

TELL SABI ABYAD II – A LATE PRE-POTTERY NEOLITHIC B VILLAGE IN NORTHERN SYRIA. Report on Architecture and Related Finds of the 2001 Campaign

Marc Verhoeven¹

INTRODUCTION

Tell Sabi Abyad II, located in the northern part of the Balikh valley in northern Syria, is a small and low, oval mound which measures about 123 x 76 m at its base and which rises about 4.5 m above the surface of the surrounding fields (Figs. 1 and 2). The site is part of a cluster of four prehistoric mounds (Tell Sabi Abyad I to IV), dating from the eighth to the sixth millennium BC. According to a series of radiocarbon dates, occupation at Tell Sabi Abyad II has to be dated between ca. 7550 and 6850 BC (Akkermans and Verhoeven 2000a).² Levels 8 to 2 represent what has been termed the Balikh I period in the local sequence (equaling the Late PPNB), whereas the topmost level 1 is part of the Balikh II period or early Pottery Neolithic.

In 2001 the earlier excavations at Tell Sabi Abyad II (see Verhoeven and Akkermans, eds., 2000) were continued in order to obtain an exposure as large as possible of one of the upper settlements in the mound, i.e. level 3, dated at ca. 7000-6850 BC. The present report is a detailed presentation of the stratigraphy, architecture and small finds of the 2001 campaign at Tell Sabi Abyad II. The report is largely descriptive; for a more interpretative account the reader is referred to Akkermans and Verhoeven 2000b. The flint and obsidian industries, animal bones and plant remains of the 2001 season have as yet not been analyzed in any detail, and apart from some preliminary comments on the flint and obsidian artefacts, these assemblages are not dealt with here.

STRATIGRAPHY AND ARCHITECTURE

The excavations at Tell Sabi Abyad II were conducted primarily in 9 x 9 m squares, designated from west to east with capital letters and from north to south with cardinal numbers (Fig. 2). The squares were separated from each other by section baulks one metre wide. In 1993, three 9 x 2 m trenches from the top of the tell down to the south were excavated in the west of squares H5, H6 and H7 in order to investigate the stratigraphic sequence of the mound. In 1996, 1999 and 2001, the areas of excavation

¹ Leliestraat 7a, 6041 GZ, Roermond, The Netherlands. m.verhoeven@raap.nl

² All dates mentioned are calibrated.

were enlarged. So far, the remains of prehistoric occupation have been unearthed in squares F5 to F8, G4 to G8, H4 to H6, and in trenches E7, H7, I5 and J5.

The stratigraphical sequence varies slightly from square to square, reflecting differences in the use of settlement space. Per square a number of strata and substrata were distinguished, each marked by consistent soil characteristics or coherent architectural features. These various strata have been regrouped into eight main phases or 'levels' of occupation. Virgin soil was reached at a depth of about two metres below the level of the surrounding fields in the six-metre deep trench H7. The levels emphasize the relationships between the various squares and they delineate coherent occupational phases. All levels have been numbered in order of excavation (i.e. from the top downwards), but will be discussed in order of accumulation.

Like the 1996 and 1999 campaigns, the 2001 fieldwork research concentrated on the level 3 village, and we succeeded in adding another 272 m² to the area of excavation. The 2001 areas of excavation consisted of squares F7, F8 and G8, the baulk between squares F7 and G7, part of the baulk between squares F7 and F8, a 10 x 1 m trench in the north of square E7, including a 1 x 1 m piece of baulk between squares E7 and F7 (called trench E7), two 1 m wide trenches in the north of squares I5 and J5 (called trenches I5 and J5), including the 1 x 1 m baulks between squares H5 and I5 and between squares I5 and J5. In total an area of approximately 812 m² has now been excavated. In 2001 deposits related to levels 4, 3 and 2 were excavated. In addition, an Iron Age pit and a possible burial dating from this period were recovered. The stratigraphic relations between the various strata in the 2001 areas of excavation have been indicated in Table 1.

Level 4

Stratigraphy

Level 4 represented the deepest level reached in the 2001 campaign. It has been excavated in trench E7 (stratum 3), squares F7 and G8 (strata 4D-4A), and trenches I5 and J5 (strata 4D-4A).

Stratum 3 in trench E7 was marked by an orange-brown/grey-spotted deposit with charcoal parts and lime spots. Its base has not been reached, but stratum 3 was at least 20 cm thick.

Stratum 4B in square F7 represented a block of very hard orange-brown loam with lime spots. Within this block, vague traces of thin grey layers may indicate that the block represented a *pisé* wall (see Fig. 5). Stratum 4A in square F7 designates debris related to the possible stratum 4B architecture. It was an up to 40 cm thick deposit of soft beige loam with lime spots and charcoal particles. Within this deposit some small, soft and ashy orange-brown deposits with charcoal parts were present.

In square G8 ovens M, N and Q and pit O marked stratum 4C. Stratum 4B was represented by the fill of these features. Stratum 4A was a thick (up to 50 cm) deposit of various debris layers which had accumulated above the stratum 4C architectural features. In the northeast, stratum 4A mainly consisted of a series of alternating 2 to 8 cm thick layers of hard orange-brown loam, divided by 2 to 8 cm thick layers of soft and ashy grey

loam. In the rest of the square stratum 4A consisted of quite hard orange-brown and chocolate-brown deposits with relatively large numbers of animal bones.

In trench I5 stratum 4D was an eastwards-sloping deposit, up to 40 cm thick, consisting of soft or hard beige/orange-brown spotted and orange-brown deposits, mostly with lime spots and charcoal particles. Strata 4C and 4B were represented by, respectively, pit L and its fill. Stratum 4A, covering pit L, was an up to 40 cm thick loamy deposit of chocolate-brown loam with orange-brown spots, charcoal particles and lime spots. This layer accumulated upon a series of hard orange-brown and beige deposits in the east of trench I5.

In trench J5 the earliest feature was the stratum 4C oven I, its fill represented stratum 4B. The uppermost level 4 deposit stratum 4A was a very thick (up to 80 cm) deposit, mainly consisting of a layer approximately 30 cm thick of orange-brown and chocolate-brown loam with many lime spots and charcoal particles.

Architecture

Level 4 architectural remains were scarce, and were mainly represented by three ovens, M, N and Q in the west of square G8. Oven M, disturbed in the west, was more or less circular, measuring 85 x 75 cm and preserved to a height of 8 cm. The oven was built of a 5 cm thick wall of orange-brown clay, and its 0.5 cm thick floor consisted of hard orange-brown clay, covered by a thin grey plaster. The fill of oven M consisted of soft grey-black ashes. Oven N, approximately 1 m to the east of oven M, was oval, measuring 1.15 x 0.60 m, and preserved to a height of 7 cm. Its hard orange-brown wall, about 2 cm thick, was only preserved in the west. The floor of the oven was covered with black-burnt stones. The fill of the oven was clearly secondary, consisting of soft beige loam. Directly northeast of oven N pit O was found. This circular pit, with a diameter of 45 cm and a depth of 12 cm, was filled with soft black ash, most likely indicating that it served as a receptacle for ashes from oven N. Oven Q was a small (90 x 35 cm) oval feature in the northwest of square G8. It had a 1.5 cm thick wall of orange-brown loam. At its southern end the interior of the oven was marked by a small (about 25 cm wide) raised platform of orange-brown clay. The oven was filled with soft grey ashes.

In trenches I5 and J5 level 4 was represented by pit L and oven I, respectively. Pit L, partly hidden in the north section of trench I5, measured at least 80 x 40 x 24 cm.³ It was filled with orange-brown loam and hard black (burnt) loam fragments. Oven I in the west of trench J5 represented a circular *tannur* of 50 x 40 cm. The wall, preserved to a height of 11 cm, consisted of a 5 cm thick orange-brown loam. The oven was filled with soft black ashes.

Level 3

As has been reported earlier (Verhoeven 2000a: 21), level 3 has three closely related building phases, and has therefore been divided in an early, a middle and a late phase (levels 3C, 3B and 3A respectively: Fig. 3). Level 3C architecture was present in

³ Dimensions of architectural features are indicated in the following order: length, width, depth/height.

the central squares (F5, G5, G6, H5, H6); level 3B buildings were only encountered in the south (trench H7, square F7, F8, G7, G8), whereas level 3A buildings were found in almost all areas. Generally speaking, the level 3 settlement seems to have grown from a central core, first expanding to the south and then to other areas as well. It is stressed here that these sublevels were closely related: taken together they represent *one* settlement which gradually expanded in the course of time. Whereas some buildings remained in use during the entire level 3 sequence, others were abandoned. Before dealing with the stratigraphy and architecture of the 2001 season in detail, it is convenient to give a general overview of the architecture.

All buildings (X, XIV, XV and XVI) were rectangular and consisted of small rectangular or more or less square rooms (see Figs. 4, 7 and 8). Buildings X and XIV were oriented NNW-SEE, but building XV was oriented NE-SW. Characteristic was the irregular appearance of the buildings, which were closely spaced. Area 1 of building XIV, with the centrally located oven AC, most likely represented a small open court. A large open area seems to have been present in square G8, given the almost total absence of level 3 architecture in this square.

The walls of the various buildings were generally 35 to 40 cm wide, and preserved to a height of about 50 cm. They were made of orange-brown, either crumbly or hard *pisé* slabs, most often intermingled with lime spots. The horizontal mortar between the slabs consisted of grey-brown loam, generally 1-2 cm thick. A vertical mortar could not be detected; it seems that the slabs were simply laid with their short ends against each other. In some instances the bases of the walls consisted of about 30 cm of compact loam upon which the *pisé* slabs had been laid. Most walls were bonded, but some abutted. The floors in the various buildings were very difficult to recognize, but it seems that they consisted simply of tamped loam. All buildings were simply founded on earth. Mud or lime plaster on the walls was observed in a few instances only.

Buttresses were often present on the corners of walls, or along the wall façades (Fig. 7). Almost all of them were found at a (much) lower level than the walls, suggesting that originally they were much lower as well. Although the walls of the various buildings were preserved to a height of about 50 cm, some (small) rooms gave no evidence of doorways. Most likely these chambers were accessible from an opening high up in the wall or, more likely, from the roof.

Two small benches or platforms in rooms 5 and 6 of building XV, oven AC in area 1 of building XIV (Fig. 7) and ovens AB and AC near building XV (Fig. 3) were the only domestic features directly (spatially) related to the level 3 buildings. The other architectural features were mainly pits and ovens around the level 3 buildings.

Level 3 has been exposed over an area of approximately 812 m², representing a large portion of Tell Sabi Abyad II (Fig. 3). In the south the edge of the tell has nearly been reached. In the west, parts of the level 3 village were disturbed by level 2 activities. In the east some more level 3 architecture is to be expected. In the north the tell slopes relatively steeply, and it is expected that most of the level 3 remains have been eroded here. We think that most of the level 3 village has been excavated and that Sabi Abyad II offers a representative view of the layout of a small Late PPNB village.

Level 3C

In order to check the continuation of the walls of level 3C buildings II, V and VIII, which were still hidden in the section baulks between squares G5 and G6 and H5 and H6, these baulks were excavated. It appeared that the reconstructions as indicated in figure 2.9 in the earlier monograph (Verhoeven 2000a) need some small adjustments. Room 1 of building VIII was not connected to building V, but was closed by a wall in the north. In the case of building II, what has been designated room 5 was originally divided into two rooms, now termed rooms 5 and 12, measuring 0.95 X 0.75 m and 1.45 x 0.75 m, respectively (Fig. 3).

Level 3B

Stratigraphy

Level 3B was encountered in squares F7, F8 and G8. In square F7 level 3 was not present in the western half of the square; here level 2 activities disturbed the level 3 architecture and related depositions. Stratum 3C in square F7 was represented by buildings X and XIV. Stratum 3B designates the first phase of debris accumulation in and around the level 3B architecture; it was an approximately 10-30 cm thick deposition of hard/crumblly orange-brown loam intermingled with lime spots.

