1) une réflexion, dans le cadre de rencontres régulières rassemblant des spécialistes de la céramique autour de questions archéologiques et historiques, pour confronter les méthodes de travail des céramologues préhistoriens, antiquisants, médiévistes et modernistes, proposer de nouveaux axes de recherche et tester de nouveaux outils ; 2) une formation aux méthodes de la céramologie destinée aux étudiants ; 3) la création d'une encyclopédie céramologique en ligne basée sur les points forts des recherches des archéologues locaux qui travaillent sur du matériel du Néolithique, de l'Age du Bronze, de l'Age du Fer, de l'Antiquité gréco-romaine, de l'Antiquité tardive, du Moyen Age occidental et oriental, des périodes moderne et ottomane.

Dans le cadre du développement de cette encyclopédie numérique, pour de nourrir la base de données à partir de laquelle elle fonctionnera, le *Céramopôle* a souhaité mettre en place des plateformes coopératives afin d'homogénéiser les connaissances et revoir les chronotypologies sur la base des découvertes récentes. Dans ce contexte, une rencontre internationale, soutenue par le *Céramopôle*, l'Université de Provence et le LAMM (CNRS), a réuni une dizaine de chercheurs à la MMSH d'Aix-en-Provence. Cette table ronde intitulée *Céramiques islamiques au Bilād al-Chām : études de contextes de l'époque omeyyade à l'époque ottomane*, organisée par V. François, a permis d'examiner le matériel d'une même zone géographique sur la très longue durée en l'occurrence sur dix siècles. Ces deux jours ont été consacrés : 1) à la mise en évidence d'assemblages de céramiques découverts récemment, en contextes stratigraphiques, de façon à caler les chronotypologies pour les époques omeyyade (al-Hadir, Apamée, Beyrouth et Jerash), abbasside (Raqqā), fatimide (Damas), ayyoubide (Apamée et Shayzar), mamelouke (Apamée, Shayzar et Damas) et ottomane (Damas) ; 2) aux typologies élaborées dans le cadre de nouvelles recherches sur les céramiques de Sultanabad et les carreaux et la vaisselle de forme d'époque ottomane.

Nous publions, dans ce volume, une partie des communications de cette rencontre, en espérant qu'elles constitueront des lots de référence utiles pour les nouvelles identifications de céramiques au Bilād al-Chām.

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\* CNRS-Aix-en-Provence

## LA CÉRAMIQUE ABBASSIDE D'AL-HADIR

Marie-Odile ROUSSET\*

J'avais présenté, lors de la rencontre d'Aix-en-Provence autour des céramiques médiévales au Bilad-al-Sham, le contexte omeyyade d'al-Hadir, qui a livré un assemblage inédit de céramiques de la deuxième moitié du 7<sup>e</sup> – 8<sup>e</sup> siècle. Cet assemblage ayant depuis été publié [Rousset 2010a et b; Rousset à paraître], j'ai préféré présenter dans cet article d'autres contextes du même site (phases III et IV), eux aussi très intéressants car ils confirment des observations qui n'ont pas toujours été clairement interprétées sur d'autres sites: l'existence d'un horizon céramique qui inclut les principaux types communs au début de l'époque abbasside mais qui exclut les productions à glaçure polychrome.

### 1. Le contexte archéologique

Le site d'al-Hadir, à environ 25 km au sud-ouest d'Alep (Syrie du Nord), est un hameau de la ville de Qinnasrin, chef-lieu de la circonscription administrative du même nom au début de l'époque islamique. Les fouilles de la mission syro-française, conduites en 2005 et 2006, ont mis au jour plusieurs phases de construction ou d'occupation, entre le milieu du 7<sup>e</sup> et le 12<sup>e</sup> siècle<sup>1</sup>. Les indications des textes et de la stratigraphie, confirmées par les comparaisons des différents types de matériaux avec les publications d'autres sites, permettent de proposer les datations suivantes:

- phase I: de 643 à la fin du 7<sup>e</sup> siècle,
- phase II: 8<sup>e</sup> siècle,
- phase III: début 9<sup>e</sup> s. à environ 840,
- phase IV: d'environ 840 à 962–966,
- phase V: 1128–1146 ?
- phase VI: milieu - fin 12<sup>e</sup> siècle.

Deux sondages ont été effectués, dans les cours des maisons qui recouvrent complètement le site ancien. Les deux secteurs (D et E) ont livré la même succession chronologique, pour les phases III et IV. Des maisons ont été bâties avec des fondations qui traversent les niveaux de décomposition organique de la phase II. Aucun sol, aucune élévation ne subsiste pour cette phase dans le secteur D. En revanche, dans le secteur E, le terrain a d'abord été aplani: les trous ou affaissements dans les couches de la phase II ont été remblayés avec de la terre presque vierge, rouge (us 233, us 289). Un second remblai a été installé après la construction des murs (us 263). De nature différente du premier, il s'agit d'une couche hétérogène et brassée, constituée d'un sédiment sablo-limoneux gris compact.

Les bâtiments partiellement dégagés mesuraient au minimum 10 × 17 m en D et au moins 18,50 m de longueur en E. Dans ce dernier secteur, les pièces s'organisent autour d'une cour, à l'ouest,

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<sup>1</sup> La mission archéologique syro-française a été codirigée par Madame Fedwa Abidou du musée d'Alep et moi-même. Elle a été financée par la Commission des Fouilles du Ministère des Affaires Étrangères et Européennes, l'appel d'offres franco-syrien du CNRS-DGAMS (en 2005) et l'UMR 8167 Orient & Méditerranée, laboratoire Islam Médiéval. Les travaux ont pu être réalisés grâce à l'aide bienveillante de la Direction Générale des Antiquités et des Musées de Syrie, ses directeurs le Dr Abd al-Razzaq Moaz et le Dr Bassam Jamous, ainsi que son directeur des fouilles et des études archéologiques, le Dr Michel al-Maqdisi.

dans laquelle plusieurs aménagements ont été observés, correspondant à différents états de sols. Deux pièces au moins occupaient le côté nord et trois le flanc est. Le bâtiment a été nettoyé avant sa réutilisation à la phase IV, au cours de laquelle un réhaussement des sols s'est accompagné de modifications mineures du bâti.

L'occupation des phases III et IV a été relativement dense, car des constructions de cette époque ont été retrouvées dans tous les sondages. Le plan des maisons est à rapprocher, par la surface des pièces relativement grande, par le soin apporté à la construction et par la présence très probable de couvertures en coupole, de ce que l'on connaît jusqu'au 9<sup>e</sup> s. dans la steppe syrienne [Genequand 2006a: 26; Genequand 2006b: 163–175].

La construction de ces grandes maisons pourrait être due à l'installation de nouveaux habitants sur le territoire de Qinnasrin. On sait qu'au début du 9<sup>e</sup> siècle, en 813, des membres d'une tribu qui habitaient un quartier hors-les-murs à Alep, les Tanukhs, en ont été chassés à la suite d'une émeute et sont venus s'installer à Qinnasrin. Ces riches marchands, vivant du commerce caravanier, ont sans doute choisi de s'installer dans un faubourg à l'extérieur de la ville de Qinnasrin, pour pouvoir poursuivre leurs activités commerciales, peut-être à al-Hadir.

## 2. Considérations générales sur la céramique

L'étude de l'ensemble de la céramique d'al-Hadir porte sur 13 282 tessons, analysés en contexte stratigraphique. Le nombre de tessons identifiables est de 1910, soit 14,38 % du total. Du fait de la nature des couches archéologiques étudiées et de la grande fragmentation du matériel, presque aucune forme complète n'a été retrouvée. Le nombre minimum d'individus (NMI) est très variable d'une phase à l'autre, car les quantités de céramiques retrouvées dépendent de la nature des unités stratigraphiques fouillées: les phases I (375 NMI) et IV (465 NMI) sont bien représentées tandis que les phases II (180 NMI) et III (117 NMI) sont essentiellement des phases architecturales. La phase V (418 NMI), quand à elle, contient de nombreuses céramiques résiduelles, mélangées aux céramiques contemporaines des prélèvements des murs, qui sont de fait sous-représentées. La phase VI (196 NMI) contient également de très nombreuses céramiques résiduelles. Pour relativiser ce problème, les pourcentages de NMI exprimés dans les histogrammes ont été calculés par phase et non par rapport au nombre total de tessons.

## 3. La céramique de la phase III

À la phase III, on note encore une grande homogénéité des pâtes de céramique, avec la permanence des quatre catégories existantes aux phases I et II: pâtes communes beige, orangée, sableuse et *brittle ware*.

- la pâte commune beige, assez fine, de couleur à dominante rosée, est le plus souvent à surface extérieure plus claire (*Fig. 1.1*). Pour certains fragments, la pâte contient de nombreuses inclusions blanches (6,83% NMI). Pour d'autres, la pâte, de même nature, contient des inclusions blanches plus rares et assez grosses (14,51% NMI).
- la pâte commune sableuse représente 29,05% du NMI de la phase III. L'argile est sableuse et les grains sont visibles à l'oeil nu. La couleur est claire, jaune pâle à verdâtre (*Fig. 1.2*).
- la pâte commune orange est la plus fréquente dans les phases I et II mais diminue de moitié à la phase III (*Fig. 1.3* 15,37% NMI). Elle a une surface qui paraît lissée, de couleur plus claire ou au contraire plus orangée que la pâte, selon la cuisson. La base est sableuse (le sable n'est pas visible à l'oeil nu). Les inclusions sont plus ou moins abondantes suivant les fragments, sous forme de grains gris de taille moyenne (des microfossiles) et de quelques grains



de chaux.

- la *brittle ware*, analysée par Agnès Vokaer [Vokaer à paraître], représente 34,18% des pâtes. Trois groupes de pâtes identifiés ailleurs en Syrie du Nord [Vokaer 2007] sont présents à al-Hadir et leurs proportions varient suivant les phases. Le groupe 1 de Vokaer est le plus abondant (terra rossa assez sableuse, inclusions de quartz). Le groupe 6 (inclusions plus

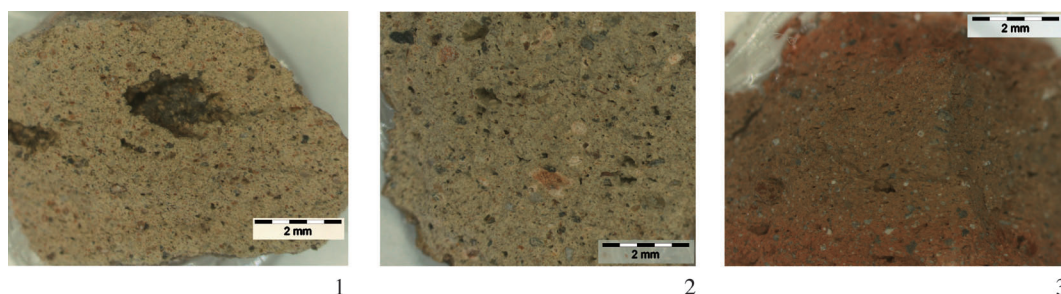


Fig. 1: Les pâtes communes utilisées depuis l'époque omeyyade à al-Hadir

Pâte commune beige, 1: n°268-107; Pâte commune sableuse, 2: n°224-1 (phase IV); Pâte commune orangée, 3: n°268-94.

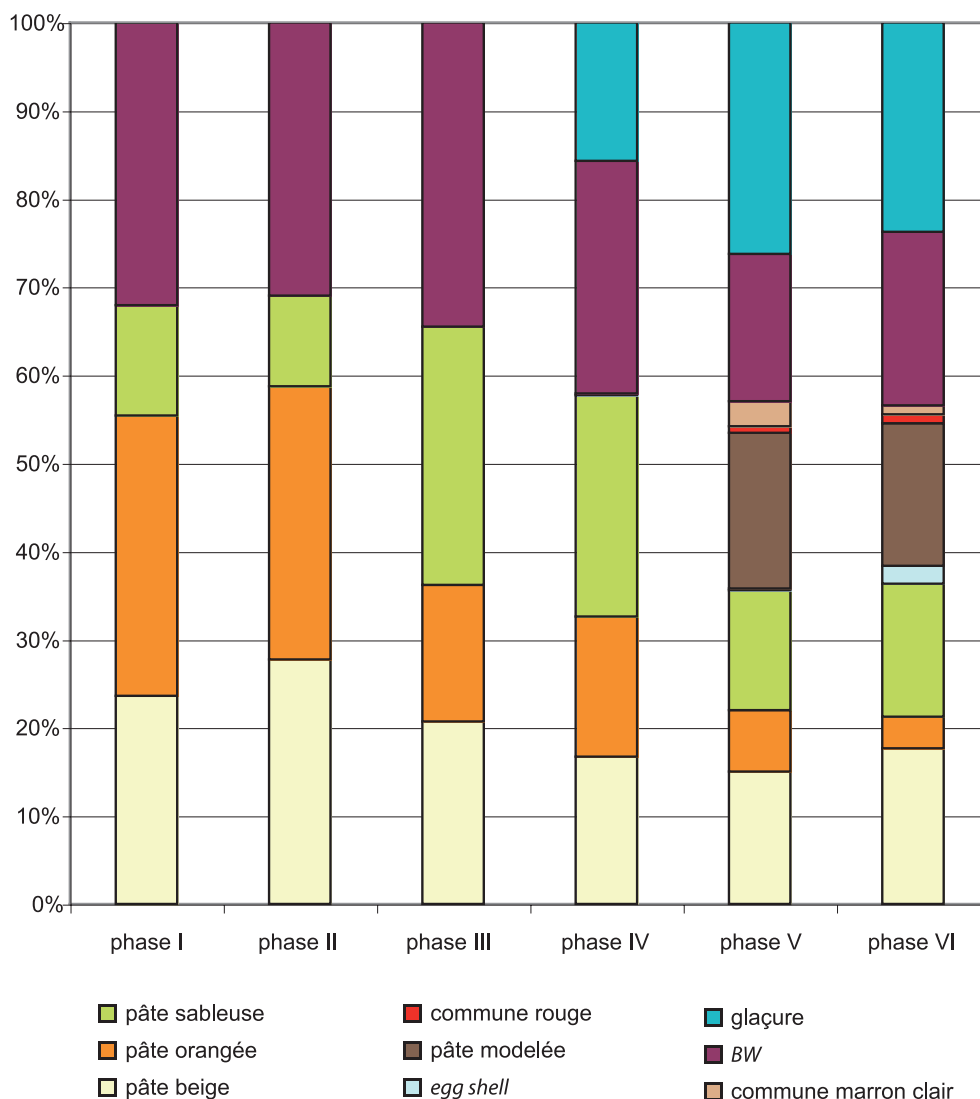


Fig. 2: Répartition des catégories de pâtes communes par phase, en pourcentage de NMI.

petites, plus nombreuses, plus cuit, avec des nodules de fer noirs) est mieux représenté à partir de la phase III. Le groupe 4 (rares inclusions de silex), de la région d'Apamée, est rare.

Les proportions des différentes pâtes changent par rapport à la phase II (*Fig. 2*), ainsi que les formes. Le nombre de *brittle ware* est à peu près stable entre les phases II et III. Les pâtes communes orangée et beige sont moins abondantes, au bénéfice de la pâte sableuse, produite avec des argiles caractéristiques de la vallée de l'Euphrate.

Les unités stratigraphiques avec les assemblages les plus complets pour la phase III correspondent au terrassement du terrain avant la construction du bâtiment (us 263, us 289) et contiennent par conséquent une bonne quantité de céramique résiduelle. Enfin cette phase est la moins bien représentée, en nombre d'individus (117). On distingue cependant de nouvelles formes: la marmite à lèvres triangulaire, à parois verticales ou à carène, les petites cruches en pâte calcaire, la bouteille moulée. Ainsi, au début du 9<sup>e</sup> s., al-Hadir aurait été approvisionné par les mêmes centres de production qu'au 8<sup>e</sup> s., mais avec une évolution dans le répertoire des formes.

### 3.1. La brittle ware

Les formes de *brittle ware* retrouvées dans les couches de la phase III sont essentiellement des vases culinaires. Certains des types omeyyades perdurent, comme les pots de cuisson à haut col; d'autres apparaissent, notamment la marmite sans col.

La marmite à parois verticales à bord à épaissement triangulaire apparaît à la phase III (*Fig. 4.4-5*)<sup>2</sup>. Une forme complète, retrouvée par la mission internationale, illustre ce type [Whitcomb 2000: fig. 5.e]. Elle porte un décor de croisillons incisés sur la panse. La caractéristique de cette marmite est de porter une rainure, à l'extérieur, qui souligne le décor d'impressions basculées. Il n'y a pas de moyens de préhension associés (les tenons triangulaires ne sont représentés qu'à partir de la phase IV). À Dêhès et Qal'at Sem'an [Orssaud 1980: fig. 307, type 7; Orssaud, Sodini 2003: fig. 6], où elle existe vers les 7<sup>e</sup> – 8<sup>e</sup> s., cette forme porte des tenons horizontaux. À Raqqa [Miglus, Stepniowski 1999: pl. 32a-k, groupe X; Saliby 2004a: fig. 15.23, pl. 49a; Saliby 2004c: fig. 8.11], les formes à parois verticales figurent dans l'*horizon III* et le palais B.

Une autre forme de marmite apparaît dans la phase III. Le bord est similaire au précédent; le haut de la panse est marqué par une carène en-dessous de laquelle les parois sont côtelées (*Fig. 4.6*). Cette forme a été retrouvée à Rahba en quelques exemplaires dans des niveaux du début du 9<sup>e</sup> s. [Rousset 1996: n°552]. Un exemplaire complet retrouvé à Qinnasrin est pourvu d'une paire d'anses horizontales fixées au niveau de la carène [matériel en cours d'étude].

La marmite à parois verticales est représentée essentiellement dans la phase III (*Fig. 3.2*) tandis que la forme fermée à carène continue à être utilisée à la phase IV (*Fig. 3.3*).

La forme de pot de cuisson à haut col, majoritaire dans les phases I et II, perdure à la phase III (*Fig. 3.1*). L'allure générale du col se modifie: il peut s'évaser, les rainures à l'extérieur disparaissent, la hauteur a tendance à diminuer par rapport aux exemplaires plus anciens (*Fig. 4.1-3*). Cette forme est également attestée ailleurs jusqu'au 9<sup>e</sup> s. puisqu'on la retrouve, par exemple, dans l'assemblage abbasside de Madinat al-Far [Bartl 1994: 146, MF8.5].

2 Les travaux relatifs aux dessins de céramique (dessin, encrage, vérification) ont été effectués par Onas Akrad, Cyril Achard, Marion Rivoal, Marie Rochette (encrage), Agnès Vokaer et moi-même.

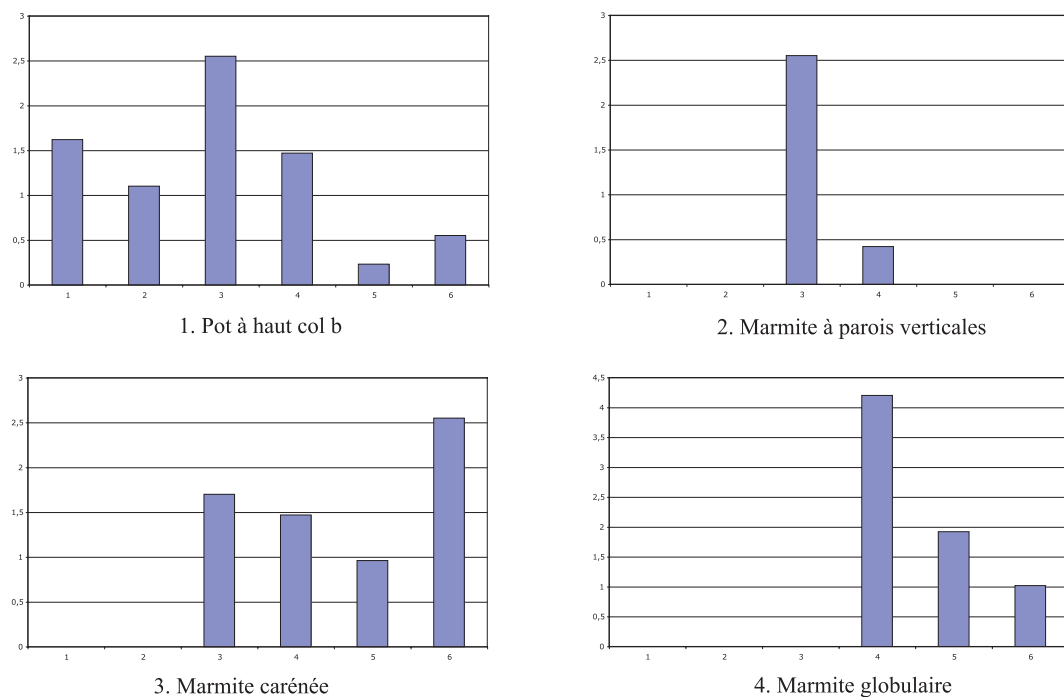


Fig. 3: Représentation des casseroles et pots de cuisson en brittle ware dans les différentes phases chronologiques (en x: les phases archéologiques, en y: pourcentage par rapport au NMI par phase).

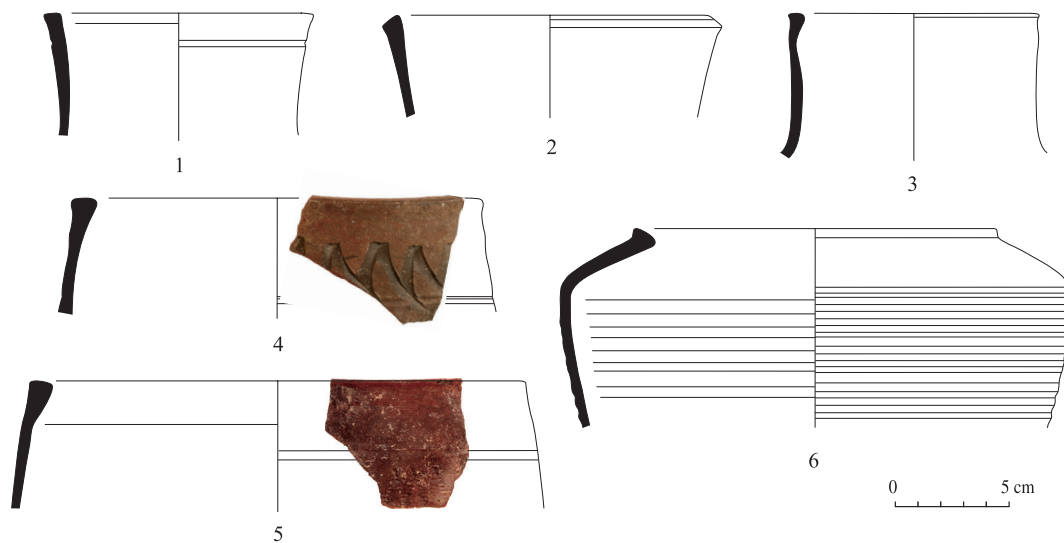


Fig. 4: Pots en brittle ware, phase III

1: n°228-23; 2: n°228-11; 3: n°263-1; 4: n°263-12; 5: n°266-36 [surface]; 6: 228-1.

### 3.2. Pâte commune beige

La coupelle à bord droit et lèvre arrondie Fig. 5.1 n'est pas une forme très répandue. Les coupelles de type Fig. 5.2 sont beaucoup plus fréquentes. Elles ont été retrouvées dans les palais B et C de Raqqa [Saliby 2004a: pl. 44e; Saliby 2004b: pl. 67a et d].

La forme de la coupelle Fig. 5.3 diffère légèrement des coupelles des phases antérieures mais le décor au peigne recoupé par des impressions obliques, sur la lèvre, a déjà été observé auparavant. Ce motif exécuté au peigne ou à l'estèque est assez commun sur les sites de Syrie du Nord, dans les niveaux byzantins à abbassides: Balikh [Bartl 1994: pl. 10], Resafa et sa région [Logar 1992:

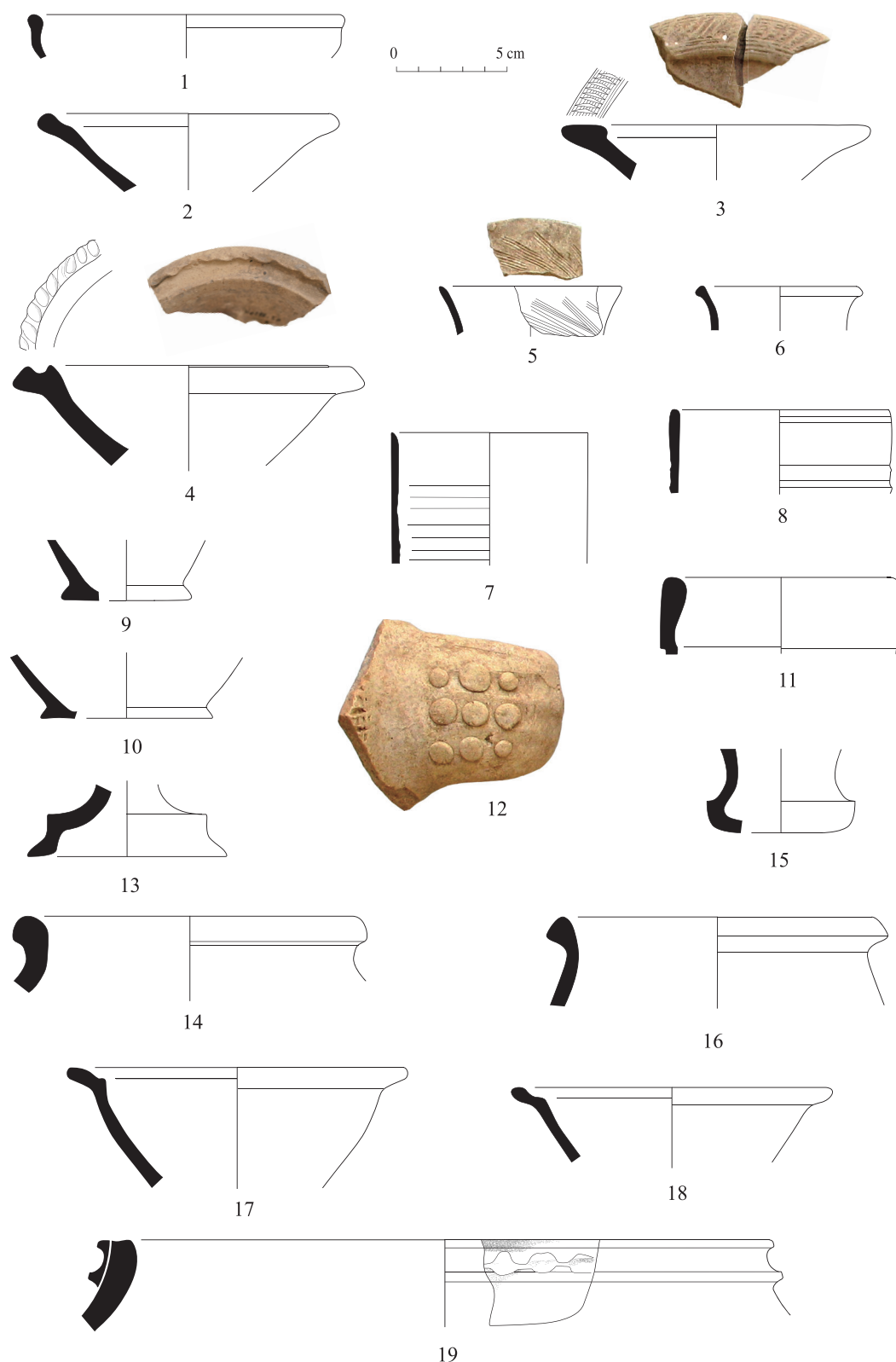


Fig. 5: Pâtes communes, phase III

*Pâte beige.* 1: n°228-18; 2: n°288-67; 3: n°244-1; 5: n°228-16; 6: n°284-7, 7: n°228-30; 8: n°260-56; 9: n°263-18; 10: n°263-19;

*Pâte sableuse.* 4: n°288-57; 11: n°228-14; 12: n°228-7; 13: n°228-13; 14: n°228-17; 15: n°228-28; 16: n°263-42.

*Pâte orange.* 17: n°214-4; 18: n°228-15; 19: n°202-51.



fig. 7.3; fig. 19.12; Knötzele 2006: pl. 15–16], Raqqa [Miglus, Stepniowski 1999: pl. 22d–m], Halabiyya [Orssaud 1991: fig. 124.56–62], Zeugma [Kenrick 2009: fig. 18.4 PT558 à 561], Tille Höyük [Moore 1993: fig. 105.22], entre autres.

La forme de petite cruche en pâte claire à parois fines est originale dans la phase III. Les cols sont variés, évasés (*Fig. 5.5–6*), avec parfois un décor peigné, comme sur la *Fig. 5.5* (avec un peigne à 5 dents). Le col vertical à lèvre amincie (*Fig. 5.7–8*) est moins fréquent. Le fond peut être plat ou en disque (*Fig. 5.9–10*). Les petites anses verticales à section rondes (3 fragments) qui existent dans la phase III peuvent être associées à cette forme. À Tell Aswad, la majorité des cruches en pâte claire a été retrouvée dans la phase la plus tardive [*horizon I*, Miglus, Stepniowski 1999: 40, groupe AA/AB]; elles apparaissent cependant dès l'*horizon III*. Une forme complète a été retrouvée dans le palais C de Raqqa [Saliby 2004b: pl. 67c].

### 3.3. Pâte commune sableuse

La coupelle *Fig. 5.4* porte un décor d'impressions digitées sur le bourrelet extérieur. Des formes complètes, avec des décors proches, ont été retrouvées dans le palais B de Raqqa [Saliby 2004a: n°13 et 16, pl. 49c] et à Tell al-Rum [Gschwind, Hasan 2006: fig. 5.35, 37]. À Tell Aswad, les coupelles du groupe J n'ont été retrouvées que dans la phase la plus ancienne [*horizon III*, Miglus, Stepniowski 1999: 34].

La jarre à lèvre en bandeau (*Fig. 5.11*) a le même profil général que les exemplaires en pâte beige commune et en pâte sableuse des phases I et II. Elle continue donc bien au-delà de l'époque omeyyade, comme on le voit ici. Elle est présente en Syrie centrale et du Nord-Est; elle existe à Raqqa dès l'*horizon III* [Miglus, Stepniowski 1999: pl. 45].

Les jarres globulaires à col court et lèvre ronde, bien que présentes dans toutes les phases – ce qui indique, pour une partie d'entre elles au moins, leur aspect résiduel – sont néanmoins un peu plus nombreuses à la phase III (*Fig. 5.14*).

La jarre à eau à encolure large et droite et lèvre ronde est représentée par une anse portant un décor de pastilles d'argile collées (*Fig. 5.12*). On distingue le début d'un décor peigné sur le col. Il ne s'agit pas d'une anse permettant le transport mais plutôt d'un élément décoratif, ces grands vases n'étant pas destinés à être déplacés. Ils devaient être disposés dans la pièce de réception de la maison car ils sont richement décorés. Cette forme est caractéristique de l'assemblage abbasside pré-céramique polychrome de Raqqa [Saliby 2004b: pl. 66d–f]. À al-Hadir, elle est également représentée en phase IV.

Le pied de bouteille *Fig. 5.13* est très développé. Les exemples de Raqqa [Gonnella 1999: pl. 78a–g, Saliby 2004b: pl. 68a] et Tille Höyük [Moore 1993: fig. 105.14, 42] montrent qu'il était associé à des corps moulés du type de ceux retrouvés dans la phase IV (*Fig. 8.1*).

Les godets de noria (ou de chaîne à godets) sont représentés par plusieurs formes dans la phase III (*Fig. 5.15–16*). Le bord est évasé pour permettre d'attacher une corde en dessous et éviter que le vase ne glisse. La lèvre offre toujours un épaississement externe triangulaire, dans cette forme connue depuis la phase I. Un nouveau profil de bord fait son apparition dans la phase III (non dessiné); il porte une lèvre dédoublée, à l'image des godets de noria de la moyenne vallée de l'Euphrate [Rousset 1996: n° 840–842, 847; Miglus, Stepniowski 1999: pl. 54–55 et pl. 56.o].

### 3.4. Pâte commune orangée

Les formes en pâte commune orangée trouvées uniquement dans les niveaux de la phase III ou postérieurs sont rares. Étant donné le nombre relativement réduit de tessons sur lesquels est fondée l'analyse (311 individus en pâte commune orangée, au total, pour l'ensemble des secteurs) et la nature

des dépôts, il n'est pas exclu que certaines de ces formes soient résiduelles.

Deux formes de coupelle n'ont pas été observées dans les niveaux précédents (*Fig. 5.17–18*). La présence de variantes en pâte sableuse confirme la permanence de cette forme dans la phase III.

Le bord de jarre *Fig. 5.19* a une lèvre simple, décorée à l'extérieur d'un cordon d'argile rapporté, régulièrement écrasé au doigt.

#### 4. La céramique de la phase IV

Les unités stratigraphiques les plus représentatives de la phase IV proviennent du secteur E, du remplissage des pièces au nord de la cour. Plusieurs évolutions dans l'assemblage céramique sont très nettes. La principale est la présence des glaçures polychromes qui représentent 15,33 % de l'assemblage et peuvent être réparties en deux grands groupes de pâtes. Les céramiques très fines, telles les petites cruches en *egg shell*, apparaissent également, même si c'est en très faible quantité, durant cette phase. On notera la très grande similitude dans les proportions de céramique commune et *brittle ware* entre les phases III et IV (*Fig. 2*), ce qui souligne leur proximité chronologique.

##### 4.1. La céramique de Basra

La glaçure monochrome turquoise, du type "partho-sassanide tardif", à pâte jaune pâle, glaçure intérieure grise-noirâtre et extérieure turquoise, déjà présente dans les phases omeyyades, est représentée dans la phase IV par 3 tessons de panse de jarre. Les analyses pétrographiques de Robert Mason ont montré que la grande majorité de ces jarres, que l'on retrouve jusqu'en Chine, était produite dans le sud de l'Iraq, dans la région de Basra [Mason 2004: 24].

La céramique à glaçure opaque sur pâte jaune pâle fine est très minoritaire (4 NMI soit 0,84% du NMI de la phase IV). Les analyses pétrographiques de E. Keall et R. Mason ont montré que le même atelier des environs de Basra produisait à la fois des jarres monochromes turquoises et des plats à glaçure opaque [Mason 2004]. Ces céramiques sont largement répandues dans tout le monde abbasside, et même au-delà, et donc en Syrie du Nord, à Madinat al-Far [Bartl 1994: 133], à Antioche [Waagé 1948: 85–95 et fig. 46–48 et 53], Hama [Riis, Poulsen 1957: 127], Qasr al-Hayr al-Sharqi [Grabar 1978, tome II: 246–249, pl. J–2], Rahba [Rousset 1996, n°1–21, niveaux Iab, deuxième tiers du 9<sup>e</sup> s.]. La pâte est homogène, très fine, et ne contient pas de dégraissant visible à l'œil nu. Elle est recouverte d'une glaçure le plus souvent blanche, rendue opaque par l'adjonction d'oxyde d'étain à la silice. La dégradation de cette glaçure donne des petits points noirs qui, suivant leur densité, assombrissent la couleur, qui peut ainsi varier du blanc jusqu'au gris-bleu. Cette base sert pour plusieurs types de décors (*Fig. 6.1–2*).

La pâte jaune pâle fine est représentée à al-Hadir par une seule forme de plat, à bords évasés et à marli plus ou moins marqué (*Fig. 6.1*). Un décor stylisé ou épigraphique est peint en bleu de cobalt sur la glaçure opaque, blanche. D'autres fragments illustrent, sur le même fond, un décor peint au lustre kaki (*Fig. 6.2*). Ce type correspond au *Basra Opaque-Glazed Group Three* de Mason, daté de 800–850 [Mason 2004: 25, 30 et 51, fig. 3.7; Northedge 1997: 218]. Les décors au bleu de cobalt et au lustre polychrome seraient les plus anciens sur les glaçures opaques. À Suse, cette catégorie est datée de la deuxième moitié du 8<sup>e</sup> s. – 9<sup>e</sup> s., tandis que pour Siraf, D. Whitehouse estime qu'elle ne peut pas être antérieure au début du 9<sup>e</sup> s. [Kervran 1977: 89, 127 et Kervran 1984: 131, fig.14, datation entre 650 et 750; Whitehouse 1979: 46].

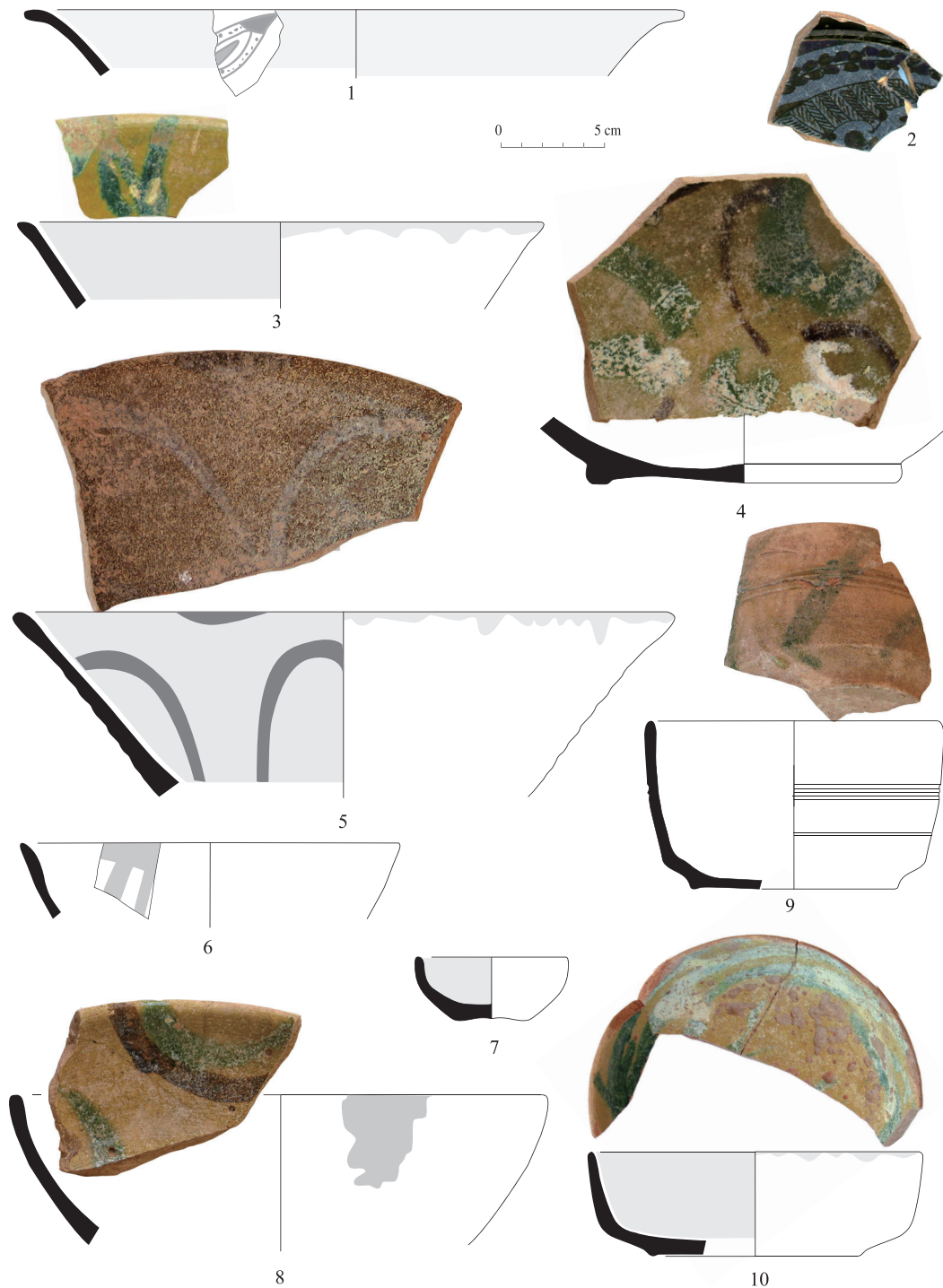


Fig. 6: Céramiques glaçurées, phase IV

**1:** n°202-22, pâte jaune pâle fine, glaçure blanc - gris opaque, décor bleu de cobalt; **2:** n°276-2, pâte *idem*, glaçure grise opaque, décor de lustre kaki; **3:** n°202-26, pâte fine orange. Int.: engobe clair, coulures vertes, glaçure jaune épaisse. Ext.: glaçure très fine, ligne courbe verte; **4:** n°202-1, pâte beige sableuse avec mica. Lignes vertes et brunes sous une sous-glaçure jaune transparente. Coulures de glaçure à l'ext.; **5:** n°202-24, pâte fine orange, lignes brunes; **6:** n°202-34, pâte orange sableuse. Int.: lignes vertes sous glaçure jaune transparente; **7:** n°260-1, pâte sableuse, glaçure int. très dégradée, irisée; **8:** n°202-18, pâte sableuse avec mica. Lignes vertes et brunes sous glaçure jaune transparente. Coulures ext. Trous de réparation; **9:** n°211-3 + 224-44, pâte beige rosée. Coulures de glaçure vertes et brun - jaune à l'ext. Glaçure très fine, partielle; **10:** n°202-10, pâte sableuse orange. Engobe int. et ext. Lignes vertes sous glaçure transparente jaune.

#### 4.2. La céramique à glaçure transparente sur pâte orangée

La presque totalité de la céramique glaçurée (13,23% du NMI de la phase IV) est d'une pâte orangée, beige ou rose selon la cuisson. Le sable contenu dans l'argile est très fin mais néanmoins visible à l'œil nu. On note également quelques vacuoles et parfois des carbonates. Certaines au moins de ces céramiques glaçurées étaient produites à Raqqa, où R. Mason et E. Keall [1999] ont mis en évidence, par la pétrographie, plusieurs pâtes locales; l'une aurait été réalisée avec des argiles provenant des alluvions de l'Euphrate (*Raqqa petrofabric Group 4*) et deux autres avec des argiles issues des alluvions du Balikh (*Raqqa petrofabric Group 3 et 5*). Ces deux groupes sont aussi utilisés pour réaliser des formes communes. Généralement, les pièces ne portent pas de glaçure extérieure, sauf des coulures. La glaçure jaune pâle au plomb, qui recouvre l'intérieur, est décorée de coulures vertes ou brunes perpendiculaires au bord ou de festons, dessinés à l'aide d'une glaçure colorée. Ce décor est parfois peint directement sur la pâte ou sur une glaçure tellement fine qu'elle en est presque invisible à l'œil nu. Cette catégorie de céramique correspond à la *Yellow Glaze* de Tell Aswad [Watson 1999]. Elle est utilisée pour les trois formes de plats ou bols de la phase IV qui apparaissent au même moment que la glaçure. Mis à part un fragment d'anse en pâte orangée recouvert de glaçure verte transparente, la glaçure est avant tout utilisée sur des formes ouvertes, vaisselle destinée à la présentation des mets.