In square F8 stratum 3F was represented by building XV and the related oven AC. As in square F7, stratum 3E, not present in the northeastern quadrant due to level 2 activities, marks the first phase of debris accumulation in and around the level 3B architecture. It was an approximately 10-30 cm thick deposition of hard/crumblly orange-brown loam intermingled with lime spots.

In square G8 stratum 3E was marked by remnants of room 6 of building XII (which was mainly located in square G7), and room 10 of building XV (mainly located in square F8). Stratum 3D presented the first debris deposition around the level 3B architecture. In the northwest this deposit consisted of an approximately 20 cm thick accumulation of 2-10 cm thick soft and ashy grey, blue-grey and green-grey layers. In other parts of the square level 3D, up to 40 cm thick, consisted of crumblly orange-brown loam and soft beige loam, intermingled with lime spots.

Architecture

The level 3B architecture was represented by buildings X and XIV in square F7, building XV in square F8, and the southern part of room 6 of building XII (Figs. 3, 7 and 8).

Building X, oriented NNW-SEE, was disturbed by level 2 activities in the west and is still partly unexcavated in the north, but it measured at least 6 x 3.25 m. The dimensions of the various rooms are given in Table 2. As appears from the table, all rooms were extremely small, and can only have been used for storage. Room 6 could be entered via room 3 by a 65 cm wide doorway. Rooms 2, 4 and 8 were also connected by doorways. The opening between rooms 2 and 4, marked by a small buttress, was 55 cm wide. The opening between rooms 4 and 8 was very narrow, being only 30 cm wide.

Rooms 5 and 7 showed no entrances at floor level, and were probably accessible from the roof only. No architectural features were encountered in building X.

Building XIV was connected to buildings X and XI, and was, like building X, disturbed in the west due to level 2 activities. The building measured at least 6 x 5 m and consisted of at least 5 rooms (Table 3). Like building X it was oriented NNW-SEE.

Area 1 was a relatively large space (at least 4.30 x 3.25 m), in fact (together with rooms 1, 2 and 3 of building XI and possibly room 2 of building XV) among the largest areas in the level 3 settlement. Given the difficulty of constructing a roof over such a large area and the presence of an oven (AC), area 1 was an open area or a small court. Oven AC, centrally located in area 1, was special in that it represented the first square oven at Tell Sabi Abyad II. The oven measured 1 x 1 m and was preserved to a height of 13 cm. The wall of the oven consisted of a 10 cm thick orange-brown loam. On the interior of this wall fragments of a 2 cm thick dark-brown and burnt clay were present. The floor of the oven was made of an approximately 0.5 cm thick hard grey plaster. The oven was filled with soft grey and black ashes. No other architectural features were encountered in building XIV. Unlike building X, all rooms in building XIV were connected by doorways. The wide (1 m) opening to room 2 was marked by a small buttress in the south. Room 3 seems to be a corridor, connecting areas 1 and 2 with rooms 4 and 5. Room 4 was linked to room 3 by a 40 cm wide opening. In the east of rooms 2 and 5 we found a relatively large quantity of animal bones (possibly aurochs), perhaps indicating butchering activities. Objects which were found on the floor of room 4 (two fragments of grinding slabs and a rubbing stone) may point to food processing and possibly to the manufacture/maintenance of stone, bone or clay artefacts, or skin processing. Connected to the southern wall of area 1 were two wall fragments which must have been part of a (small) room which was disturbed, probably due to level 3A activities.

Building XV, still partly unexcavated in the south, measured at least 10.50 x 8.50 m (Fig. 8). Unlike buildings X and XIV it was oriented NW-SE. The building consisted of at least 11 rooms (Table 4). As was indicated above, room 11 represented a level 3A addition to building XV.

Like buildings X and XIV, the northwest of building XV was disturbed by level 2 activities. Moreover, the various walls in the west were very badly preserved (to a few centimetres only) and difficult to recognize. Therefore, it cannot be excluded that the relatively large area represented by room 2 originally consisted of more, smaller, rooms. The L-shaped wall and related features (level 3A oven AB), located between buildings XIV and XV, seem to have been part of a structure which was partly destroyed due to level 3A activities. The peculiar situation, i.e. the 'mismatch' of the two walls in which oven AB was sunk with regard to the wall fragments to the south of area 1 of building XIV, remains enigmatic. As can be seen in figure 3, building XV was marked by quite a number of buttresses. All of these buttresses appeared well below the top level of the walls, strongly suggesting that originally they were much lower than the walls of building XV. Rooms 5 and 6 were marked by architectural features, i.e. a small platform or bench (50 x 25 cm) and a narrow bench (1.00 x 0.20 m), respectively. The other rooms were without features. North of room 10, however, an oval oven, AC, was encountered. Oven AC measured 1.00 x 0.30 m and was preserved to a height of 7 cm. The wall of the oven

consisted of a hard-burnt (red) loam. The oven was filled with soft beige loam, clearly secondary to its use.

Building XV differed in a number of respects from the neighbouring level 3 architecture found in the 2001 season. First, it was oriented differently. Second, building XV was marked by a relatively large number of relatively large rooms when compared to the other buildings. Third, it gave evidence of small interior platforms/benches. Fourth, different building material was used: in building XV the pisé slabs were 5-6 cm thick, and divided by a 1-2 cm thick grey mortar, while the other buildings were constructed of about 7 cm thick slabs, divided by a 2 cm thick brown/orange-brown mortar. Perhaps these differences indicate that building XV had a function that was different from the other buildings. The relatively large size of the rooms and the platforms/benches may indicate that it was used for domestic purposes, rather than for storage: perhaps it largely served as a dwelling. The remarkable change in orientation, when compared with neighbouring buildings X to XIV, might then be explained as a deliberate attempt at differentiating building XV as a dwelling from the other structures which perhaps largely served for storage.

In square G8 the southern part of a small room (no. 6) related to the earlier excavated building XII in square G7 was uncovered. Room 6, largely hidden in the section baulk between squares G7 and G8, measured at least 80 x 50 cm. Apart from this room and the northeastern corner of room 10 of building XV, no architectural features can be ascribed to level 3B in square G8. Consequently, east of building XV, and south of buildings XI and XII a quite large (at least 81 m²) open area was present in the southern part of the level 3 settlement (Fig. 3).

Level 3A

Stratigraphy

In squares F7, F8 and G8 level 3A was represented by a renovation of building XV and by a series of ovens, hearths and pits and related deposits. The ovens, hearths and pits seem to be later than the mentioned renovation, and were probably constructed when the level 3B buildings were already out of use. In trenches I5 and J5, where level 3B architecture was absent, level 3A was mainly represented by building XVI in trench I5, a wall in trench J5 and some pits in both trenches.

Stratum 3A in square F7 designates the upper fill related to the level 3B architecture. It is recalled that stratum 3B of level 3B represented the first phase of accumulation in and around level 3B buildings; stratum 3A, then, was the second main period of deposition, marking debris which accumulated when the level 3B buildings had already been abandoned. On the whole, level 3A was a 12-30 cm thick orange-brown and crumbly deposit with lime spots, and occasionally with brown loam spots.

Stratum 3D in square F8 was represented by room 11 of building XV. Debris accumulation on the floor level related to level 3B building XV clearly indicates that this room was later added to building XV. Pits AK and AQ and oven AB represent stratum 3C, and stratum 3B marks the fill of these features. Stratum 3A was similar to stratum 3A in square F7 (see above).

In square G8 stratum 3C was represented by a number of architectural features: pits B and I, hearth A and oven P. The fill of these various features represented stratum 3B. In the north and west, stratum 3A, covering the sparse level 3B architecture, was up to 34 cm thick and made up of several beige, grey and orange-brown layers, intermingled with lime spots and charcoal particles. In the east and south, stratum 3A, approximately 40 cm thick, consisted of three soft beige deposits with lime spots.

In trenches I5 and J5 strata 3F to 3A represented level 3A. Stratum 3F in trench I5 was represented by building XVI and the small platform upon which it was built. Stratum 3E, the first phase of level 3A debris accumulation and deposited against the above-mentioned platform (see Fig. 6), was 20-40 cm thick. Stratum 3E debris accumulation started with three soft orange-brown deposits with charcoal particles and lime spots. These depositions were followed by orange-brown, beige and grey-beige deposits, each with charcoal particles and lime spots. Stratum 3D was represented by two pits, features J and K, whereas stratum C marks their fill. Stratum 3B presented debris accumulation in and around building XVI. In the west of trench I5 stratum 3B was a 10-30 cm thick accumulation of alternating layers of soft and thin (2-6 cm thick) orange-brown and grey ashy layers. These layers, sloping to the east, were found over a length of approximately 1.60 m. East of these layers and against the western wall of building XVI an approximately 20 cm thick layer of beige-grey loam was followed by a 10-20 cm thick deposit of beige brown loam. Both layers show charcoal particles and lime spots. Inside building XVI stratum 3B was marked by a hard orange-brown loam. Stratum 3A represented the uppermost level 3A deposit. In the west of trench I5 stratum 3A was an approximately 30 cm thick accumulation of alternating layers of soft and thin (2-6 cm thick) orange-brown and grey ashy layers, as in stratum 3B. These deposits had accumulated against wall BA of level 3A building VII in square H5 (see Figs. 3 and 6). These layers, sloping to the east, were found over a length of about 1.60 m. East of these thin layers stratum 3A mainly consisted of a deposit of approximately 10-30 cm thick layers of grey and beige loam, either soft or hard. Inside building XVI stratum 3A was represented by a 10-20 cm thick deposit of orange-brown crumbly loam with lime spots.

In trench J5 stratum 3F was represented by wall B. Stratum 3E was the first phase of debris accumulation related to level 3A. It consisted of an approximately 40-60 cm thick deposit of grey, beige and orange-brown debris layers, mostly with lime spots, some with charcoal particles. Most of the layers were soft or crumbly. Especially east of wall B the deposits were soft and ashy. Stratum 3D presented pit H, and stratum 3C the fill of this feature. A soft beige deposit, approximately 5-20 cm thick, with lime spots, has been designated stratum 3B. Stratum 3A, only present in the west due to erosion in the east, was an about 10 cm thick soft beige/orange-brown layer intermingled with lime spots.

Architecture

Level 3A architecture was represented by room 11 of building XV, building XVI in trench I5, and pits and ovens in other areas. The level 3B buildings seem to have remained in use in level 3A times, but were like all other level 3 features gradually abandoned and destroyed and/or covered by level 2 deposits.

In the east of trench J5 the remains of a single wall (B), at least 1 m long and oriented N-S, were encountered. Room 11 of building XV, measuring 3.25 x 2.75 m, was erected in an open area northeast of the building. The walls of this room, marked by small buttresses in the north and west, were nowhere connected to the main building. When compared to the other rooms of building XV, room 11 was relatively open and large, suggesting that it served for activities rather than storage.

Building XVI in trench I5 was only exposed to a limited extent. It measured at least 2 x 1 m, and its two rooms had minimal dimensions of 60 x 75 cm. Like the level 3A buildings I and VII in square H5, immediately west of trench I5, building XVI was oriented NNW-SSE. Interestingly, building XVI was erected on a small platform, 60 cm high and minimally 2.60 x 1m. The platform was made of a very hard orange-brown loam. In both rooms 1 and 2 the floors consisted of square (25 x 25 cm) and unbaked orange-brown mud bricks, divided by a 3-5 cm thick grey-brown mortar. On the floor of room 1 three objects were found: two fragments of stone vessels, one of them representing a large and beautiful stone bowl (Fig. 9, no. 1), and a palette.