Les plats à parois évasées sont parfois associés à un décor peint en vert sur fond jaune vif (*Fig. 6.3*); un engobe recouvre la pâte et fait ressortir les couleurs des glaçures. Ils peuvent également être décorés de lignes brunes peintes directement sur la pâte et recouvertes de glaçure transparente (*Fig. 6.5*). Cette forme est toujours associée aux suivantes, comme à Rahba [Rousset 1996, n°57] et Raqqa [Miglus, Stepniowski 1999, pl. 18f–g]. Cependant, à Raqqa, elle leur est postérieure car elle n'est abondante qu'à partir de l'*horizon I* [Miglus, Stepniowski 1999: 32, groupe E].

La forme la plus fréquente est celle du bol à parois arrondies. Elle se décline dans plusieurs formats, petit, moyen ou grand. On distingue deux ensembles, d'après la forme de la lèvre et le décor. La forme avec une lèvre en biseau est moins bien représentée (*Fig. 6.6*). Elle est généralement associée à un décor de coulures verticales vertes, ou vertes et brunes, perpendiculaires au bord. La glaçure jaune qui l'accompagne est posée directement sur la pâte ou sur une surface plus claire. Pour cela, la pose d'un engobe est plutôt rare; ce résultat peut être obtenu également par une post-cuisson réductrice ou un *wash*. Le bol à lèvre arrondie (*Fig. 6.7–8*) sert de support à un décor à base de lignes courbes ou demi-cercles, qui descendent du bord. Comme pour les plats à parois évasées, il peut être peint en brun sous une glaçure transparente, qui apparaît kaki car elle est jaune pâle et posée directement sur la pâte, uniquement sur l'intérieur du plat. Il peut également être peint en vert, ou jaune, et associé à une glaçure polychrome, c'est-à-dire blanche, rehaussée de taches jaunes et vertes. Dans ce cas, la glaçure recouvre également l'extérieur de la pièce. On retrouve ces deux formes en Syrie centrale et en Iraq, sur des sites où est attestée une occupation pré-Samarra: à Rahba [Rousset 1996, n°48 et n°40–44], dans la région de Salama, Qasr al-Hayr al-Sharqi [*sparingly splashed ware* de Grabar 1978, tome I: 114 et tome II, pl. H–1.14; Genequand 2006c, fig. 6.6811–9 et 20], Apamée [Rogers 1984: 271], al-Mina [Lane 1938], Antioche [Waagé 1948], Madinat al-Far [Bartl 1994: 148, pl. MF10 et Saliby 1983: 84, pl. 18], Zeugma [Kenrick 2009, fig. 18.4, PT 612], Resafa [Logar 1992, pl. 13.3, 7], Samarra [Northedge 1990: 24, pl. 27], Hira [Rousset 1994: 46, fig. 12–O.72] et Raqqa [Miglus, Stepniowski 1999, pl. 18a–d, pl. 19ar]. À Raqqa / Tell Aswad, dans la catégorie appelée *yellow-glazed family* produite localement, la forme très largement représentée correspond aux bols avec une lèvre parfois arrondie, mais le plus souvent coupée en biseau. L'une des variantes, appelée *sparse decorated ware*, porte une glaçure transparente incolore et des dessins généralement constitués de lignes de glaçure verte, parallèles, descendant du bord [Watson 1999, p. 82].



Les bols à parois verticales et fond plat sont parfois entièrement glaçurés (*Fig. 6.10*) et parfois partiellement (*Fig. 6.9*). Ce type de forme rappelle celles des premiers bols glaçurés égyptiens [Gayraud *et al.* 2009: 180 et fig. 3.4–5]. Elle est présente sur les mêmes sites que la précédente: à Rahba [Rousset 1996, n°49] et Raqqa [Miglus, Stepniowski 1999: 32, groupes F–G, pl. 21a–n].

Il semblerait que, dès les premières glaçures, il y ait eu des productions de différentes qualités, avec un décor plus ou moins compliqué à réaliser, pour toutes les formes. De rares exemples montrent un décor particulièrement élaboré, avec l'association de plusieurs procédés permettant d'obtenir une gamme de couleur plus large: engobe, manganèse, glaçures colorées ou transparentes.

### 4.3. La brittle ware

L'utilisation de la *brittle ware* est bien attestée durant la phase IV; elle représente 25,83 % de l'assemblage total (*Fig. 2*). Certaines formes antérieures perdurent, comme les pots de cuisson à haut col (depuis la phase I) et les marmites sans col à carènes (depuis la phase III); d'autres apparaissent, notamment la marmite globulaire à col court ou sans col, la cruche à col galbé et la lampe tournée.

Les pots de cuisson à haut col sont encore bien représentés dans l'assemblage de la phase IV (*Fig. 3.1*). On note, sur certains exemplaires, un net raccourcissement du col (*Fig. 7.3*). Cette forme coexiste avec les suivantes dans l'ensemble de la Syrie du Nord abbasside [Rousset 1996, n°562; Miglus, Stepniowski 1999, pl. 33, groupe Z].

Plusieurs profils de bords illustrent une forme de marmite à col court et lèvre simple, biseauté ou arrondie (*Fig. 7.4–6*). Ces vases appartiennent aux productions de l'atelier 6 qui n'a existé qu'à l'époque abbasside. Ils ont été retrouvés jusqu'à Rahba [Rousset 1996, n°611–613].

La marmite à corps globulaire, lèvre à épaisseur interne, sans col et sans carène, est une nouveauté de la phase IV (*Fig. 3.4* et *Fig. 7.8–11*). Elle porte deux tenons triangulaires, placés au tiers supérieur de la panse. Entre ces poignées, la panse est souvent décorée d'impressions basculées, réalisées à l'estèque ou, plus rarement, au peigne. L'assemblage d'al-Hadir montre la contemporanéité de l'apparition de cette forme et des glaçures polychromes. Elle est représentée de la moyenne Mésopotamie à la côte méditerranéenne: Abu Sarifa [Adams 1970, fig. 51], Tulul al-Ukhaydir [Finster, Schmidt 1976, pl. 45d], Samarra [D.G.A. 1940, pl. 38], Ana [Northedge *et al.* 1988: 85, fig. 39.9–10], Dibsi Faraj [Harper 1980: 338, n° 65–66], vallée du Balikh [Bartl 1994, pl. 28–31 et MF8], Zeugma [Kenrick 2009, fig. 18.4, PT650, PT652], Raqqa [Miglus, Stepniowski 1999, pl. 31, groupe U], Resafa [Logar 1992, pl. 5.2, 7.12], Qasr al-Hayr al-Sharqi [Grabar 1978: 159, fig. B.11; Genequand 2006c, fig. 6.6811–6], Jerablus Tahtani [Peltenburg *et al.* 1995, pl. 29.7], Déhès [Orssaud 1980, fig. 307, types 6], al-Mina [Lane 1938: 41].

Le couvercle (*Fig. 7.2*) est un exemple unique, en pâte rouge-orangée, qui contient du sable fin, des nodules ferreux de taille moyenne et des carbonates de calcium.

La cruche à col galbé et lèvre à épaisseur triangulaire, infléchie sur l'extérieur (*Fig. 7.1*) n'a été retrouvée, en très faible quantité, qu'à partir de la phase IV.

La lampe tournée à réservoir large est relativement bien représentée à partir de la phase IV (5 fragments, *Fig. 7.7*). Une petite anse joint le bord de la coupelle à celui de l'orifice du réservoir. Le trou de la mèche est à l'opposé de cette anse. La partie supérieure du réservoir est fixée près du bord de la coupelle. Cette forme n'est réalisée qu'en *brittle ware*. Elle existe à Rahba [Rousset 1996, n°567], Tell Aswad (musée de Raqqa n°818), Antioche [Waagé 1948: 77, fig. 81, type 58a], al-Mina [Lane 1938: 42, fig. 6.A], Déhès [Orssaud 1980: 258 et fig. 310, type 5]. Elle correspond au sous-groupe 1c des lampes tournées fermées à carène médiane de Dominique Orssaud [Orssaud, Sodini 1997: 66 et fig. 1.6), qui le date du 9<sup>e</sup> – début 10<sup>e</sup> s.

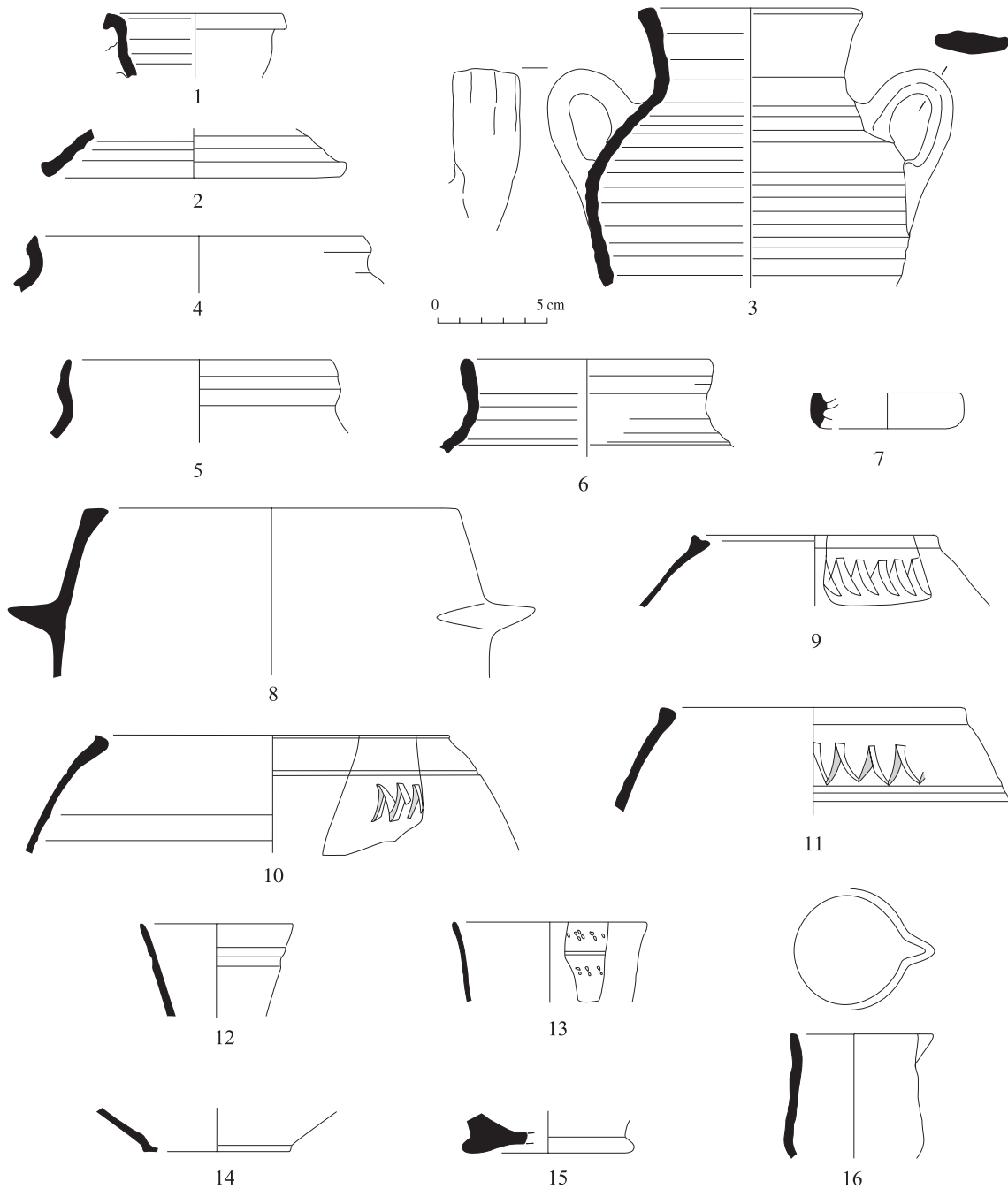


Fig. 7: Pots de cuisson en brittle ware, phase IV. 1: n°202-F; 2: n°224-47; 3: n°202-77; 4: n°202-E; 5: n°276-7; 6: n°202-56; 7: n°312-6; 8: n°202-50; 9: n°297-5; 10: n°202-48; 11: n°312-4. Pâte commune beige. 12: n°284-19; 13: n°284-21; 14: n°288-48; 15: n°284-6; 16: n°298-4.

#### 4.4. Pâte commune beige

La pâte commune beige est utilisée presque exclusivement, dans la phase IV, pour des formes aux parois minces. Cette vaisselle fine se compose essentiellement de cruches, plus rarement de petits pots ou de gobelets.

La petite cruche en pâte claire à parois fines est déjà connue dans la phase III. Les fonds peuvent être plats ou en disque (Fig. 7.14-15). Les cols sont évasés (Fig. 7.12-13), avec ou sans décor. Celui-ci peut être incisé, imprimé avec un estèque à deux dents ou appliqué (plus rare).

La petite cruche en *egg shell* ou dérivé est présente dès les niveaux les plus anciens de Tell Aswad ainsi que dans le palais B de Raqqa [Miglus, Stepniowski 1999, pl. 34–36, Saliby 2004a, fig. 12.3–7, fig. 15.182) et sur l'ensemble des sites qui ont des niveaux d'occupation de l'époque abbasside.

Un petit pot avec un bec verseur (*Fig. 7.16*) est la seule autre forme réalisée en pâte fine.

Un seul fragment de panse suffisamment complet illustre la forme de bouteille globulaire dont le décor est réalisé à l'aide d'un moule (*Fig. 8.1*), qui existe dès la phase III. La panse est moulée en deux parties qui sont ensuite soudées. La soudure est masquée par un bordon d'argile rapporté, à décor digité. Le col et la base peuvent être soit moulés, soit tournés (cf. *Fig. 5.13*). Le décor est composé de petits motifs répétitifs, réalisés à l'aide d'un poinçon sur le moule: cercles, rosettes, cœurs, losanges, bâtonnets, parfois assemblés en une composition plus large (*Fig. 8.3–7*). Ce décor au poinçon est typique des ateliers de Hira [Rousset 1994 et 2001] et de Raqqa [Gonnella 1999]. Il est fréquent dans la moyenne vallée de l'Euphrate, par exemple à Zeugma [Kenrick 2009: fig. 18.5, PT 6629–630] et à Rahba [Rousset 1996: n°755–763]. Le fragment *Fig. 8.5* est visiblement sorti du même moule qu'un tesson de Raqqa [Gonnella 1999, pl. 81f], ce qui signifie un même centre d'approvisionnement pour les deux sites.

#### 4.5. Pâte commune sableuse

La pâte commune sableuse représente 24,57 % des pâtes de la phase IV. Il n'y a pas de formes nouvelles dans cette catégorie de pâte: les exemples présentés correspondent à une évolution des profils apparus dans la phase III ou plus tôt.

Le bassin à lèvre rainurée est connu depuis la phase I. À la phase IV, la forme du bord tend à s'étirer en marli (*Fig. 8.10*) jusqu'à ce que la rainure disparaisse (*Fig. 8.9*).

Toutes les cruches réalisées en pâte sableuse sont décorées, que ce soit les cruches à parois fines ou les formes à parois plus épaisses. On a déjà pu noter le soin apporté à la décoration des vases destinés à la présentation des boissons, avec l'apparition des bouteilles à décor moulé à la phase III. La cruche à col légèrement évasé et anse à section ronde (*Fig. 8.11*), dont les prototypes apparaissent à la phase III, porte un décor peigné. Elle est connue à Rahba [Rousset 1996, n°651].

Des cruches de plus grande contenance, à parois plus épaisses, montrent un décor d'impressions digitées régulières sur la lèvre, parfois associé au décor incisé sur l'extérieur (*Fig. 8.13*). La fréquence des anses droites à section ronde (*Fig. 8.14*) permet de les associer à ces grandes cruches.

La forme à col tubulaire haut et étroit et à lèvre en bandeau aminci (*Fig. 8.17*), est décorée de lignes ondulées réalisées au peigne. L(es)anse(s) s'accroche(nt) juste en-dessous du bandeau, sur le décor. Ce type de col, qui rappelle certaines formes d'amphores romaines, est une composante habituelle de l'assemblage céramique du 9<sup>e</sup> s. de Tell Aswad [Miglus, Stepniowski 1999, pl. 48–49, groupe AL, *horizon I*].

Le col de jarre à lèvre moulurée (*Fig. 8.15*) pourrait représenter l'évolution tardive d'un type connu depuis la phase I [Rousset 2010a, figs. 2J et 8h]. On le retrouve à Rahba [Rousset 1996, n°805, 827].

Les grandes jarres à eau à lèvre épaissie et arrondie (*Fig. 8.16*) sont typiques de l'assemblage céramique du 9<sup>e</sup> s. (Rahba, Raqqa...). L'anse de la phase III (*Fig. 5.12*) appartient déjà à ce type de forme. L'extérieur du col et la panse des jarres à eau sont décorés de motifs incisés au peigne, exécutés avec soin. Cette forme, bien connue en Syrie du Nord, n'a pas été retrouvée en Iraq, ni en Syrie du Sud, ni en Palestine: à Resafa [Logar 1992, pl. 6.1], Raqqa [Miglus, Stepniowski 1999, pl. 38–39, groupe AC; Saliby 2004b, pl. 66d–f], dans la vallée du Balikh et à Madinat al-Far [Bartl 1994, pl. 12.4 et MF1.6]. À Rahba, les fragments permettant de reconstituer ces jarres proviennent des niveaux Iab et IIa, datés des 9<sup>e</sup>–10<sup>e</sup> s. [Rousset 1996: 299 et n°807–809].

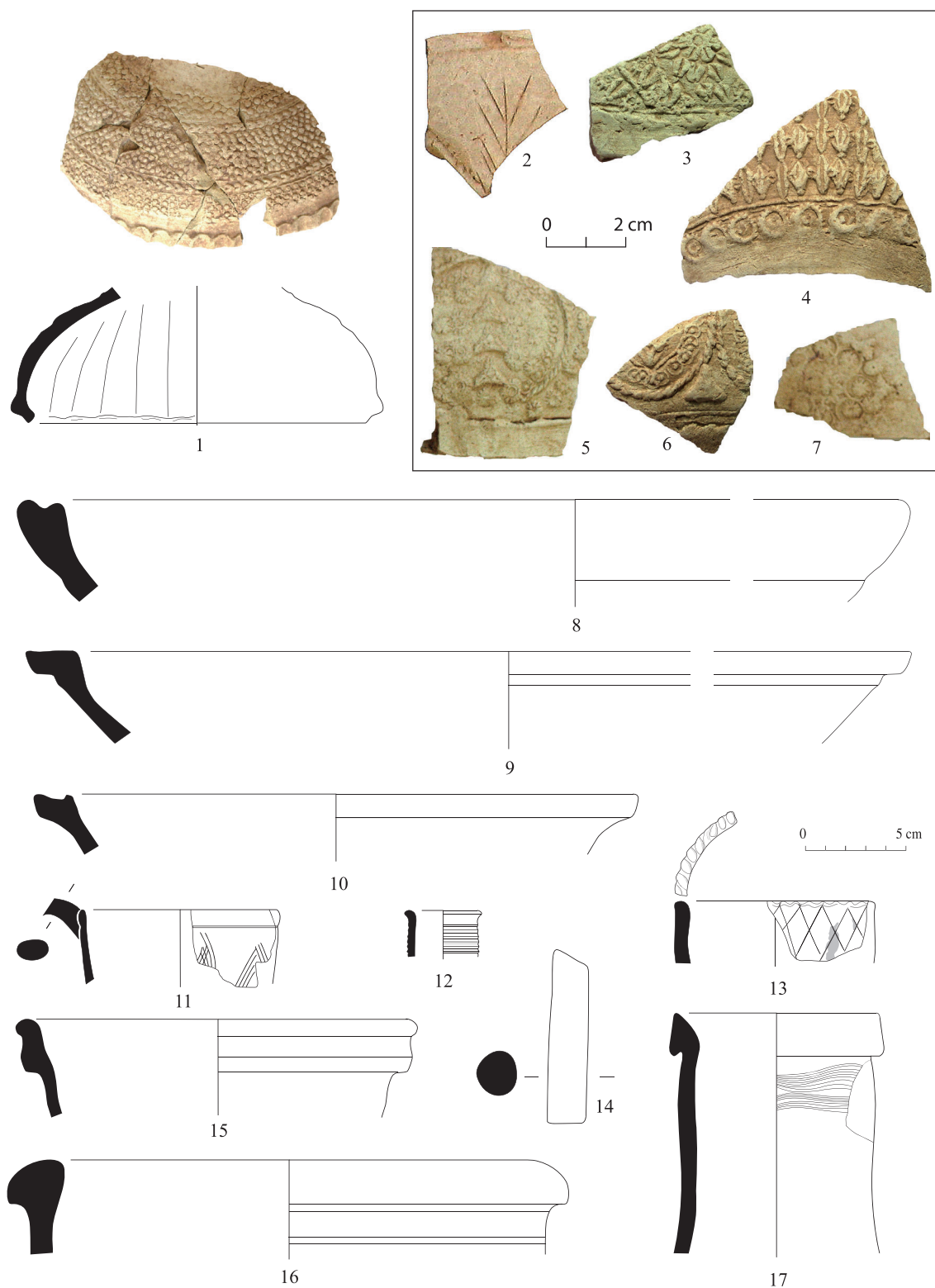


Fig. 8: Pâtes communes, phase IV

*Pâte commune beige.* 1: n°224-48; 2: n°212-6; 3: n°224-4; 4: n°224-30; 5: n°214; 6: n°224-39; 7: n°214.

*Pâte commune sableuse.* 8: n°214-1, diam. 56 cm; 9: n°202-37; 10: n°202-45; 11: n°284-1; 12: n°288-47; 13: n°267-17; 14: n°284-11 [phase VI]; 15: n°29-8; 16: n°29-5; 17: n°202-76.



## 5. Conclusion

L'assemblage de céramiques communes et culinaires de la phase III d'al-Hadir (grandes jarres à eau, jarres à lèvres en bandeau, coupelles, petites cruches en pâte fine, bouteille moulée, marmites à parois verticales) est très proche de celui de la phase IV, à ceci près que les glaçures polychromes sont absentes (les glaçures monochromes étant présentes, à al-Hadir ou ailleurs [Orssaud 2001; Genequand *et al.* 2010: 205, fig. 39] dès l'époque omeyyade).

L'apparition des premières glaçures polychromes est sujet à controverse. À Raqqa / Tell Aswad, de nombreuses variantes d'une catégorie appelée *yellow-glazed family*, une production de Tell Aswad, ont été retrouvées à partir de l'*horizon II* [Miglus, Stepniowski 1999: 21–22]. D'autres lieux de production pourraient néanmoins avoir existé en même temps que Tell Aswad, dans les régions d'al-Mina, de Samarra et peut-être à Balis [Watson 1999, p. 85]. Cette catégorie est datée par Watson de la période pré-Samarra, c'est-à-dire du début du 9<sup>e</sup> s.; les fouilleurs de Tell Aswad rattachent le début de cette production à la présence du calife Harun al-Rashid à Raqqa (796–808) et considèrent par conséquent l'*horizon III* comme antérieur à cette période. Cette séquence stratigraphique est datée par des monnaies, dont l'émission est située entre 776–803 et le milieu du 9<sup>e</sup> siècle [Heidemann 1999:15]. La fourchette est large mais les fouilleurs ont choisi la datation "haute". D'autres arguments permettent de relativiser cette datation. D'une part, l'analyse du matériel de Samarra [Northedge 1997: 219] permet de dater le début de cette production du milieu du 9<sup>e</sup> s. D'autre part, un des meilleurs arguments pour la datation des premières céramiques à glaçure polychrome se trouve à Raqqa même. En effet, dans la fouille du palais d'al-Mu'tasim (833–842), aucune céramique à glaçure de ce type n'a été retrouvée [Saliby 2004a, palais B].

La continuité des assemblages de céramique commune et culinaire suggère, pour al-Hadir, une occupation sans interruption au début de l'époque abbasside. Compte tenu de l'absence des glaçures polychromes, et des parallèles étroits avec le mobilier du palais B de Raqqa [Saliby 2004], l'assemblage de la phase III d'al-Hadir peut être attribué à une période antérieure au milieu du 9<sup>e</sup> s., soit le début du 9<sup>e</sup> s.

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## RAQQA BEFORE ‘RAQQA WARES’: TOWARD A TYPOLOGY OF ORNAMENT IN THE CERAMIC WORKSHOPS OF EARLY ABBASID TAL ASWAD

Marcus MILWRIGHT\*

The creation of typologies is a fundamental component of the study of ceramics. Most attention has been paid by scholars to the profiles of vessels as this information is the easiest to convey in diagrammatic form in archaeological publications. If they are to be meaningful typologies clearly also need to take account of other factors including ceramic fabric, manufacturing practices, and the addition of surface treatments such as burnishing, incising, moulding, moulding, slips, and glazes. The study of pottery recovered from Islamic occupation phases in the Middle East, Central Asia, North Africa, and the Iberian Peninsula must, of course, pay close attention to questions of surface treatment and ornamentation. All of these regions are marked by a rich diversity of decorated ceramic traditions, both unglazed and glazed, from the eighth century onward.

Surveying some of the better published groups of Islamic decorated pottery – such as the sgraffito wares and the underglaze-painted stonepaste wares of the Mamluk periods in Egypt and Syria – one is struck by the dazzling abundance of compositions employed on bowls, closed vessels, and other forms. This huge variety clearly represents a considerable methodological challenge, one that is often further compounded by uncertainties concerning chronology and provenance. A valuable contribution to the study of decorative typologies has been made by Robert Mason in his reconstruction of the early history of lustre-painted ceramics in the Middle East (Mason 2004. See also Golombek, Mason and Bailey 1996). Mason recognized that the complex designs on the interiors of bowls (and the simple repeated patterns on the exteriors) can be broken down into smaller components, each of which can be drawn and categorized. His reasoning is that these constitute the learned marks of individual painters or workshops. These marks are akin to the set of movements performed by a potter when making a specific vessel shape repeatedly on a kickwheel. Mason seeks to combine his vocabulary of decorative components with a conventional typology of vessel profiles and the scientific analysis of ceramic fabrics and glazes.

Mason’s integrated analysis of the physical and visual characteristics of glazed ceramics has yielded significant results. At a methodological level one needs to recognize that the formation of typologies of simple painted marks or motifs is, to a greater or lesser extent, a matter of subjective judgement. In this respect early Islamic relief-moulded ware offers an interesting opportunity to examine the possibilities and pitfalls of constructing typologies of ornamental features because the principal decorative tool is the (metal) punch. The marks made by such stamps are relatively easy to categorize both on the decorative moulds (Fig. 1) and on the finished vessels. Indeed, this process of categorizing decorative and epigraphic punches is already commonplace in the study of Roman *terra sigillata* and stamped ornament on Late Antique African red slip ware (e.g. Oswald and Pryce 1966; Hayes 1972: 217–83; Hartley and Dickinson 2008–). Substantial numbers of moulds and relief-moulded shards have been recovered from German and British excavations of the early Abbasid industrial site known as Tal Aswad (‘Black Hill’), north of the suburb of Mishlab in the town of Raqqa in northeastern Syria (for a map of the main sites, see Miglus 1999: taf. 1). Relief-moulded wares were produced in the workshops of Tal Aswad for a relatively limited period (see below), and the extensive assemblage from this locality allows for a detailed evaluation of the working

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Figure 1. Mould recovered from a surface deposit at Tal Aswad, Syria (late eighth or early ninth century) with drawings of the punch designs.

practices of the potters.

The analysis of relief-moulded pottery from Tal Aswad presented here includes consideration of the process of manufacture, the typology and dating of the extant vessels, and an examination of the composition of the ornament. The first task in the analysis of the ornament involves the identification of the vocabulary of punch designs as they appear on both the moulds and the extant shards. The next stage involves looking at how these individual motifs were used, with incised lines, to generate repeat patterns and a range of composite motifs. Two questions are particularly relevant here: first, do there exist factors which act as constraints upon the ways in which specific motifs are spatially arranged?; and second, what are the recurrent structures employed in the formation of the larger decorative schemes? This research aims ultimately to construct a 'grammar' for the decoration on relief-moulded pottery. This article presents some initial stages in this larger analytical project. A comparison is made with the relief-moulded pottery gathered from other sites excavated by the Raqqa Ancient Industries Project (led by Professor Julian Henderson of Nottingham University, UK) and with the published finds from German Archaeological Institute excavations at Tal Aswad (Miglus 1999). In the final section the results are placed into the wider context of the development of ornament in the early Islamic period. Before embarking upon this analysis it is necessary to establish briefly the setting of Tal Aswad within the historical development of Raqqa in the early Islamic period.

### **Tal Aswad the early Abbasid Period**

The industrial region on the site known today as Tal Aswad came into being as the result of the construction of the new city of al-Rafiqa ('the Companion') in the last quarter of the eighth century (On the history of the region in the Islamic period, see Heidemann 2003; 2006. For summaries of recent archaeological work on the industrial areas, see: Miglus 1999; Henderson 1999; Henderson et al. 2005). The impressively fortified city of al-Rafiqa was located approximately 600 m to the west of the existing settlement called Kallinikos. Following its incorporation into the new Islamic state in 639–40 Kallinikos was renamed al-Raqqa. Prior to the commencement of building work on al-Rafiqa in 771–72 the area immediately north of Raqqa-Kallinikos was utilized as a cemetery for

the indigenous Christian population, and it appears to have continued this function following the establishment of the pottery workshops. Some fourteen kilns have been located during geophysical surveys and excavations by the Raqqa Ancient Industries Project in the vicinity of Tal Aswad (the excavated sites are known as TA98/1, TA00/1, TA00/2, and TA01/2, and probably comprise three distinct workshops). Additional kilns were discovered further to the east in earlier German excavations (Miglus 1999: taf. 5. For a map of the whole site, see Daiber and Becker 2004: map 3). Tal Aswad formed part of a larger Abbasid period industrial complex comprising a substantial glass workshop built on the hypocaust of an earlier bathhouse (at a site further west known today as Tal Zujaj) and perhaps also other heavy manufacturing facilities (such as ironworking and brick making) in the land between Raqqa-Kallinikos and al-Rafiqā (Tonghini and Henderson 1998; Henderson et al. 2005: 141–42).

It seems probable that the pottery workshops of Tal Aswad were operated by teams of potters brought into the area from other regions (there is no sign of industrial activity on the site prior to *c.*770). Iraqi towns such as Hira may have provided some of the specialized manpower (on the ceramics of Hira, see: Talbot Rice 1934: 65–73; Rousset 1994). The main task of the Tal Aswad potters was evidently to produce utilitarian unglazed wares – water jugs (wheelthrown and relief-moulded types), storage vessels, cooking pots, lamps, chamber pots, and drainpipes – needed by the inhabitants of al-Rafiqā (built to house a garrison of soldiers from Khurasan) and the palaces constructed to the north. Excavations of the workshops and their associated refuse areas revealed much smaller quantities of glazed pottery (often of rather variable quality), probably indicating a continued reliance by consumers in Raqqa-Rafiqā upon Basra and the other major ceramic producers of Iraq for their decorated glazed wares. The high point of Abbasid Raqqa was during the occupation by the caliph Harun al-Rashid (r. 786–809) and his court. For twelve years the city functioned as the seat of the caliphate until the departure of Harun al-Rashid for Baghdad in 808.

Raqqa-Rafiqā continued to be an important administrative centre after 808 but the breakdown in security in the northern Jazīra in the early ninth century appears to have adversely affected Tal Aswad. The governor Tahir al-Husayn is known to have constructed a defensive wall at Raqqa-Rafiqā in 815 (Heidemann 2003: 37; 2006: 42). Keith Challis has tentatively identified this feature through the analysis of satellite images (Challis et al. 2004: 146–48, fig.6.4), and if the route he proposes is correct then it would mean that Tal Aswad was deliberately left as an extra-mural locality. The latest coin from Tal Aswad dates to 210/825–26 (Heidemann in Miglus 1999: 15–16), and it seems probable that ceramic production ceased around this time. Further work on the stratigraphy and the finds will be needed to establish the evolution of ceramic manufacture at Tal Aswad, but the basic chronological parameters can be defined with reasonable certainty from *c.*771 to sometime between 815 and *c.*826. In later centuries ceramic and glass manufacture shifted further west, first into the region between the two cities (which itself took on an urban character and came to be known as ‘the Burning Raqqa’, *al-Raqqa al-Muhtariqa*), and in the late twelfth and early thirteenth centuries within the walls of al-Rafiqā itself (Heidemann 2006: 44–48; Milwright 2005).

## **The Production of Relief Moulded Wares at Tal Aswad**

### **1. Vessel Typology and Manufacturing Process**

The range of vessel types which employ relief-moulded decoration is limited. Jugs/ewers are the most common form, followed by slipper lamps (not discussed in this article), although other rare types are also reported. The fragment of a splashed ware bowl was recovered from Tal Zujaj. The bevel-cut rim of the bowl conforms to a type seen in Abbasid contexts at Tal Aswad. Prior to the application of glaze, the vessel was pressed into a decorative mould, but no attempt was subsequently made to smooth over the depressions made on the interior of the bowl. The rarity of this type is

probably explained by this rather awkward feature of the whole design. Another shard from Tal Zujaj is from the neck of a closed vessel with a single handle attached to the lip of the vessel (Henderson 1999: fig. 4). The neck is wide and slightly flared in the manner of undecorated 'egg shell' ware jugs found in Abbasid contexts all over Raqqa. Unlike the jugs from Tal Aswad, the neck of the vessel from Tal Zujaj is decorated with relief-moulding (including motifs such as arcades and large rosettes not reported at TA00/2 or TA01/2).

The relief-moulded jugs from Tal Aswad all appear to have adopted much the same form. A complete profile was reconstructed from shards excavated at TA00/2 (Fig. 2). This profile correlates well with other examples of early Islamic relief-moulded jugs in the National Museum in Damascus excavated in Raqqa and elsewhere in Syria (al-'Ush 1961–62: pls. 1, 11.54, 56, 57; Daiber and Becker 2004: taf. 68. For references to other published sites in Syria and Iraq, see J. Gonnella in Miglus 1999: 55). The jug is composed of a globular body standing upon a high, pedestal foot. The globular body connects to a tall, cylindrical neck that rises to an angular rim (usually without any spout to facilitate the pouring of liquids). A long handle connects the uppermost part of the neck with the body. The top of the handle is fitted with a thumbrest, the summit of which may be decorated with a simple stamped or incised design. Impressed patterns may also be seen on the remainder of the handle. This elaborate shape may have its origins in late Sasanian and early Islamic metalwork.

The manufacture of the relief-moulded jugs was complex (for a general discussion of this topic, see Kalsbeek 1991–92). Fortunately the recovery of moulds and discarded vessels around the kilns

at TA98, TA00/1, TA00/2 and TA01/2 means that it is possible to reconstruct many of the stages in the overall process (on the relief-moulded wares from the German excavations at Tal Aswad, see: Gonnella in Miglus 1999: 58–61, 63–75, taf. 77–88). Examination of the ceramic fabric of shards from TA00/2 revealed a considerable degree of consistency in the texture, hardness, and mineral inclusions of the fired clay. This was a well prepared and finely levigated, porous paste. Much the same clay appears to have been used in the manufacture of the moulds. The firing colour proved to be more variable, ranging from pale green, to buff and pink, although this is probably the result of changes in the atmosphere of the kiln during the firing. A few examples from TA00/2 and elsewhere had fired dark grey, perhaps indicating that they had shattered during firing, later becoming part of the rake out from the kiln.

The most important part of the process is the manufacture of the globular body because this carries the relief-moulded decoration. The moulds found at Tal Aswad were wheelthrown with thick walls and were approximately hemispherical on the interior. The internal surface was carefully smoothed prior to the application of the incised and stamped

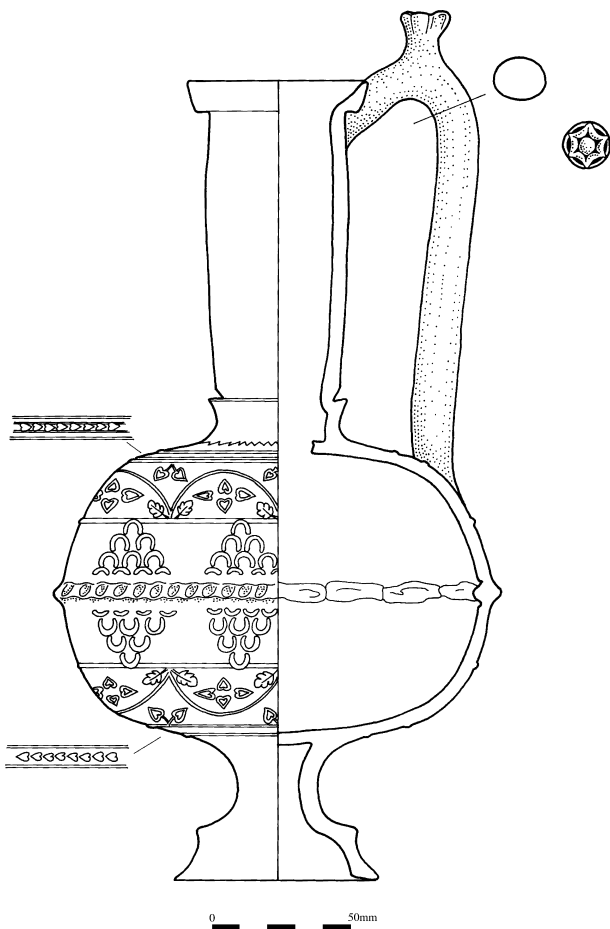


Figure 2. Reconstructed profile of a relief-moulded jug produced at TA00/2 (late eighth or early ninth century).



decoration (done when the mould was leather hard). Concentric incised lines were presumably made with the mould fixed on a wheel or turning stand, while other incisions were made freehand. The remainder of the ornament was achieved using a variety of small punches, usually no more than 5mm in diameter although some larger punches were also detected (see below). In a few cases, it seems that moulds were either made from pressing a relief-moulded vessel into the wet clay of the mould (i.e. to produce a second-generation design) or by using small baked clay tablets impressed with a design as punches. In both cases the quality of the resulting moulded decoration is coarser and much less well defined than is the case with the first technique.

The body of the jug was made by pressing wet clay into the mould. Analysis of the shards indicates that the same repeated finger motion from the base of the mould up to the rim was made by craftsmen of the TA00/2 workshop. This contrasts with the shards from TA01/2 which exhibit much less care in pressing of the clay into the mould. Once the clay had been pressed into the mould the edges were cut with a blade to create a bevelled edge. This process was repeated in order to create the other half of the body. (No example was detected where moulds with different designs had been used in the manufacture of the upper and lower halves of the body of a jug.) In order to affix the two halves a ribbon of wet clay was placed between the two. The two halves were then pressed together, the joint disguised on the exterior with a hand-formed 'piecrust' decoration. In many examples from TA00/2 the two halves sheared off at the point of junction during the firing, perhaps because the clay had been allowed to become too dry before the joint was made (this same problem is also seen in the manufacture of moulded slipper lamps). A hole was then made in the top of the body before the addition of the neck (pierced filters are uncommon though they are encountered on some contemporary egg shell wares). Both the neck and the foot were turned on a wheel before being connected to the body, the junctions being smoothed over and covered with a band of simple incised decoration. A handle was then attached with the handmoulded thumbrest added as the last element of the design.

It is not clear from the excavated kilns at Tal Aswad whether relief-moulded vessels were fired separately from other types of unglazed pottery. The absence of glaze drips on the relief-moulded wares from TA00/2 indicates that they were probably not stacked in the kiln with glazed pottery, however. Furthermore, kiln rods and plates were not recovered from around the TA00/2 kilns (even though these are common from the later phase of ceramic production represented by the finds from Tal Fukhkhah. See Tonghini and Henderson 1998). The variation detected in the fired colour of some shards from Tal Aswad is evidence that the upper chamber of the kiln might be subject to shifts between oxidizing and reducing atmospheres. For unglazed pottery this lack of control was probably of little consequence for the durability of the finished product.

## **2. Incised and punched Ornament**

The decorative schemes of the Abbasid relief-moulded wares from Raqqa rely upon two basic elements in the formation of the design, freedrawn lines with a sharp stylus and motifs created through the use of punches. The incised lines vary in depth and profile. Commonly, lines are used to subdivide the ornamental field into narrow concentric bands and wider central friezes, although a few of the moulds do not adopt this strategy. Lines might be added to create further subdivisions or to form the branches and stems of continuous vinescroll ornaments. No example was identified where an incised line passed over or obliterated a stamped motif. This suggests that the linear elements were drawn on the moulds prior to the application of the stamped motifs.

Stamped motifs were identified through examination of both the moulds excavated by the Raqqa Ancient Industries Project at Tal Aswad (TA98, TA00/1, TA00/2, TA01/2) and other sites (Tal Abu 'Ali and Tal Zujaj) and the relief-moulded shards recovered from TA00/2. The definition of the stamped motifs found on the moulds is usually much sharper with details (sometimes only visible

under magnification) that do not find their way onto the shards. For this reason, it is not always possible to ascertain whether a specific motif identified on a mould and on a relief-moulded shard were using the same punch. Furthermore, TA00/2 produced no example of a shard from a relief-moulded vessel which could be correlated with the overall decorative composition found on a surviving mould from Tal Aswad. This anomaly may be partly explained if the extant moulds were those that broke during firing and thus were never used. What happened to the moulds that were actually used remains unresolved, however. The identification of the designs of individual punches is complicated by the formation of simple composite designs from two or three decorative tools. Examples of this practice include circular or lozenge frames around other smaller motifs and the combination of a dotted circle with a three-part leaf. It is not always possible to ascertain whether such composite designs were made with one or more punches.

Seventy one separate punch designs were isolated on the moulds excavated by the Raqqa Ancient Industries Project (Fig. 3). The moulds from TA00/2 produced twenty five designs (including the mould for a handle). The punch designs can be organized into a series of categories: 'dots and circles'; 'dots with punched holes'; 'trefoils'; 'ellipses'; 'teardrops'; 'hearts'; 'lozenges'; 'pentagons'; 'horseshoes'; 'leaves'; 'rosettes'; 'composite circle motifs'; 'composite linear motifs'; 'composite lozenge motifs'; 'miscellaneous'; and 'large composite motifs'. This subdivision of the corpus of stamped motifs into broad categories is, of course, a heuristic device: it is not meant to imply either that the craftsmen would have recognized a specific motif as representing a 'leaf', a 'rosette', or a 'teardrop', or that this subdivision of the motifs into categories meaningfully reflects anything about the actual working practices of potters in Abbasid Raqqa. That said, there are instances where one is justified in arguing that a motif can be given a descriptive label according to the function it performs in a larger decorative scheme. For instance, the use of a motif in the context of a vinescroll ornament would tend to indicate that it was understood to be a representation, however abstracted, of an organic element. There is, however, room for considerable ambiguity in the area of representation.

Technically, the punched designs fall into two basic groups. The first group, comprising the large majority of the corpus, is formed through the use of small stamps made of metal. The designs are deeply impressed into the clay and the detail tends to be sharp. The second (and much smaller)

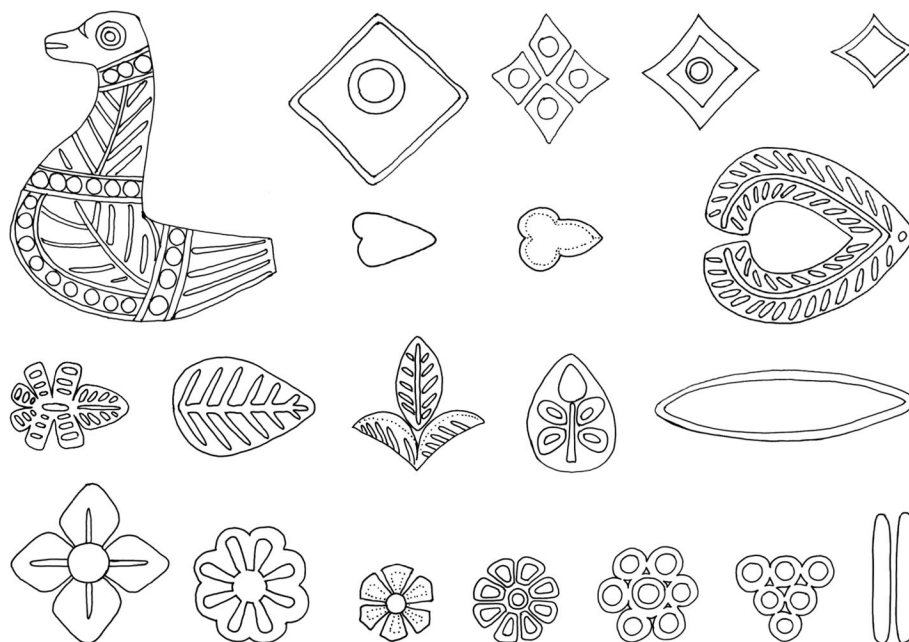


Figure 3. Selection of punch designs found on moulds and shards from Tal Aswad (not to scale).

group is more crude and shallow and was probably formed through the use of clay tablets or by pressing an already manufactured relief-moulded vessel into an undecorated mould. These motifs are reported from moulds excavated at TA98 and TA01/2. What becomes apparent from an examination of the first group of stamped designs on the moulds is that the craftsmen were relying upon subtle variations within a small vocabulary of basic forms. Geometric forms such as dots, circles, ellipses, and lozenges are found in varying degrees of elaboration. Other broadly 'nonrepresentational' motifs such as trefoils, 'horseshoes' and 'hearts' are also employed. Vegetal motifs ('leaves' and 'rosettes') tend to be highly schematic in character, such that many examples occupy an ambiguous territory between representation and geometric abstraction. Only one unquestionably zoomorphic motif was recovered, the bird on a mould from TA00/1. Absent from the Tal Aswad moulds were human and epigraphic elements, and only one published shard from the German excavations of the site incorporates architectonic forms (Miglus 1999: taf. 75).

The number of stamps employed on a single mould varies considerably. The mould illustrated on figure 1 makes use of only three punches and a sharp point. Notably, the punch employed in the narrow band at the top is repeated in the compartments and bands established in the remainder of the decorated area. The same punches also appear on different moulds found at Tal Aswad, suggesting that punches circulated among the potters within a given workshop, and perhaps even between workshops. These finely detailed punches must have been relatively expensive tools. An indication of the potential value of tools comes from the documents of the Cairo Geniza: contracts dealing with partnerships sometimes specify that specialized implements needed by a workshop constituted part of the shared assets (Goitein 1967: 87, 365). Studies of traditional ceramic manufacture in Pakistan also illustrate that a specialized item such as a fritting kiln could be co-owned by two pottery workshops (Rye and Evans 1976: 94; Raby in Atasoy and Raby 1989: 63).

Eighty three motifs were recovered from the relief-moulded shards of TA00/2 (Fig. 3). As with the moulds it is possible to arrange these into a series of basic categories: 'dots and circles'; 'dots with punched holes'; 'triangles'; 'trefoils'; 'ellipses'; 'seeds'; 'teardrops'; 'hearts'; 'crosses'; 'lozenges'; 'horseshoes'; 'leaves'; 'rosettes'; 'composite circle motifs'; and 'large composite motifs'. Many of the categories found on the moulds are taken up in the TA00/2 shards, although some are absent on the shards including 'pentagons', 'composite linear', 'composite lozenge', and zoomorphic motifs (all of which are rare on the extant moulds). Perhaps more telling is the comparison with the vocabulary of punched designs on the TA00/2 moulds. Predictably there are numerous points of confluence, though some designs are unique to the TA00/2 moulds. The shards from TA00/2 include a greater range of motifs, including new categories such as the triangle and the cross as well as additional variants upon hearts, leaves, horseshoes, and rosettes. In general, however, the typology of motifs follows the general character of the moulds with a strong emphasis upon the use of two main groups: highly schematic vegetal forms and geometric abstract forms. Human, zoomorphic, epigraphic and architectonic motifs are not found on the TA00/2 shards. Arabic script appears on one published relief-moulded bowl excavated in one of the Abbasid palaces north of al-Rafiq, but the inscription makes clear that the mould (and presumably the vessel) were manufactured in Hira by one Ibrahim al-Nasrani (Gonnella in Miglus 1999: 57–58).

The overwhelming majority of the motifs are symmetrical along one or more axes. In the case of leaf designs, this takes the form of strict symmetry across an axis formed by the central vein of the leaf. Single axis symmetry can be demonstrated with other categories such as teardrops, triangles, trefoils, and hearts. Ellipses and lozenges tend to be symmetrical through two perpendicular axes. Composite rosettes and composite circle designs may be symmetrical through two, three or four axes. Single and multiple framing bands are a common feature. The other common area of elaboration is the use of tiny decorative marks, usually dots or hatching with oblique dashes, to fill the framing band. It is difficult to account for this additional level of detail on functional grounds because this

level of detail very seldom registers upon the relief-moulded shards. The fact that so much of the fine detail of the punches can be seen on the moulds but fails to register on the actual finished vessels is a strong indication that the punches were initially made for some other purpose. *Repoussé* metalwork or leatherworking are both possibilities in this respect (on the sharing of decorative punches by potters and metalworkers in Medieval Europe, see Mortimer 1997).

### 3. The Compositional Field and Repeated Bands

In the majority of both the moulds and the relief-moulded shards from TA00/2 the compositional field is broken up into a series of concentric bands. A broad division is proposed here between the narrow bands (generally composed of one motif repeated or simple combinations of motifs) and friezes (generally containing repetitions of one or more complex composite designs). Although this division is somewhat artificial, it is clear from an examination of the complete compositions that the narrow bands are usually placed above and below the frieze to act as a frame.

A few comments can be offered about the arrangement of the patterns within the narrow bands. The simplest make use of a single motif. At its most basic the design can be achieved by repeating the given motif in a line, along a central axis parallel to the concentric incised lines that frame the band. Thus, a line of symmetry is created through the centre of the band. In some cases this is varied by: placing the line of motifs in the lower part of the band; tilting the motifs slightly off the central axis; arranging the motifs vertically within the band; or alternating the orientation of motifs. Greater complexity could be introduced by the alternation of two or more motifs (often with the motifs arranged vertically and connected to one another by curved lines incised into the mould). The most complex designs found in the narrow bands take the form of rather abstracted vinescrolls (these also appear in the main friezes) (Fig. 4). Incised lines were added first with punches being applied in the gaps to create designs that are usually broadly symmetrical along a central axis. While some of these 'vinescrolls' attempt a degree of naturalism through the use of leaf-shaped punches and a punch comprised of nine open circles arranged in a triangular formation (in imitation of a bunch

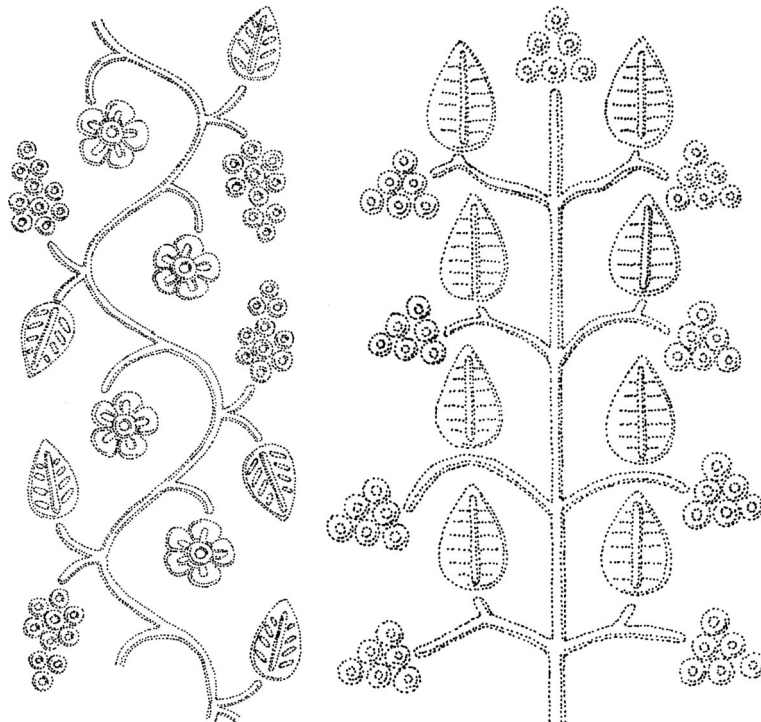


Figure 4. 'Tree' design and 'vinescroll' design from Tal Aswad (not to scale).



of grapes), the designers of the moulds evidently felt free to incorporate other motifs. For instance, one ‘vinescroll’ utilized a heart-shaped and a rosette punch, and another uses the same heart-shaped punch in an asymmetrical repeat pattern with a leaf-shaped punch (Fig. 5).

#### 4. Composite Designs in the Friezes

It is beyond the scope of this article to present a complete examination of the compositional arrangements of the main friezes but some general comments can be offered here. Occasionally the entire space is filled with a repeated design employing one or more punches. The field of the frieze might be broken down to create narrow bands and larger compartments (e.g. Fig. 1) of varying shapes and dimensions in a manner not unlike the ‘panel style’ found on underglaze-painted stonepaste wares of the thirteenth and fourteenth centuries. Another common approach was to create a large designs – typically rosettes and tree-like forms – and arrange them around the frieze leaving areas of undecorated ground between them. Sometimes these composite designs are bordered by incised lines. Two composite designs might be alternated within a single frieze.

The composite designs tend to be arranged according to lines of symmetry: the tree forms are broadly symmetrical around the vertical axis and the rosettes are organized around two, three or four axes (Figs. 4 and 5). The ‘trees’ are usually relatively simple designs with incised lines establishing the central ‘trunk’ and ‘branches’. Two, or sometimes three punches are then applied at the ends of the branches and at the top of the ‘trunk’. No attempt is made to suggest a third dimension with the entire form adopting the look of a plant pressed into a book. The composite rosettes commonly make use of a flower-like punch in the centre with a relatively wide range of punches – particularly ‘leaves’, ‘trefoils’, and ‘hearts’ – surrounding it in either centrifugal or centripetal orientation.

One of the issues noted in the introduction was that constraints must have existed upon the creation of repeated bands, composite motifs, and complete compositions. In other words, despite the immense number of permutations permitted through the combination of, for instance, twenty punches within a given workshop, the designers of the moulds relied upon a relatively limited vocabulary of composite forms. Constraints may have been imposed by the models drawn from other media (such as metalwork) or simply from the long-established design practices of a workshop. Pattern books do not survive from this early period, though documents of this type are known from the fifteenth century and later in different regions of the Islamic world. Sometimes workshops seem to have held a preference for one or more punch design employing them widely in repeated bands and composite motifs. To cite one example: numerous shards from TA00/2 make use of the same ‘hollow heart’ design. This appears in simple repeated bands, vinescrolls, and in a range of rosette and tree designs (Fig. 5). Given that the vinescrolls and the trees are, notionally at least, derived from organic forms one might presume that the ‘hollow heart’ was simply a substitute for leaf-shaped or fruit-shaped punches. This reading is questioned, however, by the combination of hearts and leaves/fruit in a variety of vinescrolls, trees, and rosettes.

To conclude this essay I will make some preliminary remarks about the wider visual context for the production of relief-moulded wares in early Abbasid Raqqa. How might the characteristics identified in the previous sections contribute to the larger issue of the evolution of Late Antique ornamental traditions to the increasingly abstracted and spatially ambiguous modes of early Islamic decoration exemplified by the carved and moulded stucco panels recovered from the buildings of ninth-century Samarra (On early developments in Late Sasanian/Islamic stucco, see: Thompson 1976; Meinecke 1991. For the carved stucco of Abbasid Raqqa, see Daiber and Becker 2004: taf. 73–79, 82).

In its use of decorative punches within a ceramic mould the relief-moulded pottery of Tal Aswad

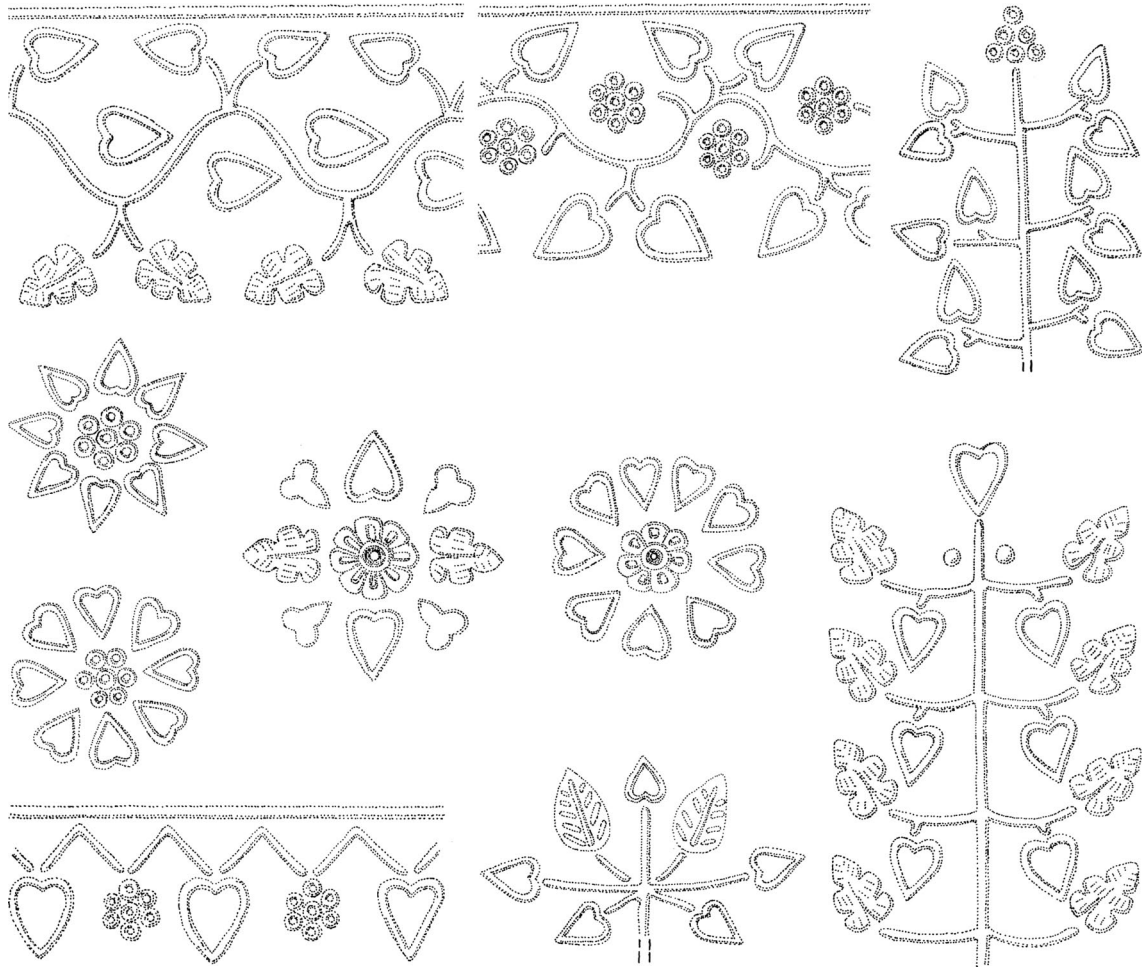


Figure 5. Repeated patterns and composite designs incorporating the 'hollow heart' punch (not to scale).

is a descendant of Roman *terra sigillata* pottery. Broad parallels may be suggested with specific punch designs – for instance, rosettes, leaves, and geometric forms – but the differences are as striking as the similarities. First, relief-moulded wares from Raqqa are made from porous buff or pink clays rather than the hard red pastes of *terra sigillata*. Second, the moulds of early Islamic wares tend to be decorated solely with punches and incisions. They lack the delicately carved detail which is a common feature of *terra sigillata* between the first century BCE and the second century CE. Third, representations of humans and other animate life are virtually absent in the relief-moulded wares of Tal Aswad (cf. Oswald and Pryce 1966: pls. XXXIII–XXXVI). Finally, the pottery of Raqqa lacks the inscriptional content that is common on *terra sigillata* (particularly stamps carrying the maker's name. See Oswald and Pryce 1966: 47–64; Hartley and Dickinson 2008–). The tendency toward abstraction seen at Tal Aswad is, however, a feature of the punches employed in some African red slip wares of the Late Antique period, although these stamped (rather than moulded) vessels did also incorporate representations of human figures and animals (Hayes 1976: figs. 38–57).

The strong connections between pottery and metalwork have been recognized in numerous academic studies, with metal vessels usually representing the prototypes for the cheaper medium of ceramics (see contributions in Vickers 1986; Tabbaa 1987). The typical profile of the Tal Aswad relief-moulded jugs does not find exact parallels in the published metalwork of the late Sasanian and early Islamic period, though the complexity of forming a ceramic vessel of this nature does suggest that the makers were attempting to imitate a metal form (on links between relief-moulded wares and the aesthetics of bejewelling artefacts, see Baer 1989). A survey of Sasanian and early Islamic

silver does also provide significant correlations both in specific motifs (particularly the rosettes, hearts, and leaves) and in the schematic quality of the vinescrolls and other decorative bands (cf. examples illustrated in Pope and Ackerman 1977: VII, pls. 204, 215, 216A, 221, 225A, 232A and B; Grabar 1967: cat. 17, 20, 24, 35, 40, 41, 51, 52). That said, the bold figural content of most Sasanian silver dishes and ewers did not find its way onto the relief-moulded ware made in Raqqa or in any of the other known production centres of the Umayyad and Abbasid periods.

More persuasive parallels may perhaps be sought in the smaller corpus of late Sasanian/post Sasanian beaten copper alloy vessels produced in Iran and elsewhere in the Middle East. Three undated platters, two in the Hermitage and one in the Islamic Art Museum in Berlin (Loukonomie and Ivanov 2003: 100–101 cat. 89; Pope and Ackerman 1977: VII, pl. 235; Piotrovsky and Vrieze

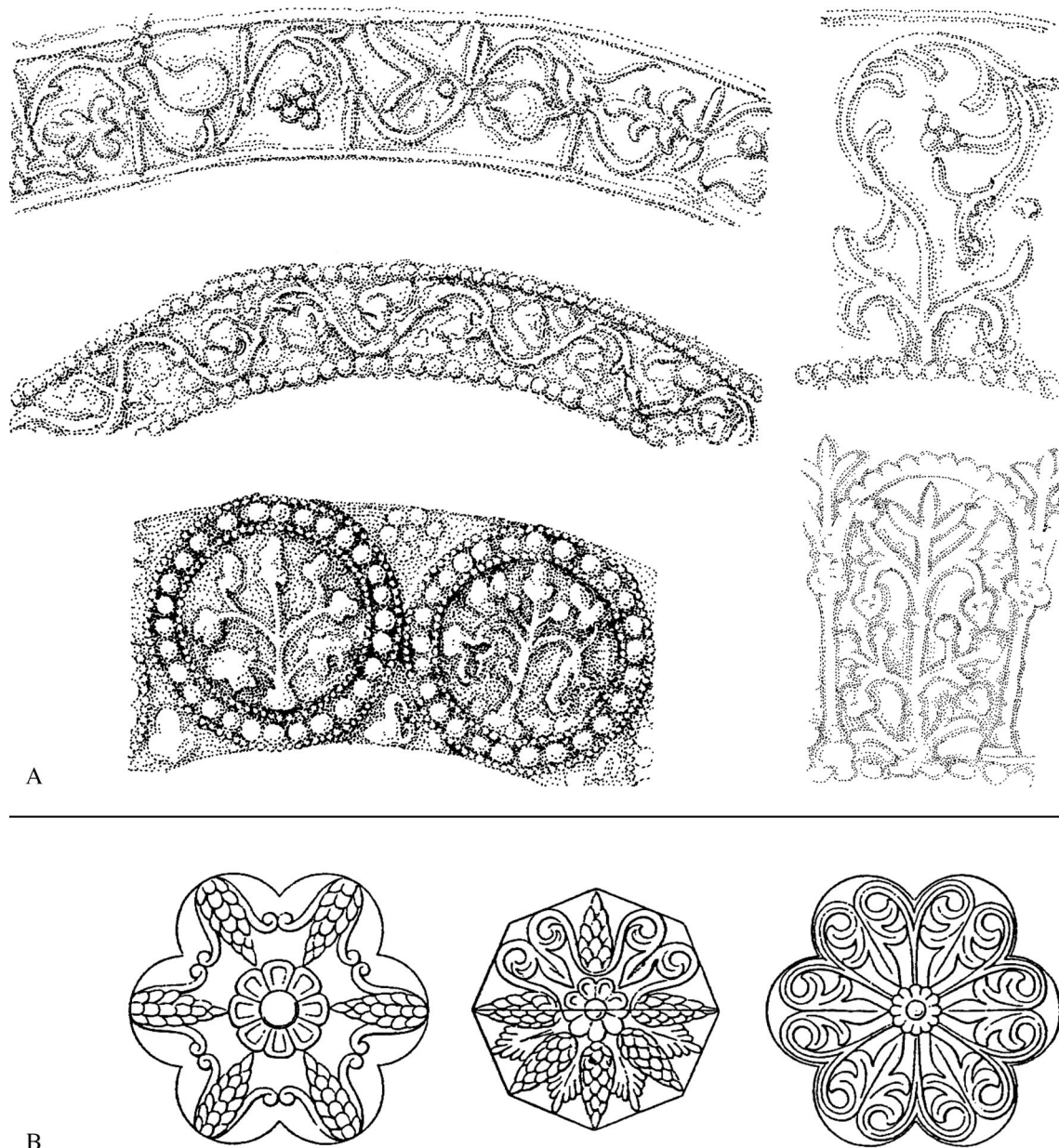


Figure 6. A. Drawings of comparative designs from three late Sasanian/early Islamic beaten copper alloy platters. After photographs in: Loukonomie and Ivanov 2003; Rosen-Ayalon 1989; Piotrovsky and Vrieze 2000. B. Drawings of rosette designs from the façade of Mshatta, Jordan. After Strzygowski 1904: fig. 75.



2000: 156 cat. 110; Rosen-Ayalon 1989: fig.28); offer an array of schematic plant forms, debased vinescrolls, abstract motifs, and repeated ornamental bands (Fig. 6.A). While none of the composite or repeated designs offers an exact parallel for the relief-moulded wares of Tal Aswad, the motifs found on these decorated bronzes are perhaps the nearest correlates in their abstracted quality. The simplified vinescroll and rosettes also appear as chased ornament on an eighth-century bronze ewer and on the bodies of two falcon-shaped aquamaniles, the first undated but probably of the mid eighth century and the second by one Sulayman and dated to [1]80/796–97 (Ettinghausen and Grabar 1987: fig. 47; Loukonine and Ivanov 2003: 96–97, cat. 84; Pietrovsky and Rogers 2004: 80–81, cat. 29, 30).

The general characteristics of the ornamental modes on the relief-moulded pottery of Tal Aswad can be located within the changes occurring in the decorative arts during the Late Antique. These characteristics include: the debasement of 'naturalistic' forms such as vinescrolls; the dominance of repeated patterns in the overall design; and the increasing tendency toward abstraction. Can one identify in the pottery of Tal Aswad themes which point toward the widespread rejection of 'classicizing' ornament in the carved and moulded stucco of Samarra? A full answer to this question will only be possible following a complete analysis of the design practices of the potters of early Abbasid Raqqa, but the examples highlighted in the previous paragraphs offer some potential avenues. First, the vinescroll designs often incorporate both 'inappropriate' punch designs such as hearts, and also introduce asymmetry with different motifs above and below the central axis. An earlier example of this asymmetry may be found in the mosaics in the soffits of the octagonal arcade of the Dome of the Rock (Nuseibeh and Grabar 1996: pls. on 96, 98, 103, 105). Second, the composite rosettes usually combine together notionally organic elements with purely abstract shapes. Furthermore, it is not uncommon for the leaves and other features to be arranged centripetally around the central rosette punch. This denies the composite design any sense of structural logic. The increasing abstraction of rosette designs has been identified in the carved console panels of the Aqsa mosque (some of which may date to the Abbasid restoration of the 770s) while the centripetal organization of organic components appears in the monumental rosettes (Fig. 6.B) carved onto the façade of the unfinished palace of Mshatta in Jordan (probably 740s) (Strzygowski 1904, 294, fig. 75; Hillenbrand 1999: 309–10, fig. 64). Thus, the relief-moulded wares of Raqqa are another example of the shifting aesthetics of this formative phase in the evolution of Islamic art.

### Acknowledgements

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## CÉRAMIQUES D'ÉPOQUE FATIMIDE À DAMAS – FOUILLES À LA CITADELLE ET À BAB KISSAN

Ibrahim SHADDOUD\*

### Céramiques fatimides à la citadelle de Damas

Cette fouille, ouverte à la citadelle en 2003, a été menée par Edmond al-Ajji, ingénieur à la Direction Générale des Antiquités et des Musées de Syrie (DGAMS). Il a découvert un puits sous le massif de fondation qui supporte le mur de liaison entre la tour 4 et la tour 3 de la muraille de la citadelle (Fig. 1: 1). Ce massif de fondation a coupé le sommet du puits. Ce dernier mesure 1,20 m de diamètre, il a été fouillé sur une profondeur de 1,20 m mais le fond n'a pas été atteint (Fig. 1: 2). En raison de l'exiguïté du puits et des difficultés techniques liées à la fouille, E. al-Ajji a procédé à un découpage stratigraphique réglé tous les 50 cm. Le remplissage était composé d'un blocage de couleur grise, d'une grande quantité de charbon de bois brûlé, de cendres, d'une petite quantité de cailloux de calcaire et de granit, il y avait également de nombreux morceaux de verre et des fragments de marbre découpé. La fouille a révélé un comblement homogène qui a sans doute eu lieu au moment de la construction de la citadelle ayyoubide.

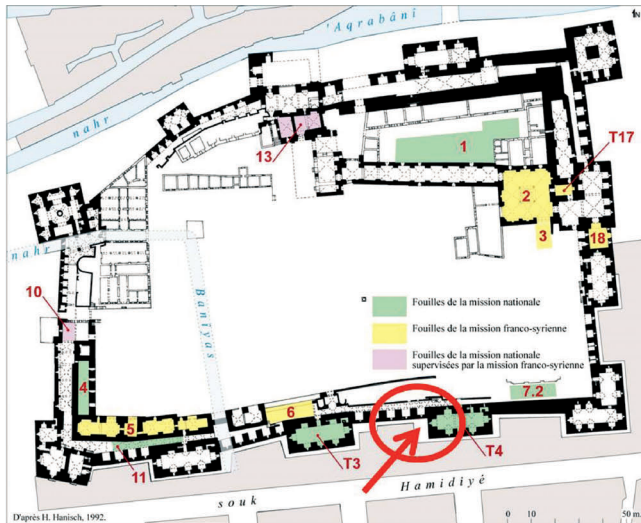
La majorité des céramiques découvertes dans ce puits date de l'époque fatimide (on compte 106 NMI<sup>1</sup>) mais il y avait cependant quelques tessons résiduels omeyyades. L'essentiel de ce matériel est sans doute d'origine damascène et provient peut-être de l'atelier de Bab Kissan tandis qu'une petite partie est probablement importée de Basra.

**Tableau de comptage des céramiques fatimides à la citadelle de Damas**

Type	NMI	Informes
Vases à liquide à pâte argileuse rouge ou claire	77	965
Tasse à pâte claire	1	
Céramique culinaire	1	75
Pot de stockage	2	
Pot de chambre	2	
Vaisselle de table à pâte argileuse claire et glaçure alcaline verte	9	
Vaisselle de table à pâte argileuse claire et glaçure alcaline jaune	2	
Vaisselle de table à pâte argileuse claire et glaçure alcaline aubergine	1	
Vaisselle de table de type Basra peinte au lustre métallique sur émail	7	1
Vaisselle de table de type Basra peinte en vert	2	
Vaisselle de table de type Basra peinte en jaune	1	
Vaisselle de table de type Basra à glaçure alcaline incolore	1	
Sous total	106	1041
Total	1147	

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1 NMI: Nombre Minimum d'Individus compté à partir des éléments de forme (lèvres, bases, anses, becs).



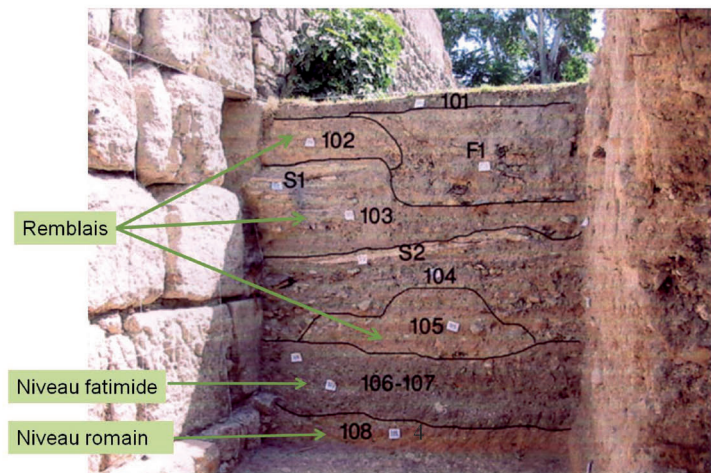
1



2



3



4



5

Fig. 1: Puits fatimide dans la citadelle de Damas (fouilles E. Al-Ajji) (1, 2); Bab Kissan (fouilles Y. Dabbour) (3, 4); Bab Kissan, barres de four à pâte argileuse blanche ou rouge (5).

### 1. Vases à liquide à pâte argileuse rouge ou claire

On trouve, dans ce puits, des cruches à pâte argileuse fine, rouge ou claire, de différentes tailles. Elles ont un col tronconique, une panse ovoïde, piriforme ou carénée à parois minces et une base



discoïde ou un fond plat (Fig. 2: 1–3). Les anses à poucier sont souvent bifides et parfois le poucier est développé en cône bague (Fig. 2: 4, 5). Elles sont attachées à la lèvre ou en haut du col et à l'épaule. Le col est orné d'un décor incisé ou découpé – un bandeau hachuré. La surface extérieure est parfois polie (Fig. 2: 2, 3). Les mêmes formes existent en pâte alluviale rouge ou en pâte beige à Fustat et à Amman (Gayraud, Trégli, Vallauri 2009: 180–181, 185, fig. 3: 11, fig. 8: 4, 5; Northedge 1992: fig. 137: 2).

Il n'y a qu'un seul fragment de type *Egg Shell* à pâte argileuse claire et parois fines, c'est une petite cruche à col tronconique orné d'un bandeau incisé – des pétales se détachent sur un fond hachuré (Fig. 2: 7).

## 2. Tasse à pâte claire

Il y a une tasse à pâte claire fine à panse carénée avec une anse en boudin et un fond convexe (Fig. 2: 6). La panse est ornée de bandeaux incisés.

## 3. Céramique culinaire

La céramique culinaire à pâte rouge est très faiblement représentée parmi le matériel du puits — 75 informes — et il n'y a qu'un seul fragment de forme. Il s'agit d'une marmite à lèvre en crochet et panse globulaire côtelée avec des taches de glaçure plombifère (Fig. 2: 8)

## 4. Pot de stockage

On recense deux pots de stockage, le premier à lèvre en bandeau et panse tubulaire est tourné dans une pâte argileuse rouge fine (Fig. 2: 9); le second, à col court, panse carénée avec une anse accrochée à la lèvre et à l'épaule est tourné dans une pâte argileuse blanche.

## 5. « Pot de chambre »

Deux « pots de chambre », tournés dans une pâte argileuse claire et fine, à lèvre déversée pour former un marli, ont une panse cylindrique parfois renflée (Fig. 3: 8, 9). L'une d'entre elles est découpée en godrons à l'extérieur (Fig. 3: 8). Le fond est plat. La glaçure verte est appliquée à l'intérieur et à l'extérieur jusqu'à mi-panse. Elle est parfois dégradée. Les mêmes formes ont été repérées à Fustat (Scanlon 1999: 277–278, fig. 6: c, pl. VII–2 et 3).

## 6. Vaisselle de table à pâte argileuse claire et glaçure alcaline monochrome

### 6.1 *Glaçure alcaline verte*

Il y a très peu de céramiques de ce type dans le puits, 9 fragments seulement, mais les formes sont très variées (Fig. 3: 1–4). Les coupes et les coupelles, tournées dans une pâte argileuse claire, ont une panse tronconique, hémisphérique ou carénée. La lèvre est légèrement éversée dans le cas des panses tronconiques. Parfois, à l'intérieur, la liaison entre la panse et le fond est soulignée par un ressaut. La base annulaire est évasée, discoïde ou plate. Cette vaisselle de table est couverte d'une glaçure alcaline verte appliquée à l'intérieur et à l'extérieur jusqu'à mi-panse. Elle est souvent très dégradée. Les mêmes coupes apparaissent à Rahba-Mayadin (Rousset 1996: 76–79, pl. 4, 5: 40, 45, 49, 57–62).

### 6.2 *Glaçure alcaline jaune*

Deux autres coupes à pâte argileuse claire se distinguent des précédentes par la couleur de la glaçure qui, cette fois, est jaune et bien conservée. On retrouve une forme à panse tronconique, lèvre éversée avec, à l'intérieur, un anneau en léger relief et on note la présence d'une coupelle à panse tronconique très fine (Fig. 3: 5, 6).

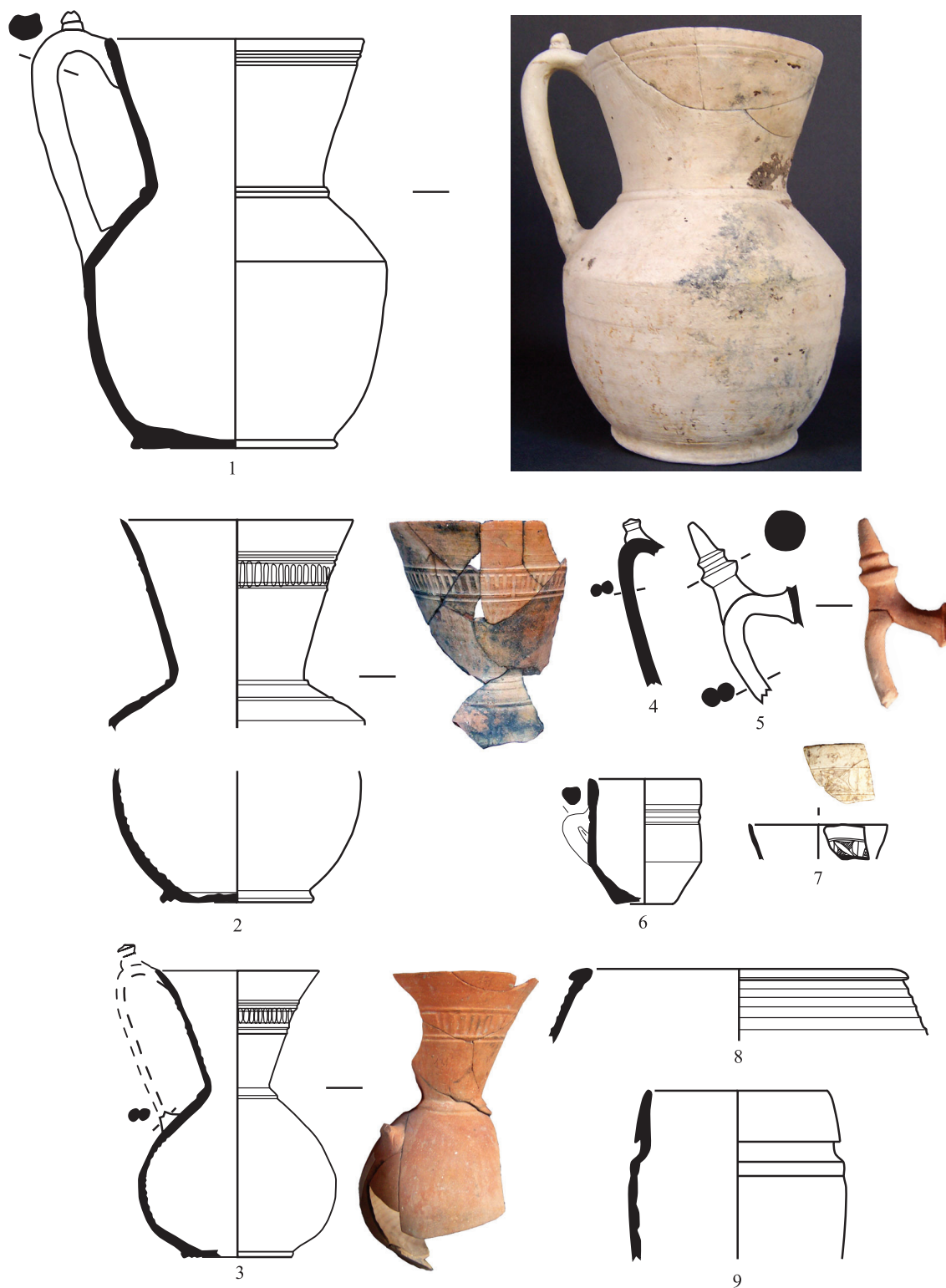


Fig. 2: Citadelle de Damas - vases à eau à pâte argileuse claire (1) et de type Egg Shell (7); vases à eau à pâte argileuse rouge (2–5); tasse à pâte argileuse claire (6); marmite et pot à pâte argileuse rouge (8, 9). Ech. 1:3.

### 6.3 *Glaçure alcaline aubergine*

Une seule coupe à lèvres éversées et panse tronconique, à pâte argileuse claire, est couverte d'une glaçure aubergine (Fig. 3: 7). Il s'agit là encore d'un vase à paroi fine qui vient compléter la gamme variée



Fig. 3: Citadelle de Damas - vaisselle de table et pots de chambre, à pâte argileuse claire et glaçure alcaline monochrome verte (1-4, 9), jaune (5, 6), aubergine (7), ou altérée (8). Ech. 1:3.

des formes de cette vaisselle de table, sans doute locale.

## 7. Vaisselle de table de type Basra

### 7.1 Peinte au lustre métallique sur émail

Parmi la vaisselle fine, deux coupes, à lèvre éversée et panse hémisphérique, sont sans doute importées de Basra. Elles sont tournées dans une pâte argileuse claire et fine (Rousset 1996: 142, 143). Ces objets émaillés sont peints au lustre métallique jaune dont il ne reste parfois que la trace (Fig. 4: 1, 2).

### 7.2 Peinte en vert

Deux coupelles, tournées dans une pâte argileuse claire, fine, ont une panse carénée et une base annulaire. Elles sont couvertes d'une glaçure alcaline verte (Fig. 4: 3). Ce matériel est très mal conservé. Les mêmes coupes apparaissent à Rahba-Mayadin (Rousset 1996: 77, pl. 4).

### 7.3 Peinte en jaune

Une grande coupe à panse hémisphérique et base annulaire évasée est le seul exemplaire de ce type. Tournée dans une pâte argileuse claire, elle est peinte en jaune sous une glaçure alcaline incolore appliquée à l'intérieur et à l'extérieur mais mal conservée (Fig. 4: 4).

### 7.4 Glaçure alcaline incolore

Ce type est représenté par une seule coupelle à pâte argileuse claire, à lèvre éversée, panse hémisphérique et base annulaire. La paroi est d'une très grande finesse. La glaçure alcaline incolore est appliquée à l'intérieur et sur toute la surface extérieure (Fig. 4: 5).

## Céramiques fatimides à Bab Kissan

En 2004, le gouvernorat de Damas a décidé d'agrandir la route le long de la muraille, au nord ouest de l'enceinte, et de percer un tunnel. La DGAMS est donc intervenue pour surveiller les travaux

**Tableau de comptage des céramiques fatimides à Bab Kissan**

Type	NMI	Informes
Céramique culinaire à pâte argileuse, rouge ou grise	3	
Bassin à pâte argileuse rouge	1	
Jatte et coupe à pâte argileuse rouge	2	
Jarres de stockage à pâte argileuse rouge ou grise	4	
Bouteille	1	
Vaisselle de table à glaçure alcaline	88	178
Pots de stockage à glaçure alcaline	7	
Marmite, bassin et pot de chambre à glaçure alcaline	6	
Tuiles peintes à glaçure alcaline	2	1
Vaisselle de table à glaçure plombifère peinte sur engobe	6	
Vaisselle de table à glaçure plombifère incisée	2	1
Sous total	122	180
Total		302



et Yamen Dabour a ouvert plusieurs sondages, au sud-est de la vieille ville à 45 m à l'ouest de Bab Kissan, pour tenter de dater la période de construction de la muraille (Fig. 1: 3). Le matériel présenté ici provient du sondage D qui mesure 6 m de long sur 3, m pour une profondeur de 2,80 m (Fig. 1: 4) (Dabbour 2006: 76, 77). Il y avait dans ce sondage de nombreuses barres de four, au moins 36, à pâte rouge ou blanche, parfois avec des traces de glaçure (Fig. 1: 5). Leur présence laisse croire à l'existence, dans les environs, d'un four à barres mais aucune structure n'a été découverte. Le matériel associé à ces barres est fatimide.

### **1. Céramique culinaire à pâte argileuse rouge ou grise**

Il n'y a qu'une seule marmite à lèvre coupée, rentrante, et panse globulaire (Fig. 4: 7) et deux couvercles à bouton de préhension (Fig. 4: 6) dont on trouve des parallèles à Fustat (Gayraud, Tréglià, Vallauri 2009: 177, 181, fig. 2: 9, 12; fig. 4: 6).

### **2. Bassin à pâte argileuse rouge**

Ce bassin a une panse tronconique, une lèvre éversée épaissie à l'extérieur, fendue d'une gorge pour recevoir un couvercle (Fig. 4: 9).

### **3. Jatte et coupe à pâte argileuse rouge**

Une jatte à panse tronconique, à lèvre coupée, est ornée un bandeau en léger relief à l'extérieur de la panse (Fig. 4: 10). On trouve aussi une coupelle à panse hémisphérique (Fig. 4: 14).