It is recalled (Verhoeven 2000a: 29, 33, 40-41) that three other platforms, all of a different nature, were excavated earlier in the level 3 settlement. First, level 3C platform O in square F5 was a long-drawn feature (5.30x1.30 m) made of rectangular orange-brown pisé slabs measuring 1 x 0.30/0.40 x 0.08 m. Second, level 3B building VI in trench H7 was, like building XVI, erected upon a small (about 4.5 x 2 m) platform. This feature was made of slabs of grey loam, which were approximately 25 cm wide and 25 to 100 cm long. Finally, the large (at least 9.80 x 6.75 m) platform A in square H4 was built of alternating layers of large grey and orange-brown pisé slabs, 0.75 to 1.35 m long, and 30 to 40 cm wide. In the south and west the platform was surrounded by a stone wall. Platform A was found directly beneath the topsoil, and it cannot be excluded that it served as the base of a now wholly eroded building. Its situation at the top of the tell, its large dimensions and the careful construction of platform A may indicate that this building was of a special (ritual?) nature. Thus it seems that different kinds of platforms were used for different purposes: as bases for activities (platform O), and as bases for (special?) buildings.

In square F8 oven AB and pits AK and AQ have been ascribed to level 3A. Oven AB was sunk into two closely attached level 3B walls in the north of square F8 (Fig. 3), raising the oven about 30 cm above floor level. Probably the two walls served as a sort of platform. Oven AB represented a circular *tannur* with a diameter of 50 cm. The hard and red-burnt clay wall of the oven was preserved to a height of 11 cm; the floor consisted of hard black-burnt loam. The oven was filled with soft black ashes. Pit AK in the south of square F8, had a diameter of about 50 cm, and a depth of about 10 cm. It was filled with soft grey ash, containing some animal bones. Pit AQ, still partly hidden in the south section, measured at least 40 x 30 x 12 cm, and was filled with soft beige loam.

In square G8 pits B and I, hearth A and oven B were the architectural features representing level 3A. Hearth A in the northwest of square G8 was circular with a diameter of 50 cm and a depth of 12 cm. It had burnt stones at the base, and was filled with soft grey ash. Oven P was found in the east of square G8, and is still partly hidden in the east section. It measured at least 60 x 30 cm and showed a 5 cm thick wall of hard

orange-brown clay. The circular pit B, in the northwest of the square, had a diameter of 40 cm and a depth of 12 cm. The feature showed a 1 cm thick dark-brown mud-plaster lining, and a floor of hard white lime plaster, 1 to 2 mm thick. Pit I, along the west section in the southwest of square G8, was kidney-shaped, measuring 70 x 13 X 12 cm.

In trenches I5 and J5 pits J, K and H, all partly hidden in the north sections, were excavated. Pits J and K in trench J5 measured at least 30 x 30 x 20 cm and 60 x 40 x 24 cm, respectively. Pit J was filled with hard beige-grey loam with many stones, charcoal particles and lime spots. The fill of pit K consisted of soft grey-black ash, intermingled with burnt orange-brown loam. Pit H in trench J5 was a large pit, measuring at least 4.60 x 1 x 1.20 m (Fig. 6). The pit was filled with several layers of soft beige and grey loam, with ashes, charcoal particles and lime spots. Relatively few finds were recovered from this large pit.

Level 2

Stratigraphy

Level 2 has been encountered in all areas of excavation. It is recalled that in squares F7 and F8 the western parts of level 3B buildings appear to have been destroyed by level 2 activities.

In trench E7 level 2 was represented by strata 2D to 2A and strata 1C to 1A. In the east of trench E7, stratum 2D accumulated upon level deposit stratum 3; most likely level 3 was disturbed due to level 2 activities. The base of stratum 2D has not been exposed, but the deposit was at least 50 cm thick. The stratum, slightly sloping to the west, consisted of a series of soft and ashy, grey and beige layers, mostly intermingled with lime spots. Stratum 2C was represented by pit C in the east of trench E7, stratum 2B was the fill of this pit. Stratum 2A was a 40 to 60 cm thick accumulation of debris layers of mainly soft and crumbly deposits intermingled with lime spots and gently sloping to the west. Two architectural features, wall D and oven A, represented stratum 1C, and the fill of oven A was marked stratum 1B. Stratum 1A had accumulated around wall D and oven A, and represented a 10-30 cm thick hard beige-grey deposit with lime spots, charcoal particles and many stones. These stones, measuring about 10 x 10 cm, were grey and angular, and many showed traces of burning, perhaps indicating that they had been used as cooking stones. In fact, all over the tell large numbers of such stones were recovered from level 2, suggesting that cooking with stones was a regular activity.

In square F7 stratum 2B was the first of the level 2 layers. The deposit, sloping towards the west (Fig. 5) was up to 80 cm thick and consisted of an approximately 10 cm thick soft grey and orange-brown layer upon which a series of grey and beige ashy layers with lime spots and many charcoal particles had accumulated. Moreover, thin grey and black ash layers were present. Stratum 2A presented a thick (up to 60 cm) accumulation of soft and crumbly grey-beige debris layers in the west of the square. Pit I and pit J marked stratum 1C, and their fill has been designated stratum 1B. In the east of square F7 the topmost stratum 1A covered the level 3B architecture (buildings X and XIV). Here the deposit consisted of an approximately 20 cm thick crumbly orange-brown deposit with lime spots, probably representing upper wall debris of the level 3B buildings, followed by

an about 20 cm thick layer of hard beige-grey loam. In the west of square F7 stratum 1A, about 40 cm thick, was represented by soft grey and ashy deposits, covered by a hard grey layer with many stones (see above).

In square F8 level 2 was mainly represented by a series of pits. Strata 2C and 2B designate pit AR and its fill. Stratum 2A was an at least 60 cm thick deposit (its base has not been reached) in the northwest quadrant of square F8, consisting of various beige and grey, soft and ashy layers, sloping to the west, with lime spots and charcoal particles. Stratum 1 presented pits AL, AM, AN, AN, AO and AP and their fill. These pits were all dug from an eroded level 2 floor level, and all are still partly hidden in the west and east sections of square F8.

The large pit AL which was encountered in square F8 (see above) continues in square G8, where it also marked stratum 1. Stratum 2 in square G8 was an approximately 10 cm thick deposit of grey and orange-brown loam with lime spots.

In trench I5 level 2 was designated by strata 2 and 1. Stratum 2, covering the level 3A deposits, was an approximately 40 cm thick deposition consisting of beige and orange-brown layers with lime spots, gently sloping towards the east and covered by a layer of soft beige loam. Stratum 1 presented pit I and its fill. This pit was dug from an eroded level 2 floor level.

In trench J5, at last, level 2 was represented by a 10-20 cm thick soft beige deposit.

Architecture

Apart from wall D and oven A in trench E7, level 2 was represented by pits (n = 9). Wall D in the west of trench E7 and still partly hidden in the north section was a feature at least 1 m long of hard crumbly grey-beige clay. Oven A, located about 4.50 m to the east of this wall, was a circular tannur of approximately 50 x 30 cm, preserved to a height of 14 cm. The wall of the oven was 2 cm thick and consisted of a 2 cm hard orange-brown clay, covered on the interior with a 2 mm thick black-burnt lime plaster, which also covered the floor. Upon the floor burnt pebbles and cobbles were found. The fill of the oven was marked by soft black ashes, among which the fragments of three figurines were found.

The location, stratum assignment, shape, dimensions and fill (excluding artefacts) of the various level 2 pits are presented in Table 5.

Iron Age

Stratigraphy

On the basis of sherds pit J in trench J5 has been dated to the 7th-6th century B.C., i.e. to the Iron Age. This pit and its fill, dug from an eroded floor level, were represented by stratum 1. In square F7 a human burial may also date from the Iron Age, suggested by the find of an iron dagger in the grave. A (much) later date, however, cannot be excluded.

Pit

In the east of trench J5, pit J, still partly hidden in the north section, measured at least 1.20 x 0.60 x 40 cm. Pit J was filled with soft beige loam with lime spots, and, as indicated above, Iron Age sherds.

Burial

Largely hidden in the extreme north of the section between squares F7 and G7, a human burial to be dated to the Iron Age or later (see above) was found. The skeleton was recovered from an unlined pit of 1.90 x 0.70 x 0.65 m. At the base of this pit the 1.65 m long articulated skeleton of an adult - probably male - was found. The person had been positioned on his back, and was oriented NW-SE, the head in the west, facing south. The left arm was flexed across the chest, the right arm was extended along the body. Of the legs the right one was flexed, the left one extended. Next to the right hand (and most likely originally placed into it) were two burial gifts: an 11 cm long whetstone with a little hole at one end, which probably served for suspension on a rope, and fragments of an iron dagger.

THE SMALL FINDS

In Table 6 the quantities of the various categories of small finds have been indicated, including the total amount, i.e. the number of the 2001 small finds together with those of the earlier excavations (Verhoeven 2000b). In Tables 7, 8 and 9 the raw material, the dimensions of complete objects and stone sorts are indicated respectively.

A total number of 127 small finds was recovered from the various areas of excavation in 2001. The majority of the finds were small fragments of various stone vessels. Rubbing/polishing stones, grinding slabs and grinders were also well represented. The other objects were present in small quantities.

Most items (around 81%) were made of stone but clay was commonly used as well, accounting for about 13% of the objects. Artefacts made of bone and of lime (white ware) were found in small quantities (Table 6). Most of the objects (85 %) were broken and probably discarded as refuse. The remaining complete objects may have been left behind at abandonment because there was no further use for them, or perhaps they were simply lost.

The small finds as presented in the following sections have been ascribed to a number of categories and subcategories, viz. the ground-stone industry (grinding slabs, grinders, hammer stones, celts, stone vessels), miscellaneous stone tools, beads and pendants, figurines (anthropomorphic and zoomorphic), tokens, white ware, and bone tools.

The Ground-Stone Industry

The ground-stone assemblage of Sabi Abyad II recovered in 2001 consisted of grinding slabs, grinders, a mortar, hammer-stones, celts, and stone vessels. These stone

implements represent the majority of the small finds ($n=74$, or 58.3% of the assemblage). Apart from the hammer-stones almost all ground-stone tools were broken. Most of the artefacts, especially the grinding slabs and grinders, were made of grey-black basalt, especially of the vesicular type. Limestone and gypsum were commonly used as well, in particular for the stone vessels. The other, mainly non-indigenous, stone sorts were used more sparsely (Table 9). These exotic stones, including basalt, must have been obtained outside the Balikh valley, from the Euphrates valley or the Turkish piedmont.

Grinding slabs⁴

Eleven grinding slab fragments were recovered, all of them made of vesicular basalt. The shape of the fragments indicates that the slabs had an oval shape, a flat working surface and a concave base. The working surface was almost always polished due to use, but polish on the other side indicates (secondary?) use as well. One fragment had traces of red-brown material, perhaps ochre.

Grinders

Earlier (Verhoeven 2000b: 94) it was reported that three types of grinders were used at Sabi Abyad II: Type 1 grinders are rather large, oval, rounded or loaf-shaped tools, which closely resemble the grinding slabs in shape but not in size (generally, the grinders are much smaller). Most likely, these type 1 grinders were used in combination with the grinding slabs. Type 2 grinders are rather small, flat and more or less rectangular tools. Often, type 2 grinders are made of a very porous basalt, with 'spongy' but rough surfaces. Type 3 grinders had a shape which was either squat and rounded or more or less square with rounded edges. In 2001 at least three type 2 grinders, including one complete specimen (Table 8), were found. These small tools all showed the spongy surface just mentioned. It is assumed that the majority of the other grinders belong to type 1, but due to the high degree of fragmentation, a reliable typological assignment of the grinders is not possible. Polish occurs on flat as well as on convex sides. Traces of red pigment, perhaps ochre, on one specimen may indicate that it was used for grinding pigments, or perhaps for rubbing pigments on hides or cloth. Traces of lime or gypsum on another fragment suggest that grinders were also used for applying plaster on walls or for the production of white ware.

Mortar

A smooth and fine-grained fragment of basalt represented a shallow mortar with a thick (2 cm) base and a rounded rim. This is the only example of a mortar at Sabi Abyad II. Pestles were wholly absent. Apparently grinding was almost totally done with grinders and grinding slabs. In contrast, grinding in the Pottery Neolithic levels at nearby Tell Sabi Abyad I was done with mortars and pestles as well as with grinders and grinding slabs (Collet and Spoor 1996: 416-422).

⁴ Due to the high degree of fragmentation, it was in many cases not possible to distinguish between grinding slabs or grinders; the following discussion of both classes of tools is based upon the clear examples only.

Hammer-stones

Of the three hammer-stones two were made of flint and more or less cubical in shape. One of these objects (S01-89) had traces of red pigment, most likely ochre, indicating that - like grinding slabs and grinders - it was involved in the production and/or application of pigments. The third hammer-stone was more or less spherical and smaller than the others (Table 8). All hammer-stones showed battered areas.

Celts

Two complete celts and two fragments of celts were found. The complete specimens were both made of blue-black dolorite. One of these objects was very small (4.8 x 2.0 x 1.6 cm); the other measured 8.4 x 3.6 x 1.7 cm (Fig. 10, nos. 7 and 8). The larger celt had a sharp cutting edge and battered sides, suggesting that besides cutting it was also used for grinding, hammering or polishing. The small celt was well polished on all sides. The two fragments represent the base of a celt made of gabbro and the wedge-shaped cutting edge of an unidentified fine-grained blue-green stone. Both fragments were polished due to use.

Stone vessels

Stone vessels represented the most numerous category of small finds (n= 26, 20.5 % of the assemblage). All vessels were made of either limestone, alabaster or gypsum, varying in colour from white to pink, beige, brown and grey. In all cases, the exterior of the vessels was smoothed and polished. In contrast, the interior was often somewhat rougher and marked by scratches, probably resulting from the manufacturing process. Four main types of stone vessels can be distinguished (see also Verhoeven 2000b: 95):

Type 1: open bowls. These vessels are marked by rounded vessel walls and simple rounded or pointed rims.

Type 2: closed bowls. These vessels are characterized by straight or rounded, (slightly) incurving walls and simple plain rims.

Type 3: wide open bowls. Type 3 vessels represent low and wide, open bowls or plates with plain rounded or flat rims.

Type 4: miniature bowls. As yet, type 4 is represented by one fragment of a very small bowl with three feet.

As in earlier campaigns, the stone vessels found in 2001 were represented by small fragments only: complete specimens have not been uncovered as yet. Only six rim fragments were found. As indicated on figure 9, fragment numbers 2, 3, 4 and 5 represent type 1; number 6 type 2; number 1 type 3, and number 7 type 4. The type 3 bowl was made of a white alabaster which was marked by thin orange bands. This is an outstanding example of the regular practice of making use of the characteristics of stones for decorative effect of stone vessels.

The type 4 miniature bowl was not attested prior to 2001. It is represented by a very carefully made vessel of dark-grey limestone. Only half of the bowl was preserved, but originally it must have had a diameter of 4 cm, and it stood to a height of 1.6 cm on three little feet. The vessel had a sharp carination near the base and was marked by a

small rim. Perhaps such miniature bowls were used as containers for medicines or cosmetics.

In the Balikh valley vessels similar to those of Sabi Abyad II have been found at the Late PPNB sites Tell Assouad (Level VIII) and Tell Damishliyya (stratum 2) (Cauvin 1972, figs. 1, 3 and 4; Akkermans 1988, plate 10). Outside of the Balikh valley similar vessels have been reported from Late PPNB Bouqras at the confluence of the Euphrates and the Khabur (Roodenberg 1986: 138-157).

Miscellaneous Stone Tools

Rubbing/polishing stones. Quite a number (n= 17) of smooth, unworked pebbles of fine-grained stone (mainly sandstone and limestone) were found. They may have been used for the rubbing and polishing of all kinds of commodities. Black pigment on one fragment and red pigment on another suggest that rubbing/polishing stones were used for pulverizing and applying pigments. More generally, polished and battered areas and scratches seem to indicate that these objects were used for grinding, rubbing and polishing.

Retouchoirs. It is suggested that two longitudinal objects made of fine-grained stone (gabbro and dolorite) were used as retouchoirs, given the presence of traces of battering and scratches at their short ends (Fig. 10, nos. 9 and 10). The complete cylindrical specimen measures 11.7 x 3.2 x 2.7 cm. The other object, only partially preserved, was flattened in section.

Palette. One unworked pebble of brown limestone (11.2 x 7.1 x 3.1 cm) with a central depression may have been used as a palette.

Weight. A biconically pierced and smooth fragment of basalt perhaps represents a weight (Fig. 10, no. 13). The perforation was very smooth, presumably as a result of regular use. The reconstructed diameter is 11.8 cm. A similar object, but made of flint, was recovered earlier at Sabi Abyad II (Verhoeven 2000b: Fig. 4.6, no. 6).

Bead and pendant

Items of personal decoration were represented by a small (diam.: 0.2 cm) and flat disc-shaped bead made of green stone (Fig. 10, no. 6), and possibly by a polished irregular fragment of quartzite.

Figurines

The remains of 12 small figurines were found: two anthropomorphic figurines, one of which was nearly complete, three fragments of zoomorphic statuettes, four possible fragments of human figurines, and three irregularly shaped small pieces of smooth clay which might depict either humans or animals.

Anthropomorphic figurines

Most interesting was the find of a very stylized human head made of soft white limestone (Fig. 10, no. 4). The head was found in an open area ascribed to level 2. Due to

excavation, the neck was artificially shortened and flattened. The somewhat oval head measured 2.6 x 1.6 x 2.0 cm. The eyes, indicated by two shallow holes, were the only facial features that had been rendered. Two similar heads have been found earlier at Sabi Abyad II (Verhoeven 2000b: 100). Furthermore, they were recovered from PPNB Tell Assouad, also located in the northern part of the Balikh valley (J. Cauvin 1972, Fig. 4, no. 6), and from PPNB Gürcütepe in the Harran plain (Schmidt 1998). These figurines have as yet not been reported from sites in other regions, and therefore seem to have been a characteristic of the Balikh valley and its continuation into the plain of Harran. Earlier (Verhoeven 2000b: 100) I have suggested that these heads were originally fastened to another body of clay or wood, as they cannot stand by themselves. Perhaps, however, the heads were meant to be isolated features, and they may have played a role in the so-called PPNB skull cult, marked by the deliberate isolation, and sometimes decoration, of human skulls of perhaps important ancestors (Bienert 1991; Verhoeven 2002a).

The other human figurine, like the above figurine recovered from an open area in level 2, is reminiscent of another type of statuette that was found earlier (Verhoeven 2000b: Fig. 4.9, no. 4). This 3.2 x 2.7 x 3.1 cm clay fragment, with the head and legs missing, seems to represent a woman, as a small depression between the legs probably indicates a pubic triangle. She was sitting on her buttocks, which were clearly indicated (Fig. 10, no. 2). The arms were not indicated. The lower back was marked by irregular scratches.

The four *possible* human figurine fragments, all without heads, were marked by flat bases and cylindrical (Fig. 10, no. 3) or conical bodies. One of these fragments (F01-11) was made of a grey limestone, the others of unbaked clay.

Zoomorphic figurines

The animal figurines consisted of three small representations of bulls in clay. The clearest example was a large fragment showing the body and the legs of a bull. Attention for detail is witnessed by the testicles and the spine which were clearly indicated (Fig. 10, no. 1). Another, much smaller, fragment represented part of a bull's neck and head, with two broken-off horns. The third piece was a fragment of a curved horn. Such small horns were also recovered in earlier campaigns at Sabi Abyad II (Verhoeven 2000b: 101). A match for the horns at Sabi Abyad II is perhaps found at Assouad, level VIII (Cauvin 1972, fig. 4, no. 1).

Tokens

We encountered seven small artefacts with simple geometric shapes which most likely served as tokens, i.e. counting devices expressing the quantities of objects exchanged or otherwise deployed (see e.g. Schmandt-Besserat 1992). With regard to the earlier campaigns, it was reported that there were three types of clay tokens (Verhoeven 2000b: 102). On the basis of the 2001 campaign two types can be added. Moreover, besides tokens of clay, tokens of stone were identified. So now the typology is as follows:

Type 1: cones of clay; *Type 2*: spheres of clay and stone (Fig. 10, no. 5); *Type 3*: crescent-shaped object of clay; *Type 4*: disc-shaped clay object; *Type 5*: half-round object of stone. In Table 8 the various dimensions of the complete tokens have been listed.

White Ware

Six fragments have been found of vessels made of so-called white ware or *vaisselle blanche* (e.g. Maréchal 1982; Moorey 1994:149). One fragment was of a flat base and part of an oblique vessel wall, both 1.5 cm thick. The other pieces represent rough, 0.8 to 2 cm thick vessel walls, one with a rounded rim. The white ware was tempered with different substances: small stones, coarse sand, fine sand, and fine sand together with vegetal material.

Bone Tools

The bone implements were represented by two complete awls, two tip fragments of awls, and a piece of polished bone. Most likely, all bone tools were made of the *metapodia* of adult ovicaprids. The complete awls were 8.5 and 7.4 cm long respectively (Fig. 10, nos. 11 and 12). It seems that the point of the smaller awl had been renewed by removing longitudinal pieces of bone. All awls had more or less sharp points that were either triangular, round or flattened in section, and all were smoothed and polished by use. The fragment of polished bone, finally, may have belonged to an awl or, alternatively, to a spatula or polishing instrument.

The Flint and Obsidian Industries

Copeland (2000: 66-67) has divided the flint and obsidian industries of Sabi Abyad II into three stratigraphically successive groups of lower, middle and upper levels, called phases 3 (levels 8-7), 2 (levels 6-4) and 1 (levels 3-2), respectively. In the periods proper to the Balikh valley chronological scheme of Akkermans (1993: 110-113), these industries pertain to the Balikh I period. Following the general PPNB chronological sequence as proposed by the Cauvins (M.-C. and J. Cauvin 1993; M.-C. Cauvin 1994), Copeland has divided this period into four sub-periods:

Balikh IA, comparable to the Cauvins' PPNB *Ancien*, dated ca. 9000-8100 BC: site BS 397 in the Balikh valley;

Balikh IB, an Early PPNB *Moyen* phase, dated ca. 8100-7800 BC (as yet unattested in excavation but perhaps present elsewhere in the valley);

Balikh IC, Late PPNB *Moyen*, dated ca. 7800-7500 BC: Sabi Abyad II phase 3 (levels 8-7);

Balikh ID, PPNB *Récent*, dated ca. 7500-6850 BC: Sabi Abyad II phase 2 (levels 6-4: Early PPNB *Récent*) and phase 1 (levels 3-2: Late PPNB *Récent*).

According to Copeland's analyses, the upper levels (3-2) at Sabi Abyad II clearly show that more sophisticated techniques had emerged than were present in the lower levels. Indeed, the main lithic traits of the PPNB *Récent* levels excavated in 2001 (levels 4, 3 and 2) are the appearance of pressure-flaking and the presence of Amuq points and backed and/or truncated sickle elements. As indicated in the introduction, the flint and obsidian artefacts recovered in 2001 have as yet not been analyzed in detail, and are

therefore only briefly and very generally commented upon here. On figures 11-13 a small selection of the material is presented.

Quite a number of tanged arrowheads, were found, mainly Byblos points (Fig. 11, nos. 1-4), but some Amuq points as well (Fig. 11, nos. 5-6). Interestingly, a number of the arrowheads seem to represent half-products, indicating that they were made at the tell. Especially the open area in square G8 was rich in arrowheads, perhaps indicating a production area. Furthermore, a number of lusted sickle elements were found. As has been noticed earlier (Copeland 2000; Copeland and Verhoeven 1996) some of these reaping tools showed traces of bitumen (Fig. 12, nos. 6 and 7). Apart from these artefacts, the flint tools consisted of various scrapers (especially round scrapers: Fig. 13, nos. 2 and 4), truncated pieces, notches or denticulates, pieces with fine or abrupt retouch and an occasional burin (Fig. 12, no. 4) or borer. The flint debitage was mainly represented by flakes and blades. Cores were scarce.