### **4. Jarres de stockage à pâte argileuse rouge, grise ou beige**

Le premier type de jarre, à pâte grise, a un long col tronconique terminé par une lèvre éversée épaissie à l'extérieur (Fig. 4: 8). Le second type, plus gros, à pâte rouge, a un col légèrement tronconique orné d'un bandeau en léger relief, la lèvre est épaissie à l'intérieur (Fig. 4: 11). Une autre jarre, de forme différente, un large col cylindrique terminé par une lèvre éversée et épaissie, est tournée dans une pâte beige (Fig. 4: 12).

### **5. Bouteille**

Il n'y a qu'une seule bouteille à pâte rouge, à lèvre épaissie à l'extérieur montée sur un petit col souligné par un anneau saillant (Fig. 4: 13). Ce même genre d'objet apparaît en grande quantité dans les fouilles de Fustat (Gayraud, Tréglià, Vallauri 2009: 177, fig. 1, 2: 1 et 2).

### **6. Céramique à glaçure alcaline**

La céramique à glaçure alcaline — essentiellement de la vaisselle de table — représente la majorité des découvertes dans le sondage D à Bab Kissan. On compte 103 NMI et 327 informes. Dans la plupart des cas, sans doute à cause des conditions d'enfouissement, la glaçure alcaline est très altérée. Toute la céramique de ce type a été tournée dans une pâte argileuse claire et fine. Il y a des coupes, des coupelles, des bassins, des pots et des « pots de chambre » de différentes tailles.

#### *6.1 Vaisselle de table*

La vaisselle de table est représentée par des coupelles à panse hémisphérique et fond plat (Fig. 5: 1, 2) ou panse hémisphérique et base annulaire (Fig. 5: 3). De plus grandes coupes, montées sur une base annulaire, ont tantôt une panse hémisphérique à lèvre dans le prolongement de la panse, ou légèrement éversée, ou encore à marli (Fig. 5: 4–9), tantôt une panse carénée et un fond plat (Fig. 5: 10). Sur tous ces objets, la glaçure n'apparaît plus que sous la forme de traces. Une autre série de coupes, à panse hémisphérique ou tronconique et lèvre éversée, est peinte en jaune sous glaçure alcaline (Fig. 6: 3). On retrouve le même type d'objet à Qal'at Sem'an et à Rahba-Mayadin

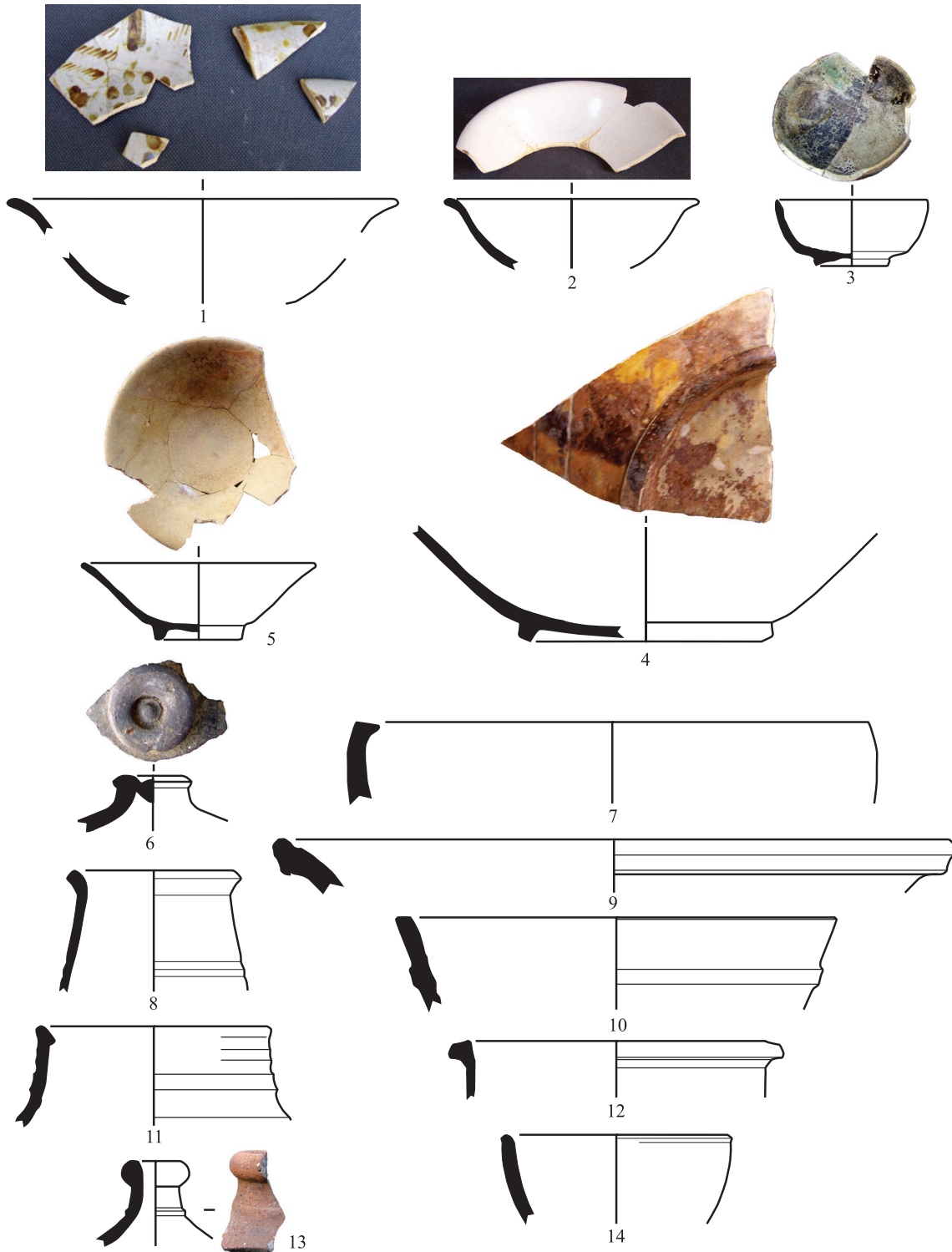


Fig. 4: Citadelle de Damas - vaisselle de table, à pâte argileuse claire, type Basra, peinte au lustre métallique sur émail (1, 2), peinte en vert ou en jaune sous glaçure alcaline incolore (3, 4), à glaçure alcaline incolore (5). Bab Kissan - marmite, bassin, coupelle, bouteille et jarre à pâte argileuse rouge (9–11, 13, 14), grise (6–8), (beige (12)). Ech. 1:3.

mais avec des couleurs peintes en vert (Blanc, Orssaud 2009: 286, fig. 5 a: Xb, 5; Rousset 1996: 76, 77, pl. 4: 40, 45).

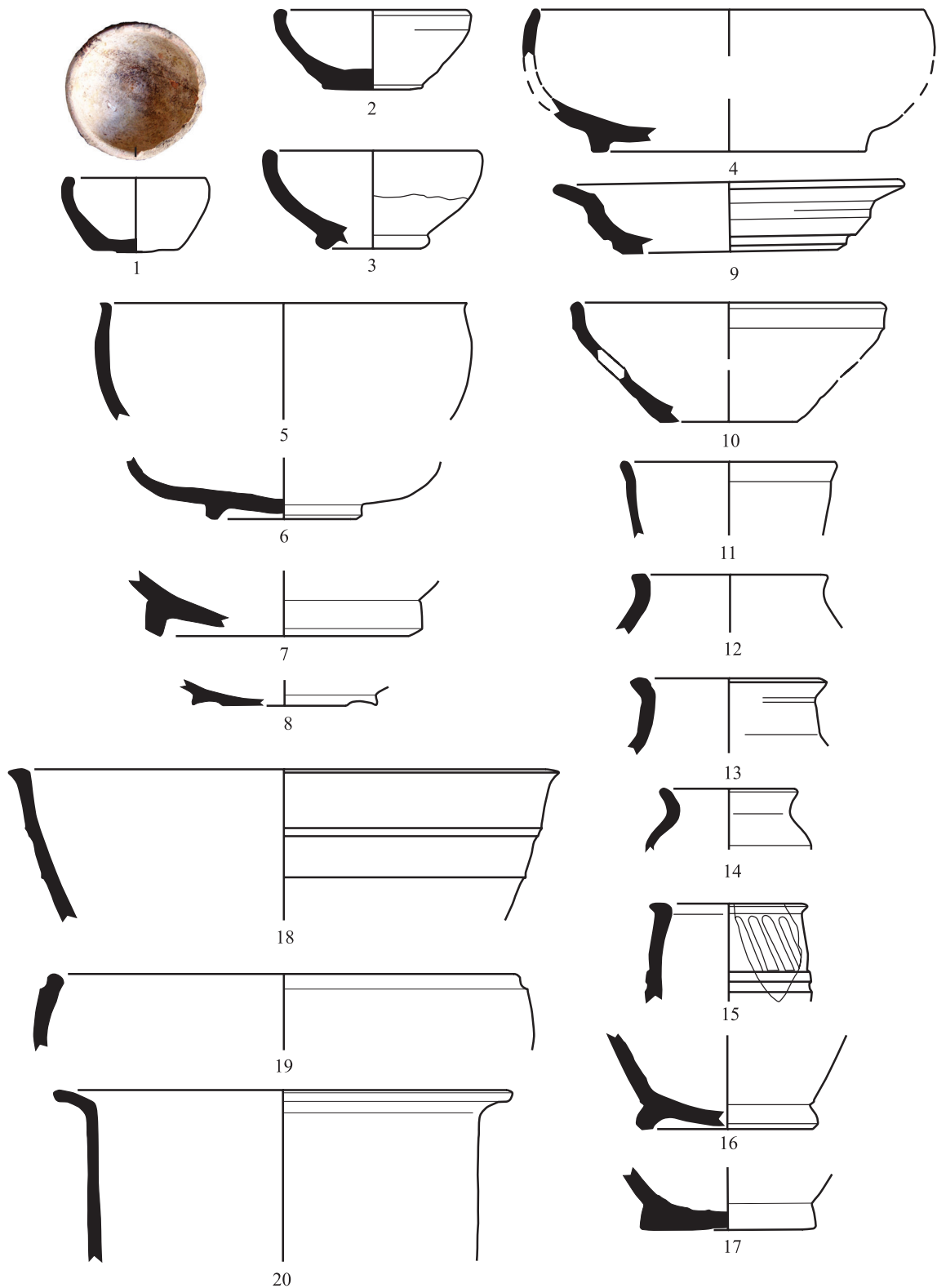


Fig. 5: Bab Kissan - céramiques à pâte argileuse claire, glaçure alcaline altérée. Ech. 1:3.

### 6.2 Pots de stockage

Les pots de stockage glaçurés ont un col court et des lèvres éversées. Une jarre à col cylindrique renflé est ornée d'un bandeau découpé en godrons (Fig. 5: 11–15). Les bases sont annulaires ou discoïdes (Fig. 5: 16, 17).

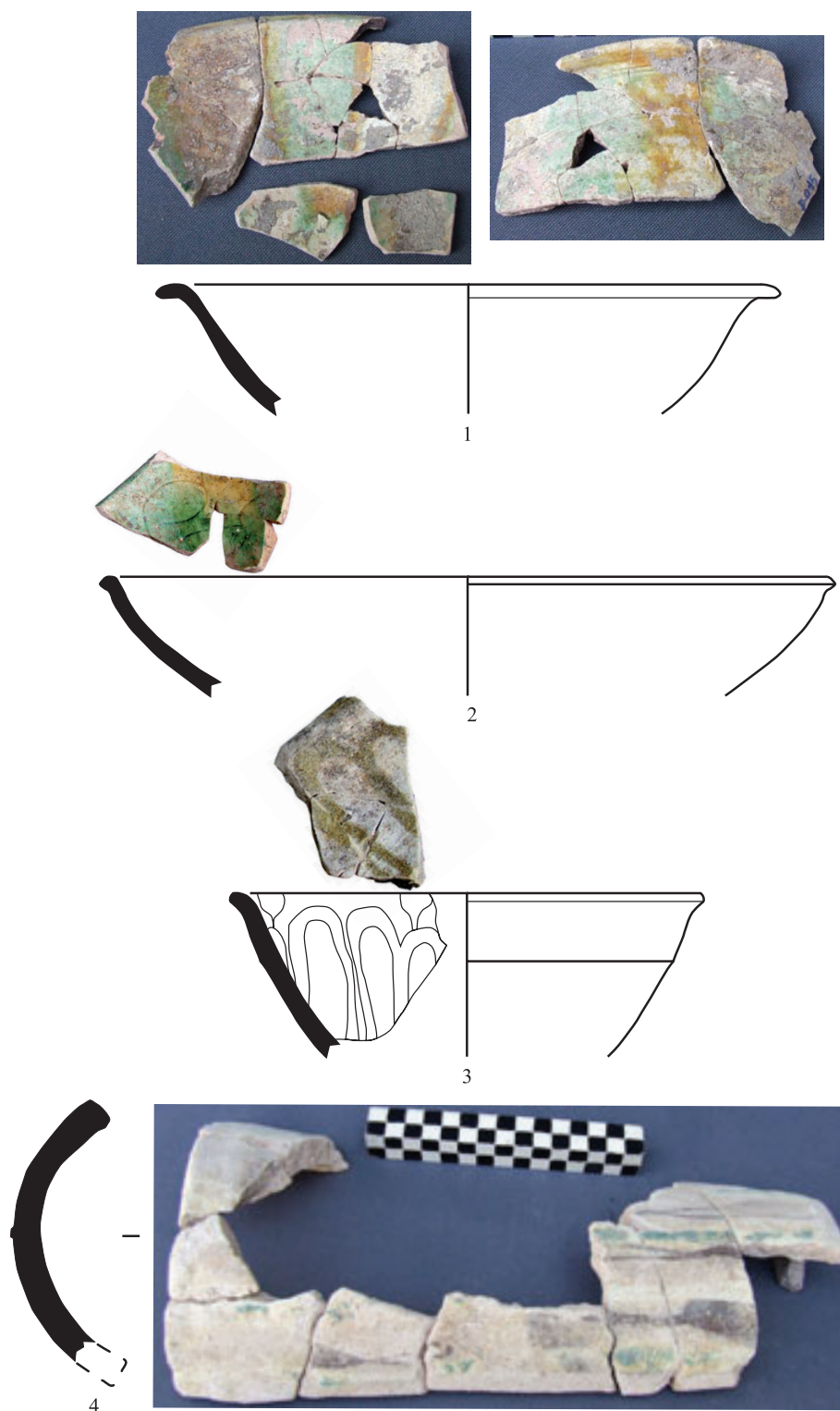


Fig. 6: Bab Kissan - vaisselle de table à pâte argileuse claire, peinte en jaune et vert sur engobe blanc sous glaçure plombifère incolore (1), incisée et peinte sous glaçure plombifère incolore (2), peinte en jaune sous glaçure alcaline incolore (3); tuile peinte en vert et manganèse sous glaçure alcaline incolore (4). Ech. 1:3.

### 6.3 Marmite (?), bassin, et « pot de chambre »

Un objet attire notre attention. Il s'agit d'une marmite à panse globulaire avec une lèvre destinée à recevoir un couvercle mais qui, curieusement, est couverte d'une glaçure alcaline, qu'on ne s'attend



pas à trouver sur une céramique culinaire (Fig. 5: 19). Un seul bassin est conservé. Il a une panse tronconique ornée d'un bandeau en relief et une lèvre éversée (Fig. 5: 18). Un grand « pot de chambre » à panse cylindrique et lèvre déversée pour former un marli est l'unique exemplaire retrouvé dans le sondage (Fig. 5: 20).

#### 6.4 Tuiles peintes

Deux tuiles, fabriquées dans une pâte argileuse claire, l'une plate à glaçure alcaline aubergine et l'autre ronde peinte en vert et aubergine sous une glaçure alcaline incolore très altérée, sont les seuls exemplaires de céramique architecturale trouvés dans la fouille (Fig. 6: 4).

### 7. Vaisselle de table, engobée, à glaçure plombifère incolore

#### 7.1 Peinte en jaune et vert

Ce groupe est illustré par six coupes, de différentes tailles, à panse hémisphérique et lèvre éversée, montées sur une base annulaire (Fig. 6: 1). Des sortes de longues feuilles sont peintes en vert et jaune sur un engobe blanc. Une glaçure plombifère incolore recouvre le tout. On retrouve ce type de coupe à Rahba-Mayadin (Rousset 1996: 79, pl. 5)

#### 7.2 Incisée

Une coupe et deux fragments de panse sont ornés d'un décor géométrique grossièrement incisé à travers un engobe blanc. Ces motifs sont rehaussés de coulures jaunes et vertes sous une glaçure plombifère incolore (Fig. 6: 2).

Les découvertes de barres à Bab Kissan laissent croire à l'existence d'un atelier, implanté en dehors de l'enceinte, probablement dès la fin de l'époque abbasside comme en témoigne un certain nombre de formes typiques (Fig. 2: 1–4; Fig. 5: 1–3) mais il s'est développé à l'époque fatimide. Les céramiques, mises au jour dans le puits à la citadelle, ont en commun avec celles de Bab Kissan les pâtes et les formes. Il est probable qu'elles proviennent de cet atelier. Mais, tandis que la plupart des fragments du puits sont des céramiques communes, ceux découverts à Bab Kissan sont des exemplaires de vaisselle de table. Ces deux lots se complètent donc pour livrer une première image des productions fatimides à Damas.

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**PRELIMINARY CONSIDERATIONS ON CERAMIC PRODUCTIONS OF  
THE ISLAMIC PERIOD FROM THE MIDDLE ORONTES REGION:  
A REPRESENTATIVE ASSEMBLAGE FROM APAMEA**

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**Abstract**

L'étude présentée ici fournit une évaluation préliminaire des productions céramiques de la période islamique attestées dans la région du Moyen Oronte. Elle se focalise, en particulier, sur un assemblage représentatif provenant des récentes investigations archéologiques effectuées par l'équipe du Centre de Recherches en Archéologie et Patrimoine de l'Université libre de Bruxelles dans le quartier nord-oriental de la ville d'Apamée de Syrie. L'analyse du matériel a permis d'identifier la présence sur le site de céramiques de production locale, glaçurées et non glaçurées, qui témoignent de l'existence d'une installation modeste mais intensive, probablement rurale, datée du 13<sup>e</sup> et 14<sup>e</sup> siècles. L'auteur se propose ici de mettre en évidence les changements et les permanences relatifs à cet assemblage afin de construire une première chrono-typologie qui puisse être une référence pour la région.

**Introduction**

The Middle Orontes region, broadly comprises between the towns of Homs to the south and Jisr al-Sughur to the north, has shown, since earlier periods, an intense settlement activity, strongly influenced by favourable environmental and climatic conditions. Nevertheless, the systematic study of its historical landscapes and archaeological sites has started rather late and it focused, at the very beginning, primarily on pre-Islamic settlements<sup>1</sup>. Until recent times, the most important archaeological excavation which also referred to the Islamic period, was carried out in Hama between 1931 and 1938 by the Danish Archaeological Mission [Poulsen and Riis 1957]. The work published by Poulsen in 1957 provides, in fact, important data concerning ceramic productions attested in Central Syria during the Islamic period and it still offers a reference model for the whole region.

It is only in the past decade that new archaeological researches have been conducted in order to investigate more in detail the characteristics of the Islamic occupation of this area. In 2003, the General Directorate of Antiquities and Museums of Syria (DGAMS) and the German Archaeological Institute of Damascus (DAI) surveyed the area between al-Rastan and Shayzar, in the vicinity of Hama, with the intent of documenting ancient settlement activities. The study has allowed to detect the presence of several small settlements dated to the Islamic period, that witnesses the significant population growth occurred in Middle Islamic times. In this period, almost none of the main sites of the region is occupied or re-occupied, while new villages and minor centres are founded *ex novo* [Bartl and al-Maqdissi 2007: 233]. Furthermore, the archaeological project carried out since 2002 at Qal'at Shayzar (University Ca' Foscari of Venice)<sup>2</sup> and the investigations of the north-eastern

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1 It is in particular from the seventies that deeper researches have been conducted in the region. In those years Courtois investigated the Bronze Age tells to the north of Hama [Courtois 1972]; later, in 1988, a group of researchers surveyed the area between Rastan and Shayzar, focusing mainly on prehistoric settlements [Sanlaville, Besancon, Copeland e Muhsen 1993]; in 1999–2000 survey campaigns were carried out in the Homs region by Philip *et al.* [Philip *et al.* 2002] and more recently, further investigations have been conducted by Fortin [2007] and Bartl and Maqdissi [2007].

2 From 2002, the University Ca' Foscari of Venice (Dir. Cristina Tonghini) and the General Directorate of Antiquities and Museums

quarter at Apamea (Université Libre de Bruxelles)<sup>3</sup>, started in 2003, are providing an important contribution to the collection of new data, especially concerning settlement activities and material culture.

In this contribution, the author aims to present a preliminary picture of the archaeological documentation emerging from recent investigations carried out in the region. In particular, the ceramic assemblage issued from a representative sector of the bathroom complex in the north-eastern quarter of Apamea (Sector C), recently investigated by the archaeological team of the Centre de Recherches en Archéologie et Patrimoine of the University of Brussels (ULB), will be presented in detail. Even if quite restricted, this *corpus* offers various elements of discussion concerning the characteristics of the ceramic productions spread in the region during the Islamic period and, especially, during the 13<sup>th</sup> and 14<sup>th</sup> centuries.

### Investigations at Apamea: presentation of the archaeological context

The archaeological site of Apamea (Fig. 1), usually known for its classical and byzantine history, can also be considered, for different reasons, as a representative context of the settlement history of the Middle Orontes region during the Islamic period.

Capital of the roman province of *Syria Secunda* and later administrative centre of an archdiocese, the town of Apamea remains until the Arab conquest one of the most important urban centres of the region. The study of transformations and changes occurred from 636 (Arab conquest) is still in progress and constitutes one of the main issues focused by recent archaeological investigations conducted in the site (Université libre de Bruxelles). Even if the features of the occupation during the different Islamic periods have not been completely documented yet, archaeological researches have provided so far new interesting data. During the Middle-Islamic period (12<sup>th</sup> – 15<sup>th</sup> centuries) a substantial transformation of the settlement features of the site has been noted by archaeologists: if the citadel of Qal'at al-Mudiq [Dangles 2004: 189–204], located to the west, becomes a strategic centre already from the 10<sup>th</sup> century, the low town (where the classical town of Apamea on the Orontes is settled) seems to be only partially occupied: just few quarters of the site show archaeological signs of an occupation between the 12<sup>th</sup> and 14<sup>th</sup> centuries and attest the presence of a modest but intense rural occupation<sup>4</sup>.

In this contribution, the author focuses on the archaeological investigations program carried out in the north-eastern quarter of Apamea from 2003. The project aims at documenting and reconstructing the settlement activities of a neuralgic area of the town, located between the northern walls and the colonnade streets (the *cardum*), over a long span of time. The archaeological research brought to light an imposing thermal complex that seems to be in use from the 2<sup>nd</sup> to the 7<sup>th</sup> century and that was later reoccupied as inhabited area undoubtedly until the Mamluk period (14<sup>th</sup> cent.). The archaeologists identified six occupational phases to be attributed to the Islamic period (Phases

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of the Arabic Republic of Syria developed an archaeological project at Qal'at Shayzar, *Progetto Shayzar: Study and Valorisation of a Muslim Citadel of the Middle Orontes (Syria)*, that aims to investigate features, origins and evolutions of a fortified settlement in Central Syria and to document the development of constructive techniques in relation to the context of military architecture of the region. Moreover, a conservation and restoration program has begun in 2004 in order to enhance the rich architectural heritage of the site [www.progetto-shayzar.it].

3 The new research program at Apamea, started in 2002 under the direction of Prof. Didier Viviers (Université libre de Bruxelles), is mainly focused on the extensive archaeological investigations of the north-eastern quarter of the ancient town. The excavations brought to light an imposing thermal complex, occupied, with various purposes, until the Mamluk period [Viviers 2006, 109–122]. Archaeological investigation in this sector are still in progress.

I would like to thank the team of the Centre de Recherches en Archéologie et Patrimoine (ULB) for their collaboration and sustenance during the study of this assemblage.

4 So far, just the area of the north-eastern quarter has brought to light a significant documentation of the Middle Islamic period. Anyway, previous researches conducted at Apamea [Rogers 1972 and 1984] and data emerging from the study of surface material suggest that other small occupations, dated between the 12<sup>th</sup> and 14<sup>th</sup> centuries, were probably located in the ancient city.



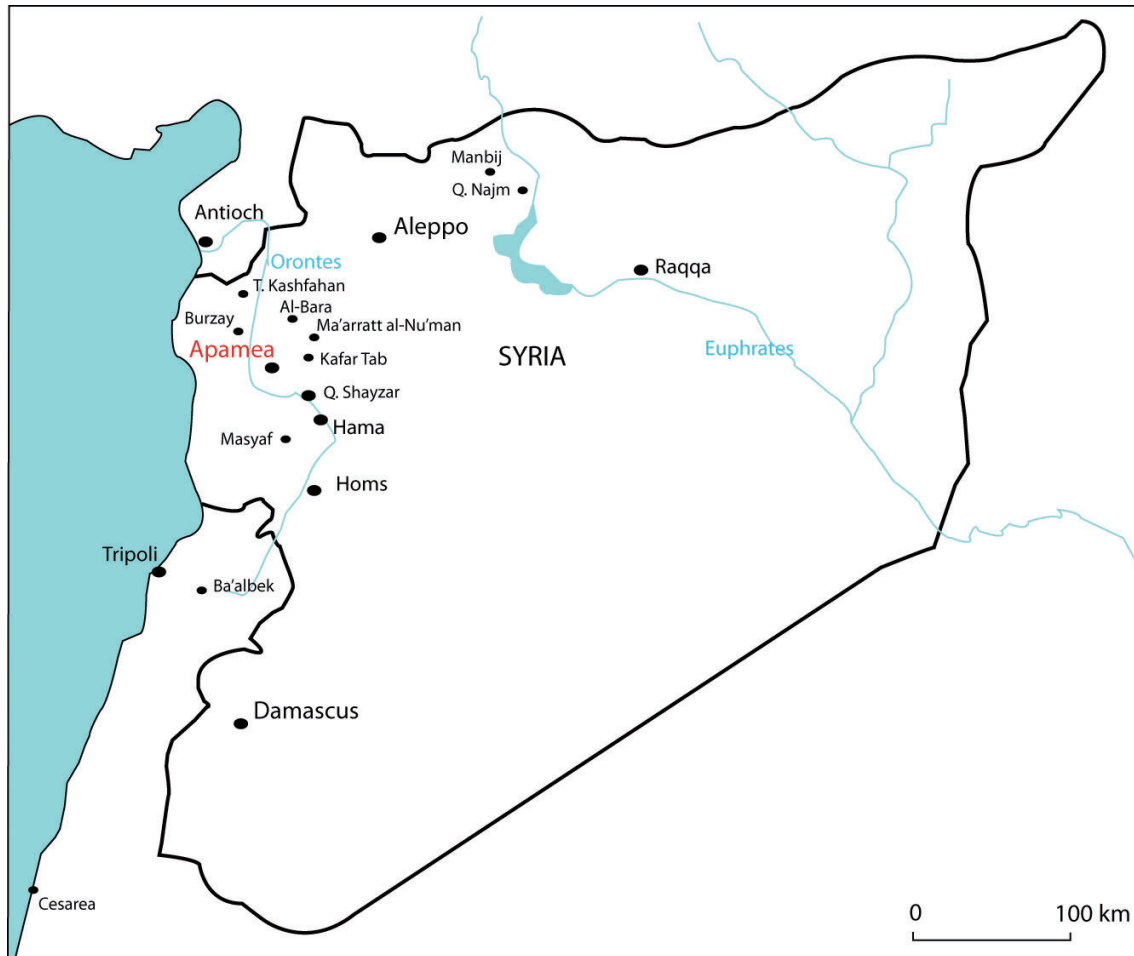


Fig. 1: Location of the site of Apamea.

2–7) that are characterised by the exploitation of the entire area of the bathroom complex and by the creation of new small spaces (rooms with plain soil usually arranged with *tannurs*) that follow the general disposition of the existing structures.

This article will focus on a representative context of the bathroom complex, Sector C, located to the south-west of the excavated area (Fig. 2).

At the very beginning of the Islamic occupation (Phase 2), the sector doesn't undergo substantial changes or adjustments. It is just partially re-arranged with a new pavement and some of the doors are closed. Various modifications of the space occur during the following phases. In Phase 3, one of the dividing walls is removed, creating a big room all over the sector. Some collapses determine the need of re-paving the area during Phase 4, when also two *tannurs* are settled in the north-western corner. Phase 5 and 6 are marked by several arrangements that mainly consist in the installation of new soils and *tannurs*; part of the space collapses at the end of Phase 6. The last occupation (Phase 7) is very circumscribed and the area is in a very bad state, but it is probably still occupied, as attested by the presence of some *tannurs*.

The abandon of the sector is marked by the collapse of the remaining structures, probably caused by a seismic event.

### The ceramic assemblage

The material presented in this contribution comes from the south-western sector of the bathroom complex at Apamea (Sector C) and constitutes a sample of the ceramic assemblage dated to the Islamic



Fig. 2: The bathroom complex in the north-eastern quarter at Apamea. Location of Sector C.

period collected in the area. Furthermore, from a more general view, it also provides interesting indications of the repertoire of Islamic pottery productions spread in the Middle Orontes region between the 12<sup>th</sup> and 14<sup>th</sup> centuries.

The publication of the Islamic pottery typology from the north-eastern quarter of Apamea is currently in progress and it will appear integrated to stratigraphic data in the collection of the Académie Royale de Belgique.

In this paper, some central issues will be approached in detail in order to define evolution and continuity of the ceramic groups identified on the site and to provide a valid chronology for this assemblage.

The *corpus* presented here consist mainly of common ware productions: *glazed wares*, *cooking wares* (partially covered by a layer of uncoloured glaze) and *unglazed ware* (mostly handmade). A preliminary observation of fabrics suggests that all these ceramic groups were locally produced, but no wastes or kiln traces have been identified so far. Residual and unfortunately not well documented in the investigated context is the group of *Siliceous Ware (Fritware)*.

#### *Glazed Ware*

Among the ceramic productions identified in sector C, *Glazed Ware* is certainly the group that offers more cues of reflexions and information about chronology. The analysis of this assemblage, in fact, allows to identify evolutions in vessels shapes and variations in groups occurrences, according to the different occupational phases.

Almost all of the glazed fragments collected in sector C present a red body (iron rich fabric with mineral inclusions, *Munsell Soil Color Charts*: 2.5YR 5/6 – 4/6, red-dark red), that is also common to cooking wares.

Three different types of surface treatment have been identified among the glazed material: 1) Slip painted decoration under transparent coloured lead glaze; 2) Incise decoration through a layer of slip, covered by transparent coloured lead glaze and 3) Monochrome glaze usually applied on a thin layer of white or creamy slip.

All objects belonging to *Glazed Ware* seem to have been employed as tableware (bowls).

*Slip Painted Ware* is the most common group among glazed productions (60 fragments; 62,5%), abundantly documented during all the Islamic phases. During phases 3–5, two different types of *Slip Painted Ware* have been documented in this sector: the first one, scarcely attested, is characterised by thin lines of slip, which create elaborate interlacing decorative patterns, covered by a light yellow glaze, sometimes with green splashes (Pl. 1: 1–3); while the second one is characterised by thicker lines of slip, which form quite simple decorative motifs, covered by a yellow or green glaze (Pl. 1: 4–10). Both types are exclusively associated to open forms. The first one appear with a unique type of bowl, with slightly carinated walls and simple or quite rounded rim (Pl. 1: 1–3). This form is well documented in the region of Tripoli between the end of the 13<sup>th</sup> century and the beginning of 14<sup>th</sup> century [Salamé-Sarkis 1980: fig. 25, 27–28]. Other parallels dated to the same period, can be found, for example, at Khirbat al-Burin [Kletter and Stern 2006: fig. 19: 4] and Homs [Rugiadi 2001/2: fig. 15: 150; fig. 16: 177].

The second group presents a more diversified variety of shapes. The bowl with carinated walls and ledge rim (Pl. 1: 4–5) is attested in the sector during all the Islamic phases and constitutes the most common form of the *Slip Painted* assemblage. This bowl is profusely documented in all the Bilād al-Shām: at Damascus, it is attested in the Ayyubid period [McPhillips 2004: fig. 34] but also in Mamluk contexts. Véronique François rather notices that during the Ayyubid period, *Slip Painted Ware* is characterised by a red porous fabric, still documented in the Mamluk phases, when a finer orange fabric also appears [François 2008: fig. 18–700; 2009: 271, fig. 4: 17]. More to the south, a similar bowl, with wider and quite squared ledge rim, is usually dated to the 12<sup>th</sup> and 13<sup>th</sup> centuries [Stern and Avissar 2005: fig. 7: 7, 9–11].

During phases 3–5, other bowl types are also attested, but in lower quantity: flared bowls (Pl. 1: 6); slightly carinated bowls with thickened or rounded rim (Pl. 1: 7) and hemispherical bowls with simple rim (Pl. 1: 8). These shapes have been documented in Damascus [McPhillips 2004: fig. 33; François 2009: fig. 4: 18]; Tripoli [Salamé-Sarkis 1980: fig. 28: 2] and Israel [Avissar et Stern 2005: fig. 7: 6; Getzov 2000: fig. 24: 13]. Few exemplars of lamps are also attested (Pl. 1: 10).

During phases 6 and 7, some changes have been observed in *Slip Painted Ware*. First of all, only the group with simpler decoration is documented, while the group with a more elaborate decoration disappears in this area (as in the rest of the bathroom complex). Furthermore, the most common shapes attested during this period are carinated bowls with ledge rim and flared bowls with simple rim (Pl. 1: 4–6), while other types disappear.

*Monochrome glaze ware* is quite poorly documented in sector C (20 fragments). It is characterised by a red fabric (*Munsell Soil Color Charts*: 2.5YR 5/6 – 4/6 red-dark red) usually covered by a beige or whitish slip and by a thin layer of transparent lead glaze, mostly green coloured (few fragments with uncoloured glaze have also been documented). *Monochrome glaze ware* seems to increase in the very last phases of the Islamic occupation of the area (Phases 6 and 7), without approaching the quantity of *Slip Painted Ware*. As already explained, these two glazed groups are characterised by a similar fabric; they also share the same morphological repertoire: bowls with thickened rim (Pl. 2: 6, 9), sometimes slightly carinated (Pl. 2: 7) and flared bowls with simple rim (Pl. 2: 10).



The outer surface of *monochrome glaze ware* is often covered by slip and glaze, but just in the upper part of the vessel. In Southern Bilād al-Shām, flared or curved bowls with simple or rounded rim are attributed to the Mamluk period, from the second half of the 13<sup>th</sup> century to the 15<sup>th</sup> century and later [Stern and Avissar 2005: fig. 4: 1–2; Lazar 1999: fig. 2: 3]; the same chronology has been attributed to vessels found in Tripoli [Salamé-Sarkis 1980: fig. 30: 4–9].

Glazed fragments with incised decoration are extremely rare in sector C. They are characterised by thin incisions executed on a layer of beige slip and covered by a well preserved yellow glaze. Once again, the ceramic material presents a red fabric, similar to that of groups previously described.

This kind of fabric has been employed also for a unique shard, a small bowl with a ledge rim covered by a turquoise glaze on the inner surface and by a layer of creamy slip on the outer one (Pl. 2: 8).

Although not well represented (14 fragments) and exclusively residual, *Fritware* (glazed siliceous ware) provides valid chronological data that allow to contextualise the different phases identified by the archaeologists and to provide a chronological framework for common productions.

Just two fragments of *fritware* have been collected from earliest phases (Phase 3–5): a small jug with two handles, decorated with lustre and cobalt blue (Pl. 2: 1) and a fragment of a dish with a ledge rim, covered by a monochrome turquoise glaze. The first object is very well executed: the outer surface is decorated with fine decorative motifs, painted with a chocolate coloured lustre and the inner surface is covered by cobalt blue, except for the upper part, where an horizontal band of lustre runs all over the rim. The fabric is rose and compact.

The features of fabric and the kind of decoration allow to date this vessel to the late 12<sup>th</sup> – early 13<sup>th</sup> century [Tonghini 1998: fritware 2, 46–51].

Among the fragments belonging to the latest phases of the Islamic occupation (Phases 6–7), we noticed three objects simply covered by a turquoise glaze and two shards painted in black under a transparent turquoise glaze (Pl. 2: 4–5). They are all characterised by a porous white-yellowish body. This material is in a very bad state of preservation (fragmentary and deteriorated); just two fragments of open forms have been identified: two small bowls with simple or ledge rim (Pl. 2: 2–3). Since shape and decoration cannot provide chronological data because of fragmentary conditions, the characteristics of fabric allow to identify this material. *Fritwares* with a porous yellowish body are usually dated to the Mamluk period [Tonghini 1998: fritware 3, 51–55].

### *Cooking Ware*

Well documented in sector C and in the bathroom complex more in general, is the group of red *cooking ware* (120 fragments). In fact, except for one fragment of handmade cooking ware characterised by a calcareous body with calcite, it constitutes the unique ceramic group employed for cooking food. The morphological repertoire mainly consists of closed forms and in particular of globular pots. Just few exemplars of pans have been documented in this area.

Earlier shapes attested in sector C are globular pots with folded rim (Pl. 3: 1–3) and pots with short neck and everted rim (Pl. 3: 5–7). The first type is abundantly documented until the abandon of the space (Phases 3 – 7).

This is the most common shape of Northern and Central Syria during the Middle Islamic period (12<sup>th</sup> – 14<sup>th</sup> cent.), as attested in various sites of the region: Rahba-Mayadin [Rousset 1996: fig. 61: 606–609], Damascus [McPhillips 2004: fig. 44: 10–11], Rusafa [Knötzele 2006: taf. 31: 1–9], Qal‘at Ja‘bar [Tonghini 1998: fig. 145: f, g], Tripoli [Salamé-Sarkis 1980: fig. 37: 8] and Hama [Poulsen 1957: 240]. Short neck pots probably appear earlier in the region, during the 11<sup>th</sup> century and continue to be documented until the 13<sup>th</sup> century [Knötzele 2006: taf. 31: 11].



On the contrary, the morphological repertoire of *cooking wares* from Southern Bilād al-Shām differs: during the Crusaders period a globular neckless pot with everted rim predominates; while since the Mamluk period the most common shape becomes a lengthened pot with thick everted rim [Avisar and Stern 2005: fig. 39].

From phase 4, a variety with a wider folded rim appears in sector C (Pl. 3: 4) and, in later phases (Phases 6 and 7), pots with short neck disappear. Finally, a new shape is documented from phase 6: a globular pot with a ribbed rim, probably covered by a lid.

As regards open forms, pans have been documented exclusively in the earliest phases (Phases 3–5). They are usually hemispherical or rounded vessels with a thickened or ribbed rim, equipped with two horizontal handles (Pl. 3: 8–9).

Glazed pans with red fabric become popular in Bilād al-Shām from the 12<sup>th</sup> century. Some chronological distinctions have been made by Avisar and Stern for the ceramic material identified in Israel [Stern and Avisar 2005: 96–98, fig. 41], where productions of the Crusaders period are characterised by a red fabric covered by a thick and well preserved glaze; while Mamluk productions have a brown or orange body and a thin layer of glaze. They share some morphological similarities: the most spread shape for both productions is a pan with flared walls and everted rim, equipped with basket handles.

All objects employed for cooking purposes were glazed on the interior (transparent uncoloured glaze) in order to create an impermeable surface more suitable for cooking. Some splashes of glaze can be found also on the exterior, below the rim, but just for decorative reasons.

#### *Unglazed Ware*

*Unglazed Ware* is very common in sector C and represents the 54% of the whole ceramic *corpus* of this area (257 fragments). Unlike *Glazed Ware* and *Cooking Ware*, it presents a calcareous body, quite porous, beige or green coloured (*Munsell Soil Color Charts*: 5Y 7/3 pale yellow - 2.5YR 7/2 light grey).

Among unglazed productions, *Handmade geometrically painted ware* constitutes the most representative group (253 fragments), but, even if well documented in the sector, the number of minimum forms identified is quite exiguous. Fragments belong to few standardised forms: jars with long neck and simple or slightly everted rim and decorated handles (Pl. 4: 1–2); dishes with flat base (Pl. 5: 1–2); basins with flat base and flared walls (Pl. 5: 3–5) and small jugs (Pl. 4: 3–4, 7, 10).

All objects have been moulded by hand using the coiling technique: traces of clay joints are still visible on the inner surface. Objects usually present a painted decoration, often representing geometrical figures, that is located on neck, shoulders and handles. They are usually painted in red (the colour of painting can change because of the firing temperature) and more rarely in red and black. The bichrome painting is usually associated to a finer decoration (Pl. 4: 4; Pl. 5: 6–7). Finally, some finds are decorated with deep incisions, roughly executed, as in the case of a small jug found in phase 5 (Pl. 4: 7).

The *handmade geometrically painted ware* (HMGPW) appears in Bilād al-Shām at the 12<sup>th</sup> century and reaches its highest diffusion during the Ayyubid and Mamluk periods; it is still produced in the Ottoman period, when the technique seems to deteriorate [Avisar and Stern 2005: 113]. This ceramic production is mainly documented in rural contexts, where it seems to replace in part wheel-made productions [Johns 1998: 65–93]. Nevertheless, various urban sites, such as Damascus [McPhillips 2004: fig. 67; François 2008: fig. 17–800], Hama [Poulsen 1957: 270–274, fig. 1000–1035] and Jerusalem [Tushingham 1985: 145, 150] have attested a small presence of *handmade geometrically painted ware*.

The emerging archaeological frame probably reflects the social and political situation of the

period: the Ayyubid and Mamluk times are marked, in fact, by an important population growth, that involves above all rural areas. Consequently, new cheap and easily moulded productions, like *HMGPW*, begin to be massively produced. Even if probably produced in the vicinity of the finding contexts, this ware gains a certain popularity all over the Bilād al-Shām, where a quite standardised morphological and decorative repertoire is documented.

As regards the site of Apamea, some not well-finished fragments (wastes or more probably, second choice objects) have been identified during the excavations of the bathroom complex; this can suggest that *handmade geometrically painted ware* was probably produced not too far from the site. This rests just an hypothesis, since archaeologists don't dispose of more precise data.

As regards chronological evaluations, the material from Apamea doesn't provide valid indications about morphological or decorative changes related to this group. *Handmade geometrically painted ware* is documented since the first occupation of sector C (Phases 2 and 3) and continues to be attested, without significant variations, until the abandon of the space (Phase 7).

Only four fragments of *Mouldmade Ware* were found in sector C. The most interesting piece is a jug issued from phase 3 (Pl. 5: 8). The moulded decoration stands on the shoulders and it is characterised by a series of spirals inscribed in vertical bands. Three fragments, richly decorated with geometrical motifs (Pl. 5: 9–11), belong probably to pilgrim flasks. All the material presents a quite porous beige-green calcareous body.

*Mouldmade Ware* is well documented in the Bilād al-Shām: at Hama, Poulsen ascribes this group, and in particular that of pilgrim flasks, to the very last occupational phase at the citadel, before the Mongol invasion in 1401 [Poulsen 1957: 270–274, fig. 1000–1035]. Moreover, the author reports the finding of some moulds, suggesting that Hama was probably a production centre. A find, very similar to Apamea big jug, has been identified in Jerusalem, where, on the basis of archaeological evidence, moulded jugs are in use from the beginning of the Ayyubid period until the Mamluk period [Tushingham 1985: 145, fig. 35: 38]. In Damascus, McPhillips identifies a consistent group of fine moulded ware characterised by thin walls and smooth surface, not documented among the material of sector C in Apamea. Some objects more similar to those presented here have also been identified, but in lower quantity [McPhillips 2004: 168–170]: they have a porous buff or pale yellow body associated with an epigraphic, vegetal or figurative moulded decoration, common to pilgrim flasks. This group is attested for the first time in 12<sup>th</sup> century and continues to be abundantly documented in later periods (13<sup>th</sup> – 14<sup>th</sup> cent.). Remains of a Damascene workshop that produced pilgrim flasks during the Mamluk period have been identified at the beginning of the 20<sup>th</sup> century [Sauvaget 1932].

Typical shapes of the Mamluk *moulded ware* production are flasks with rounded body and flasks with flat body, both with handles emerging from the base of neck [Avisar and Stern 2005: 117, fig. 49]. The Mamluk material is usually adorned with elaborate geometric, floral or figurative patterns as well as with blazons and inscriptions (in this case usually related to Mamluk heraldry).

## Conclusions

The archaeological excavation of sector C, in the south-western area of the bathroom complex of Apamea, provides a representative sample of ceramic productions dated to the Islamic period. The analysis of this assemblage, together with the stratigraphic documentation of the area, allows to date this occupation to the 13<sup>th</sup> and 14<sup>th</sup> centuries. In this period, the entire complex was occupied by a modest but intense settlement characterised by the presence of small rooms, usually equipped with one or more *tannur*, organised following the preserved structures of the bathrooms.

The archaeological documentation and the analysis of the finds provide evidence for a continuous occupation of the area, that can be divided, on the base of the collected data, into two main periods: 1) *phases 3, 4 and 5* (13<sup>th</sup> cent.); 2) *phases 6 and 7* (late 13<sup>th</sup> – 14<sup>th</sup> cent.).

This sequence finds valid correspondences in the study of the ceramic assemblage discussed

in this contribution. As already explained, in fact, during phases 3, 4 and 5, two decorative types of *Slip Painted Ware* have been documented (the first one characterised by a fine and quite complex decoration and the second one, larger in quantity, by a simpler decoration). On the contrary, from phase 6, just the second type is attested. Moreover, the variety of forms associated to this group seems larger during the first period; later, just bowls with flared walls and carinated bowls with ledge rim are attested.

The archaeological evidence also reports the increment of *monochrome glaze wares* during phases 6 and 7.

Some evolutions have been attested also in regards to the group of *cooking ware*. If the globular pot with everted rim continues to be documented during the whole period of the occupation, the type with short neck disappears after the phase 5. Furthermore, in phase 6 the globular pot with ribbed rim starts to be attested. Finally, open forms (pans) have been documented exclusively in the earliest phases (Phases 3–5).

The presence of some finds with a siliceous body (*Fritware*), even if attested as residual materials, seems to confirm this picture. Fragments with a porous body covered by a turquoise glaze, probably associated to Mamluk productions, have been issued only in later phases.

Unfortunately, this study doesn't bring relevant chronological data concerning changes and evolutions of *Unglazed pottery*. On the one hand, *Moulded ware* is not well documented in the site and consequently doesn't offer relevant cues of discussion; the few fragments collected in the area have been documented in all the Islamic phases and are broadly dated to the 13<sup>th</sup> and 14<sup>th</sup> centuries. On the other hand, *Handmade geometrically painted ware*, which represents the most large ceramic group of this *corpus*, seems to be not subjected to any variations in style or shape.

The recent archaeological seasons at Apamea have provided a great amount of evidence in support of the study of common ware productions attested in the region, allowing to illustrate a usually underrepresented territory. The ceramic assemblage discussed here provides a preliminary frame of groups spread in this area in the 13<sup>th</sup> and 14<sup>th</sup> centuries and constitutes a point of departure in the creation of a valid chronotypology.

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### Captions of Plate 1 to 5

#### (Pl. 1) Slip Painted Ware

1. Bowl, Slip painted decoration under transparent yellow glaze (AP.04.IV.67.7, Phase 5). Diam. 15 cm.
2. Bowl, Slip painted decoration under transparent yellow glaze (AP.04.IV.130.50, Phase 5)
3. Bowl, Slip painted decoration under transparent light green glaze (AP.04.IV.124.26, Phase 4). Diam. 29 cm.
4. Bowl, Slip painted decoration under transparent yellow glaze (AP.05.I.29.26, Phase 3) Diam. 35 cm.
5. Bowl, Slip painted decoration under transparent green glaze (AP.05.I.59.18, Phase 3). Diam. 38 cm. Photo by Aude Vanlathem.
6. Bowl, Slip painted decoration under transparent green glaze (AP.04.IV.130.47, Phase 5). Diam. 25 cm.
7. Bowl, Slip painted decoration under transparent yellow glaze (AP.06.I.5.21, Phase 5). Diam. 19 cm.
8. Bowl, Slip painted decoration under transparent green glaze (AP.06.I.3.14, Phase 7).
9. Bowl, Slip painted decoration under transparent yellow glaze (AP.04.IV.130.3, Phase 5). Photo by Aude Vanlathem.
10. Lamp, Slip painted decoration under transparent green glaze (AP.04.IV.130.5, Phase 5). Photo by Aude Vanlathem. Drawing by Anja Stoll (CReA – ULB).

#### (Pl. 2) Fritware and Monochrome Glaze Ware

1. Small jug, Fritware decorated in lustre and cobalt blue (AP.04.IV.212.27, Phase 4); Diam. 6 cm. Photo by Aude Vanlathem. Drawing by Anja Stoll (CReA – ULB).
2. Dish or bowl, Fritware with turquoise glaze (AP.04.IV.129.14, Phase 6).
3. Dish or bowl, Fritware with turquoise glaze (AP.04.IV.129.14, Phase 6).
4. Fritware painted in black under transparent turquoise glaze (AP.04.IV.30.32, Phase 7). Photo by Aude Vanlathem.
5. Fritware painted in black under transparent turquoise glaze (AP.04.IV.30.31, Phase 7). Photo by Aude Vanlathem.
6. Dish or bowl, green glaze ware (AP.04.IV.67.6, Phase 7).
7. Bowl, green glaze ware (AP.05.I.30.41, Phase 6).
8. Bowl, turquoise glaze ware (AP.04.IV.212.20, Phase 4).
9. Bowl, green glaze ware (AP.04.IV.30.29, Phase 7). Diam. 15,5.
10. Bowl, green glaze ware (AP.04.IV.30.3, Phase 7). Diam. 22,5 cm.

#### (Pl. 3) Cooking Ware

1. Cooking pot (AP.04.IV.130.39, Phase 5). Diam. 17 cm. Drawing by Anja Stoll (CReA – ULB).
2. Cooking pot (AP.04.IV.130.9, Phase 5). Diam. 17 cm. Drawing by Anja Stoll (CReA – ULB).
3. Cooking pot (AP.04.IV.30.22, Phase 6). Diam. 19 cm.
4. Cooking pot (AP.04.IV.30.23, Phase 6). Diam. 18,5 cm.
5. Cooking pot (AP.05.I.30.26, Phase 3). Diam. 14 cm.
6. Cooking pot (AP.06.I.15.29, Phase 3). Diam. 13,5 cm.
7. Cooking pot (AP.05.I.30.17, Phase 3). Diam. 17,5 cm. Drawing by Anja Stoll (CReA – ULB).
8. Pan (AP.05.I.56.39, Phase 3). Diam. 21,5 cm.
9. Pan (AP.05.I.59.5, Phase 3). Diam. 15,5 cm.

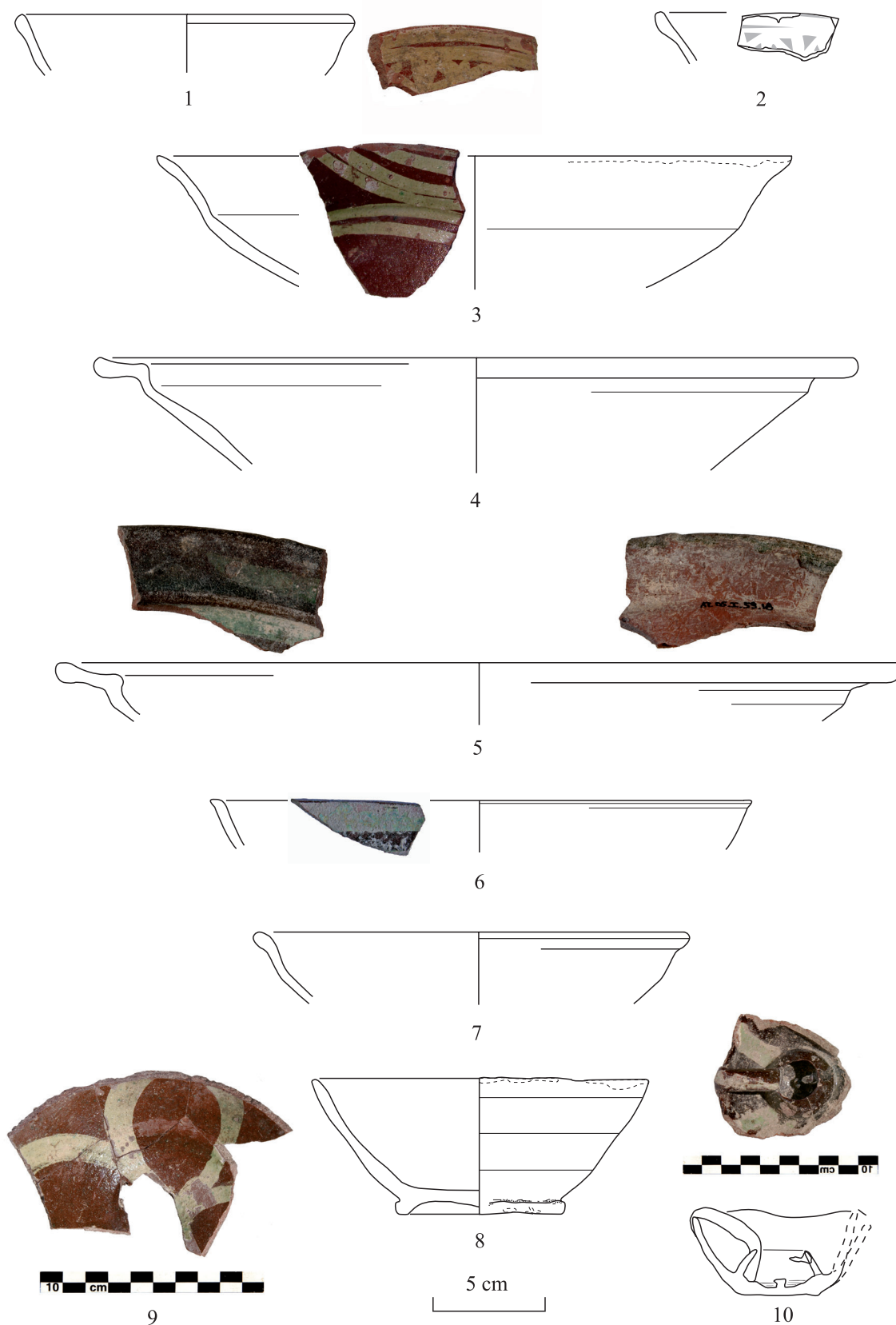
#### (Pl. 4) Handmade Geometrically Painted Ware

1. Jar (AP.04.IV.130.57, Phase 5). Diam. 16,5cm.
2. Jar (AP.05.I.28.20, Phase 4). Diam. 13,5 cm.
3. Jug (AP.05.I.59.3, Phase 3). Diam. (rim) 5 cm; (base) 4,5 cm. Photo by Aude Vanlathem. Drawing by Anja Stoll (CReA – ULB).
4. Jug, painted in black and red (AP.04.IV.73.2, Phase 7). Diam. 6 cm. Drawing by Anja Stoll (CReA – ULB).
5. Handle of a jug (AP.04.IV.173.11, Phase 6).
6. Handle of a jar (AP.04.IV.130.70, Phase 5). Drawing by Anja Stoll (CReA – ULB).
7. Handmade jug with incised decoration (AP.04.IV.130.18, Phase 5). Diam. 6,5 cm. Drawing by Anja Stoll (CReA – ULB).

8. Jar (AP.04.IV.30.30+35, Phase 7). Diam. 7,5 cm. Drawing by Anja Stoll (CReA – ULB).
9. Jar (AP.04.IV.30.34, Phase 7). Diam. 13,5 cm.
10. Spouted jug (AP.05.I.56.4, Phase 3). Diam. 8 cm. Drawing by Anja Stoll (CReA – ULB).

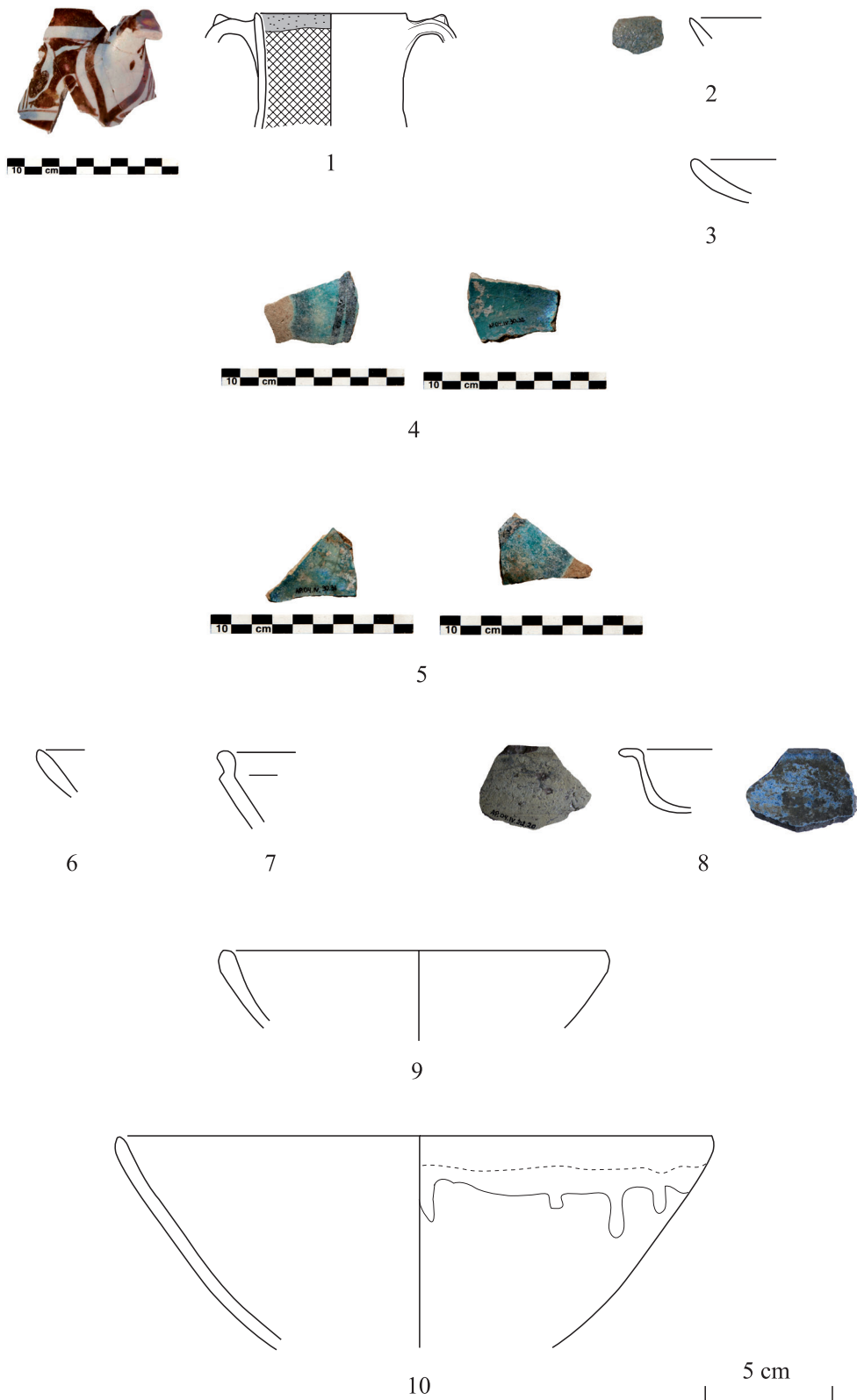
**(Pl. 5)** *Handmade Geometrically Painted Ware and Moulded Ware*

1. Dish (AP.05.I.59.16, Phase 3). Diam. (rim) 17,5 cm; (base) 14 cm.
2. Dish (AP.04.IV.173.3, Phase 6). Diam. (rim) 14 cm; (base) 10 cm.
3. Basin (AP.05.I.56.9, Phase 3). Diam. 23 cm. Drawing by Anja Stoll (CReA – ULB).
4. Basin (AP.05.I.30.4, Phase 3). Diam. 25,5 cm.
5. Basin (AP.05.I.29.27, Phase 3). Diam. 29 cm.
6. Fragment painted in black and red (AP.04.IV.130.27; Phase 5).
7. Spout painted in black and red (AP.05.I.28.19, Phase 4).
8. Big jug, Moulded Ware (AP.05.I.56.47, Phase 3). Drawing by Anja Stoll (CReA – ULB).
9. Fragment of pilgrim flask, Moulded Ware (AP.06.I.6.1, Phase 4).
10. Fragment of pilgrim flask, Moulded Ware (AP.04.IV.130.42, Phase 5).
11. Fragment of pilgrim flask, Moulded Ware (AP.04.IV.117.15, Phase 7).

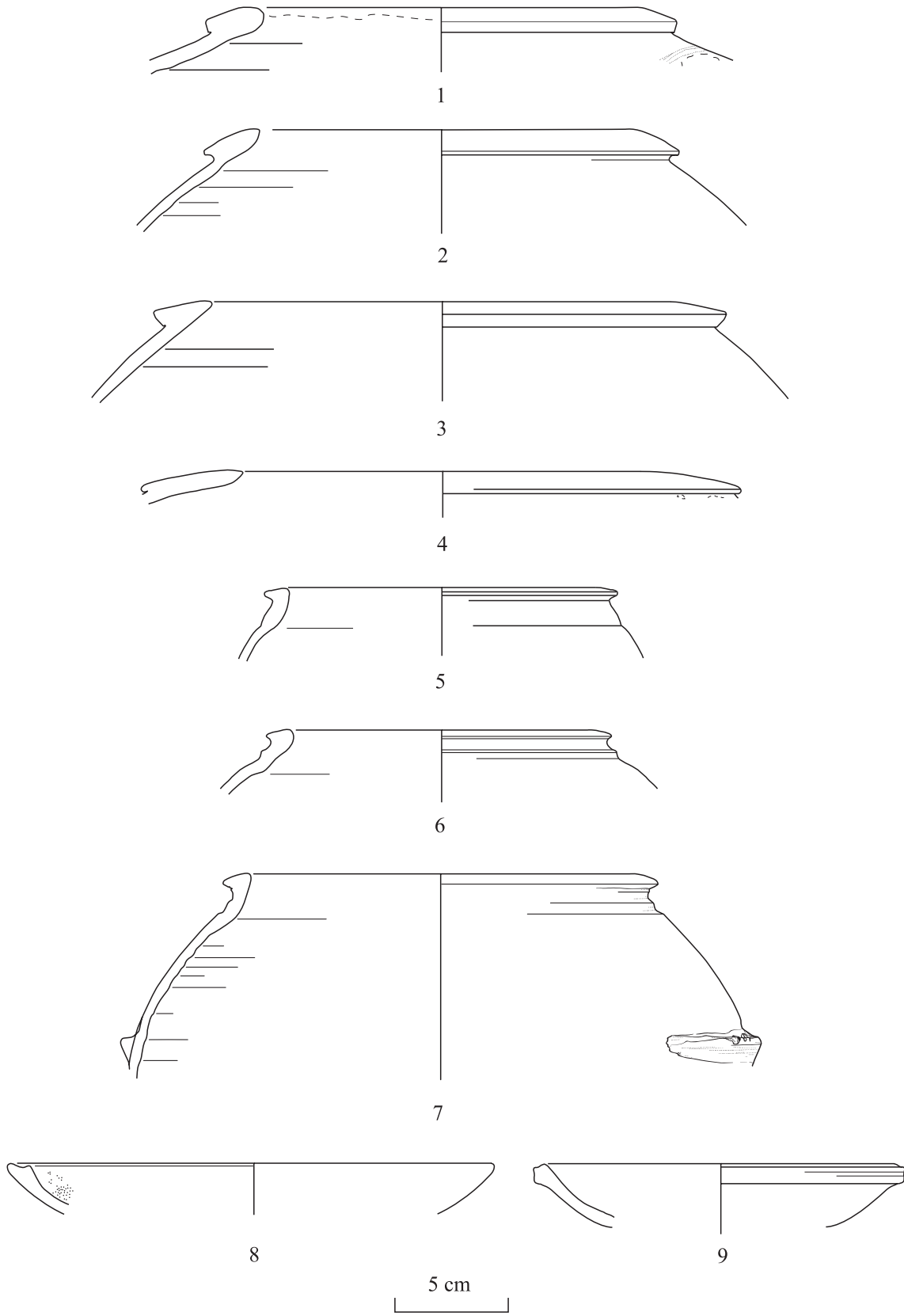


Pl. 1: Slip Painted Ware

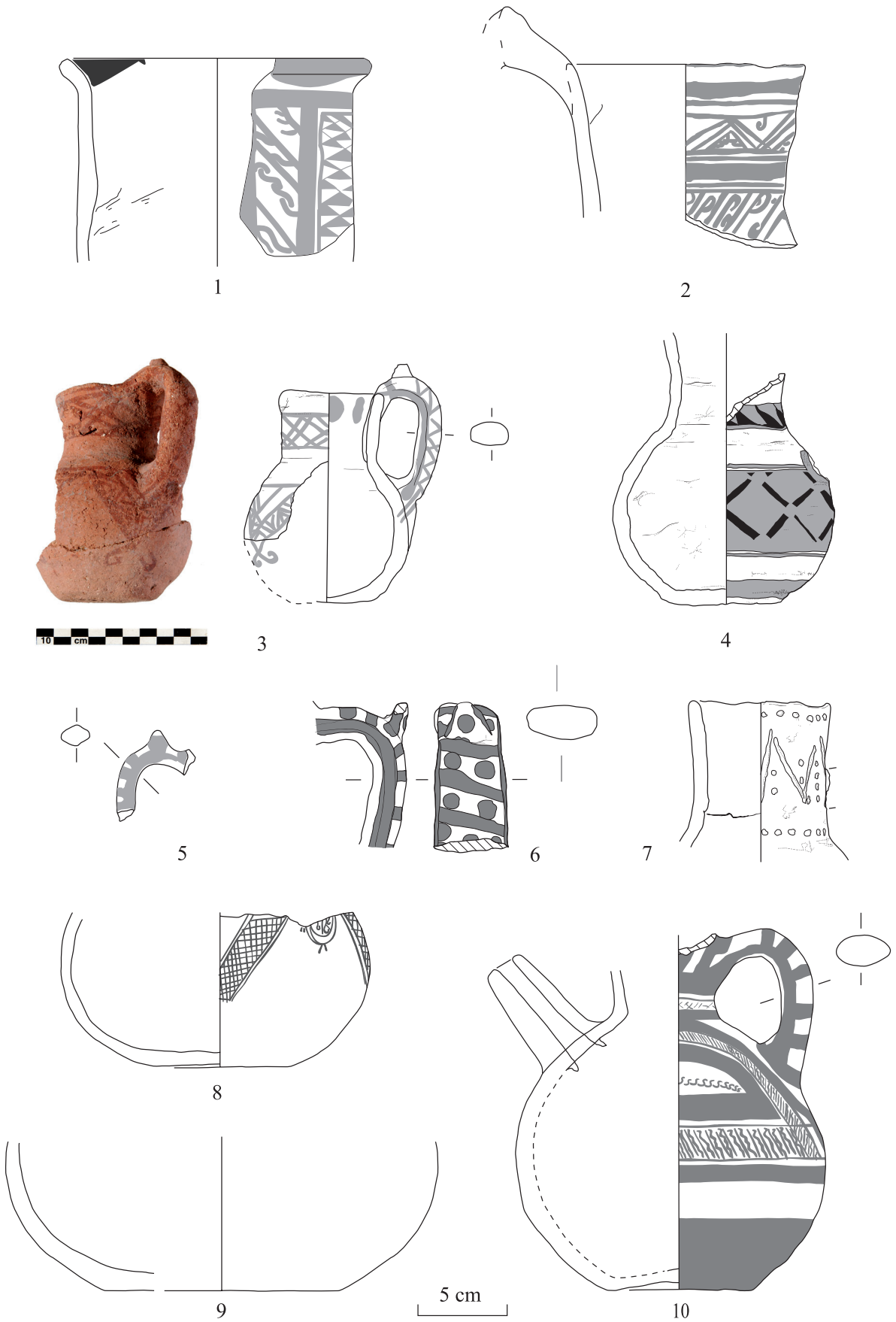




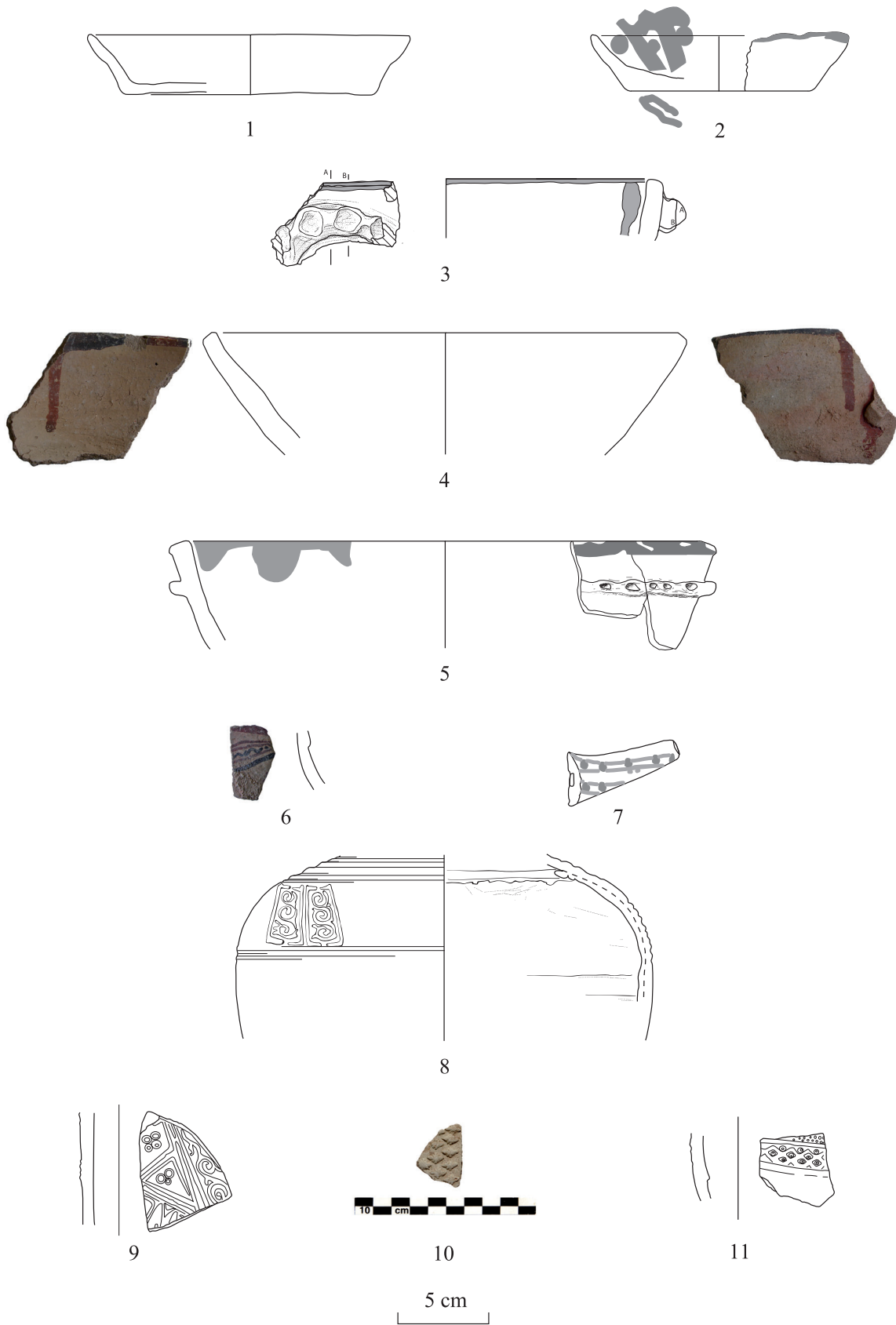
Pl. 2: Fritware and Monochrome Glaze Ware



Pl. 3: *Cooking Ware*



Pl. 4: Handmade Geometrically Painted Ware



Pl. 5: Handmade Geometrically Painted Ware and Moulded Ware



## WHAT IS MAMLUK IMITATION SULTANABAD?

Rosalind A Wade HADDON\*

### Abstract

Examples of ‘imitation Sultanabad’ are seemingly ubiquitous at all major Mamluk sites in Bilad ash-Sham and Egypt, yet there is still confusion as to what qualifies as ‘real Sultanabad’. What is beyond question is that all the variations are fourteenth century products, although few examples of the ‘real thing’ have been scientifically excavated in Iran itself. Through working on the Iranian, Mamluk and Golden Horde material and identifying diagnostic shapes I can demonstrate how to distinguish between the different products and their decoration. As the contemporary Golden Horde material is little known outside of the Russian-speaking world it is appropriate to include it, in the hope that examples may be identified from Mamluk sites in the future.

### Introduction

There have been numerous studies concentrating on the ceramic arts of Ilkhanid Iran [the most recent being Watson 2006], but comparatively few on those of the Mamluk world, other than archaeological reports [Walker 2010], and none specifically comparing the output of these two closely connecting worlds. There was a third major player in Western Asia at this time, namely the Mongol Jochid dynasty generally referred to as the ‘khans of the Golden Horde’ or the ‘ulus Jochi,’ that controlled much of the Volga basin, the Crimea, and Transoxiana, once the homeland of the Khwarazmshahs, who had been centred around Konya Urgench in present day Turkmenistan until they moved into Khurasan after overcoming the Seljuks at the end of the twelfth century. The less well-known Jochid material culture is an extremely important dimension of this complex Turko-Mongol world. Little of the Russian archaeologists’ work has been published in a western language, and their publications are difficult to locate, thus the topic has proved to be a challenging one. The situation has been greatly facilitated by the internet and easier contact with Russian, Uzbek, and Kazakh colleagues through recent conferences. What is most fortuitous from an archaeological point of view is that their two capitals on tributaries of the Volga – namely Saray and New Saray, identified by Fyodorov-Davydov [1984: 17] as Selitryonnoye and Tsarevo – were both established on virgin sites [*Ibid.*, 9].

### Golden Horde Archaeology

Selitryonnoye’s finds’ starting date is mid-thirteenth century, although they largely investigated the fourteenth century levels. Tsarevo’s occupational levels start in the mid-fourteenth century, which is useful for the chronology of the finds. Following years of fieldwork campaigns at both sites, and many others in the Volga basin, Sary Krym in the Crimea, Saraichik on the Ural River, just north of the Caspian Sea, in Kazakhstan, Konya Urgench in Turkmenistan and Mizdakh in Uzbekistan, we have a much fuller picture of the material culture of the Golden Horde. At Selitryonnoye a series of pottery workshops dating to the fourteenth century have been excavated, many of which were producing what the Russians call *kashi* or ‘semi-faience’ and what we know

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as composite-bodied siliceous wares, fritwares or stonepaste wares (hereinafter ‘siliceous wares’). Updraught kilns were used and all the kiln furniture finds, consisting of trumpet-shaped supports (Plate 1), trivets (Plate 2), and glaze testers are similar to those found in the Mamluk and Ilkhanid world [*Ibid.*, illustrations 85 & 86]. Perhaps even more interesting is the discovery of stucco plaster moulds (Plate 3). The difficulty of working with a siliceous paste as opposed to a much more plastic clay one has long been recognised, and the Russian archaeologists found evidence for manufacturing these *kashi* wares in piece-moulds:

*“The dispute as to how kashi vessels were formed was finally resolved by the finding of a large number of alabaster [for this read stucco] piece-mould components in the potter’s shop at the Selitryonnoye site. The mould also produced the relief on the kashi sherd.”* [*Ibid.*, 144]

This latter point was certainly not the case in the Ilkhanid and Mamluk equivalents, the relief for these was definitely created with slip-trailing. Fyodorov-Davydov goes on to say that they were not biscuit fired, only having a single firing once the decoration and glazes were applied. They also found evidence for recycling fired tile fragments that were ground down for reuse [*Ibid.*, 144].

Stucco moulds for star tiles were found at Takht-i Sulayman [Morgan 2005, xv], so perhaps there is a case to extrapolate and suggest a similar technology of moulding vessels and finishing them on the wheel was practised in Iran, Syria and Egypt. No other *kashi* workshops have been excavated on the Volga or Crimean sites, but Emma Zilivneskaya [personal communication at conferences in Kazan 2006 and Nukus 2007] who has been working in the Lower Volga for a considerable time, is convinced they will find some eventually. Kazakh archaeologists at Saraichik have found several kilns for everyday clay vessels, but have yet to find any *kashi*-producing ones, and fear they may have been eroded away by the meandering Ural River which has cut away large sections of the industrial area of the site [Samashev *et al.* 2008, 14–15].

### **Ilkhanid Classification**

Oliver Watson [Watson 2006, 325–6] has suggested an amendment to the Sultanabad classification, as described by Arthur Lane in Late Islamic Pottery [Lane 1957, 10–13] separating the geometric and panel-styled wares from the grey-slipped and polychrome relief wares. Morgan has named the grey slip-relief ones ‘coloured ground’ [Morgan 1995] and the polychrome relief ones ‘Aragh’. I have adopted the term ‘coloured ground’ too, but prefer ‘polychrome relief’ to describe Morgan’s Aragh wares (Plates 4a & b). This fits in well with the Mamluk context of ‘imitation Sultanabad’. My thesis will include all the differences between the geometric and panel style wares too [Wade Haddon, forthcoming]. There have been three doctoral theses written on the topic of Ilkhanid fine wares: Peter H Morgan [Morgan 2005] for the University of Oxford; Madame Mathias-Imbert [Mathias-Imbert 1992] for Sorbonne IV; and Tomoku Masaya on the tiles of Takht-i Sulayman for the Institute of Fine Arts in New York [Masuya 1997]. Morgan is a great exponent of a potters’ diaspora, and suggests they were taken forcibly in 1260 from Raqqa to Iran. Then, with the fall of the Ilkhanids in the mid-fourteenth century he proposes that these potters’ families moved back to Syria, settling in Damascus [Morgan 2005, 78]. I have not found any textual evidence to support such a theory, but it is certainly a convenient way of explaining the transmission of decorative techniques and designs. I question the reliability of using potters’ *nisbahs* to indicate their immediate heritage and birthplace, and suspect that in many instances they may have been used by the workshops to imply quality and not actuality.

### **Background History**

Most commentators suggest that the Mamluk-Mongol conflicts post 1260 barred all trade, yet it

was Jazīra-born Majd al-Dīn al-Sallāmī, slave trader to the Mamluk Sultan al-Nāṣir Muḥammad (r. 693–94/1293–4, 698–708/1299–1309, 709–741/1310–41), who negotiated the eventual peace treaty in the 1320s, which would imply regular contact and better relations with both protagonists at a commercial level throughout the conflict, albeit with the occasional hindrance and lack of security on the caravan routes [Tsugitaka 2006]. It is important to remember that many of the Mamluks also had relatives in Iran and shared a common culture with the ruling elite. And, what is relevant to this paper is the fact that all three polities had well-established ceramics industries in their urban centres, which most probably would have relied on middle class and not princely patronage, which as Yves Porter has demonstrated had persisted under Khwarazmshah rule in Iran after the first Mongol invasions of 1220/21 [Porter 2006]. I accept that the evidence for Raqqa indicates a cessation in production after 1260, but perhaps that was because it became a border town largely deserted except for the military, vulnerable to tribal incursions, and as a consequence the merchant classes, the potters' patrons, moved their trade to a more secure location, and the potters would have followed them. During prolific periods of building activity, such as there were in the first half of the fourteenth century teams of craftsmen would have moved to the work, but there are no records indicating that this was state sponsored or just a natural process.

### Diagnostic Features in the Decoration

The material should speak for itself, so let us examine examples from all three production areas (Plate 5). Unfortunately very little of the Ilkhanid material is known from excavations or surveys. Note the similarities and differences. Typically the Golden Horde infill on the grey ground between the foliage and the figure of Burak is stippled with single dots; the Mamluk example has roughly executed fine lines, pointed trifoliate leaves and iron red – a colour *never* found in examples from the other two areas; the Ilkhanid example is more neatly executed with fine lines and the important difference with the foliage is that it has much more rounded, cotton ball-like trifoliate leaves than the diagnostic Mamluk spikey ones, which resemble a duck's footprint. The Golden Horde leaves are elegant trefoils, almost like a fleur-de-lis, on scrolling stems. Note the treatment of the lotus in the fragment illustrated in Plate 6. It is as though the Mamluk potter could not resist accentuating the details of the lotus, another flower and peacock's wings with cobalt blue and red.

Ilkhanid glazes were extremely unstable and frequently highly iridesced, whereas the Mamluk and Golden Horde ones did not appear to suffer to such an extent from chemical reactions in the soil. The English collector, Gerald Reitlinger, who donated his collection to the Ashmolean Museum in Oxford kept meticulous notes on all his collection, but a devastating fire in his Sussex home had disastrous consequences on about 5% of the collection, caused not by the fire but by water damage from the fire brigade's powerful pressure hoses. The card for his dish illustrated in Plate 5b included a photograph indicating it was almost complete at time of purchase, but most of the rim and cavetto must have been a plaster infill which was washed away under the force of the pressure hoses. Reitlinger was far more concerned with decoration than aesthetics, and purchased imperfect examples as long as he considered their decoration to be of interest; as a result his collection is invaluable for its variety and scope. The bowl illustrated in Plate 7 is a typical example of how the chemicals in the soil affected these alkaline glazes in Iran. We see this on the few known pieces sourced from scientific excavations and surveys. The German team at Bisitun excavated fragments in the Ilkhanid Palace [Luschey-Schmeisser 1996: plate 50]. We await publication of the Takht-i Sulayman fourteenth century material excavated by Naumann. There were reports given out by the Iranian Cultural Heritage News Agency in 2006 of more recent finds by archaeologist Yousef Moradi of an Ilkhanid pottery workshop, but no examples were illustrated [CHNA 2009]. None have been reported from Sultaniyya to date, and I was permitted to inspect the excavated material held in the Cultural Heritage stores in Zanjan and at the dig house in Sultaniyya with negative results.

So how can we distinguish the Mamluk material from the Ilkhanid and Golden Horde products? Take a close look at Plate 8c and note the use of red to highlight the centres of the stylised lotus flowers and the cobalt blue dots marking the leopard the lotus petals. The Ilkhanid open vessels seldom have blue dots on the interior, never have red details, and the ground is usually a greeny-grey, as opposed to the more bluey-grey of the Mamluk products. All three types have arcaded exteriors, with grey grounds and white slip-trailed vertical lines in relief outlined in black, imitating the moulded lotus leaf petals on Chinese hemispherical bowls (see Plate 6b) [Komaroff 2002, 178]. The picture is different for closed forms, where both the Mamluk and Ilkhanid potters had difficulty in controlling the cobalt which frequently bled into the other decoration. The Golden Horde example (Plate 8a) is distinguished by scrolling foliage and single stippled dots for infills, as opposed to squiggles, hatching and dashes which are found on both Ilkhanid and Mamluk examples. I have yet to find a Golden Horde *albarello* made with a siliceous paste – there are many red clay bodied sgraffiato examples, so they were certainly in use, but perhaps not as containers for more high-value commodities. Indeed, the Mamluks as the major players in the spice trade would appear to have produced proportionally many more *albarelli*, judging from the archaeological finds and numbers displayed in museums. Most of these closed forms had a plain turquoise glaze on their interiors, presumably for economic reasons.

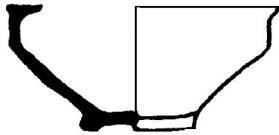
### Diagnostic Shapes

So how can we distinguish them other than by decoration? The answer is shape. This becomes the check to balance any decorative queries. Although hemispherical bowls, which slavishly copied Chinese prototypes, are a shape common to all three groups, as a rule the Ilkhanid ones are more finely potted. Most of the other forms are highly distinctive, and are shown in Figure 1.