The obsidian tools mostly consisted of small retouched blades and so-called corner-thinned blades (CTB: Fig. 12, nos. 9 and 10). This type is defined as "an obsidian blade, bladelet or fragment of the same, having one to four small burin-like facets on the ventral surface at the corners of the distal or proximal ends" (Copeland 2000: 62). The obsidian debitage was mainly represented by unretouched blades and bladelets. Unique for Tell Sabi Abyad II was the find of a miniature bladelet core (Fig. 12, no. 11).

Earlier, Copeland (2000: 66-70) has related the flint and obsidian industries of Sabi Abyad II to other PPNB sites. Here, only the relations of the lithics from the upper levels 4, 3 and 2 at Sabi Abyad II, excavated in 2001, are briefly dealt with. In the Balikh valley the lithics of Tell Assouad (levels VIII-VII) and Tell Damishliyya (levels 1 and 2) are comparable to those of the upper levels at Sabi Abyad II (Akkermans 1988; Cauvin 1972; Nishiaki 1993/94, 2000). Middle Euphrates sites in Syria which show connections are Abu Hureyra 2B, especially with regard to Amuq points (Moore 1975), and Halula (PPNB *Récent* levels: Molist et al. 1994, 1996; Molist and Ferrer 1996). To the north of the Balikh, excavations at Gürcütepe in the Harran plan in Anatolia have produced tools reminiscent of those of Sabi Abyad II (Schmidt 1995). To the east in the Khabur basin, Bouqras (lower levels), Tell es-Sinn, Fakhariyah, Feyda and Kashkashok II (especially with regard to CTB's) show connections (Nishiaki 1993, 2000; Hole 1994; Roodenberg 1986, 1979/80). Typologically, the obsidian tool-types from the Khabur sites are similar to those found in the Balikh valley. It has been suggested that the Khabur sites formed the trade links between the Balikh and the eastern obsidian provenance areas (Hole 1995).⁵

AFTERWORD

The excavations at Tell Sabi Abyad II in 2001 have confirmed the earlier findings and conclusions, that have been reported in Verhoeven and Akkermans, eds., 2000. The large exposure of the level 3 settlement (over 800 m²) provides a representative picture of

⁵ Due to the large standard deviations of the dates at the Neolithic sites in the El Kowm oasis in the Syrian desert (Stordeur, ed., 2000:305), the chronological relation between Sabi Abyad II and the El Kowm sites is unclear at present.

the material culture of a Late PPNB community in the steppes of northern Syria. The architecture at the site has two main characteristics: it is irregular (but see also Akkermans and Verhoeven 2000b), and the rooms are very small, probably mainly serving for storage. These people were farmers, but elsewhere (Verhoeven *in press*) I have argued that these farmers may also have practised nomadic pastoralism, using many of the small rooms at the tell for storing their products while they were on the move with their sheep and/or goats. For pastoral nomads the village may have been a focal point, a centre not only for economic activities, but also for social activities, such as meetings and feasts.

As is well known, many (large) PPNB sites in the Levant and Anatolia have provided spectacular evidence of ritual practices (Verhoeven 2002a), and a fair amount of research has focused on these sites and PPNB ritual practice. The recovery of 'temples' (e.g. 'Ain Ghazal, Nevali Çori: Rollefson 2000; Hauptmann 1983), large statuary (e.g. Göbekli Tepe: Schmidt 2001), stone masks (e.g. Nahal Hemar: Bienert 1995), decorated skulls (e.g. Jericho: Kenyon 1981), elaborate burial structures (e.g. Djade: Coqueugniot 1998), and so on, gives the general impression that the PPNB was a 'special' period in Near Eastern prehistory, marked by an elaborate or at least very visible ritual life (contrary to the Pottery Neolithic; Verhoeven 2002b). The important role of ritual at many PPNB sites cannot be denied, but it should be kept in mind that there are also (small) sites from which spectacular evidence of ritual is absent. Sabi Abyad II is such a small, 'normal', site. While rituals were probably carried out (witness the figurines), they were most likely of a different nature than rituals at sites such as just mentioned. Thus, Tell Sabi Abyad II mainly presents a picture of the domestic way of life of a small PPNB community.

Focusing on Syria, Sabi Abyad II is different from other excavated sites in yet another respect. As has been noted earlier (Akkermans and Verhoeven 2000b: 177), sites excavated in the Euphrates basin, such as Abu Hureyra, Halula and Bouqras, were much larger and marked by a careful settlement planning (Moore 1975; More, Hillman and Legge, eds., 2000; Molist 1998; P.A. Akkermans et al. 1983). Moreover, PPNB settlement in the Euphrates basin seems to have been largely restricted to a few large mounds, as opposed to the Balikh valley, which was marked by a pattern of small villages dispersed throughout the basin. Other evidence that PPNB communities in the Balikh valley were distinctive from others, comes from the figurines. As yet the stylized limestone human heads (see above) have only been reported from sites in the Balikh basin (Assouad and Tell Sabi Abyad II) and its continuation into the plain of Harran (Gürcütepe). The people who lived at Tell Sabi Abyad II and at other Balikh sites may thus represent a specific 'group' within the PPNB 'culture', sharing general traits, like tanged projectile points, but with many local characteristics, like settlement distribution, village lay-out and a specific material culture, such as the stylized human heads.

Acknowledgements

This research was supported by the Council for the Humanities, which is part of the Netherlands Organization for Scientific Research (NWO), and by the Faculty of Archaeology of Leiden University. I am grateful to Peter M.M.G. Akkermans for the

opportunity to direct the work at Tell Sabi Abyad II, and for his much-valued advice with regard to the excavations, analysis and publication. Merel Brüning and Akemi van Acht-Kaneda did a wonderful job with regard to the small finds registration in the field. Mikko Kriek made the drawings. Ans Bulles carefully corrected the English text. Last, but not least, Sofie Debruyne made the 2001 campaign an unforgettable experience.

BIBLIOGRAPHY

- Akkermans, P.A. et al., 1983 – Bouqras Revisited: Preliminary Report on a Project in Eastern Syria. *Proceedings of the Prehistoric Society* 49: 335-372.
- Akkermans, P.M.M.G., 1988 – The Soundings at Tell Damishliyya. In: van Loon, M.N. (ed.): Hammam et-Turkman I. Nederlands Historisch-Archaeologisch Instituut, Istanbul: 19-67.
- Akkermans, P.M.M.G., 1993 – Villages in the Steppe: Later Neolithic Settlement and Subsistence in the Balikh Valley, Northern Syria. *International Monographs in Prehistory*, Ann Arbor.
- Akkermans, P.M.M.G. and M. Verhoeven, 2000a – Chronology. In: Verhoeven, M. and P.M.M.G. Akkermans (eds.): Tell Sabi Abyad II: The Pre-Pottery Neolithic B Settlement. Report on the Excavations of the National Museum of Antiquities Leiden in the Balikh Valley, Syria. Nederlands Historisch-Archaeologisch Instituut, Istanbul: 1-2.
- Akkermans, P.M.M.G. and M. Verhoeven, 2000b – Conclusions. In: Verhoeven, M. and P.M.M.G. Akkermans (eds.): Tell Sabi Abyad II: The Pre-Pottery Neolithic B Settlement. Report on the Excavations of the National Museum of Antiquities Leiden in the Balikh Valley, Syria. Nederlands Historisch-Archaeologisch Instituut, Istanbul: 173-180.
- Bienert, H.D., 1991 – Skull Cult in the Prehistoric Near East. *Journal of Prehistoric Religion* 5: 9-23.
- Bienert, H.D., 1995 – The Human Image in the Natufian and Aceramic Neolithic Period of the Middle East. In: Waldren, W.H., J.A. Ensenyat and R.C. Kennard (eds.): *Ritual, Rites and Religion in Prehistory: IIIrd Deya International Conference of Prehistory*. BAR Int. Series 611 (i, ii), Oxford: 75-103.
- Cauvin, J., 1972 – Sondage à Tell Assouad (Djézireh, Syrie). *Annales Archéologiques Arabes Syriennes* 22: 85-88.
- Cauvin, M.-C., 1994 – Synthèse sur les industries lithiques Néolithique Préceramique en Syrie. In: Gebel, H.-G. and S. Kozłowski (eds.): *Neolithic Chipped Stone Industries of the Fertile Crescent*, Berlin, Ex Oriente: 279-298.
- Cauvin, M.-C. and J. Cauvin, 1993 – La séquence néolithique PPNB au Levant Nord. *Paléorient* 19/1: 23-28.
- Collet, P. and R.H. Spoor, 1996 – The Ground-Stone Industry. In: P.M.M.G. Akkermans (ed.): Tell Sabi Abyad: The Late Neolithic Settlement. Report on the Excavations of the University of Amsterdam (1988) and the National Museum of Antiquities Leiden (1991-1993) in Syria, volume II. Nederlands Historisch-Archaeologisch Instituut, Istanbul: 415-438.
- Copeland, L., 2000 – The Flint and Obsidian Industries. In: Verhoeven, M. and P.M.M.G. Akkermans (eds.): Tell Sabi Abyad II: The Pre-Pottery Neolithic B Settlement. Report on the Excavations of the National Museum of Antiquities Leiden in the Balikh Valley, Syria. Nederlands Historisch-Archaeologisch Instituut, Istanbul: 51-89.
- Copeland, L. and M. Verhoeven, 1996 – Bitumen-Coated Sickle-Blade Elements at Tell Sabi Abyad II, Northern Syria. In: Kozłowski, S.K. and H.G. Gebel (eds.): *Neolithic Chipped Stone Industries of the Fertile Crescent, and their Contemporaries in Adjacent Regions*. Studies in Early Near Eastern Production, Subsistence, and Environment 3, Berlin, Ex Oriente: 327-330.
- Coqueugnot, É., 1998 – Dja'de El Mughara (Moyen-Euphrate): un village néolithique dans son environnement naturel à la veille de la domestication. In: Fortin, M. and O. Aurenche (eds.): *Espace naturel, Espace habité en Syrie du Nord (10e-2e millénaires av. J-C)*. Travaux de la Maison de l'Orient 28: 109-114.
- Hauptmann, H., 1993 – Ein Kultgebäude in Nevalı Çori. In: Frangipane, M., H. Hauptmann, M. Liverani, P. Matthiae and M. Mellink (eds.): *Between the Rivers and over the Mountains*. University of Rome: 37-69.