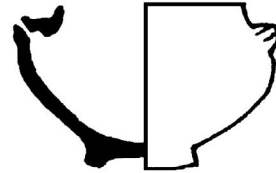
Mamluk *albarelli* are consistently more evenly proportioned, with the shoulder diameter equalling the carination above the ring base and the neck is longer, with a more projecting rolled rim to secure an animal membrane seal. This is the same for all forms of decoration. Interestingly I have not found any *lajvardina* examples in the Mamluk corpus, but cobalt and lustre was popular [see Watson 2004, 399; Cat R.2 and BM website for G.265]. The other two distinctive forms, and these are not, to my knowledge, found in any of the other territories, are the Iranian ‘T-rim’ (see Plate 4a and Fig. 1) and the Golden Horde ‘rosewater bowl’ or *gyulabdan* (Plate 11 and Fig. 1). Both are well attested in archaeological contexts. The T-rim was in use in the pre-Mongol period with slightly different decorative designs and continued through the fourteenth century, but was not in the Timurid repertoire by the fifteenth century. I have yet to find an example in Bilad ash-Sham, other than a fragmentary Kashan lustre piece from Hama, listed by Poulsen as ‘faïence Persane’ [Riis & Poulsen 1957, 125–6, fig. 384]. As to the so-called rosewater bowl from the lands of the Golden Horde, the extraordinary nipple-like bosses and the spout are useful diagnostic tools and are frequently preserved in archaeological contexts, but have not been found as yet in Iran, Iraq, Egypt or Bilad ash-Sham. They have been found as far west as Novgorod, where Golden Horde wares formed the majority of the foreign imports in the thirteenth and fourteenth centuries, whereas from the ninth to thirteenth centuries Syrian wares were in the majority, indicating either a marked shift in trading contacts [Koval 2006, Table 10.2, p. 188], or the Syrian traders that operated from the Golden Horde centres had assimilated their cultural artefacts by then. We know from Ibn Battuta that there was a large foreign community in Saray, including Syrians [Ibn Battuta 1983, 166]. Of course without written records there is no means of knowing if the objects were traded for their utility, were the containers for commodities traded, or just represent familiar household goods in a foreign trading colony. There was a Christian connection too as a similar bowl to that illustrated in Plate 11 was found buried with a fourteenth century bishop in Novgorod [Mongait 1948], and closer to home in Thessaloniki two bowls were used as *bacini* in the Vlatadon monastery, and assumed to be



## Different Diagnostic Shapes (not to scale)

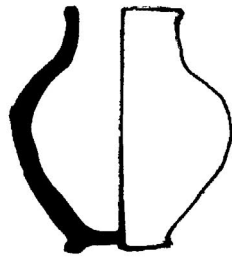


Iranian T-rim bowl -  
shape spans 12th-14th  
centuries

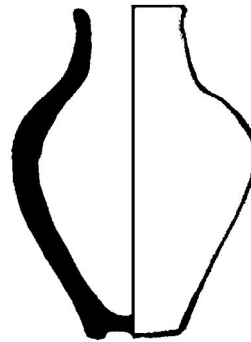


Golden Horde Rosewater Bowl  
13th-14th century shape which con-  
tinued in Central Asia to 15th century

### Large Jars



Ilkhanid  
Typically decorated in black  
under a turquoise glaze

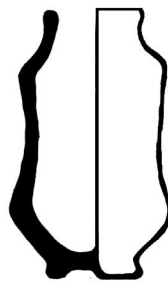


Mamluk  
Typically decorated in so-called  
Sultanabad or coloured-ground  
style

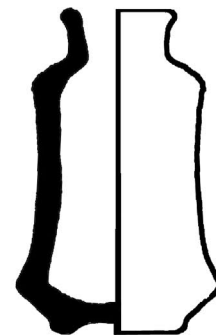
### Albarelli



Golden Horde  
Typically these are  
earthenware with  
*sgraffiato* decoration



Ilkhanid  
Composite bodies:  
all decorative  
varieties



Mamluk  
Composite bodied:  
no *lajvardina*

Fig. 1

pilgrimage gifts [Poluboyarinova and Sedov 2007]. One fragmentary example of a bowl was found in excavations at San Lorenzo Cathedral in Genoa when they were preparing to install a washroom [Mannoni 1975, plate 2, p. 47, fig. 34].

### **Mamluk Decorative Differences**

Apart from shape, there are other decorative motifs that distinguish Mamluk imitation Sultanabad. The pointed trifoliate leaf appears in both decorative forms: the polychrome relief wares already discussed; then there are examples with similar designs executed in fine black lines on a flat white ground, such as the *albarello* in Plate 9a. There is no slip relief on this type and the outlines are drawn in a much more careless, cursive manner. There is a well-known slipped relief jar in the Louvre [Bernus-Taylor 2001, 78, MAO 618] which is a magnificent example that closely follows its Ilkhanid prototype, but the leaves on the neck are typical Mamluk spikey trifoliate ones and the inscription is in Arabic – those on Ilkhanid vessels were normally in Persian, usually poetry, except for conventional brief blessings. Some ring base fragments have a date roughly inscribed on their interiors – with ‘made in the year forty-four’ or ‘forty-five’ (see Plate 13). The 700 is understood – the *hijra* years 744 and 745 are equivalent to 1343 or 1344. Nothing of significance happened in these years, but it has been suggested that they are regnal years for Sultan Nasir Muhammad, who ruled for around 45 years if you discount his times in exile in Kerak [Gibbs 2000, 16]. The reason for inscribing these vessels with these dates is insignificant relative to the importance of the information given to support the archaeology. I have yet to find a dated slipped-relief example, which raises the possibility that the non-relief Mamluk examples could have evolved a little later – the less complex and more easily executed designs suggest mass production. The Ilkhanid coloured ground examples are thought to have come into use in the early fourteenth century, but continued to be used throughout the century [Morgan 1995]. Both Mamluk varieties are found in archaeological contexts, but good stratigraphy for these levels is limited. Perhaps the Aleppo material will assist. There are certainly many more examples that await study there.

Another collector who delighted in the different designs on pottery fragments was Major Gayer Anderson – his sherd collection remains in his museum tucked up against the walls of the Ibn Tulun mosque in Cairo (see Plates 6 and 13). These were acquired in the 1920s and 1930s, but unfortunately any record that he may have made has long since been lost. They are presumed to have been from Fustat. I do have a photographic record and notes on all 700+ fragments – they range from ‘Abbasid lustre ware through to Ottoman, with Western and Far Eastern imports, and a good variety of slipper lamps.

### **Design Influences**

So, how do we account for this common link in decoration? Lane proposed and argued convincingly that textiles were the main medium of transmission for the decorative themes found on the ceramics [Lane 1957, 5–10]; Yolande Crowe has published further textile evidence from a dated tomb belonging to a Chinese princess in support of Lane’s theory [Crowe 1991]. The exhibition catalogue *The Legacy of Genghis Khan* mounted in New York and Los Angeles included a detailed article demonstrating these influences and how they were transmitted [Komaroff 2002, 169 ff]. During the Mongol period textiles were the most highly valued of diplomatic gifts and in Mamluk Cairo the humble potter would have certainly seen them paraded through the streets during one of the many ceremonial parades. Many of the robes worn by the Mongols in Rashid ad-Din’s *World History* in the Edinburgh University Library are identical to the patterning reproduced on Mongol ceramics (Plates 10a and 10b). The textiles depicted on some of the seated rulers’ thrones share the same grey and white palette, as do some of the over-garments. Note the more schematic pointed, trifoliate leaves on the elephant’s blanket (Plate 10b), surely an inspiration for the Mamluk leaf? Similar leaves

are found on contemporary Yuan silk tapestries or *kesi* [Komaroff 2002, 174, fig 203]. In this example the lotus stamens have been picked out in red just like the imitation Sultanabad fragments from Fustat illustrated in Plates 6a and 8c. This very distinctive angular trifoliate leaf appears in other media and was ubiquitous on Mamluk portable objects, including enamelled glass lamps, inlaid metalwares, illuminated manuscripts and playing cards.

I have yet to find a reference to an Ilkhanid ‘Sultanabad’ fragment being found at a Mamluk site. Scanlon never found one in Fustat, and to my knowledge neither has the Polish team in Alexandria. Indeed, there is no evidence to indicate it was in circulation in Iraq, as evidenced by the sherd collection in the Ashmolean assembled by Reitlinger when he was excavating and surveying in the Kish region in the early 1930s. The only slipped-relief ware fragments that I have identified amongst his collection are so-called ‘Bojnurd’ examples, believed to have been produced in Khurasan [Watson 2004, 386–87; and Wade Haddon, forthcoming], and Mamluk underglazed-painted panel style examples. It will be interesting to compare some of the Aleppo Mamluk material with the so-called Ilkhanid material from Wāsiṭ [Safar 1945, fig. 18, #61] and Nippur [Gibson et al 1998, figs. 20–21]. There is no doubt that the black under a transparent turquoise glaze pieces from Wāsiṭ are Ilkhanid, but the underglaze blue, turquoise and black geometric and panel-style varieties resemble Syrian products. The antiquities trade has distorted our ideas on the distribution of these vessels, and I suspect that Ilkhanid Sultanabad was limited to Azerbaijan, highland Iran and Fars.

## Conclusions

I think it would be dangerous to speculate about a mass movement of potters from Iran at the ‘fall’ of the Ilkhanids in 1335. The various political groupings continued to patronise manuscript production, and the urban elite would seem to have joined in this activity, as outlined by Elaine Wright in her study [Wright 1997]. This group would certainly have needed table wares too. There is nothing to support any diaspora theory for the potters and there was already a well-established industry in both Bilad ash-Sham and Egypt. I have already stated above that *nisbahs* are no definitive guide to a person’s origins, they give no indication as to when a family moved, and it could well have been several generations ago. Or, it could have been conceived as a device to assure a certain quality. In the case of the Golden Horde, the picture is very different and they would definitely have needed skilled artisans to build their new cities and establish their craft industries. Russian scholars have suggested that potters from Konya Urgench and other established urban centres were encouraged or indeed forced to move there. For a trade that had no proven central organisational hierarchy it is quite extraordinary how uniform their products were. One explanation I can think of is that these products were used by state administrators and ordered en masse for government administrative posts. We have material evidence that the foreign residents brought some of their own table wares, and luxury imports like Chinese porcelain and celadon were apparent, but no real or imitation Sultanabad as far as I can see, only Kashan lustre and Raqqa wares [Polyuboryarinova 2006]. Certainly celadons were imitated in all three areas, many slavishly copying the original Chinese prototypes. The tablewares in each area were probably considered totally normal and uniform, albeit slightly differently decorated, thus not eliciting any description or comments by travellers. Ibn Battuta marvelled at the wealth of Konya Urgench and when he visited the qadi, who in turn took him to the emir, Qutlughtimur, he commented on inlaid silver and imported Iraqi glass displayed in niches, but there was no mention of ceramics [Ibn Battuta 1983, 166]. It must have been too mundane for comment.

There is one other idea that I have with regard to potters’ patrons, and that is the numerous religious institutions that were established in the fourteenth century. The waqfiyas indicate that the endowments allowed for utensils and vessels to feed both the poor and their more wealthy visitors. The state-run post houses were meant to be for the exclusive use of government messengers, so

many of the merchants supported the religious institutions and relied on them for hospitality during their journeys if there was no suitable caravansarai. Ibn Battuta describes the variety of travellers on the road and demonstrates the facility of travel between these different political zones, their inherent hardships and luxuries. An institutional demand may account for a degree of uniformity in the wares produced, yet it was the possibility of contact to be able to exchange ideas and influences that was probably the greatest impetus. I hope I have demonstrated how it is possible to distinguish between the products of these three political centres, but identifying the production centres remains a mystery for the Ilkhanids; Damascus is the most likely centre for the Mamluk material, yet that is by no means proven to date. If it transpires there were several production centres for the Golden Horde material then certainly it is possible that this was the case for both the Mamluks and Ilkhanids.

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Plate 1. Clay trumpet-shaped kiln spacer with traces of siliceous-paste vessels adhered to it from the Russian excavations at Selitryonnoye, excavated by Fyodorov-Davydov in 1969, and exhibited at the Hermitage's Kazan branch in 2006. Astrakhan State Regional Historical and Architectural Museum reserve, inventory number AM3 KP 16257/37 A 7562. Measurements: height 11.5 cms; base diameter 8.3 cms.



Plate 2. Waster consisting of six bowls stuck together, with a tripod spacer or trivet visible between the second and third vessel, from a kiln excavated at Selitryonnoye by Fyodorov-Davydov in 1981; Astrakhan State Regional Historical and Architectural Museum's reserve, inventory number AM3 HB 16530 [Kramarovskiy 2006: 141, cat # 591]. Measurements: 21.5 × 21 × 17 cms.



Plate 3. Part of a stucco mould for a capital excavated at Tsarevskoye by A Tereshchenko in the 1840s. Exhibited at the Hermitage's exhibition in Kazan 2006, # 244. State Hermitage Museum inventory number Cap-1580. Measurements: 23 × 28 cms; 2.5 cms thick.



4a



4b

Plate 4a. Ilkhanid Sultanabad or grey-slipped relief ware T-rim bowl, classified as 'coloured ground' by Morgan. It is decorated on the interior with three flying phoenixes on a densely foliated background with lotus blossoms; the exterior has a band of pseudo epigraphy with imitation lotus petals depicted below. V&A collection, London, inventory number C52- 1910: height 13 cms; diameter 29.2 cms.

Plate 4b. Polychrome slipped-relief ware dish, classified as 'Aragh ware' by Morgan. V&A collection, London, inventory number C55.1952. Measurements: diameter 32 cms.





5a



5b



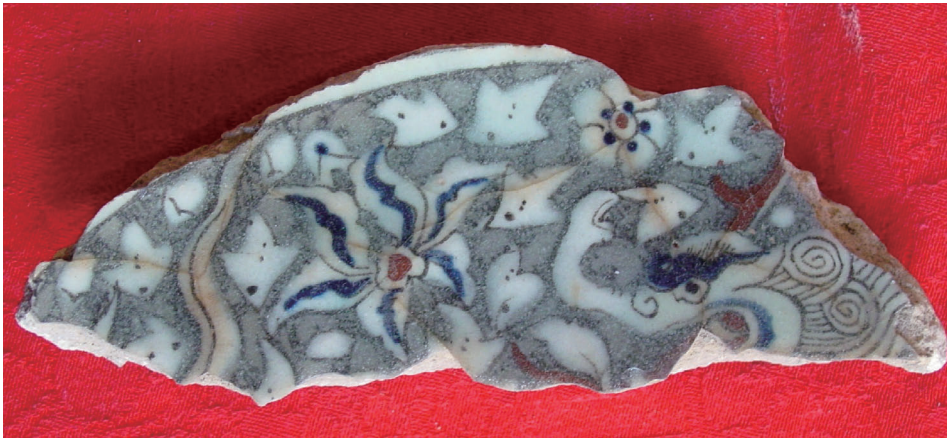
5c

Plate 5a. Mamluk polychrome relief ware, or imitation Sultanabad, with a riderless, richly caparisoned horse - bowl base fragment in the collection of the Staatliche Museen zu Berlin - Museum für Islamische Kunst, inventory number I. 4930 – foot diameter 11.5 cms; height of foot 2 cms.

Plate 5b. Ilkhanid coloured-ground dish with two deer and a falcon, Ashmolean Museum inventory number EA 1978.1667 – diameter 33 cms.

Plate 5c. Golden Horde polychrome-relief ware dish depicted a mythical figure, Astrakhan State Regional Historical and Architectural Museum Reserve, inventory number AM3 KP4708 A 133 – diameter 22.1 cms.





6a



6b

Plate 6a and b. Body fragment of a Mamluk imitation Sultanabad fragment with a lotus flower and part of a peacock amongst trefoil-leaf foliage. Gayer Anderson Museum, Cairo, inventory number 453: 13 cms × 5.5 cms.



Plate 7. Ilkhanid Sultanabad or coloured-ground bowl in the collection of the Reza Abbasi Museum, Tehran. Accession number 1640, photographed in 2002: diameter 21.1 cms, height 9.7 cms.



8a



8b



8c

Plate 8a. A Golden Horde bowl depicting a snow leopard amongst scrolling foliage from the Volga area. Azov Museum of Local Lore inventory number KP25144/78 A1-426/178: diameter 19.5 cms; height 11 cms.

Plate 8b. An Ilkhanid bowl with a Mongol figure seated on a cross-legged campaign stool amongst a field of foliage with rounded trefoil leaves, lotuses and flowers, with gamebirds amidst similar foliage flying around the cavetto. British Museum collection, 1952 2-14.6. Its diameter is 19.2 cms; height 8.8 cms. 'Imase Use by kind permission of the Trustees of the British Museum'.

Plate 8c. Base fragment of a Mamluk dish decorated with a prancing snow leopard in a field of spikey trifoliate leaves and lotuses from the collection of the Staatliche Museen zu Berlin - Museum für Islamische Kunst, inventory number I. 1836: foot diameter 9 cms; height 1.5 cms.





9a



9b

Plate 9a. Mamluk *albarello* in the David Collection, Copenhagen, inventory number 6/2006. The four birds are amusingly depicted – each opening its beak a little more than that of its neighbour as the song unfolds - height 34.1 cms (Photo: Pernille Klemp).

Plate 9b. Ilkhanid *albarello* in the V&A collection, C.219–1912: height 33.02 cms; diameter 17.78 cms.



10a



10b

Plate 10a & b. Details of miniature paintings from the Edinburgh University Library's portion of the *Jami'a al-Tawārikh*, MS, 1306: on the left is Sultan Mahmud of Ghazni wearing an overgarment comparable with Ilkhanid coloured-ground motifs, and on the right the elephant's covering recalls Mamluk imitation Sultanabad decoration with its spikey trifoliate leaves [After Rice 1976, nos. 58 & 57, respectively].





Plate 11. Golden Horde *gyulabdan* or 'rosewater bowl' from the Volga area. Azov Museum of Local Lore, inventory number KP 25355/A1-468/1. Diameter 19 cms [Kramarovsky 2005, # 605].



Plate 12. Hemispherical Golden Horde bowl decorated with a pseudo-epigraphic band below the rim, a stylised leaf band below this and a lotus on thin stem in the tondo. Image courtesy of Christie's London, purchased by the David Collection, Copenhagen in 2000 [Christie's 2000, 135 #269], inventory number 54/2000 [von Folsach 2001, 173, #223: diameter 18.7 cms; height 8.9 cms.



Plate 13. Base fragment of a bowl decorated with trifoliate leaves on a white ground with traces of three birds; the centre is inscribed in Arabic: *'umila sanat / hamsat wa / araba'in* – 'made in the year 45'. Gayer Anderson Museum, Cairo # 541; base diameter 8 cms.

ALL PHOTOGRAPHS TAKEN BY THE AUTHOR, EXCEPT THE VICTORIA & ALBERT MUSEUM IMAGES OF THE ILKHANID WARES, THE DAVID COLLECTION COPENHAGEN MAMLUK ALBARELLO AND THE CHRISTIE'S GOLDEN HORDE BOWL

## ASSEMBLAGES DE CÉRAMIQUES DU DÉBUT DU XV<sup>e</sup> ET DU XVIII<sup>e</sup> SIÈCLES À DAMAS

Véronique FRANÇOIS\*

### Abstract

In order to offer a new typological frame for archaeologists working in Bilad al-Sham, pottery collected in the recent Franco-Syrian excavations within the citadel of Damascus, offers an exceptional opportunity to deal with the ceramics used in a big urban site during Mamluk and Ottoman periods. In a context of a relative shortage of discoveries in stratified contexts, one level dated of the beginning of the 15th c. and another one dated to the 18th c. are presented here. The Mamluk pottery has been collected in a room filled intentionally after the Mongols attack of 1401 while the Ottoman ware comes specifically from a sealed deposit in a staircase of tower n°4. These well-dated typologies would allow identifying a large range of culinary dishes, tableware and storage jars.

À la demande de la Direction Générale des Antiquités et des Musées de Syrie (DGAMS), des fouilles ont été menées par une équipe franco-syrienne à la citadelle de Damas de 1999 à 2003, à raison de deux campagnes par an. Une superficie de 1600 m<sup>2</sup> a ainsi été excavée sous la direction de S. Berthier, alors chercheur à l'Institut français d'Etudes Arabes, et A. Taraqji puis E. El-Ajji, respectivement archéologue et ingénieur à la DGAMS (Berthier 2001–2002: 29–46; *eadem* 2002–2003: 393–413). De grandes quantités de céramiques y ont été mises au jour, celles des époques mameloukes et ottomanes ont été publiées (François 2008, 2009 (a): 53–66, 2009 (b): 265–278). C'est une petite partie de ce matériel qui est présenté ici. Deux assemblages bien datés, le premier du début du XV<sup>e</sup> siècle et le second du XVIII<sup>e</sup> siècle, constituent des ensembles de références pour la Syrie centrale et s'apparentent, au moins pour l'époque mamelouke, aux céramiques mises au jour en Jordanie et en Palestine.

La description des catégories et des types découverts dans ces deux contextes s'inscrit dans la typologie générale mise en place pour l'étude de toutes les céramiques mameloukes et ottomanes de la citadelle (François 2008). Pour faciliter le retour à la publication générale et afin de pouvoir ainsi replacer ce matériel parmi les autres trouvailles datées entre la fin du XIII<sup>e</sup> et le XIX<sup>e</sup> siècle, les appellations qui ont été utilisées dans la synthèse sont conservées ici. La présentation du matériel de ces deux contextes homogènes, sous la forme d'un catalogue, est volontairement très descriptive. Elle voudrait être un outil pour faciliter les nouvelles identifications de matériel et favoriser les comparaisons.

### Assemblage du début du XV<sup>e</sup> siècle

En parallèle aux chantiers ouverts par la Mission franco-syrienne dans la citadelle, d'autres fouilles plus limitées, ont été conduites par la Mission nationale syrienne. Elles ont également livré des céramiques dont une partie, présentée ici, provient d'un remplissage homogène. Une quantité importante de poteries mameloukes a en effet été recueillie dans les niveaux supérieurs du comblement intentionnel de chambres de tir effondrées et d'une salle en retrait entre la courtine seldjoukide et

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la courtine ayyoubide (zone 7.2) (Fig. 1). Selon toute vraisemblance, ce comblement a été mis en place après l'attaque de Tamerlan en 1401, peut-être en 1407, lorsque le gouverneur de la ville, Nawrûz al-Hâfizi, a entrepris des travaux de reconstruction des défenses extérieures et des tours de la citadelle endommagées par l'attaque des Mongols. Des monnaies de 1406–1408 et quelques fragments de faïence espagnole retrouvés dans ce niveau valident l'hypothèse d'un remplissage au début du XV<sup>e</sup> siècle.

Ce niveau bien caractérisé a fourni 1 683 éléments de forme (Nombre Minimum d'Individus/NMI) de céramiques culinaires, de pots, de vases à liquides, de jarres de stockage et de vaisselle de table.

Forme	NMI		Informes
Céramiques communes (culinaire, de stockage, vases à eau et à usages spécifiques)	884	53%	5910
Céramiques fines (vaisselle de service et de table)	799	47%	3739
Total	1683		9649

Les céramiques culinaires et de stockage, majoritairement fabriquées en pâte rouge, sont à peine plus abondantes que la vaisselle de service. Ce matériel révèle toute la variété des poteries employées à cette époque tant pour la cuisine, avec différents types de marmites, de pots et de jattes allant au feu, que pour la conservation et le stockage avec des pots et des jarres de toute taille parfois glaçurées. Les vases à liquides — *ibriq* à bec tubulaire, cruchon et gargoulette à filtre mais aussi « gourde de pèlerin » — ne sont pas moins diversifiés dans leur forme, leur pâte et leur traitement de surface. À l'inverse des bassins à usages polyvalents, d'autres objets tels que les pots de chambres et certaines coupes grossières avaient des fonctions spécifiques. La gamme de coupes, coupelles et autres plats employés pour le service et la table n'est pas moins grande. Si la vaisselle à glaçure plombifère est la plus abondante (89% de la céramique fine du comblement), les grandes productions mameloukes dont la forme et le décor sont souvent influencés par les importations de porcelaine et de céladon de Chine font également partie du vaisselier.

## I. Pour la cuisine, le service, le stockage et l'hygiène

Des marmites et des pots, de petites jarres, un cruchon et des bouteilles, des bassins et des pots de chambre sont tournés en pâte rouge. Ces objets du quotidien sont parfois glaçurés au plomb ou, plus rarement, peints à l'engobe rouge. Les pâtes claires caractérisent les gargoulettes à filtre et les « gourdes de pèlerins » ainsi qu'un type particulier de coupes.

### 1. Céramique à pâte argileuse, rouge

#### *Marmites sans revêtement et marmites partiellement glaçurées au plomb*

Aucun objet entier n'a été retrouvé dans ce contexte. Très peu de marmites sont glaçurées.

*Forme 1* (Fig. 2: 1 et 2): marmite sans col; lèvres courtes à inflexion externe horizontale ou oblique; panse globulaire; anse horizontale, en boudin ou rubanée, collée en haut de la panse, en pont; base convexe avec un ombilic. Pâte orange, fine, avec de petites inclusions blanches, parfois rose saumon, fine et dure. Le diamètre à l'ouverture varie entre 13 et 20 cm. Des marmites de ce type apparaissent à Burj al-Ahmar dans les niveaux datés entre 1265 et 1390 (Pringle 1986: 146, fig. 48: 39); à Jérash, dans des niveaux ayyoubido-mamelouks (Tholbecq 1997–1998: 172–173: 67) ainsi qu'à Tripoli (Salame-Sarkis 1980: 214, fig. 37: 8).

*Forme 2* (Fig. 2: 5): grande marmite à deux anses rubanées à arêtes, horizontales; panse ovoïde. Pâte orange foncé, fine.



Céramiques communes			
Rapport entre pâte rouge et pâte claire			
Catégorie	NMI		Informes
Communes à pâte argileuse rouge	563	64%	1388
Communes à pâte argileuse claire	321	36%	4522
Total	884		5910
Communes à pâte argileuse rouge sans revêtement ou partiellement glaçurées au plomb			
Catégorie	NMI		Informes
Culinaires	147	26%	585
Culinaires glaçurées	13	2%	30
Vases à liquide	124	22%	351
Vases à liquide glaçurés	14	2%	32
Céramiques de stockage et de transport	157	28%	200
Céramiques de stockage et de transport glaçurées	61	11%	100
Bassins	19	3%	30
Poterie sanitaire glaçurée	4	- de 1%	17
Cruches et jarres de stockage peintes à l'engobe rouge	8	1%	43
<i>Dérivée de HMGPW</i>	1	- de 1%	/
Lampes	15	3%	/
Total	563		1388
Communes à pâte argileuse claire			
Catégorie	NMI		Informes
Céramique à usage spécifique: coupes et pots	43	13%	22
Moules à sucre	5	2%	/
Bouteilles et « gourde de pèlerin »	6	2%	30
Gargoulettes à filtre	267	83%	4470
Total	321		4522

*Forme 3* (Fig. 2: 3): marmite à col court, vertical; lèvres droites; panse globulaire. Glaçure plombifère sur la panse à l'extérieur. Pâte orange, fine et dure.

*Forme 4* (Fig. 2: 4): marmite sans col; lèvres rentrantes en T; panse ovoïde. Pâte rouge foncé.

### **Pots à cuire**

*Forme 1* (Fig. 2: 6): pot à cuire sans col; lèvres à épaississement externe; panse ovoïde; paroi épaisse. Pâte au cœur noir et surface brunie.

*Forme 2* (Fig. 2: 7): pot à cuire sans col; lèvres en crochet, panse ovoïde. Pâte fine et dure, orange ou rose.

*Forme 3* (Fig. 2: 8): pot à cuire sans col; lèvres plates à inflexion externe; panse ovoïde. Pâte fine et dure, orange ou rose saumon.

### **Jattes allant au feu, glaçurées au plomb**

Pour l'époque mamelouke, l'essentiel des jattes mis au jour à la citadelle provient de ce contexte. Les traces de feu présentes sur tous ces objets témoignent d'une utilisation sur un foyer.

*Forme 1* (Fig. 2: 9): jatte; lèvres à gorge, à inflexion externe, destinée à recevoir un couvercle; panse peu profonde hémisphérique à courbe discontinue; fond plat. L'intérieur et le bord à l'extérieur sont couverts d'une glaçure plombifère brillante, appliquée directement sur la pâte, et d'une tonalité orangée. Mais, sur d'autres exemplaires, elle est chocolat ou brun caramel. On observe quelques gouttes de glaçure à l'extérieur, sur la panse. Le diamètre à l'ouverture pour des jattes de ce type

oscille entre 22 et 28 cm. Pâte orange vif, fine avec parfois quelques inclusions blanches.

*Forme 2* (Fig. 2: 10): jatte; lèvre verticale à gorge interne destinée à recevoir un couvercle; panse à carène haute. L'intérieur et le bord, à l'extérieur, sont couverts de glaçure plombifère brillante appliquée directement sur la pâte, de tonalité brune. Le diamètre à l'ouverture est compris entre 16 et 25 cm. Pâte orange avec de petites inclusions blanches. Un objet de ce type, trouvé à Giv'at Yasaf, est daté des XIV<sup>e</sup>–XV<sup>e</sup> siècles (Stern 1999: 130, fig. 3: 42).

*Forme 3* (Fig. 2: 11): jatte à tenon de préhension ou à deux anses horizontales, en pont, collées sur le haut sur la panse; lèvre à inflexion externe; panse tronconique. Le fond est sans doute plat. L'intérieur et le bord, à l'extérieur, sont couverts de glaçure plombifère incolore, brillante, appliquée directement sur la pâte, de tonalités chocolat et brun caramel. Le diamètre à l'ouverture varie entre 25 et 30 cm. Pâte orange avec de petites inclusions noires et blanches.

### ***Petites jarres***

*Forme 1* (Fig. 3: 1): petite jarre; long col évasé, bague à l'attache de l'anse rubanée à arête; lèvre éversée; panse globulaire côtelée. Pâte orange, fine et dure, parfois brunâtre. Des becs tubulaires de toutes tailles laissent croire à l'existence de jarres pourvues de ce type de goulot mais aucun exemplaire complet n'a été mis au jour.

*Forme 2* (Fig. 3: 2): petite jarre; long col renflé, côtelé; lèvre rentrante, à épaulement interne et aplati, lèvre légèrement éversée ou lèvre droite; une anse rubanée, à arête, attachée à mi-col et avant l'épaulement; panse hémisphérique. Pâte rouge brique, très fine.

### ***Petites jarres à bec tubulaire, glaçurées au plomb***

*Forme 1* (Fig. 3: 3): jarre à bec tubulaire attaché à l'épaulement; long col évasé, bague; lèvre à inflexion externe parfois épaissie à l'intérieur; une anse en boudin ou rubanée est attachée à l'épaulement et à mi-col; panse ovoïde ou globulaire; base annulaire. Un engobe beige et une glaçure plombifère verte, parfois de mauvaise qualité, sont appliqués sur une grande partie de l'objet, à l'extérieur, et en coulures à l'intérieur. Pâte orange, fine avec parfois de petites inclusions blanches.

### ***Bouteilles***

*Forme 1* (Fig. 3: 4): petite bouteille; goulot cylindrique côtelé; lèvre légèrement éversée; paroi fine. Pâte pourpre, très fine.

*Forme 2* (Fig. 3: 5): petite bouteille; goulot cylindrique; lèvre éversée en crochet; paroi fine. Pâte pourpre, très fine.

### ***Cruchon partiellement glaçuré au plomb***

*Forme 1* (Fig. 3: 6): cruchon; long col évasé; bec pincé; une anse rubanée attachée à mi-col et à l'épaulement; panse ovoïde côtelée; base discoïde plate. Engobe et glaçure plombifère verte sur le col puis glaçure seule à l'épaulement, de tonalité chocolat. Pâte grise, surcuite, fine et dure. Un objet de ce type a été mis au jour à Tell 'Arqa (Hakimian, Salame-Sarkis 1988: 28, fig. 16: 6).

### ***Gargoulettes à filtre***

Ces très rares vases à filtre, à pâte rouge, apparaissent dans les niveaux du XV<sup>e</sup> siècle et constituent sans doute le pendant marginal et tardif des gargoulettes à pâte claire très nombreuses dans les autres contextes mamelouks de la citadelle.

*Forme 1* (Fig. 3: 7): vase à filtre à embouchure étroite, entre 5 et 6 cm de diamètre; long col tulipe ou long col cylindrique. Le col peut être orné de cercles concentriques et de tresses incisés et des bandeaux de hachures sont tracés au peigne sur la panse. Pâte orange vif, très fine.

*Forme 2* (Fig. 3: 8): vase à filtre à large embouchure, autour de 12 cm de diamètre; long col

cylindrique; filtre attaché haut (à 3 cm de l'embouchure), plat, découpé et orné d'un décor géométrique ou végétal stylisé; panse carénée; paroi fine (0,3 cm d'épaisseur). Le col et la panse sont ornés d'un décor incisé, pseudo-calligraphique, végétal stylisé ou géométrique sur semis de points. Pâte orange vif, très fine.

### **Pots**

*Forme 1* (Fig. 3: 9): pot; col court; lèvre droite parfois légèrement épaissie à l'intérieur; panse balustre ou ovoïde; base discoïde convexe. Pâte rouge pourpre, fine.

### **Jarres sans revêtement ou glaçurées au plomb**

*Forme 1* (Fig. 3: 10): jarre à deux anses rubanées ou à arêtes; long col cylindrique parfois côtelé; lèvre à inflexion externe, épaissie à l'extérieur et à gorge à l'intérieur, parfois repliée; panse balustre ou hémisphérique. Le diamètre à l'ouverture est compris entre 9 et 15 cm. Pâte orange, fine avec parfois des petites inclusions blanches; plus rare, pâte pourpre et fine ou cœur rouge et surface brunâtre voire grise. Un type proche de celui-ci apparaît parmi le matériel de Tell'Arqa (Hakimian, Salame-Sarkis 1988: 28, fig. 16: 5).

Dans ce comblement, on trouve également d'autres formes: des jarres à col cylindrique large et lèvre éversée dont le diamètre à l'ouverture est de l'ordre de 20 cm et la pâte orange ou orange clair, fine avec parfois des inclusions noires et blanches; des jarres à long col cylindrique, lèvre éversée, épaissie à l'extérieur et aplatie ou à gorge avec deux anses à arêtes tournées dans une pâte rose saumon, fine ou orange foncé tendre (François 2008).

Quelques jarres de différentes tailles sont partiellement glaçurées au plomb.

*Forme 1* (Fig. 3: 11 et 12): jarre de taille moyenne à grande; long col cylindrique; lèvre éversée, épaissie à l'extérieur. Une glaçure plombifère vert foncé ou kaki, est appliquée en coulures ou en bandes, sur le bord, à l'intérieur comme à l'extérieur. Le diamètre à l'ouverture varie entre 12 et 22 cm. Pâte orange, fine et dure avec parfois de petites inclusions blanches. Une jarre de même forme apparaît à Jérash dans les niveaux ayyoubido-mamelouks (Tholbecq 1997–1998: 178–179: 100).

Il existait également, dans cet assemblage, des contenants de plus grande taille avec un col court, épais, cylindrique, tronconique ou évasé; une lèvre rentrante, épaissie à l'intérieur et à l'extérieur; une panse cylindrique ou hémisphérique, ornée d'un ou deux cordons appliqués digités, ou de cordons pincés, et/ou de lignes ondulées tracées au peigne; et un fond lenticulaire. Ces jarres de grande taille sont fabriquées dans une pâte orange vif avec de grosses inclusions blanches ou une pâte rose saumon avec de petites inclusions blanches ou encore avec une pâte orange, fine (François 2008).

### **Bassins**

*Forme 1* (Fig. 4: 1): bassin à lèvre en T oblique ou horizontale; panse hémisphérique ou tronconique; fond plat plus ou moins épais. Le diamètre à l'ouverture est de plus ou moins 40 cm. Pâte orange foncé avec de petites inclusions blanches, parfois le cœur est gris, parfois ce sont les surfaces internes et externes qui sont brunes. Ce type de bassin, qui semble apparaître à la citadelle dans des niveaux datés de la fin de l'époque ayyoubide, se maintient jusqu'à la fin du XV<sup>e</sup> siècle. On trouve des exemplaires semblables à Yoqne'am, dans les niveaux mamelouks (Ben-Tor, Avissar, Portugali 1996: 128–129, fig. XIII.85: 1).

*Forme 2* (Fig. 4: 2): bassin à lèvre à boudin à crochet externe; panse carénée assez fine et fond plat. Le diamètre à l'ouverture varie de 30 à 38 cm. Pâte orange vif ou orange foncé avec de petites inclusions blanches, parfois la surface est orange ou rouge et le cœur gris. Dans les fouilles de la citadelle, cette forme est attestée dans des niveaux de la fin du XIII<sup>e</sup> siècle mais aussi de la fin du XV<sup>e</sup>. De tels bassins étaient employés à Giv'at Yasaf où ils sont datés des XIV<sup>e</sup>–XV<sup>e</sup> siècles

(Stern 1999: 130, fig. 3: 45) et à Yoqne'am où ils sont attribués à l'époque mamelouke sans plus de précision (Ben-Tor, Avissar, Portugali 1996: 128–129, fig. XIII.85: 2).

On a aussi trouvé, dans ce niveau, un très grand bassin de 58 cm de diamètre avec une lèvre en T plate, une panse épaisse hémisphérique et deux anses en boudin horizontales, tourné dans une pâte rouge foncé, fine (François 2008).

### ***Poterie sanitaire à glaçure plombifère***

*Forme 1* (Fig. 4: 3): pot à lèvre à inflexion externe horizontale; panse hémisphérique, cylindrique ou ovoïde; deux anses à arêtes. L'intérieur est couvert d'engobe beige ou blanc, parfois appliqué en jus pauvre, et de glaçure plombifère brillante, vert pré, vert émeraude ou vert foncé. Pâte orange vif, dure.

### ***Dérivée de Hand Made Geometric Painted Ware (HMGPW)***

La *HMGPW*, une céramique à pâte grossière, modelée, décorée de motifs géométriques complexes peints à l'engobe rouge sur un engobe blanc ou beige, apparaît sur les sites du Bilâd al-Châm au milieu du XII<sup>e</sup> siècle et est bien attestée dans les niveaux d'occupation mamelouks. Cruches et pots sont présents sur la plupart des sites ruraux fouillés au Proche-Orient, d'Alep au nord à Aqaba au sud et des côtes de la Méditerranée aux rivages de l'Euphrate. Cependant, très peu de fragments de *HMGPW* ont été mis au jour à la citadelle. Et, dans ce comblement, un fragment de panse attire l'attention car, bien que son décor géométrique peint à l'engobe rouge foncé sur un fond engobé blanc soit de même aspect et de même style que celui des *HMGPW*, la cruche est tournée et non pas modelée et porte des traces de glaçure plombifère verte (Fig. 4: 4).

### ***Cruches et jarres peintes à l'engobe rouge poli***

La vaisselle à engobe rouge est faiblement représentée dans les contextes d'occupation mamelouks de la citadelle (50 NMI) alors qu'elle est très abondante dans les niveaux ayyoubides (plus de 2000 individus) (François 2009a: 269–271). Dans cet assemblage du début du XV<sup>e</sup> siècle, cette production apparaît donc comme une survivance éphémère de productions plus anciennes. On y recense une base annulaire de cruche, à disque interne, tournée dans une pâte beige orangé (Fig. 4: 5) et un fragment de panse, à pâte orange, dure avec de petites inclusions blanches, orné d'un bandeau de fleurs de lys incisé (Fig. 4: 6). Les jarres sont plus nombreuses et de diverses tailles, les plus grandes ont un diamètre à l'ouverture de 39 cm. Le type illustré ici est une jarre à col cylindrique côtelé, lèvre épaissie à l'extérieur. Tournée dans une pâte beige rosé avec des dégraissants végétaux et des inclusions blanches, elle est entièrement couverte d'engobe rouge (Fig. 4: 7). Il est sans doute possible de lui associer un fond discoïde plat, épais, avec un engobe rouge appliqué à l'intérieur et à l'extérieur (Fig. 4: 8).

### ***Lampes***

De façon générale, les lampes à huile mameloukes sont assez peu nombreuses dans les secteurs fouillés. Deux coupelles glaçurées au plomb, à bec pincé, fond plat ou discoïde, tournées dans une pâte argileuse, orange, dure avec de petites inclusions blanches sont les seuls exemplaires trouvés dans ce contexte (Fig. 4: 9). Des lampes de ce type sont également présentes à Baalbek (Kohl 1925: 132, fig. 81); à Hama (Riis, Poulsen 1957: 279–280, fig. 1068); à Tell er-Ras, parmi les vestiges d'un village datés des XIV<sup>e</sup>–XV<sup>e</sup> siècles (Stern 1999: 133, fig. 4, n°54–55); à Abû Gôsh; à Bet Shean, deuxième moitié XIII<sup>e</sup> siècle–XIV<sup>e</sup> (Hadad 1999: 208, 220, fig. 5: 22, 23); à Fostat, où elles sont datées entre le XIII<sup>e</sup> et le XV<sup>e</sup> siècle (Kubiak 1970: 16); à Tripoli, fin XIII<sup>e</sup>–XIV<sup>e</sup> siècle (Salame-Sarkis 1980: 187–191, fig. 31: 1–4, pl. LIX); à Giv'at Yasaf, où elles sont attribuées aux XIV<sup>e</sup>–XV<sup>e</sup> siècles (Stern 1999: 133, fig. 4: 54, 55); à Hornat Manot, dans les niveaux mamelouks des XIV<sup>e</sup>–XV<sup>e</sup> siècles (Stern



2001: 290, 291, fig. 12: 2).

## 2. Céramiques à pâte argileuse claire

### *Coupes à usage spécifique*

Une série de coupes à panse tronconique a été tournée dans une argile blanche kaolinitique, fine et dure ou dans une argile calcaire, rosée et truffée de dégraissants végétaux (Fig. 4: 10). La surface, après cuisson, rugueuse et irrégulière, en fait des récipients peu adaptés pour la cuisine. La forte épaisseur des parois et la standardisation des formes peu élaborées, ainsi que l'aspect grossier, conduisent à penser que ces coupes étaient employées dans le cadre d'une activité artisanale impossible à déterminer en l'absence de traces d'usage. Une quantité importante de ces vases, trente huit individus, a été retrouvée dans cet assemblage mais d'autres contextes de découvertes à la citadelle confirment que cette céramique était en usage au XV<sup>e</sup> siècle.

### « Gourde de pèlerin »

Ces grosses flasques, à pâte calcaire claire, tournées et moulées, sont une constante des niveaux ayyoubides et mamelouks au Proche-Orient. Dans le comblement de la courtine, un seul exemplaire a été identifié. Cette gourde à col renflé, lèvre droite, a deux anses plates attachées à l'épaule (Fig. 4: 11) provient, peut-être, du quartier de Sâlihiyye où un centre de production a été repéré. L'emplacement de cette officine correspondrait à l'ancien *mahallat al-Fawâhîr* ou « quartier des potiers » situé sur le versant du Qâsiyûn (Sauvaget 1932: 1–8).

### *Gargoulettes à filtre*

Les fines gargoulettes à pâte calcaire, beige ou verdâtre, poreuse et dont l'embouchure est fermée par un filtre simplement percé de trous ou parfois orné d'une fontaine (Fig. 4: 16) sont très abondantes dans les fouilles de la citadelle (298 NMI). Dans le contexte 7.2, elles représentent 83% des poteries à pâte claire. Sur les panses et sur les cols cylindrique ou en forme de tulipe (Fig. 4: 12, 13), des décors calligraphiques, géométriques, végétaux ou en écailles, sont finement incisés. Les anses les plus caractéristiques sont des anses rubanées, à poucier cylindrique ou pyramidal, ornées d'une sorte de ruban ondulé en relief et les bases annulaires sont évasées (Fig. 4: 14, 15). Ces gargoulettes à parois fines et aux décors variés apparaissent, à la citadelle, dès la fin de l'époque ayyoubide, dans un niveau antérieur à 1260, et se maintiennent durant toute la période mamelouke. Elles sont aussi bien attestées sur d'autres sites du Bilâd al-Châm. À Burj al-Ahmar, les vases à filtre de ce type apparaissent dans des niveaux datés entre 1265 et 1390 (Pringle 1986: 145, fig. 48/30, 31). À Acre, des fragments de gargoulettes à pâte verdâtre semblent correspondre aux exemples damascènes, ils sont datés de la fin du XIII<sup>e</sup> siècle mais sont antérieurs à 1291 (Stern 1997: 40, fig. 4: 19–21). Enfin, dans les fouilles du *jardin arménien* à Jérusalem, cette catégorie d'objets est présente dans des niveaux datés de 1375–1400 (Tushingham 1985: 149, fig. 43: 1–8).