- Hole, F., 1994 – Khabur Basin PPN and Early PN Industries. In Gebel, and S. Kozłowski (eds.): *Neolithic Chipped Stone Industries of the Fertile Crescent*, Berlin, Ex Oriente: 331-347.
- Hole, F., 1995 – Remnant Neolithic/Epi-Paleolithic Sites in the Khabur Basin. *Neo-Lithics* 2/95: 7-8.
- Kenyon, K.M., 1981 – Excavations at Jericho. Volume Three: The Architecture and Stratigraphy of the Tell. Plates. British School of Archaeology in Jerusalem, London.
- Maréchal, C., 1982 – Vaiselles blanches du Proche Orient: El Kowm (Syrie) et l'usage du plâtre au néolithique. *Cahiers de l'Euphrate* 3: 217-251.
- Molist, M., 1998 – Espace collectif et espace domestique dans le Néolithique des IX^{ème} et VIII^{ème} millénaires B.P. au nord de la Syrie: apports du site de Tell Halula (Vallée de l'Euphrate). In: Fortin, M. and O. Aurenche (eds.): *Espace naturel, Espace habité en Syrie du Nord (10e-2e millénaires av. J.-C.)*. Travaux de la Maison de l'Orient 28: 115-130.
- Molist, M. and Ferrer, A., 1996 – Industries lithiques pendant la période 8-75000 B.P. à Tell Halula dans le cadre de l'Euphrate Moyen Syrien. In: Kozłowski, S. and H.-G. Gebel (eds.): *Neolithic Chipped Stone Industries of the Fertile Crescent and Their Contemporaries in Adjacent Regions*, Berlin, Ex Oriente: 431-442.
- Molist, M., J. Mateu and T. Palomo, 1994 – Étude préliminaire sur les industries lithiques du PPNB moyen et récent de Tell Halula (Haute Vallée de l'Euphrate, Syrie). In Gebel, H.-G. and S. Kozłowski (eds.): *Neolithic Chipped Stone Industries of the Fertile Crescent*, Berlin, Ex Oriente: 349-363.
- Molist, M., Palomo, T. and A. Ferrer, 1996 – The Evolution of the Tell Halula (Syria) Chipped Stone Industry during the 9-8th Millennia bp. *Neo-Lithics* 1/96: 5-6.
- Moore, A.M.T., 1975 – The Excavation at Tell Abu Hureyra in Syria: A Preliminary Report. *Proceedings of the Prehistoric Society* 41: 50-77.
- Moore, A.M.T., Hillman G.C. and A.J. Legge (eds.), 2000 – Village on the Euphrates: From Foraging to Farming at Abu Hureyra. Oxford University Press, New York, etc.
- Moorey, P.R.S., 1994 – Ancient Mesopotamian Materials and Industries: The Archaeological Evidence. Clarendon Press, Oxford.
- Nishiaki, Y., 1993 – Lithic Analysis and Cultural Change in the Late Pre-pottery Neolithic of Syria. *Anthropological Science* 101/1: 91-109.
- Nishiaki, Y., 1993/94 – Notes on the Neolithic Stone Artifacts from Tell Damishliyya, Balikh Valley, Syria. *Archiv für Orientforschung* 40/41: 301-303.
- Nishiaki, Y., 2000 – Lithic Technology of Neolithic Syria. BAR Int. Series 840, Oxford.
- Rollefson, G.O., 2000 – Ritual and Social Structure at Neolithic 'Ain Ghazal. In: Kuijt, I. (ed.): *Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation*. Kluwer Academic/Plenum Publishers, New York, etc.: 163-188.
- Roodenberg, J.J., 1979/80 – Sondage des niveaux néolithiques de Tell es-Sinn, Syrie. *Anatolica* 7: 21-34.
- Roodenberg, J.J., 1986 – Le mobilier en pierre de Bouqras: Utilisation de la pierre dans un site néolithique sur le Moyen Euphrate (Syrie). Nederlands Historisch-Archaeologisch Instituut, Istanbul.
- Schmandt-Besserat, D., 1992 – Before Writing: From Counting to Cuneiform. University of Texas Press, Austin.
- Schmidt, K., 1995 – Investigations in the Upper Mesopotamian Early Neolithic: Göbekli Tepe and Gürcütepe. *Neo-Lithics* 2/95: 9-10.
- Schmidt, K., 1998 – A New LPPNB Figurine Type: The 'Tell Assouad Type'. *Neo-Lithics* 1/98: 7-8.
- Schmidt, K., 2001 – Göbekli Tepe, Southeastern Turkey: A Preliminary Report on the 1995-1999 Excavations. *Paléorient* 26 (1): 45-54.
- Stordeur, D., (ed.), 2000 – El Kowm 2: une île dans le désert. La fin du Néolithique précéramique dans la steppe syrienne. CNRS, Paris.
- Verhoeven, M., 2000a – The Excavations: Stratigraphy and Architecture. In: Verhoeven, M. and P.M.M.G. Akkermans (eds.): *Tell Sabi Abyad II: The Pre-Pottery Neolithic B Settlement. Report on the Excavations of the National Museum of Antiquities Leiden in the Balikh Valley, Syria*. Nederlands Historisch-Archaeologisch Instituut, Istanbul: 3-49.
- Verhoeven, M., 2000b – The Small Finds. In: Verhoeven, M. and P.M.M.G. Akkermans (eds.): *Tell Sabi Abyad II: The Pre-Pottery Neolithic B Settlement. Report on the Excavations of the National Museum*

- of Antiquities Leiden in the Balikh Valley, Syria. Nederlands Historisch-Archaeologisch Instituut, Istanbul: 91-122.
- Verhoeven, M., 2002a – Ritual and Ideology in the Pre-Pottery Neolithic B of the Levant and South-East Anatolia. *Cambridge Archaeological Journal* 12 (2): 233-258.
- Verhoeven, M., 2002b – Transformations of Society: The Changing Role of Ritual and Symbolism in the PPNB and PN Periods in the Levant, Syria and South-East Anatolia. *Paléorient* 28 (1): 5-14.
- Verhoeven, M., in press – A Tale of Two Tells: Comparing Lifestyles at Neolithic Tell Sabi Abyad II and Tell Sabi Abyad I, Northern Syria. Commemorative Volume to Lorraine Copeland.
- Verhoeven, M. and P.M.M.G. Akkermans (eds.), 2000 – Tell Sabi Abyad II: The Pre-Pottery Neolithic B Settlement. Report on the Excavations of the National Museum of Antiquities Leiden in the Balikh Valley, Syria. Nederlands Historisch-Archaeologisch Instituut, Istanbul.

E7	F7	F8	G8	I5	J5	Level
					1	Iron Age
1A	1A	1	1	1	2	2
1B	1B					
1C	1C					
2A	2A	2A	2	2		
2B						
2C						
2D	2B	2B 2C				
	3A	3A	3A	3A	3A	3A
		3B	3B	3B	3B	
		3C	3C	3C	3C	
				3D	3D	
				3E	3E	
		3D		3F	3F	
	3B	3E	3D			3B
3C	3F	3E				
3	4A		4A	4A	4A	4
	4B		4B	4B	4B	
			4C	4C	4C	
				4D		

Table 1. Stratigraphic relations between the various strata in the areas of excavation of the 2001 campaign.

Room	Dimensions (l x w in m)
1	at least 1.00 m wide
2	at least 1.50 x 0.50
3	1.50 x 1.15
4	1.15 x 0.70
5	1.00 x 0.65
6	1.20 x 0.90
7	0.75 x 0.70
8	1.50 x 1.05

Table 2. Room dimensions of level 3B building X.

Room	Dimensions (l x w in m)
1	at least 4.30 x 3.25
2	3.00 x 1.40
3	2.75 x 0.90
4	1.75 x 0.65
5	1.90 x 0.95

Table 3. Room dimensions of level 3B building XIV.

Room	Dimensions (l x w in m)
1	1.30 x 1.00
2	3.60 x 3.25
3	2.25 x 1.50
4	at least 2.25 x 2.25
5	1.90 x 1.00
6	2.00 x 1.00
7	1.85 x 0.50
8	at least 2.00 x 1.00
9	at least 0.75 x 0.65
10	at least 3.00 x 2.50
11	3.25 x 2.75

Table 4. Room dimensions of level 3B building XV.

Pit	Location	Stratum	Shape	Dimensions (l x w or Ø x d in m)	Fill
C	E7: partly hidden in N section	2C	elongated	at least 2.50 x 1 x 0.30	soft black ash, thin and burnt red and white layers, many burnt stones
I	F7: NE	2	kidney-shaped	0.60 x 0.30 x 0.03	soft grey ash, ab
J	F7: NE	2	rectangular with rounded corners	0.70 x 0.50 x 0.03	soft beige
AL	F8: E, G8: W partly hidden in sections	1	irregular	at least 6.50 x 3.60 x 0.60	soft beige, ls, cp
AM	F8: E partly hidden in section	1	irregular, bell-shaped section	at least 0.60 x 0.30 x 0.30	soft beige
AN	F8: E partly hidden in section	1	irregular	at least 0.80 x 0.40 x 0.24	soft beige, ls
AO	F8: W partly hidden in section	1	irregular	at least 0.70 x 0.35 x 0.30	orange-brown, ls
AP	F8: W partly hidden in section	1	irregular	at least 0.30 x 0.25 x 0.18	soft beige
I	I5: N partly hidden in section	1	irregular	at least 0.60 x 0.50 x 0.60	soft beige, ls

Table 5. Characteristics of the level 2 pits (all fill contains loam, ls = lime spots, cp = charcoal particles, ab = animal bones).

Object	Level				Total 2001	Total all campaigns
	4	3	2	mixed		
Grinding slab	3	5	1	2	11	34
Grinder	3	4	3	1	12	41
Grinding slab or grinder	3	6	3	5	17	17
Mortar		1			1	1
Hammer-stone		2		1	3	26
Celt	1	1	1	1	4	11
Stone vessel	3	10	7	6	26	84
Rubbing/polishing stone		5	6	7	17	46
Retouchoir		1		1	2	2
Palette		1			1	8
Weight		1			1	4
Bead		1			1	9
Pendant		1			1	2
Anthropomorphic figurine			2		2	6
Anthropomorphic figurine?			1	3	4	4
Zoomorphic figurine		2	1		3	36
Anthropomorphic or zoomorphic figurine			2	1	3	3
Token	1	3		3	7	24
White Ware	2	1	3		6	14
Bone awl	1		2	1	4	24
Polished bone			1		1	1
Total	17	45	33	32	127	472

Table 6. Number and chronological distribution of the small finds.

Raw material	N	%
Stone	109	85.8
Clay	13	10.2
Bone	5	3.9
Total	127	100

Table 7. The raw material of the small finds.

Object	No.	Length	Width	Height	Diameter
Type 2 grinder	S01-9	6.2	4.7	1.3	
Hammer-stone	S01-18	5.3	5.1	4.3	
	S01-58	3.5	3.8	3.0	
	S01-89	4.7	5.0	4.2	
Rubbing/polishing stone	S01-19	7.3	7.1	2.4	
	S01-53	2.9	2.4	0.4	
Celt	S01-77	8.4	3.6	1.7	
	S01-98	4.8	2.0	1.6	
Retouchoir	S01-33	11.7	3.2	2.7	
Palette	S01-87	11.2	7.1	3.1	
Token	S01-36				2.1
	S01-78				2.3
Bead	B01-1			0.1	0.5
Anthropomorphic figurine	F01-10	2.6	1.6	2.0	
Type 1 token	S01-93	2.5	1.9	2.0	
Type 2 token	O01-2				2.6
	O01-3				3.1
	S01-36				2.1
	S01-78				2.3
Type 4 token	O01-1			0.9	3.9
Type 5 token	S01-75	1.7	2.4		
Bone awl	I01-2	8.5	2.1	1.5	
	I01-3	7.4	1.4	0.7	

Table 8. Dimensions (in cm) of complete small finds.

Stone sort	N	%
Limestone	23	21.1
Gypsum	11	10.1
Limestone/gypsum/alabaster	11	10.1
Sandstone	5	4.6
Flint	1	1
Quartzite*	2	1.8
Vesicular basalt*	30	27.5
Compact basalt*	11	10.1
Dolorite*	4	3.7
Gabbro*	1	1
Porfirite*	1	1
Granodiorite*	1	1
Unidentified	8	7.3
Total	109	100

Table 9. The stone sorts as represented by the PPNB small finds. * = stone sorts not indigenous to the Balikh valley.

CATALOGUE OF ILLUSTRATED SMALL FINDS

Order of presentation: master file no., description, material, dimensions, provenance.

Figure 9. Stone vessels.

1. S01-86, stone bowl, wide and open shape (type 3), flat rim, gypsum with orange bands, Th: 1.1 cm, H: 6.2 cm, D: 27.2 cm, I5, level 3A, building XVI, rooms 1-2.
2. S01-88, stone bowl, open shape (type 1), rounded rim, limestone, Th: 1 cm, D: 17.3, I5, level 3A, building XVI, rooms 1-2.
3. S01-12, stone bowl, open shape (type 1), rounded rim, limestone, Th: 1.1 cm, F7, level 2, open area.
4. S01-74, stone bowl, open shape (type 1), pointed rim, limestone, Th: 0.6 cm, D: 14.9 cm, G8, levels 3A/3B, open area.
5. S01-68, stone bowl, open shape (type 1), rounded rim, limestone, Th: 1 cm, G8, levels 2/3B, open area.
6. S01-66, stone bowl, closed shape (type 2), flat rim, limestone, Th: 0.8 cm, D: 16 cm, G8, levels 3A/3B, open area.
7. S01-258, miniature bowl (type 4), with three feet, limestone, Th: 0.8 cm, H: 1.6 cm, D: 3.3 cm, E7/F7 baulk, levels 2/4, open area.

Figure 10. Various small finds.

1. F01-5, zoomorphic figurine: bull, testicles indicated, unbaked clay, L: 4.5 cm, W: 1.7 cm, H: 3.2 cm, E7, level 2, open area.
2. F01-1, anthropomorphic figurine: seated female, head and legs broken off, unbaked clay, L: 3.2 cm, W: 2.7 cm, H: 3.1 cm, F7, level 2, open area.
3. F01-2, base of anthropomorphic figurine, unbaked clay, H: 2.9 cm, D: 1.9 cm, E7, level 2, open area.
4. F01-10, anthropomorphic figurine: stylized human head, neck artificially flattened at base, very soft limestone, L: 2.6 cm, W: 1.6 cm, H: 2.0 cm, F8, level 2, open area.
5. S01-36, spherical token (type 2), limestone, D: 2.0, F8, levels 3A/3B, building XV, room 8.
6. B01-1, small bead, green stone, H: 0.3 cm, D: 0.9 cm, F8, levels 3A/3B, building XV, rooms 2, 4.
7. S01-98, small celt, dolorite, L: 4.8 cm, W: 2.0 cm, H: 1.6 cm, J5, level 3A, pit H.
8. S01-77, celt, traces of use (small pits) on sides, dolorite, L: 8.4, W: 3.6, H: 1.7, G8, level 4, open area.
9. S01-14, retouchoir, traces of use (small pits) at short end, dolorite, L: 5.4 cm, W: 2.3 cm, H: 1.1 cm, F7, level 3B, building XIV, room 1.
10. S01-33, retouchoir, traces of use (small pits) at both short ends, gabbro, L: 11.7 cm, W: 3.2 cm, F8, levels 2/3A, open area.
11. I01-3, bone awl, smooth and polished due to use, probably made of *metapodium* of sheep/goat, tip probably renewed by flaking, L: 7.4, W: 1.4, H: 0.7, F8, levels 2/3A, open area.
12. I01-2, bone awl, smooth and polished due to use, probably made of *metapodium* of sheep/goat, L: 8.5 cm, W: 2.1 cm, H: 1.5 cm, E7, level 2, open area.
13. S01-65, weight, compact basalt, L: 7.0 cm, W: 3.3 cm, D: 11.8 cm, G8, levels 3A/3B, open area.

CATALOGUE OF ILLUSTRATED FLINT AND OBSIDIAN TOOLS

Order of presentation: type and special traits, raw material (fine-grained unless stated otherwise), colour, provenance.

Figure 11. Flint artefacts: projectile points.

1. Byblos point, grey-brown flint, proximal 'PPNB scar', F8: levels 2/3A/3B, open area.
2. Byblos point, grey-white flint (dehydrated light grey flint), F8: levels 2/3A, building XV, room 10.
3. Byblos point, yellow-brown flint, F7: level 3B, building XIV, room 3.
4. Small Byblos point, light-brown flint, G8: levels 3A/3B, open area.
5. Amuq point, light chocolate-brown flint, F8: levels 2/3A, open area.
6. Amuq point, chocolate-brown flint, G8: levels 2/3A, open area.

Figure 12. Various flint and obsidian artefacts.

1. Retouched blade, retouch at both lateral edges of dorsal side, honey-coloured flint, F8: levels 3A/3B, building XV, room 2.
2. Long blade with use-retouch at lateral edges of dorsal side, medium-grained grey-white (dehydrated?) flint, F8: levels 3A/3B, building XV, room 2.
3. Truncated piece, retouched at one lateral edge of ventral side, brownish-white medium-grained flint, F8: levels 2/3A, open area.
4. Burin, two working edges, dark-brown flint, G8: levels 3A/3B, open area.
5. Blade with use-retouch at both lateral edges of dorsal side, translucent grey obsidian, F8: levels 3A/3B, building XV, room 2.
6. Lusted sickle blade, lustre and black bitumen at both lateral edges, beige flint, G8: levels 2/3A, open area.
7. Lusted sickle element, use-retouch with sickle gloss at one lateral edge of ventral side, traces of bitumen of dorsal side, medium-grained honey-coloured flint, F8: levels 2/3A, open area.
8. Lusted sickle blade, one toothed lateral edge with slight sickle gloss, medium-grained honey-coloured flint, G8: levels 2/3A, open area.
9. Corner-thinned blade (CTB), two scars at proximal end, use retouch at one lateral edge of dorsal side, grey-black slightly translucent obsidian, F8: levels 3A/3B, building XV, room 2.
10. Corner-thinned blade (CTB), one scar at proximal end, use retouch at both lateral edges of dorsal side, grey-black obsidian, F8: levels 3A/3B, building XV, room 2.
11. Miniature bladelet core, black obsidian, F7/G7 baulk: level 2, open area.

Figure 13. Flint artefacts: scrapers.

1. Double end-scraper, also retouched at lateral edges of dorsal side, light-brown flint, G8: levels 3A/3B, open area.
2. Round scraper, medium-grained beige flint, F8: levels 2/3A, open area.
3. End-scraper on flake, grey-brown flint, F8: levels 3A/3B, building XV, room 2.
4. Round scraper, grey-beige flint, F8: levels 2/3A, open area.

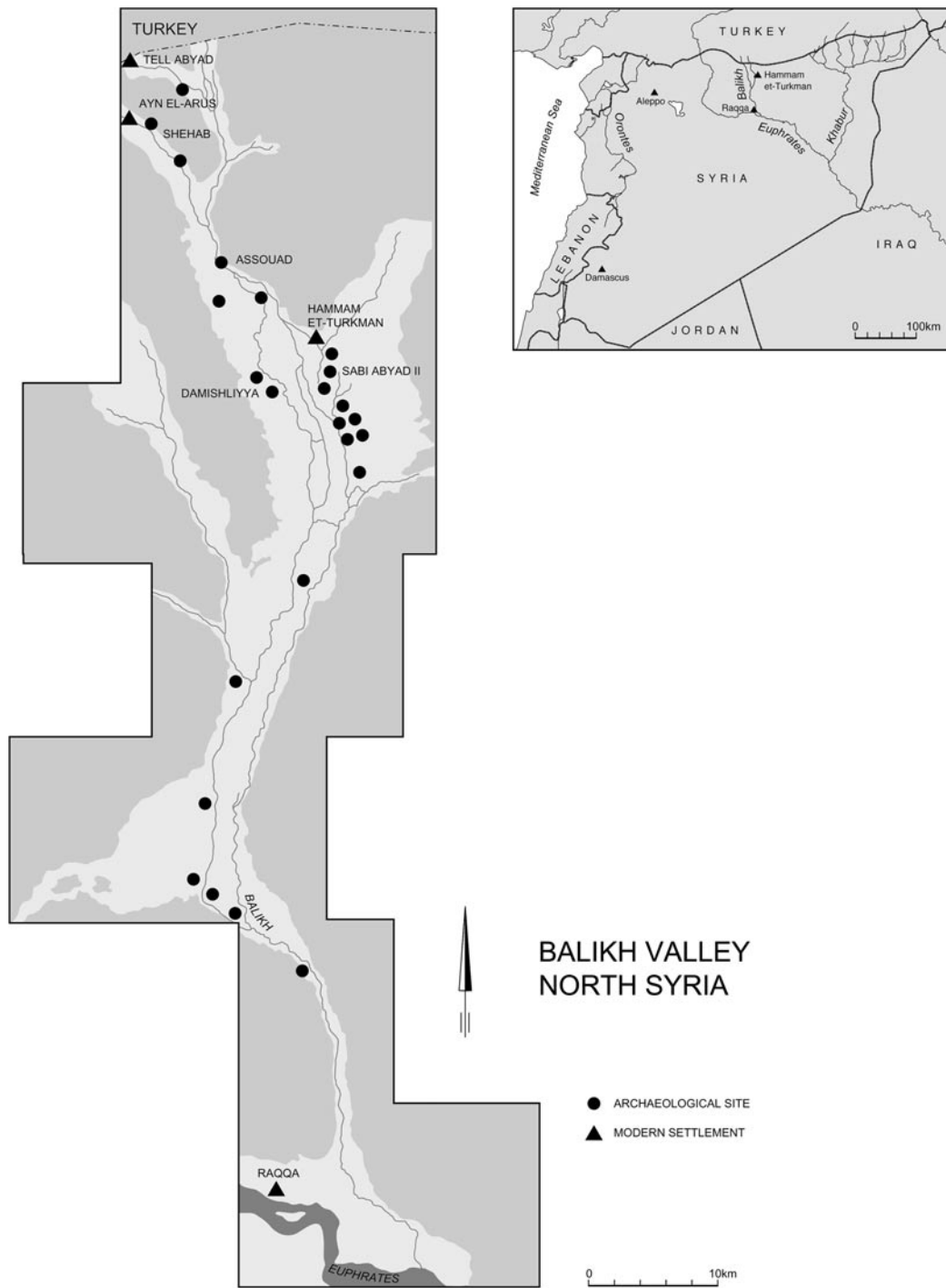


Fig. 1. Map of the Balikh valley and the location of PPNB sites.

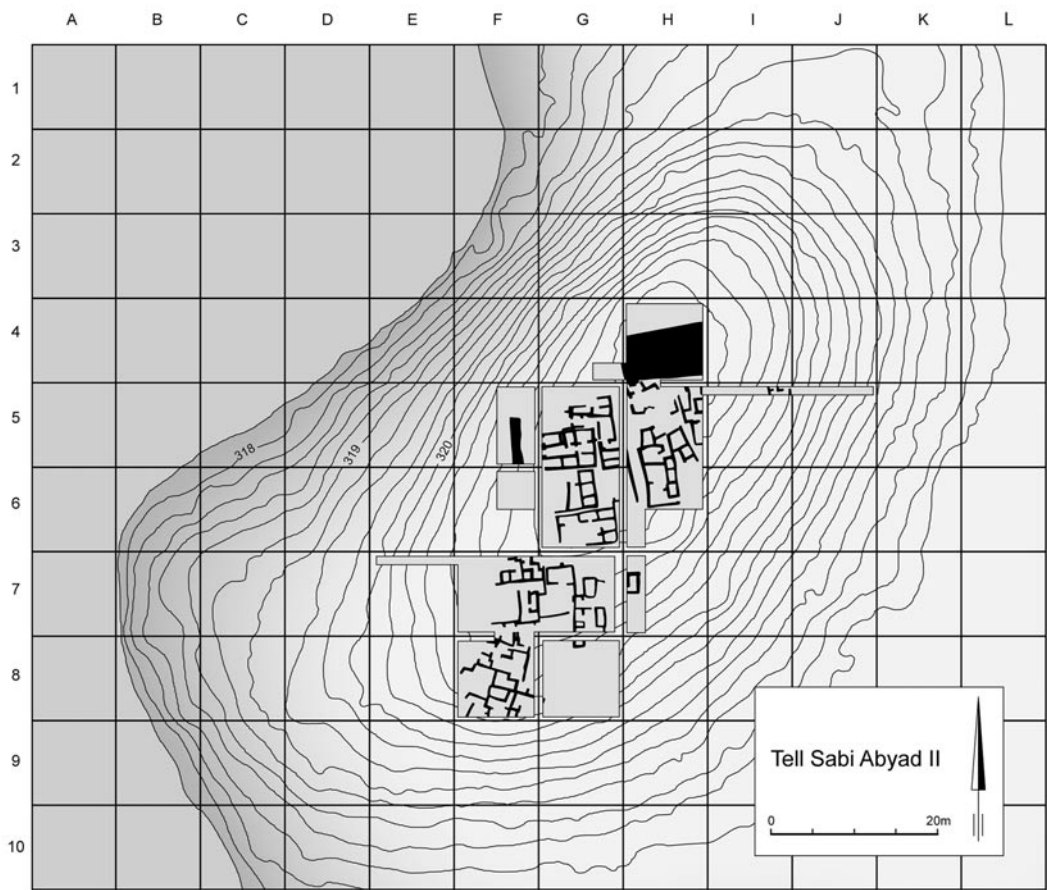


Fig. 2. Contour map of Tell Sabi Abyad II with the areas of excavation.