## II. Pour le service et la table

La vaisselle de table et de service, à pâte argileuse rouge, glaçurée au plomb, est la céramique fine la plus fréquemment attestée parmi les découvertes de ce niveau (89% des découvertes). Les coupes et les coupelles, simplement couvertes d'une couche de glaçure colorée sur engobe, dominent en nombre mais d'autres traitements de surface comme la peinture à l'engobe, l'incision, le champlévé ont été utilisés pour décorer cette céramique. Aucun fragment peint à l'engobe n'a été découvert dans ce contexte. Il est difficile de déterminer avec précision les lieux de fabrication de ces objets, sans doute réalisés dans plusieurs ateliers en Syrie, au Liban, en Jordanie et en Palestine. Cependant une partie de la vaisselle glaçurée au plomb, trouvée à la citadelle, a été produite dans un seul et

même atelier comme en témoignent des séries de coupes aux formes identiques mais de traitements de surface différents. Les découvertes de Damas militent en faveur d'une production locale, dès la fin du XIII<sup>e</sup> siècle, et qui se serait poursuivie jusqu'à la fin de la période mamelouke. Pour sa part, la vaisselle à pâte siliceuse couverte d'une glaçure alcaline est très faiblement représentée dans ce niveau.

Rapport entre les principales catégories de vaisselle de table et de service			
Catégorie	NMI		Informes
Pâte argileuse et glaçure plombifère	717	89%	1714
Pâte siliceuse et glaçure alcaline	69	9%	2019
Productions importées	13	2%	6
Vaisselle à pâte argileuse et glaçure plombifère			
Catégorie	NMI		Informes
Glaçure monochrome sur engobe	397	55%	806
<i>Reserved Slip Painted Ware</i>	122	17%	333
<i>Green Splashed Ware</i>	49	7%	145
Décor incisé	41	6%	120
<i>Gouged Ware</i>	105	14%	310
Moulée	3	1%	/
Total	717		1714
Vaisselle à pâte siliceuse et glaçure alcaline			
Catégorie	NMI		Informes
Glaçure monochrome, translucide ou opaque	17	25%	413
Imitations de céladons chinois	9	13%	265
Peinture en noir sous glaçure bleu turquoise	11	16%	33
Peinture en bleu et noir sous glaçure incolore	12	17%	850
Peinture en bleu sous glaçure incolore	17	25%	434
Peinture polychrome sous glaçure incolore	3	4%	24
Total	69		2019

## 1. Vaisselle à pâte argileuse rouge et glaçure plombifère

### *Glaçure plombifère monochrome sur engobe*

Plus de la moitié de la vaisselle de ce comblement est simplement couverte d'une glaçure plombifère monochrome brillante, de couleur verte et plus rarement jaune, appliquée sur une couche d'engobe blanc ou rose. La paroi externe est partiellement couverte d'engobe et de glaçure. La pâte est orange vif, fine et dure, avec parfois de petites inclusions blanches.

*Forme 1* (Fig. 5: 1): coupe et coupelle peu profonde; lèvres épaissies à l'intérieur et à l'extérieur; panse hémisphérique parfois à carène haute; base annulaire assez plate. Le diamètre à l'ouverture est compris entre 11 et 19 cm. Pâte orange vif, fine et dure. Cette forme est attestée à Yoqne'am (Ben-Tor, Avissar, Portugali 1996: 99, fig. XIII.36: 2, 4, 8).

*Forme 2* (Fig. 5: 2): coupelle peu profonde; lèvres à marli oblique souvent incurvé; panse à carène haute. Le diamètre à l'ouverture est compris entre 14 et 18 cm. Pâte orange, dure et fine. Ce type est illustré par les découvertes de Yoqne'am faites dans des niveaux du XIV<sup>e</sup> siècle (Ben-Tor, Portugali, Avissar 1979: 74, fig. 5: 1); de Pella, dans les contextes des XIV<sup>e</sup>–XV<sup>e</sup> siècles (Smith 1973: pl. 58: 948, 51, pl. 72: 999, 964, 967, 843, 973); et de Tripoli (Salame-Sarkis 1980: 187, fig. 31: 10, 11).

*Forme 3* (Fig. 5: 3): coupe peu profonde; lèvres verticale, épaissies à l'intérieur; panse à carène haute, rectiligne. Le diamètre à l'ouverture est compris entre 22 et 24 cm. Pâte orange, fine. Les niveaux

datés de la fin du XIV<sup>e</sup> siècle à Burj al-Ahmar en contenaient également (Pringle 1986: 148, fig. 49: 50).

*Forme 4* (Fig. 5: 4): coupe et coupelle profonde; lèvre légèrement épaissie à l'intérieur et à l'extérieur; panse hémisphérique; base annulaire évasée. Le diamètre à l'ouverture est compris entre 15 et 23 cm. Pâte orange, fine, avec de petites inclusions calcaires.

### ***Green Splashed Ware***

Cette catégorie, faiblement représentée par des coupes engobées de formes variées — à carène haute, à lèvre épaissie à l'intérieur, à marli oblique, à lèvre éversée (Fig. 5: 5 et 6) — a pour caractéristique un décor de coulures de pigments verts appliqués sous une glaçure plombifère jaune pâle. La pâte fine est orange clair. D'un point de vue morphologique, ce groupe s'apparente aux vases simplement glaçurés et aux *Reserved Slip Painted Wares*. Les *Green Splashed Wares* sont relativement fréquentes sur les sites du Proche-Orient comme en témoignent les découvertes de Tell Jezreel (Grey 1994: 60) et de Césarée (Brosh 1986: 69, fig. 216–19, pl. VI:1a, b). À Burj al-Ahmar, on les rencontre dans des niveaux datés entre 1191 et 1265, de 1265 et de 1390 (Pringle 1986: 149, fig. 49: 58–62), à Acre dans des contextes du XIII<sup>e</sup> siècle (Pringle 1997: 141, fig. 9: 37) et à Yoqne'am dans des niveaux du XIV<sup>e</sup> siècle (Ben-Tor, Avissar, Portugali 1996: 102, fig. XIII.42).

### ***Décor incisé***

La vaisselle de table incisée sur engobe est peu représentée (6%). Les éléments ornementaux sont des cercles concentriques qui se développent sur toute la surface interne de l'objet et des représentations végétales stylisées — des feuillages ou des pétales disposés en bandeaux (Fig. 5: 7).

### ***Reserved Slip Painted Ware***

Les coupes et les coupelles de *Reserved Slip Painted Ware* sont décorées de grosses coulures irrégulières et d'aplats d'engobe blanc qui ne couvrent que très partiellement la surface interne créant ainsi un contraste coloré entre les zones engobées et la pâte laissée nue. Une glaçure plombifère brillante, le plus souvent jaune pâle mais parfois vert émeraude, recouvre l'intérieur et le bord à l'extérieur. Elle est généralement rehaussée de taches vertes translucides. Des glaçures vertes et jaunes sont quelquefois associées sur un même vase. Cette catégorie représente 17% des céramiques à glaçures plombifères trouvées dans la zone 7.2. Ailleurs au Bilâd al-Châm, la *Reserved Slip Painted Ware* apparaît: à Burj al-Ahmar, autour de 1265 (Pringle 1986: 149); à Giv'at Yasaf, où elle est datée des XIV<sup>e</sup>–XV<sup>e</sup> siècles (Stern 1999: 126, fig. 1: 10, 11); à Tripoli (Salame-Sarkis 1980: 176, pl. LIV, LVI) et à Yoqne'am, où elle est attestée dans les niveaux de la fin XIII<sup>e</sup>–XIV<sup>e</sup> siècle (Ben-Tor, Avissar, Portugali 1996: 96, 98, fig. XIII.34).

*Forme 1* (Fig. 5: 8): coupelle peu profonde; lèvre à épaississement interne; panse évasée assez plate; base annulaire très plate. Le diamètre à l'ouverture est compris entre 16 et 22 cm. Pâte orange avec des petites inclusions blanches ou orange vif, très fine.

*Forme 2* (Fig. 5: 9): coupe et coupelle peu profonde; lèvre à marli à gorge; panse évasée, assez plate; base annulaire plate. Le diamètre à l'ouverture est compris entre 21 et 28 cm. Pâte orange vif, dure et très fine.

### ***Gouged Ware***

Dans le contexte 7.2, les grands plats et autres coupes, dont le décor est arraché à la gouge à travers une couche d'engobe, représentent les deux tiers des découvertes de ce type à la citadelle. Des éléments géométriques sont diversement combinés dans des bandeaux ou organisés en décor couvrant, tandis que les représentations animales et les fleurons végétaux sont plus rares. La glaçure brillante, jaune pâle ou jaune d'or, est souvent rehaussée de coulures de pigments colorés verts, mais elle

peut être monochrome, jaune ou vert émeraude. La pâte orange est fine. De simples coupelles à panse hémisphérique, dont le diamètre à l'ouverture est compris entre 16 et 24 cm, côtoient des coupes peu profonde à marli et de grands plats à panse carénée montés sur une base annulaire évasée avec un anneau de pose à gorge (Fig. 5: 10). Le diamètre à l'ouverture est compris entre 26 et 37 cm. À la citadelle, cette production, a été mise au jour dans des contextes de la fin du XIII<sup>e</sup> jusqu'au XV<sup>e</sup> siècle. Cette catégorie de céramique champlevée est très répandue dans tout le Bilâd al-Châm. Elle est présente à Tell Jezreel (Grey 1994: 59) et à Beyrouth dans des niveaux de la fin XIII<sup>e</sup>–XIV<sup>e</sup> siècle (El-Masri 1997–1998: 109, fig. 11). Elle apparaît aussi à Kerak (Mason, Milwright 1998: 178, fig. 3); à Tall Dair 'Allah, dans des contextes de la fin du XIII<sup>e</sup> siècle (Franken, Kalsbeek 1975: 139–140, fig. 38: 23, 27, 28) et à Jérash dans des niveaux ayyoubido-mamelouks (Tholbecq 1997–1998: 174–175: 80, 82). On la trouve dans les niveaux d'abandon croisés du château de Beauvoir et dans des contextes du XIII<sup>e</sup> siècle de Capernaum (Loffreda 1982: 420, fig. 9: 2, 4) et de Nazareth (Bagatti 1971, 24, fig. 19: 5–8); à Sainte-Marie-du-Carmel (Pringle 1984 (a): 105–107, fig. 8: 64, 69–71) et, à Giv'at Yasaf, les fouilles ont livré des coupes datées des XIV<sup>e</sup>–XV<sup>e</sup> siècles (Stern 1999: 126, fig. 1: 6–9). Sur le Mont Pèlerin et à St Elie de Bqufa, près de Tripoli, elle est attestée à la fin XIII<sup>e</sup>–XIV<sup>e</sup> siècle (Salame-Sarkis 1980, 175–178, pl. LII, 2).

### ***Décor moulé sous glaçure plombifère***

Ces coupelles à parois fines, ornées, à l'extérieur, d'un décor moulé, calligraphique ou géométrique, sont tournées dans une pâte bien épurée avec de fines inclusions de sable, dure, cuisant rose, couverte, à l'intérieur comme à l'extérieur, d'un engobe blanc et d'une glaçure plombifère très brillante, vert émeraude, jaune d'or ou aubergine. À Damas, ces vases sont typiques des assemblages de la fin XIII<sup>e</sup> et du XIV<sup>e</sup> siècle et une seule coupelle a été trouvée dans le comblement de la courtine (Fig. 5: 11). Cette céramique typiquement mamelouke est surtout présente au sud du Bilâd al-Châm, sur des sites urbains et ruraux (Milwright 2003: 91–101). Elle n'apparaît pas dans les villes côtières et les quantités mises au jour sont toujours faibles. Le lieu de fabrication de ces objets pourrait être Jérusalem où des vases moulés glaçurés sont apparus en grand nombre à proximité d'un four, localisé dans le quartier juif de la vieille ville. Une coupelle sur piédouche apparaît parmi le matériel de la citadelle de Hama (Riis, Poulsen 1957: 130, fig. 398) et divers fragments ont été trouvés dans les fouilles de la citadelle d'Alep. Cette catégorie de vaisselle est aussi attestée à Giva'at Dani dans la vallée d'Ayalon (Lazar 1999: 129, fig. 2: 9); à Jérusalem, à la Porte de Damas, fin du XIII<sup>e</sup> siècle (Pringle 1984 (b): 38, fig. 3: 5, 7, 9) et dans la fouille du *jardin arménien* dans les niveaux datés de 1375–1400 (Tushingham 1985: 149, fig. 39: 12, fig. 41: 31, 36, 41, fig. 44: 13); à Yoqne'am (Ben-Tor, Avissar, Portugali 1996: 102, pl. XIII.26); à Kerak, dans des niveaux datés des XIII<sup>e</sup>–XIV<sup>e</sup> siècles (Masson, Milwright 1998: 178, fig. 3: 13–15). Des tessons de coupes de mêmes formes ont également été mis au jour à Iznik en Anatolie (Özkul Findıncı 2001: 161, fot. 162–163).

## **2. Vaisselle à pâte siliceuse et glaçure alcaline**

### ***Glaçure alcaline monochrome translucide ou opaque***

Divers types de coupes et des pots de réserve (Fig. 6. 1) fabriqués dans une pâte siliceuse, beige ou jaunâtre, tendre, sont recouverts, à l'intérieur et à l'extérieur, d'une couche de glaçure alcaline, incolore translucide ou colorée en vert pâle translucide ou bleu turquoise opaque. Cette catégorie représente 25% des céramiques à glaçure alcaline de ce niveau.

### ***Imitations de céladons chinois à glaçure alcaline verte, translucide ou opaque***

Le succès des importations de céladons chinois au Moyen-Orient fut tel qu'il a généré la création de nombreuses imitations en Egypte et au Bilâd al-Châm. Les artisans ont tenté de s'approcher au plus près des modèles originaux en copiant les formes, la couleur de la couverte et parfois les décors



mais ils ne sont parvenus que très rarement à un résultat satisfaisant. Les imitations de céladons trouvées à Damas sont réalisées avec une pâte siliceuse, rose et dure ou beige et tendre. Ces pièces rares se rapprochent des originaux chinois par: les formes, comme les coupelles à bordure lobée en accolade (Fig. 6: 1), les panses godronnées (Fig. 6: 3) et les coupes fines aux lèvres éversées; les décors (Fig. 6: 1); les tonalités des couvertes. Mais les glaçures alcalines syriennes, colorées en vert céladon et vert jade, parfois translucides, sont épaisses. Bien que dans les publications, il soit rarement fait mention de ce type d'objets, on en recense un exemplaire à Tripoli (Salame-Sarkis 1980: 225–226, pl. LXX) et, à Burj al-Ahmar, un grand plat à bord lobé en accolade et glaçure gris-bleu, identifié comme une imitation de céladon, apparaît dans les niveaux datés entre 1350 et 1390 (Pringle 1986: 150, fig. 51: 77). À Kerak, quelques fragments sont considérés comme des importations de Damas (Masson, Milwright 1998: 178, 187, fig. 3).

#### *Peinture en noir sous glaçure alcaline bleu turquoise*

Les quelques exemplaires peints en noir sous glaçure bleue, mis au jour dans la zone 7.2, sont des coupes à panse hémisphérique (Fig. 6: 6) ou des petits pots à lèvre éversée et panse globulaire ou cylindrique (Fig. 6: 7). Des branches ondulantes à longues feuilles, des tiges et des vrilles dites « herbes aquatiques » ou « feuilles de saule », qui se développent sur la panse, à l'intérieur comme à l'extérieur (Fig. 6: 6), s'apparentent à certains décors des productions de Kashan, du début du XIII<sup>e</sup> siècle. Des surcuits, au décor végétal de même style, conservés au Musée de l'Université américaine de Beyrouth, ont été trouvés à Bâb Charqî (Carswell 1973: 23, pl. 7), il est donc envisageable que ces vases soient les représentants d'une production damascène.

#### *Peinture en noir et bleu sous glaçure alcaline incolore*

Des coupes à panse carénée et lèvre à marli (Fig. 6: 4) ou à panse hémisphérique et des jarres à lèvre épaissie (Fig. 6: 5) sont diversement décorées de motifs géométriques ou végétaux stylisés tracés en noir et colorés en bleu. Ces objets ont sans doute été réalisés dans des officines de la ville comme le prouvent des ratés de cuisson trouvés dans un vieux cimetière de la banlieue de Damas et conservés au *Metropolitan Museum of Art* de New York. L'un de ces surcuits est d'ailleurs semblable à une des coupes du comblement (Fig. 6: 4). M. Jenkins date cette catégorie de vaisselle de la première moitié du XV<sup>e</sup> siècle (Jenkins 1984 :105) tandis qu'à Yoqne'am, elle est datée de la deuxième moitié XIII<sup>e</sup>-XIV<sup>e</sup> siècle et attribuée aux ateliers de Damas (Ben-Tor, Avissar, Portugali 1996: 116). Enfin à Sainte-Marie-du-Carmel et à Burj al-Ahmar, des vases semblables sont plutôt attribués au milieu du XIV<sup>e</sup> siècle (Pringle 1984 (a): 107, fig. 9: 74–76; Pringle 1986: 153, fig. 51: 82–86).

#### *Peinture en bleu sous glaçure alcaline incolore*

Cette catégorie d'objets — 25% de la vaisselle à glaçure alcaline du contexte — peinte au bleu de cobalt sous une glaçure alcaline incolore puise son ornementation dans le monde des porcelaines « bleu et blanc » de Chine. Il est généralement admis que cette production a vu le jour vers à la fin du XIV<sup>e</sup> siècle, en réponse aux importations massives au Proche et au Moyen-Orient de porcelaines d'époque Yuan (1260–1367) et du début de la période Ming (1368–1644), et qu'elle s'est ensuite développée au XV<sup>e</sup> siècle. À la citadelle, les découvertes en stratigraphie confirment cette chronologie et les plats au décor sinisant sont plus nombreux dans les niveaux du XV<sup>e</sup> siècle. Parmi les décors caractéristiques, on trouve des griffons aux ailes déployées, des rubans volants, des champignons sacrés *lingzhi* (Fig. 6: 9), des nuages spiralés et des méandres; des médaillons flammés, des pivoines, des fleurs de lotus en bouquets (Fig. 6: 8). Les découvertes de Burj al-Ahmar et de Kerak sont attribuées tantôt à la fin du XIV<sup>e</sup> siècle tantôt au XV<sup>e</sup> (Pringle 1986: 153, fig. 51: 81; Brown 1989: 286, 300, fig. 5: 5).

***Peinture polychrome sous glaçure alcaline incolore***

L'importance de cette catégorie pour l'histoire des productions de vaisselle damascènes est inversement proportionnelle au nombre de vases mis au jour à la citadelle, soit dix individus seulement dont trois dans la zone 7.2. Ces céramiques constituent cependant un maillon essentiel dans le développement des fabrications locales aux époques mamelouke et ottomane. Ce qui caractérise ces objets, peints polychromes sous une glaçure alcaline incolore, c'est l'introduction, au sein de la gamme chromatique habituelle constituée de noir et de bleu, d'oxydes de chrome cuisant vert pré. À Damas, ces pigments verts constituent une sorte de marque de fabrique des productions locales de vaisselle et de carreaux à l'époque ottomane. Mais les découvertes de la citadelle révèlent que ces oxydes de chrome étaient employés sur des vases dont le décor est sans ambiguïté de style mamelouk comme cette coupe profonde à panse hémisphérique ornée d'un décor couvrant constitué de fleurs de lotus insérées dans une sorte de filet (Fig. 6: 10).

***Faïence de Valence***

Dans les fouilles de la citadelle, quatre faïences originaires des ateliers de Manises et Paterna en Espagne, ont été mises au jour et deux d'entre elles proviennent du comblement de la courtine. Elles se caractérisent par un décor peint au lustre métallique doré, cuivreux ou jaune miel, souvent associé à du bleu de cobalt sur une glaçure stannifère (Fig. 6: 11 et 12). Cette vaisselle était en usage à la citadelle de Jérusalem (Johns 1950: 189, pl. LXIII: 2); à Nazareth (Bagatti 1971: 5–32, fig. 19); à la citadelle de Hama (Riis, Poulsen 1957: 133, fig. 403, 405, 406), à Baalbeck (Sarre 1925: 133: 87, 89) et à la citadelle d'Alep.

**Assemblage du XVIII<sup>e</sup> siècle**

La fouille de la Tour 4, menée par la Mission nationale, a dégagé un escalier qui, entre le premier et le second étage, a été obturé à l'époque ottomane, plus précisément au cours du XVIII<sup>e</sup> siècle comme le révèlent les poteries qui y ont été découvertes (Fig. 1). Cet ensemble est d'autant plus remarquable qu'il contient une gamme étendue d'objets destinés à la cuisine, au stockage et au service.

Catégorie	NMI		Informes
Céramiques communes (culinaire, de stockage, vases à eau et à usages spécifiques)	251	68%	413
Céramiques fines (vaisselle de service et de table)	116	32%	123
Total	367		536

Les marmites, absentes dans ce lot tout comme elles le sont aussi dans les autres niveaux ottomans, ont, selon toute vraisemblance, été remplacées par des chaudrons. Des jattes, des bassins et des jarres sont tantôt glaçurés tantôt peints à l'engobe. Comme dans la plupart des contextes ottomans, il y avait, dans la Tour 4, quelques gargoulettes à pâte grise ainsi que des fragments de chandeliers. Ces céramiques communes représentent les deux tiers des découvertes de cet assemblage. La vaisselle de table y est faiblement représentée. Pour cette époque, les coupes à pâte siliceuse et glaçure alcaline l'emportent à peine sur celles fabriquées en pâte argileuse et glaçurées au plomb. Quant aux productions de Grèce, de Turquie et de Chine, retrouvées dans cette partie de l'escalier, elles datent l'assemblage.

**I. Pour la cuisine, le service et le stockage**

Les céramiques communes peuvent être divisées en deux grandes catégories du point de vue de leur

fabrication. Une première série d'objets se caractérise par une pâte rouge, tantôt laissée nue, tantôt glaçurée ou peinte à l'engobe rouge ou noir, tandis qu'une part moins importante a été cuite dans une atmosphère réductrice comme en témoigne la couleur grise ou noire de la pâte.

Céramiques communes			
Catégorie	NMI		Informes
Pâte argileuse rouge sans revêtement	92	37%	204
Pâte argileuse rouge glaçurée	20	8%	4
Pâte argileuse rouge peinte à l'engobe rouge	3	1%	/
Pâte argileuse rouge peinte à l'engobe noir	29	12%	51
Pâte argileuse grise sans revêtement	103	41%	151
Pâte argileuse grise peinte à l'engobe blanc	4	1%	3
Total	251		413

## 1. Céramique à pâte rouge sans revêtement

### *Ecuellen*

À la citadelle, les écuellen à panse côtelée sont caractéristiques des contextes des XVII<sup>e</sup> et XVIII<sup>e</sup> siècles.

*Forme 1* (Fig. 7: 1): écuellen; lèvres en crochet plus ou moins marqué; panse hémisphérique, parfois côtelée; fond lenticulaire ou plat. Le diamètre à l'ouverture est compris entre 15 et 20 cm. Pâte rouge foncé, dure, avec des inclusions blanches ou pâte rosée, un peu savonneuse.

### *Coupes et jattes*

*Forme 1* (Fig. 7: 3): grande coupe; lèvres en bandeau; panse évasée. Pâte rosée avec de petites inclusions noires et blanches.

*Forme 4* (Fig. 7: 4): grande coupe; lèvres rentrantes; panse hémisphérique côtelée. Pâte rouge, friable.

*Forme 6* (Fig. 7: 2): coupelle; lèvres épaissies à l'extérieur; panse évasée. Pâte rosée, un peu savonneuse.

### *Coupelle*

Ces petites coupes à lèvres rentrantes, souvent percées de deux trous, à panse évasée parfois côtelée, sur un fond plat ou une base discoïde plate, sont fabriquées dans une argile orange clair, fine et dure contenant parfois de petites inclusions blanches (Fig. 7: 5).

### *Bassin*

*Forme 3* (Fig. 7: 6): bassin; lèvres rentrantes, en bandeau; panse hémisphérique et fond plat. Pâte orange clair, fine et dure ou pâte rouge foncé, sableuse.

### *Vases à liquide*

*Forme 1* (Fig. 7: 7 et 8): pichet; col évasé ou cylindrique; lèvres éversées, légèrement épaissies à l'extérieur; panse ovoïde; une anse avec arêtes attachée à mi-col et à l'épaule. Pâte poreuse orange, fine et dure.

*Forme 4* (Fig. 7: 9): vase à liquide; long col évasé; lèvres rentrantes; une anse rubanée attachée en haut du col. Pâte poreuse orange, fine et dure.

### *Jarre*

*Forme 9* (Fig. 7: 10): très grosse jarre; col cylindrique ou évasé; lèvres droites, épaissies à l'extérieur. Pâte orange, fine et très dure avec parfois des inclusions blanches.

## 2. Céramiques communes à pâte rouge, glaçurées

### *Jatte*

*Forme 5* (Fig. 8: 1): grande jatte; lèvre éversée, épaissie à l'intérieur et à l'extérieur, repoussée au doigt; panse hémisphérique. À l'intérieur et à l'extérieur, la glaçure est appliquée directement sur la pâte sous la forme de coulures. Pâte rosée, fine et dure.

### *Jarres*

*Forme 2* (Fig. 8: 2): jarre; col cylindrique avec taches de glaçure kaki; lèvre rentrante, épaissie à l'intérieur, plate. Pâte rosée, fine et dure.

*Forme 6* (Fig. 8: 5): grosse jarre; col court avec des taches de glaçure kaki; lèvre rentrante, épaissie à l'extérieur. Pâte orange, fine et dure.

### *Bassins*

*Forme 1* (Fig. 8: 3 et 4): bassin dont le diamètre à l'ouverture est compris entre 25 et 62 cm; lèvre rentrante, en bandeau; panse hémisphérique. À l'intérieur, la glaçure est appliquée directement sur la pâte — effet brun ou kaki — en coulures seules, quelques coulures parfois à l'extérieur. Le bassin 4 est orné de lignes ondulées, tracées au peigne. Pâte orange, fine et dure.

## 3. Céramiques communes à pâte rouge, peintes à l'engobe rouge

### *Vases à liquide*

*Forme 1* (Fig. 8: 6): vase à liquide; long col évasé; lèvre rentrante; une anse en boudin à arêtes. À l'extérieur, on trouve des coulures d'engobe rouge et des traces de glaçure verte ou des bandes rouges peintes sur un engobe orange. Le diamètre à l'ouverture est compris entre 6 et 9 cm. Pâte rosée, fine.

*Forme 7* (Fig. 8: 7): jarre; col large, évasé; lèvre rentrante, épaissie à l'intérieur. Le col est orné de lignes tracées au peigne sous un engobe rouge brunâtre. Pâte rosée, dure.

## 4. Céramiques à pâte argileuse rouge, engobées noires

Ces objets ont été cuits dans une atmosphère oxydante puis la pâte argileuse rosée, orange ou parfois brunâtre, a été couverte, à l'extérieur, d'un engobe noir.

### *Jarres*

*Forme 1* (Fig. 9: 1): jarre; long col évasé, côtelé dans sa partie supérieure et orné, en son milieu, d'une collerette ondulée; lèvre éversée; une anse boudin est attachée à mi-col et à l'épaule. Un engobe noir couvre tout l'extérieur. Pâte brunâtre, fine avec des inclusions blanches.

*Forme 2* (Fig. 9: 2): jarre; col évasé qui se termine par deux bagues superposées; lèvre éversée; une anse assez plate attachée à mi-col. Sur l'épaule, quelques lignes sont tracées au peigne. Un engobe noir couvre tout l'extérieur. Pâte brunâtre, fine avec des inclusions blanches.

### *Bassins*

*Forme 2* (Fig. 9: 3): bassin à lèvre rentrante, en bandeau; panse hémisphérique. Un engobe noir est appliqué à l'extérieur. Pâte rosée, dure.

## 5. Vases à eau à pâte rouge, engobés blancs

Ce type d'objet est très rare dans la fouille. Il s'agit uniquement de vases à liquide dont la surface extérieure est couverte d'un engobe blanc qui sert parfois de fond à des éléments peints à l'aide de pigments rouges et dorés.



*Forme 4* (Fig. 9: 4): vase à liquide; col cylindrique. La base du col est soulignée par une bague. Sur un fond d'engobe blanc, des hachures croisées et des pétales sont peints à l'aide de pigments rouges et dorés. Pâte rosée, fine et dure.

*Forme 5* (Fig. 9: 5): vase à liquide; col large découpé de deux rangées de triangles, à la base, une bague rapportée, découpée; une anse attachée à mi-col. Toute la surface extérieure est couverte d'engobe blanc. Pâte dure, brunâtre, assez grossière avec des inclusions noires.

## 6. Chandelier

D'un point de vue morphologique, les chandeliers de terre, indistinctement cuits en atmosphère oxydante ou réductrice, reprennent les formes de leurs homologues de métal, c'est-à-dire un socle tronconique ou évasé surmonté d'une collerette de laquelle s'échappe une tige creuse, souvent baguée, terminée en bulbe aux lèvres éversées. À la citadelle, aux côtés de ces objets d'une grande sobriété, quelques bougeoirs se distinguent dont celui découvert dans la Tour 4. Son socle est découpé — un bandeau de triangles placés tête-bêche — et couvert d'engobe blanc appliqué à la brosse sur une pâte rouge foncé, sableuse, avec de nombreuses inclusions noires et blanches (Fig. 9: 6).

## 7. Céramiques à pâte grise

### *Vases à filtre*

Les vases à filtre à parois fines, cuits en atmosphère réductrice, représentent 86% du total des céramiques à pâte grise sans revêtement trouvés dans les niveaux des XVIII<sup>e</sup> et XIX<sup>e</sup> siècle de la citadelle mais ils sont très faiblement représentés dans le comblement de la Tour 4. Ces gargoulettes à long col cylindrique avec un filtre découpé, une panse globulaire sur pied annulaire, sont simplement ornées de lignes tracées au peigne. Les filtres sont grossièrement découpés en fleur ou en virgules rayonnantes, parfois surmontés d'une fontaine. Ces cruches sont fabriquées dans une argile poreuse laissée nue pour rafraîchir l'eau destinée à la boisson. Probablement réalisé dans les ateliers de Damas, ce type d'objet est aussi fabriqué en Egypte et en Tunisie au XVIII<sup>e</sup> et au début du XX<sup>e</sup> siècle (Raban 1971: 146–155; Amouric, Richez, Vallauri 1999: 173–175, fig. 338) et on les retrouve dans les fouilles ouvertes à Chypre et en Crète (von Wartburg 2001: 382; Hahn 1997: 189–190). Au Caire, selon E.W. Lane, un voyageur anglais du XIX<sup>e</sup> siècle, ces cruches dénommées *kulleh* lorsqu'elles ont une embouchure large et *dorak* lorsque l'embouchure est étroite « sont faites d'une terre grise et poreuse, qui rafraîchit l'eau délicieusement, par évaporation et, elles sont généralement placées dans un courant d'air. L'intérieur est souvent noirci avec la fumée d'un bois résineux et parfumé ensuite au mastic » (Lane 1860: 147–148). Ces vases à eau, fermés par un bouchon d'argent, de cuivre, d'étain, de bois ou de palmes tressées sont placées sur un plateau de cuivre étamé qui recueille l'eau qui exsude de la terre.

*Forme 1* (Fig. 9: 7 et 8): vase à filtre; large col cylindrique; lèvre rentrante; une anse à arête est attachée à mi-col et à l'épaule; panse globulaire. Le filtre est fixé en bas du col, il peut être orné d'une fontaine, il est découpé en fleur ou en virgules rayonnantes. Le col et la partie supérieure de la panse sont ornés de lignes verticales, horizontales ou inclinées tracées au peigne. Pâte grise, fine et dure, poreuse. Diverses bases peuvent être associées à ces objets: des bases annulaires basses très évasées ou parfois très hautes et des bases annulaires droites et basses.

### *Jarres*

*Forme 1* (Fig. 9: 9): jarre; col évasé; lèvre rentrante; panse ovoïde; une anse rubanée attachée à mi-col et à l'épaule. Pâte grise, fine.

*Forme 4* (Fig. 9: 10): jarre; col évasé; lèvre épaissie à l'extérieur, plate, et soulignée par une bague; une anse attachée à mi-col. Pâte gris-jaunâtre, fine, dure, poreuse, surface savonneuse.

*Forme 1* (Fig. 10: 1): jarre; long col tronconique; lèvre rentrante en crochet; deux anses en boudin

attachées à mi-col; panse ovoïde. Pâte gris-jaunâtre, dense, avec de nombreuses inclusions noires.

## II. Vaisselle de table glaçurée

Les productions de vaisselle de table et de service, à pâte argileuse rouge et glaçure plombifère sur engobe, se maintiennent à l'époque ottomane et représentent 32% des céramiques fines utilisées à la citadelle aux XVII<sup>e</sup>–XVIII<sup>e</sup> siècles et 40% des poteries glaçurées de la Tour 4. Elles se distinguent des fabrications mameloukes par un engobe beige, appliqué en jus pauvre, et par une glaçure de qualité médiocre le plus souvent teintée en vert. Les coupes ottomanes sont de grande taille et l'anneau de pose des bases annulaires est généralement repoussé au doigt (Fig. 10: 2, 3). La variété des techniques décoratives est limitée à l'application d'une simple glaçure monochrome ou à quelques traits de pinceaux. Pour sa part, la production de vaisselle à pâte siliceuse tendre se poursuit à l'époque ottomane, sans atteindre toutefois le volume des fabrications de la période mamelouke. Elle s'interrompt à la fin du XVIII<sup>e</sup> siècle. La céramique à pâte siliceuse représente 49% du total de la vaisselle fine découverte dans la Tour 4. On ne remarque aucun changement ni aucune innovation dans les techniques ornementales. Les décors sont tantôt tracés en noir sous une glaçure alcaline bleu turquoise, tantôt peints en bleu ou en bleu et noir sous une glaçure alcaline incolore ou encore peints en polychromie dans une gamme de noir, de bleu et de vert, des techniques et des coloris

<b>Rapport entre les principales catégories de vaisselle de table et de service</b>			
Catégorie	NMI		Informes
Pâte argileuse et glaçure plombifère ou à l'antimoine	46	40%	27
Pâte siliceuse et glaçure alcaline	57	49%	95
Productions importées	13	11%	1
Total	116		123
<b>Vaisselle à pâte argileuse, glaçurée</b>			
Catégorie	NMI		Informes
Glaçure plombifère monochrome	31	67%	25
Glaçure à l'antimoine	15	33%	2
Total	46		27
<b>Vaisselle à pâte siliceuse et glaçure alcaline</b>			
Catégorie	NMI		Informes
Glaçure monochrome	5		10
Imitations de céramiques chinoises	14		23
Imitations de céramiques d'Iznik	2		/
Peinture en noir sous glaçure bleu de cobalt	9		6
Peinture en bleu et noir sous glaçure incolore	6		9
Peinture en bleu sous glaçure incolore	5		1
Peinture en noir sous glaçure incolore	4		/
Peinture en polychromie sous glaçure incolore	12		46
Total	57		95
<b>Vaisselle importée</b>			
Catégorie	NMI		Informes
Céramique de Kütahya	7		/
Céramique de Çanakkale	1		1
Céramique de Didymotique	4		/
Porcelaine imari de Chine	1		/
Total	13		1

déjà employés par les potiers mamelouks. La nouveauté réside dans l'introduction d'un répertoire ornemental typiquement ottoman qui s'inspire pour une grande part des décors peints sur les carreaux et sur la vaisselle fabriqués dans les ateliers d'Iznik en Anatolie.

### 1. Glaçure monochrome verte sur engobe

Ces coupes de toutes formes et parfois de grande taille (autour de 30 cm de diamètre) ont, pour point commun, l'application, en jus pauvre, sur un engobe beige, d'une glaçure plombifère verte de mauvaise qualité, pleine d'impuretés qui, après cuisson, présente de nombreux picots et une surface granuleuse.

*Forme 1* (Fig. 10: 2): coupelle à carène haute soulignée par un ressaut externe; lèvres légèrement éversées; base annulaire tronconique, l'anneau de pose, à gorge, est repoussé au doigt, effet de feston. Engobe beige et glaçure vert-brun de qualité moyenne appliquée en couche fine à l'intérieur. Le diamètre à l'ouverture est compris entre 15,6 et 18 cm. Pâte orange avec de petites inclusions blanches.

*Forme 5* (Fig. 10: 3): coupe à panse hémisphérique; base annulaire haute, à gorge, l'anneau de pose est repoussé au doigt, effet de feston. Engobe beige appliqué très partiellement à l'intérieur et glaçure marron brillante sur la pâte nue et verte sur l'engobe. Au fond, traces de collage de la base d'un autre vase. Pâte orange, dure avec des inclusions blanches.

### 2. Céramique peinte en vert absinthe sur glaçure jaune

Une glaçure jaune, souvent brillante — tantôt appliquée sur un jus pauvre d'engobe tantôt sur un engobe blanc plus épais — associée à des décors végétaux stylisés peints en vert absinthe caractérise ce groupe. La pâte calcaire est orange clair, elle contient parfois des inclusions noires. Cette céramique est très caractéristique de ce contexte.

*Forme 1* (Fig. 10: 5): coupe à panse hémisphérique. À l'intérieur, l'engobe blanc appliqué en jus pauvre est couvert d'une glaçure jaune sur laquelle un feuillage stylisé et des lignes ondulées sont peints en vert absinthe. Pâte orange avec de grosses inclusions blanches.

*Forme 2* (Fig. 10: 4): coupelle à panse très plate; lèvres épaissies à l'intérieur ou amincies; base annulaire très plate. À l'intérieur, un engobe blanc appliqué en jus pauvre est couvert d'une glaçure jaune canari sur laquelle un feuillage stylisé est peint en vert absinthe. À l'extérieur, la glaçure jaune est très brillante. Le diamètre à l'ouverture est compris entre 15,5 et 20 cm. Pâte orange avec de grosses inclusions blanches.

*Forme 7* (Fig. 10: 6): coupe et coupelle à marli horizontal ou oblique à peine marqué; panse hémisphérique. À l'intérieur et à l'extérieur, un engobe rosé en jus pauvre est couvert d'une glaçure jaune, brillante sur laquelle sont peints, en vert absinthe, une ligne sur le bord ou des feuillages stylisés sur la panse. Le diamètre à l'ouverture est compris entre 15,5 et 28 cm. Pâte rose, dure, avec de petites inclusions blanches.

### 3. Vaisselle à pâte siliceuse et glaçure alcaline

#### *Imitations damascènes des céladons chinois*

Les céladons étaient certainement les productions chinoises les plus appréciées au Proche-Orient entre le XIII<sup>e</sup> et le XV<sup>e</sup> siècle. En témoignent le volume des importations et les nombreuses copies réalisées dans les ateliers de Fostat et de Damas qui rendent compte de la popularité de ces objets auprès d'une clientèle qui ne possédait sans doute pas les revenus suffisants pour acquérir les pièces originales. L'intérêt manifesté pour ces grès à couverte vert jade s'est poursuivi au-delà de l'époque mamelouke. C'est à Ivaz Paşa, vizir de Mehmed I<sup>er</sup> (1413–1421), qu'Aşıkpaşazâde attribue l'introduction de la porcelaine chinoise à la cour ottomane qui y devient familière dès la deuxième moitié du XV<sup>e</sup> siècle (Atasoy, Raby 1990: 88). À leur tour, les potiers ottomans ont tenté de copier ces productions prestigieuses. À Iznik, les fouilles des ateliers, menées dans le centre de la ville,

ont mis au jour de rares fragments de céladons chinois qui ont peut-être servi de modèles à une production locale de copies apparue sous la forme de quelques céramiques frittées à glaçure verte (Aslanapa, Yetkin, Altun 1989: 179; Özkul Fındık 2001: 134: 139, 140). Les fouilles de Saraçhane Camii, quant à elles, ont livré de grands plats bas et de petites coupes à glaçure opacifiée en bleu turquoise ou en vert, réalisés à Iznik à la fin du XVI<sup>e</sup> et au XVII<sup>e</sup> siècle, qui apparaissent comme des substituts bon marché aux céladons chinois (Hayes 1992: 256–258, n°13, 19–21). On trouve par ailleurs confirmation de cette fabrication dans plusieurs textes de la fin du XVI<sup>e</sup> et du début du XVII<sup>e</sup> siècle dans lesquels il est fait mention de grandes quantités de céramique d'Iznik monochrome, blanche, bleue et verte (Raby, Yücel 1983: 45–46). En Iran, au XVII<sup>e</sup> siècle, les potiers safavides ont imité à leur tour les céladons de Chine en réalisant de grands plats peu profonds, à marli chantourné et panse godronnée, le plus souvent couverts d'une glaçure opaque vert jade ou plus rarement bleu turquoise. Le Musée national de Koweït (Watson 2004: 464–465) et le Musée de Topkapı Sarayı en possèdent de très beaux exemplaires. Pour leur part, les imitations de céladons chinois, à pâte siliceuse dure, rose ou beige, trouvées à la citadelle de Damas, apparaissent dans des niveaux datés des XVII<sup>e</sup> et XVIII<sup>e</sup> siècles. À la différence des copies d'époque mamelouke, les formes sont plus lourdes et les glaçures opaques sont très épaisses. Ces vases s'apparentent en de nombreux points aux imitations réalisées en Iran safavide cependant, la découverte d'un raté de cuisson — deux petites coupes collées l'une à l'autre, couverte d'une glaçure translucide vert émeraude, brillante — milite en faveur d'une production damascène, pour la première fois attestée à travers les découvertes de la citadelle. Plusieurs exemplaires de cette production sont apparus dans l'escalier de la Tour 4.

*Forme 1* (Fig. 10: 9): grand plat; lèvres éversées, horizontales; panse hémisphérique soulignée, à l'extérieur, par un anneau au relief; base annulaire tronconique, épaisse.

*Forme 2* (Fig. 10: 8): coupe; marli terminé par un bandeau droit ou incurvé; panse hémisphérique parfois à godrons incisés. La glaçure translucide est vert émeraude brillante ou kaki.

*Forme 4* (Fig. 10: 7): petites coupes; lèvres éversées; panse hémisphérique et base annulaire basse. La glaçure est vert jade, opaque.

### *Imitations damascènes des céramiques d'Iznik*

À propos de la fabrication damascène d'imitations des céramiques d'Iznik, il convient d'emblée d'écarter toute ambiguïté quant aux termes « groupe de Damas » ou « faïence de Damas » qui désignent en fait une partie des productions des ateliers anatoliens caractérisée par d'amples compositions florales naturalistes traitées dans une gamme chromatique comprenant du noir, du bleu de cobalt et turquoise, du violet de manganèse et du vert de chrome à l'aspect vert olive ou vert tilleul (Soustiel 1985: 317, 328–331). Ces objets turcs furent attribués aux ateliers de Damas par les collectionneurs et autres érudits du XIX<sup>e</sup> siècle sur le fait, qu'entre 1870 et 1880, un grand nombre de carreaux importés de Damas avait la même palette colorée et un décor naturaliste à motif floral de style d'Iznik et que certaines pièces remarquables du type « groupe de Damas », aujourd'hui restituées à Iznik, furent achetées par des collectionneurs en Syrie, ce qui ajouta à la confusion. Il fallut attendre 1909 pour qu'une publication conteste cette étiquette de Damas et que le nom d'Iznik soit prononcé pour la première fois relativement à ces objets aux teintes délicates. Ces coupes fleuries peintes en polychromie ont finalement été attribuées aux ateliers d'Iznik et, plus spécialement, à une production datée entre 1540 et 1555. Ce que les collectionneurs ignoraient alors c'est que des imitations de carreaux et de vaisselle d'Iznik avaient effectivement été fabriquées à Damas à l'époque ottomane mais que ces copies ne se limitaient pas aux vases du style de « faïence de Damas » mais s'inspiraient aussi très largement d'autres phases décoratives de la production anatolienne. D'un point de vue technique, les imitations d'Iznik sont réalisées dans une pâte siliceuse, tendre, qui ne peut être confondue avec la pâte des originaux, plus blanche, plus fine et surtout beaucoup plus dure. La glaçure



est moins transparente et le rouge n'a jamais été introduit dans la palette damascène. Le répertoire décoratif, quant à lui, se rattache incontestablement aux thèmes exploités depuis le début du XVI<sup>e</sup> siècle dans l'ensemble de l'Empire ottoman mais il est traité avec une plus grande liberté dans la composition et moins de soin dans le tracé.

Ainsi la tulipe et l'œillet, sans conteste, les deux fleurs les plus représentées sur une grande variété de supports — vaisselle, carreaux de revêtement, tissus, panneaux de bois peint, pièces d'armement — poussent sans entrave sur nombre de vases de Damas dont ceux qui ont été mis au jour dans le comblement de l'escalier de la Tour 4. Elles sont tantôt peintes en noir sous une glaçure bleu de cobalt (Fig. 11: 1) tantôt peintes en bleu et noir et manganèse sous une glaçure incolore (Fig. 11: 2–4) ou dessinées en noir et colorées en pourpre et vert (Fig. 11: 5). Le décor calligraphique, peint en bleu de cobalt et vert tilleul, agrémenté de noir, organisé en cartouches polylobés sur un semis de points et de hachures (Fig. 11: 6), puise également au répertoire turc comme en témoignent les similitudes qui existent avec quelques fragments découverts dans les fouilles des fours à Iznik (Özkul Fındık 2001: 183: 219) ainsi qu'une pièce de la collection Bérard, attribuée à Damas pour le XVII<sup>e</sup> siècle (Soustiel: 1985, 356, n°377), et une chope de Saraçhane Camii, datée du début du XVI<sup>e</sup> siècle (Hayes 1992: 254, pl. 33: 47). On retrouve par ailleurs ce type de cartouches calligraphiés, associés à des palmettes *rumi* organisées en bandeau, sur le bord d'une coupe très proche des pichets d'Iznik de la fin du XVI<sup>e</sup> siècle (Atasoy, Raby 1990: 271, n°602–604).

L'origine et le développement de cette production à Damas sont encore peu connus. De la même façon qu'après la prise de Damas par les Ottomans en 1516, la ville se couvre de bâtiments réalisés dans le style de ceux érigés dans la capitale de l'Empire, une partie de la vaisselle de table damascène sacrifie aux canons décoratifs mis en place par les dessinateurs du palais impérial. S'il existe à l'évidence un lien entre les imitations damascènes et la vaisselle d'Iznik présente à Damas — qui a pu servir de modèles aux potiers — la question est de savoir à quelle période cette entreprise de copies a débuté. En effet, les vases de style d'Iznik, trouvés dans les fouilles de la citadelle, sont caractéristiques des niveaux du XVIII<sup>e</sup> siècle. Il existe donc un décalage chronologique important entre l'apparition probable des importations anatoliennes sur le marché local et la fabrication de leurs imitations. Ceci est d'autant plus troublant qu'il existe à Damas, dès le XVI<sup>e</sup> siècle, une production de carreaux « à la mode » d'Iznik liée au vaste programme architectural entrepris aussitôt après la conquête de la ville. La présence des copies damascènes d'Iznik dans des contextes du XVIII<sup>e</sup> siècle marque peut-être une sorte de renaissance de la mode de la capitale qui se développe un peu plus tardivement dans cette partie de l'Empire. À moins qu'une autre explication soit avancée. La production d'Iznik périclité au cours du XVII<sup>e</sup> siècle (Atasoy, Raby 1990, 273, 288) et, en 1719, sur ordre impérial, une nouvelle manufacture est établie à Istanbul, dans le quartier de Balat à Tekfur Sarayı où, sur les conseils techniques des derniers potiers d'Iznik, sont fabriqués des carreaux de revêtement. D'autres centres, tels que Diyarbakır ou Kütahya, produisent aussi des carreaux « à la manière des ateliers d'Iznik » mais apparemment pas de pièce de forme. Le tableau dressé par J. Soustiel de la fabrication de poterie de style d'Iznik dans l'Empire est sans doute assez juste: « *Plusieurs manufactures disséminées sur le territoire anatolien et au-delà, travaillant relativement de concert sous l'égide du pouvoir, fabriquaient chacune de leur côté des objets assez voisins les uns des autres. Bien entendu, il faut tenir compte des décalages dans le temps, comme des variantes plus ou moins notables dues aux matériaux locaux et à la façon d'exploiter les décors choisis ou imposés.* » (Soustiel 1985: 322). Dans ce contexte, il est vraisemblable que les ateliers damascènes étaient des centres-relais qui faisaient perdurer, au XVIII<sup>e</sup> siècle, sous une forme abâtardie, la fameuse production de vaisselle d'Iznik.

Ces fabrications de vaisselle peinte damascènes semblent avoir été commercialisées dans l'ensemble du Bilâd al-Châm. Elles sont bien représentées parmi le matériel mis au jour dans les fouilles allemandes de la citadelle d'Alep. Leur étude confirmera ou infirmera la datation établie

à Damas. Ces copies d'Iznik ont aussi été identifiées: à Ma'arrat al-Nu'man (Porter, Watson 1987: 204–205, pl. 12, 13); à Beyrouth; à la citadelle de Jérusalem, à Kerak, et à Tal 'Afiq — bien que, pour ces derniers sites, il n'a pas été possible de vérifier la validité des attributions. Elles ont également atteint la capitale de l'Empire comme en attestent le matériel recueilli dans les fouilles de Saraçhane Camii, à Istanbul (Hayes 1992: pl. 39 :2, 5, 8). Des exemplaires de ces productions sont aussi présentes dans divers musées: à l'*Ashmolean Museum* d'Oxford par exemple et au Musée national de Koweït (Milwright 2000: 201, fig. 5; Watson 2004: 444, Cat. T.23) ainsi qu'au Louvre.

### *Autres céramiques peintes*

Sur la base des découvertes de la citadelle, la production de vaisselle fine frittée de Damas paraît s'être presque exclusivement limitée aux imitations de vaisselle de luxe d'Iznik. Quelques vases s'en distinguent toutefois dont ceux mis au jour dans le comblement de l'escalier de la Tour 4. Une jarre peinte en bleu et noir sous une glaçure incolore (Fig. 11: 7) s'apparente à un exemplaire découvert à Saraçhane Camii, dans un niveau de la seconde moitié du XVI<sup>e</sup> siècle, et attribué à Damas (?) (Hayes 1992: 259, pl. 39: 8). Des coupes et des coupelles, à panse hémisphérique, sont ornées de motifs floraux ou d'éléments géométriques peints en noir sous une glaçure bleu turquoise (Fig. 12: 1 et 2).

### **III. Vaisselle importée**

#### *Céramique de Kütahya*

Les *fincan*, fabriqués à Kütahya, en Anatolie centrale au XVIII<sup>e</sup> siècle, employés pour servir le café, ont véritablement inondés les marchés du monde ottoman (Bilgi 2006; François 2007: 293–320). Ces tasses à café sans anse et toujours montées sur une base annulaire cylindrique sont peintes au bleu de cobalt sur fond blanc ou à l'aide d'une palette colorée particulièrement riche constituée d'un jaune citron très lumineux, d'un bleu de cobalt, d'un turquoise de cuivre, d'un vert émeraude de cuivre, d'un violet de manganèse et de rouge — un sable ferrugineux — appliqués sous une glaçure alcalino-plombifère transparente (Fig. 12: 3).

#### *Céramique de Çanakkale*

De facture plus modeste, la céramique fabriquée au XVIII<sup>e</sup> siècle à Çanakkale, une ville située sur la rive asiatique des Dardanelles (Öney 1976 (a): 173–181; Öney 1976 (b): 151; Soustiel 2000: 173–181), est représentée dans cet assemblage par un couvercle au décor de résille fleurie organisée autour d'une rosace centrale traitée en orange et bleu sous une glaçure incolore (Fig. 12: 4). Au Proche-Orient, les attestations de céramique de Çanakkale sont rares. On en trouve quelques exemplaires à Hama, identifiés par les auteurs comme une faïence occidentale (Riis, Poulsen 1957, 133: 408), et à Acre (Edelstein, Avissar 1997, 131, 132, pl. III: 13).

#### *Céramique de Didymotique*

L'origine des vases peints à l'engobe et des coupes de type *Marbled Ware* découverts à la citadelle n'est pas clairement définie. Cependant, il est possible que ces objets proviennent d'un atelier de Grèce du Nord, une région où la production de vaisselle de terre à l'époque ottomane était assez développée comme le signale Evliya Çelebi qui mentionne l'existence d'ateliers à Ainos, Selânik, Midye et Dimoteka (von Hammer 1834–1846: 31–32). C'est à ce dernier centre, Didymotique, une grosse bourgade de Thrace située au bord de l'Evros (Bakirtzis 1980: 147–153), que pourrait se rattacher un grand plat recueilli dans la Tour 4. Il se distingue par son décor d'engobes mêlés, rouge tomate et vert foncé, étirés au peigne, sous une glaçure vert clair brillante (Fig. 12: 5) — une ornementation qui rappelle les papiers *ebru* tant prisés dans l'Empire ottoman. L'inventaire

des découvertes indique que cette vaisselle peinte à l'engobe et marbrée, produite en Thrace aux XVIII<sup>e</sup>–XIX<sup>e</sup> siècles, était employée à l'est de Tripoli, à proximité de l'église St-Elie de Bqûfa (Salame-Sarkis 1980, 176–186, figs. 24–26, pl. LVIII: 1, 3, pl. LXXII: 7) et à Acre (Edelstein, Avissar 1997, 131, 132, fig. 1: 8–10).

### *Porcelaine de Chine*

Dans cet assemblage, les productions chinoises sont uniquement représentées par une coupe en porcelaine *imari* du XVIII<sup>e</sup> siècle avec, à l'extérieur, un riche décor en émaux rouge de fer et vert de cuivre rehaussé d'or — un motif floral se détache sur un échiquier orné de fleurons quadrilobés (Fig. 12: 6).

— — —

Ces deux assemblages bien datés permettent de dresser un inventaire des différentes catégories de céramiques employées dans un contexte militaire pour le premier — à l'époque mamelouke, la citadelle est le siège et la résidence du pouvoir administratif et militaire — et urbain pour le second — au XVIII<sup>e</sup> siècle, les sources témoignent de l'ouverture de la citadelle aux civils qui est devenue un quartier de la ville (François 2011). L'assemblage du début du XV<sup>e</sup> siècle peut être confronté aux nombreuses découvertes faites au Bilâd al-Châm et dont certaines, les plus récentes, sont publiées dans ce même volume; celui du XVIII<sup>e</sup> siècle apparaît parmi les rares niveaux ottomans connus dans cette même région. En effet sur ce vaste territoire qu'est le Bilâd al-Châm, la vaisselle fabriquée et utilisée à l'époque ottomane est mal connue (François 2005: 281–308; François 2008). Cependant des découvertes encore peu abondantes, faites dans des contextes calés chronologiquement, ont fourni des indications précises sur d'assez courtes périodes. Ainsi à Saint-Jean d'Acre, la fouille d'un puits dans la tour croisée a livré une belle collection de godets de noria pour puiser l'eau, de jarres pour la transporter, de cruches pour la conserver et la servir. Ces céramiques communes, sans doute de fabrication locale, sont datées de la fin XVIII<sup>e</sup>-début XIX<sup>e</sup> siècle, en rapport avec la dernière phase d'utilisation du puits établie sur des données historiques (Stern 1997, 65–68). À Acre toujours, les fouilles de maisons ottomanes situées près du hammam ont mis au jour un échantillonnage de vaisselle étrangère daté entre la fin du XVI<sup>e</sup> et le milieu du XIX<sup>e</sup> siècle (Edelstein, Avissar 1997: 132–135). De tels résultats contribuent peu à peu au développement de classifications plus sûres. Dans ce contexte, les céramiques recueillies dans la Tour 4 de la citadelle apparaissent comme un jalon supplémentaire dans l'étude de ce matériel tardif.

L'étude des céramiques mameloukes et ottomanes découvertes dans une autre grande citadelle de Syrie, celle d'Alep, permettra à terme de compléter le vaisselier pour ces périodes. Ce matériel est d'autant plus intéressant que les premiers résultats auxquels J. Gonnella, J. Carswell et moi sommes parvenus montrent des assemblages très différents dans leur composition, témoignant de la richesse et de la variété des productions au Bilâd al-Châm.

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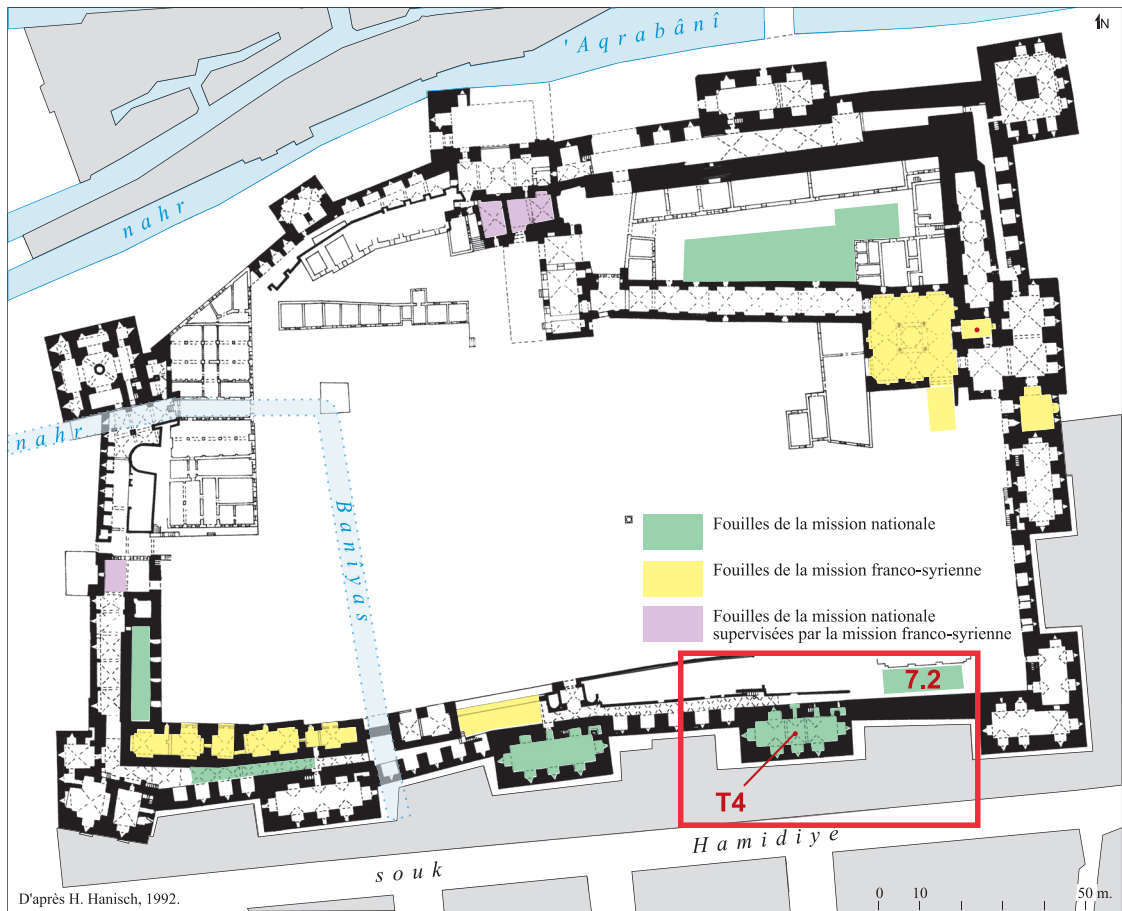


Fig. 1: Citadelle de Damas, localisation des contextes du début du XV<sup>e</sup> (7.2) et du XVIII<sup>e</sup> siècles (T4)

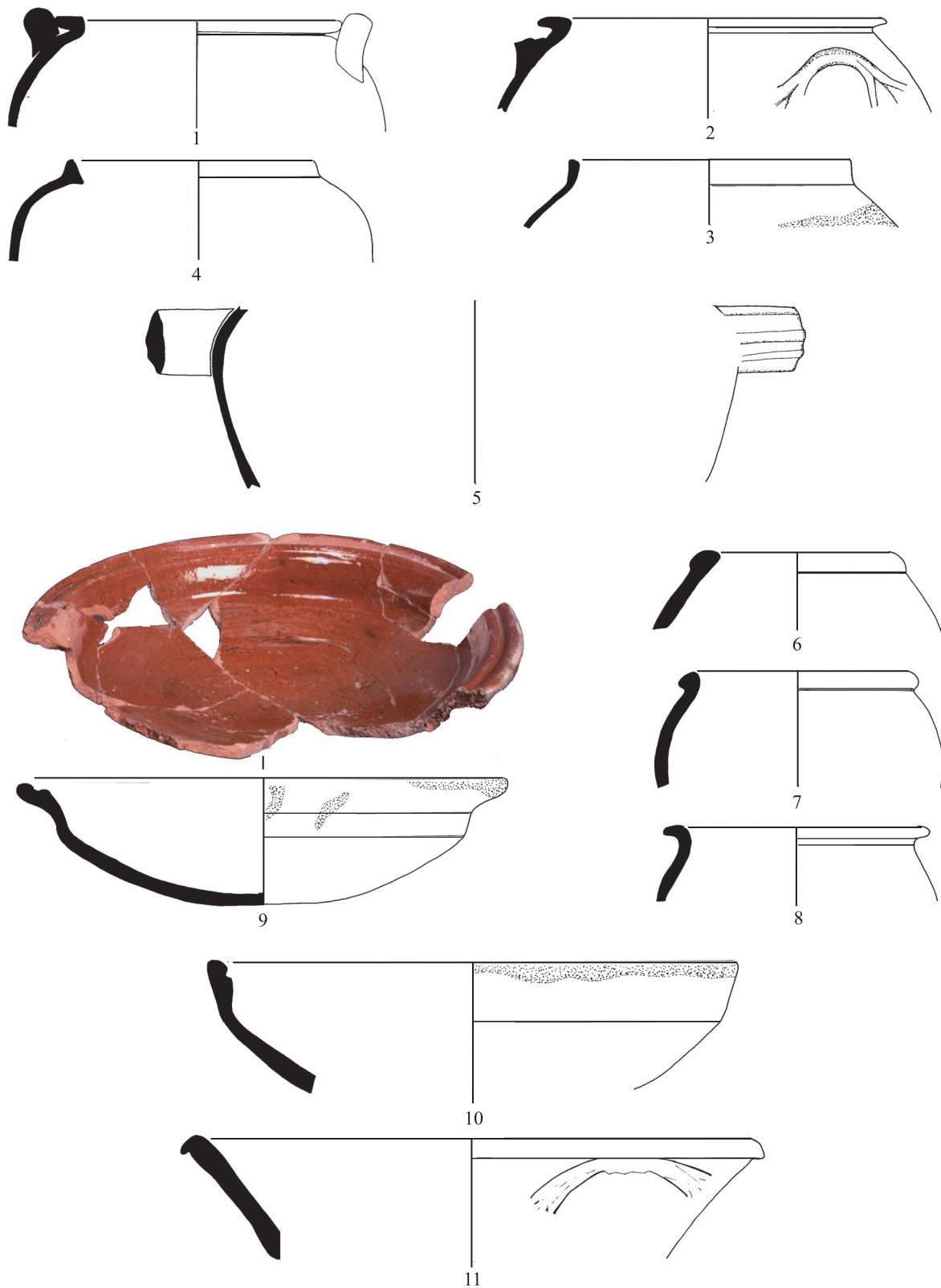


Fig. 2: Assemblage du début XV<sup>e</sup> siècle - marmites, jattes et pots à pâte rouge. Ech. 1:3.



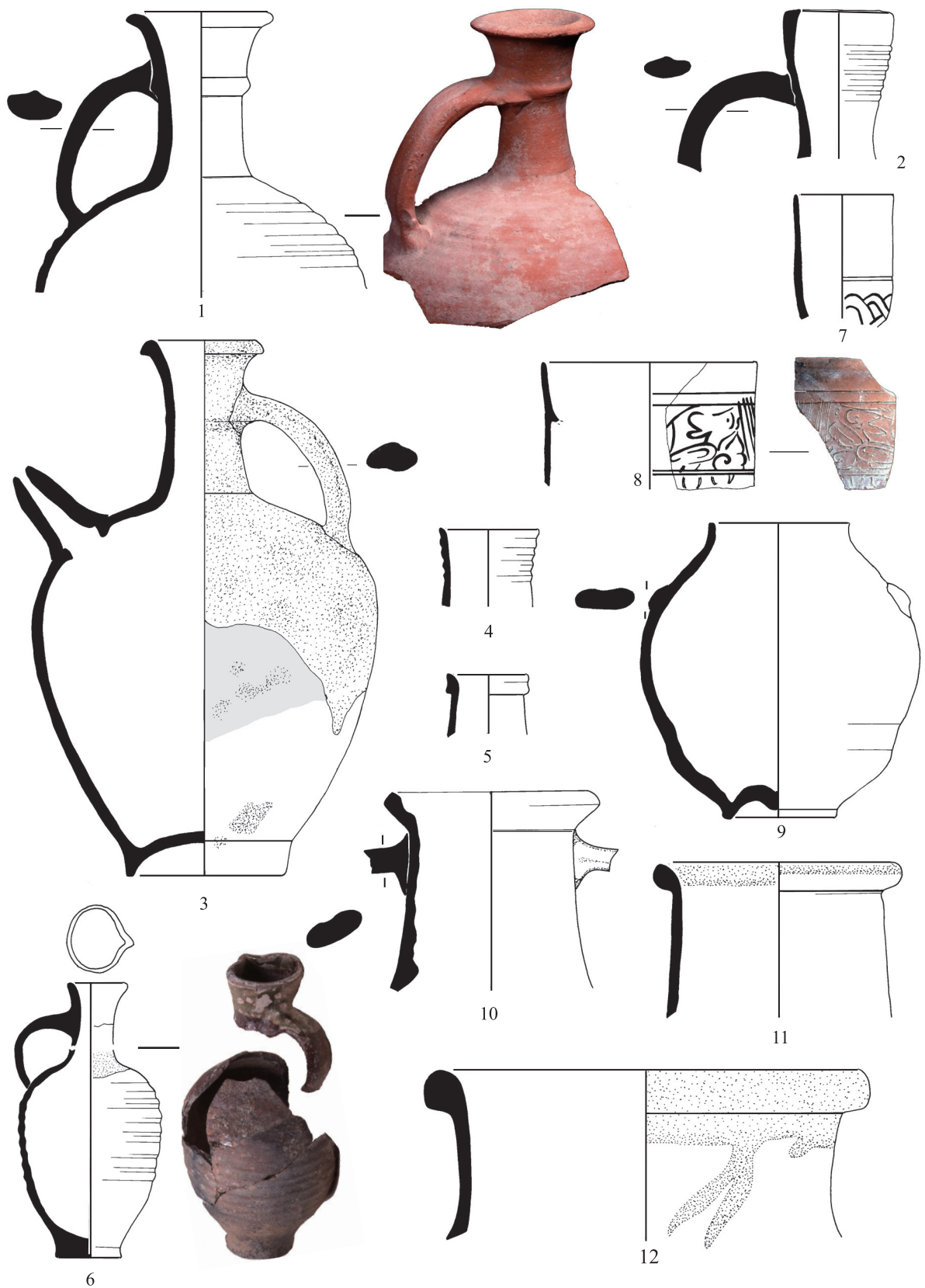


Fig. 3: Assemblage du début XV<sup>e</sup> siècle - jarres, bouteilles, gargoulettes, cruche et pots. Ech. 1:3.

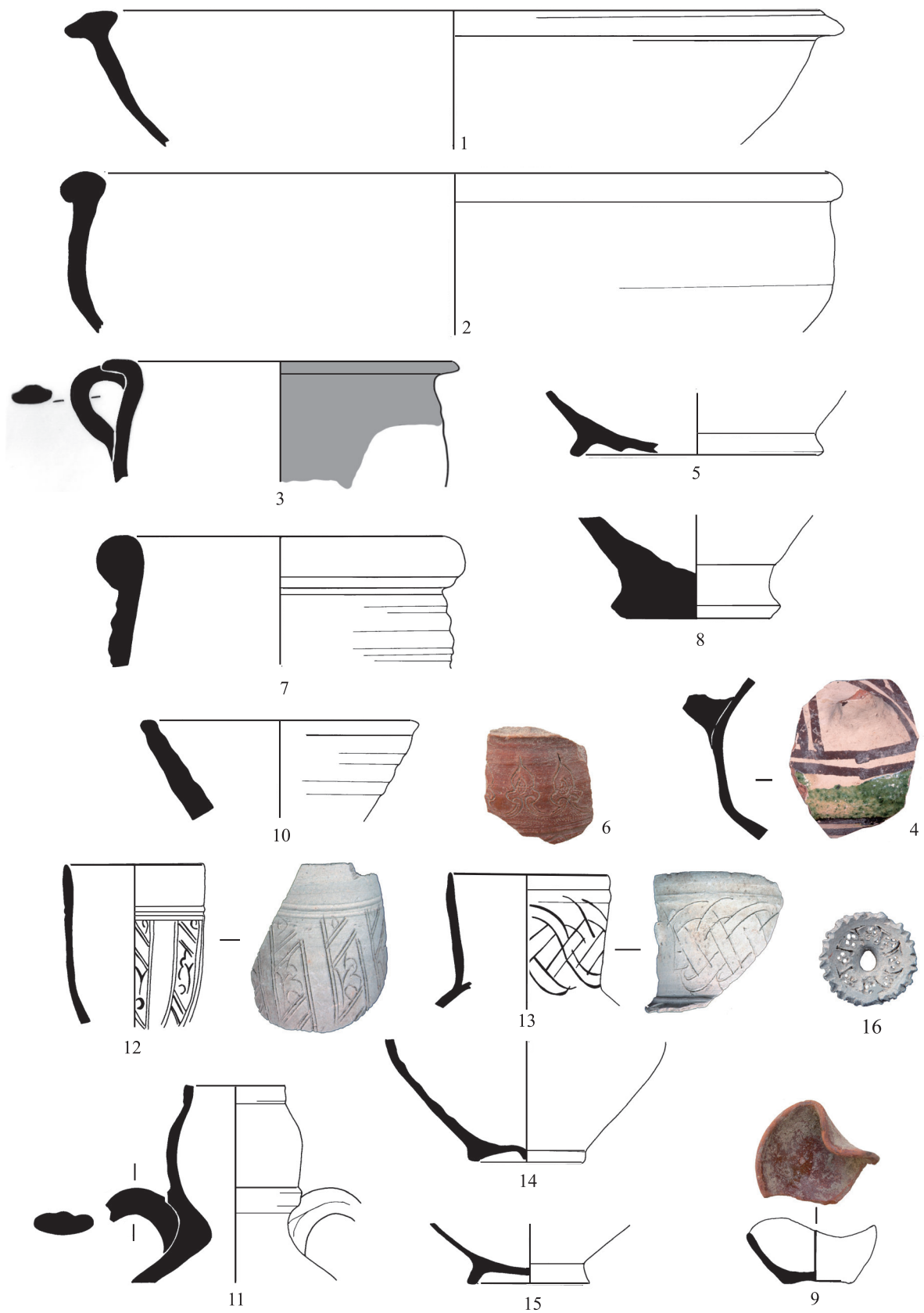


Fig. 4: Assemblage du début XV<sup>e</sup> siècle - bassins, pots de chambre et dérivée de *HMGPW* à pâte rouge (1–4); vases à eau et jarres à pâte rouge, engobés en rouge (5–8); lampe (9); coupe à pâte claire (10); “gourde de pèlerin” (11) et gargoulettes à pâte claire (12–16). Ech. 1:3.



Fig. 5: Assemblage du début XV<sup>e</sup> siècle - vaisselle de table à pâte rouge et glaçure plombifère monochrome (1-4), de type *Green Splashed Ware* (5, 6), incisée (7), de types *Reserved Slip Painted Ware* (8, 9) et *Gouged Ware* (10) et céramique à décor moulé (11). Ech. 1:3.



Fig. 6: Assemblage du début XV<sup>e</sup> siècle - vaisselle de table à pâte siliceuse et glaçure alcaline monochrome (1), imitations de céladons chinois (2, 3), peinte en noire sous glaçure bleue (6, 7), peinte en bleu et noir sous glaçure incolore (4, 5), peinte en bleu sous glaçure incolore (8, 9), peinte polychrome (10). Faïences d'Espagne (11 et 12). Ech. 1:3.



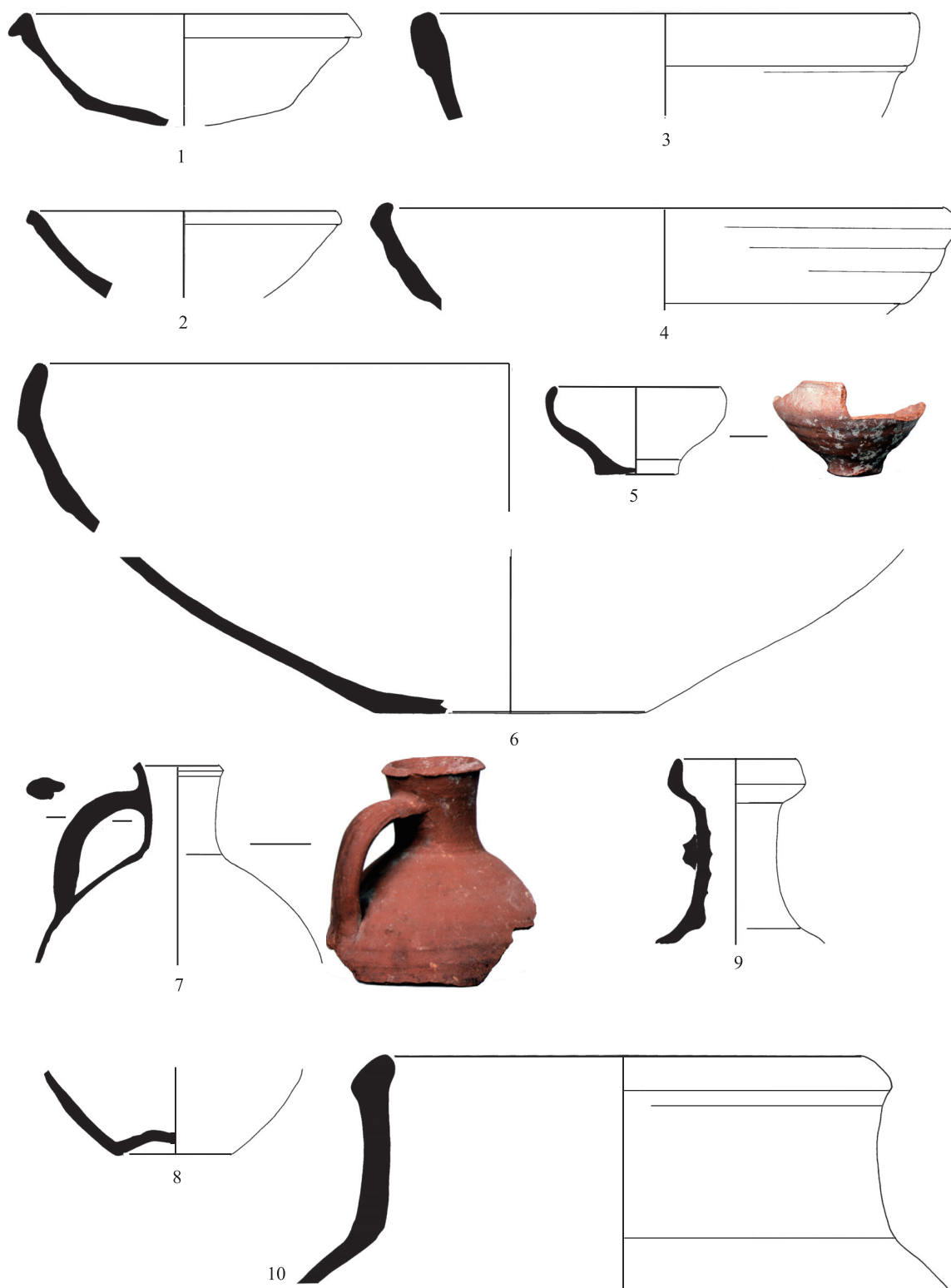


Fig. 7: Assemblage du XVIII<sup>e</sup> siècle - jattes, coupelles, bassins, cruches et jarres à pâte rouge. Ech. 1:3.

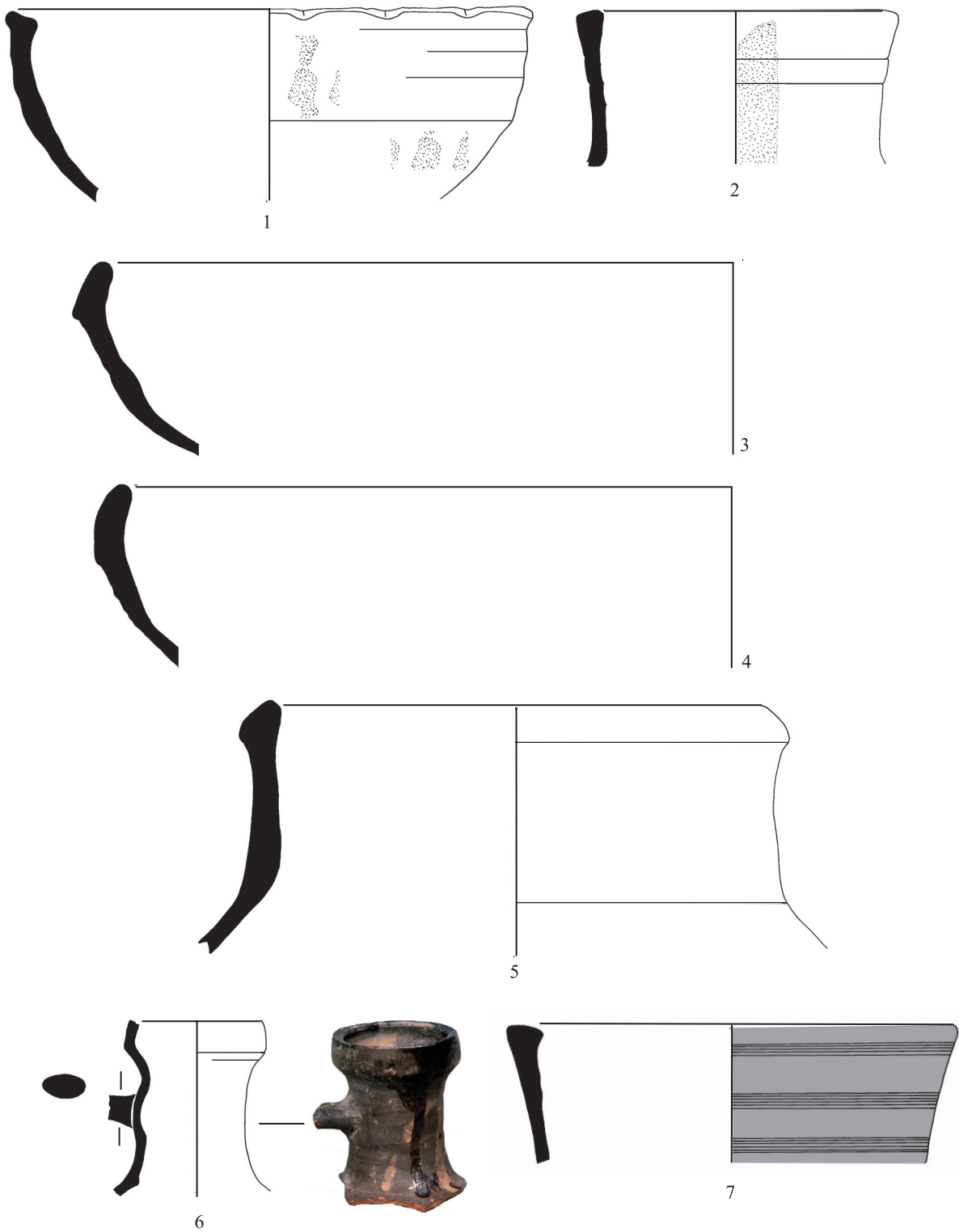


Fig. 8: Assemblage du XVIII<sup>e</sup> siècle - jattes, bassins et jarres à pâte rouge partiellement glaçurés (1-5) ou peints à l'engobe rouge (6, 7). Ech. 1:3.

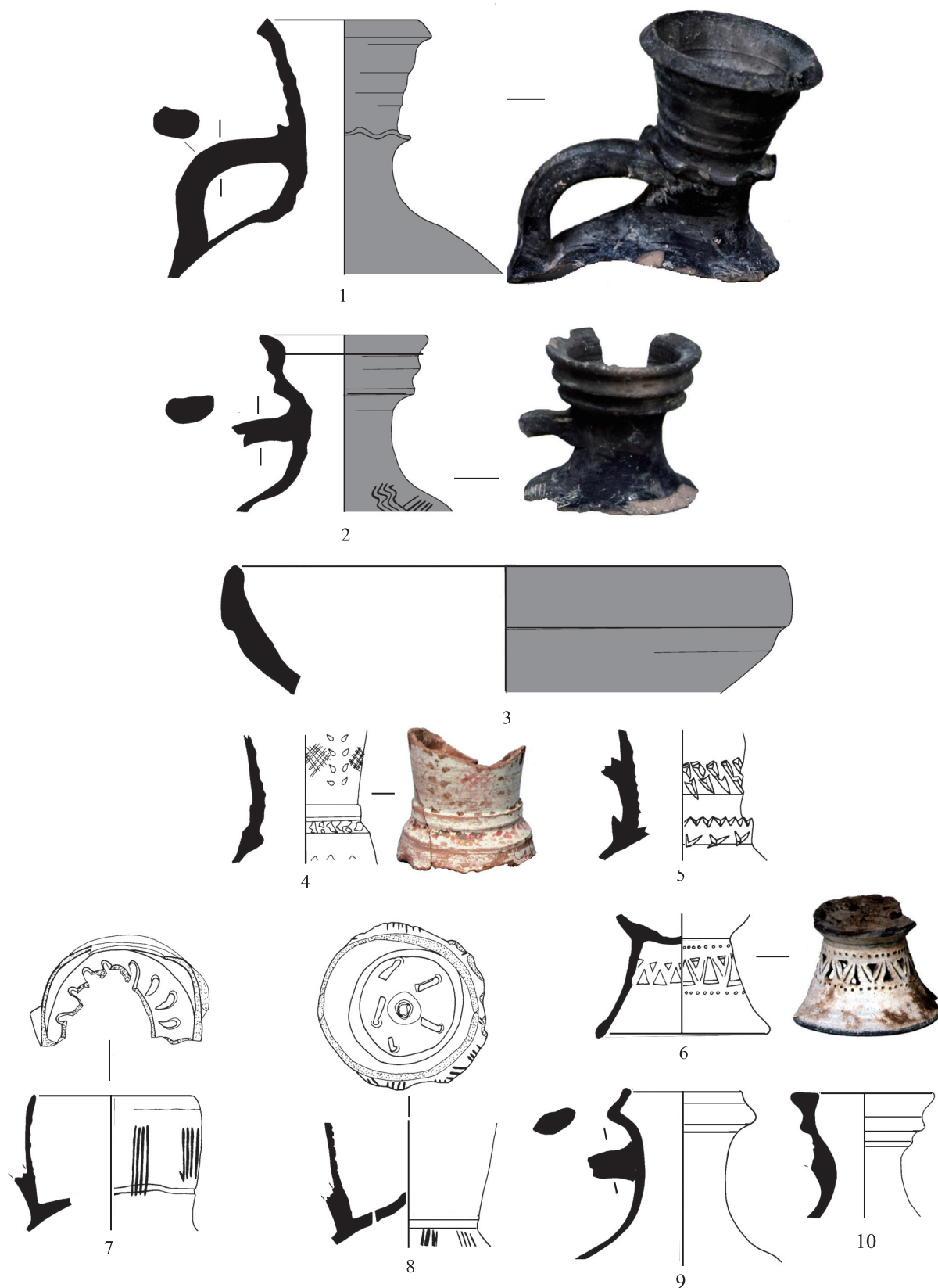


Fig. 9: Assemblage du XVIII<sup>e</sup> siècle - jarres et bassins à pâte rouge, engobés en noir (1-3); cruche et chandelier à pâte rouge, engobés en blanc (4-6); gargoulettes à pâte claire (7, 8) et jarres à pâte claire (9, 10). Ech. 1:3.



Fig. 10: Assemblage du XVIII<sup>e</sup> siècle - jarre à pâte grise (1); vaisselle de table à pâte rouge et glaçure plombifère monochrome (2, 3), peinte en vert sur glaçure jaune (4-6); imitations de céladons en pâte siliceuse et glaçure alcaline (7-9). Ech. 1:3.





Fig. 11: Assemblage du XVIII<sup>e</sup> siècle - imitations de céramiques d'Iznik à pâte siliceuse et glaçure alcaline (1-6); jarre à pâte siliceuse peinte en bleu et noir sous glaçure alcaline incolore (7). Ech. 1:3.



Fig. 12: Assemblage du XVIII<sup>e</sup> siècle - vaisselle de table à pâte siliceuse peinte en noir sous glaçure alcaline bleu de cobalt (1, 2); céramiques de Kütahya (3), de Çanakkale (4) et de Didymotique (5); porcelaine chinoise imari (6). Ech. 1:3.



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1. The manuscript should be typed on one side only of A-4 size paper. To be accompanied with the computer disk is strongly preferable.
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3. Please be sure to prepare necessary drawings and tables as digital files in the computer disc, or on separate papers one by one (less than 23.5×16.0 cm each in size of completion of printing), with explanations and consecutive numbers respectively, and compile them aside from the text. In addition, designate, on the margin of the text, where each one should be inserted.
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9. As a rule, the first proofreading shall be done by the original author.

編集後記 **Editor's notes**

Thanks to many substantial contributions from abroad such a fairly voluminous issue, Vol. XXXII, has been published. On behalf of our institute I express my sincere gratitude to these authors, and preferably to the next contributors I wish to keep in mind the minimum use of full color illustration if necessary.

(Y. Okada)

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