Fig. 3. Plan of the level 3 settlement. Apart from pit A in square G4 and pit I in square H5, all pits are level 2 features. Islamic burials are marked with a B.

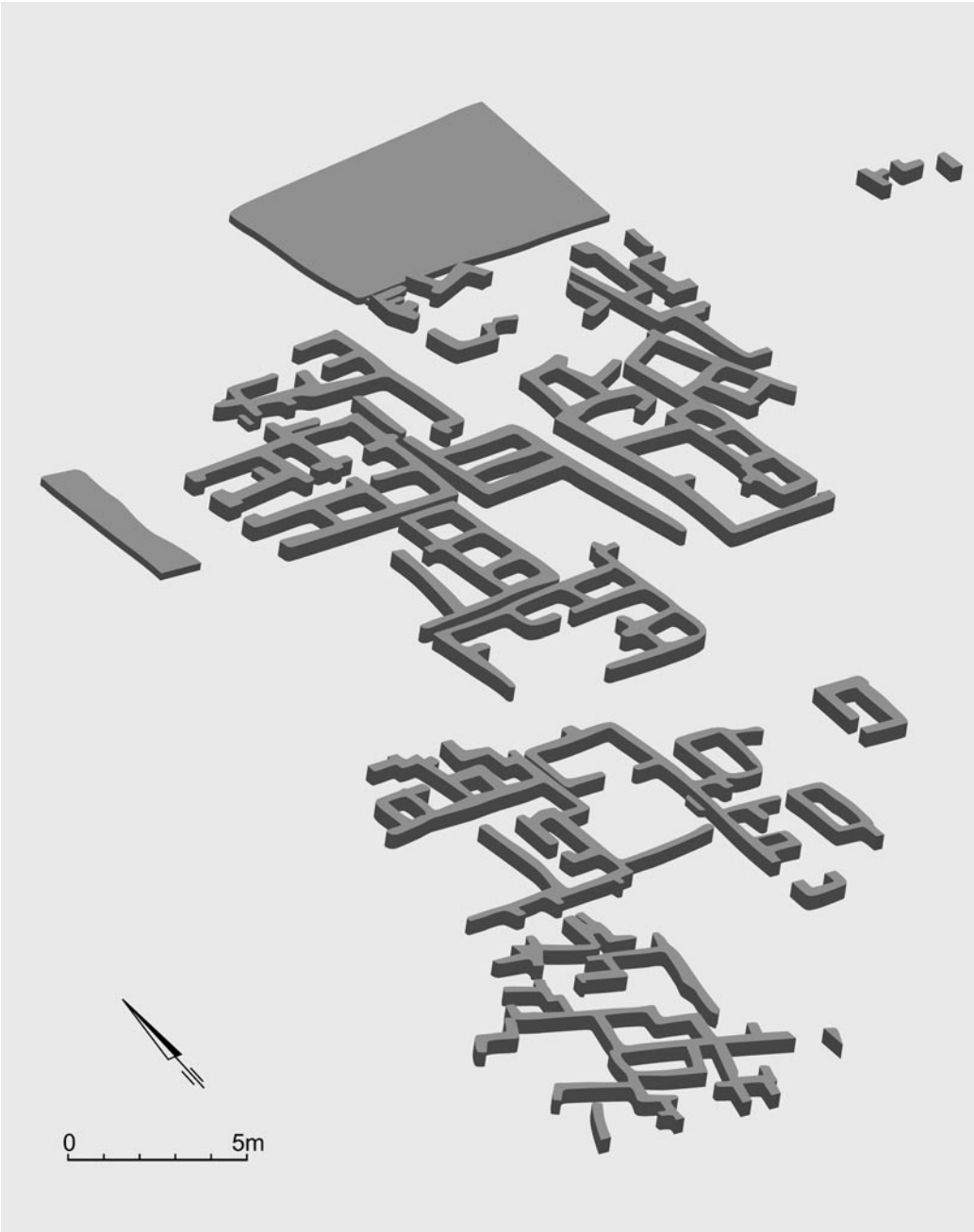


Fig. 4. Axonometric reconstruction of the level 3 settlement.

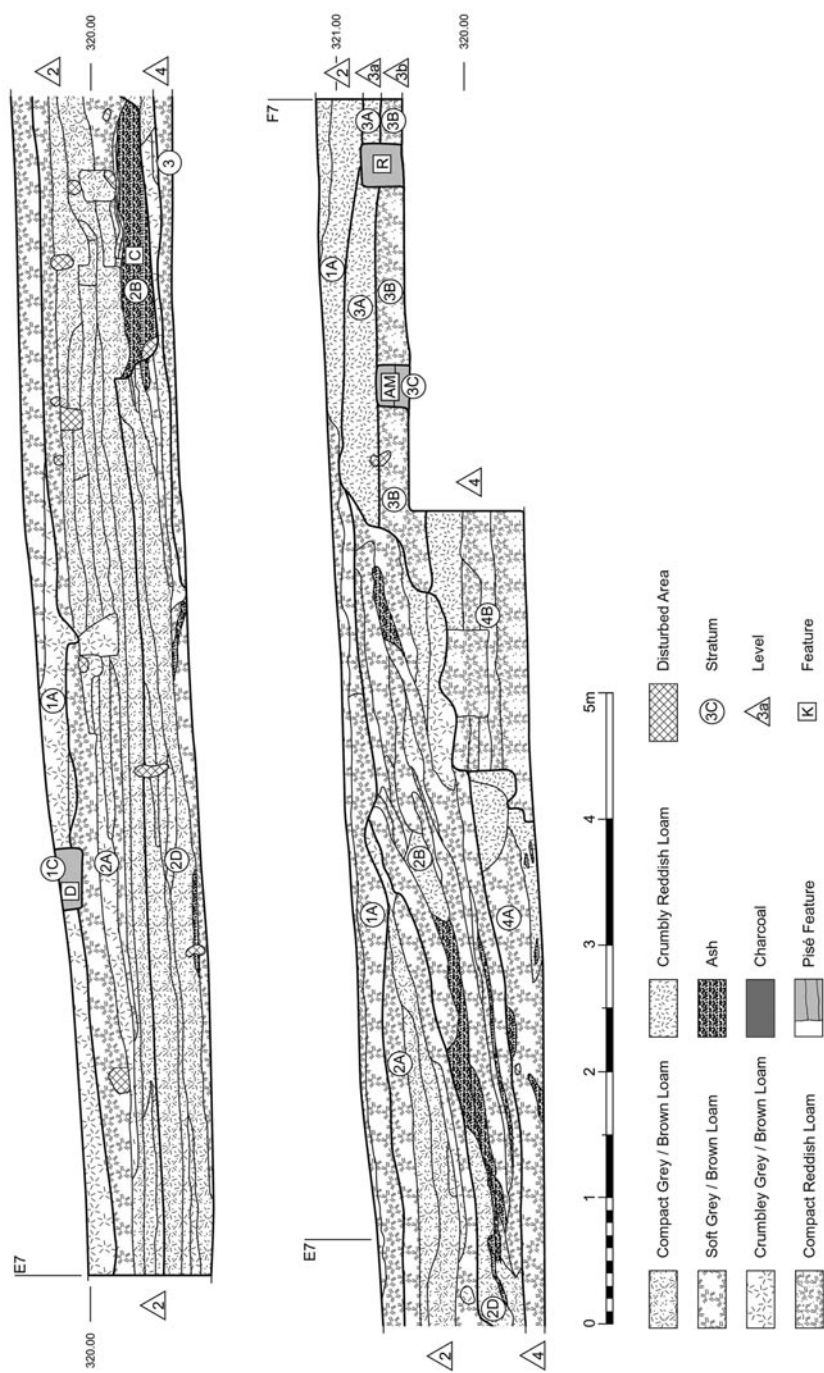


Fig. 5. North sections of squares E7 and F7.

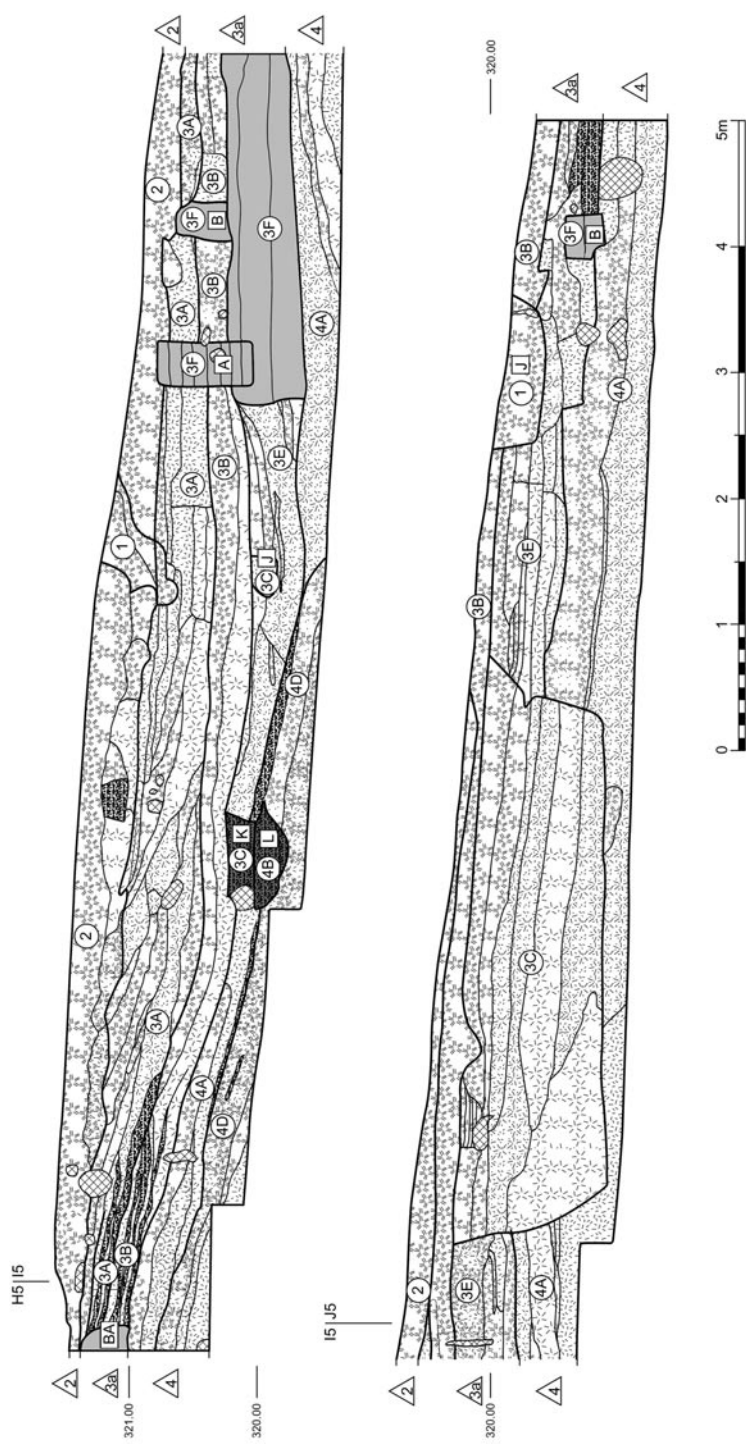


Fig. 6. North sections of squares I5 and J5 (legend: see Fig. 4).



Fig. 7. Level 3 architecture in squares F7 and F8: buildings X, XIV and XV.



Fig. 8. Level 3 architecture in square F8: building XV.

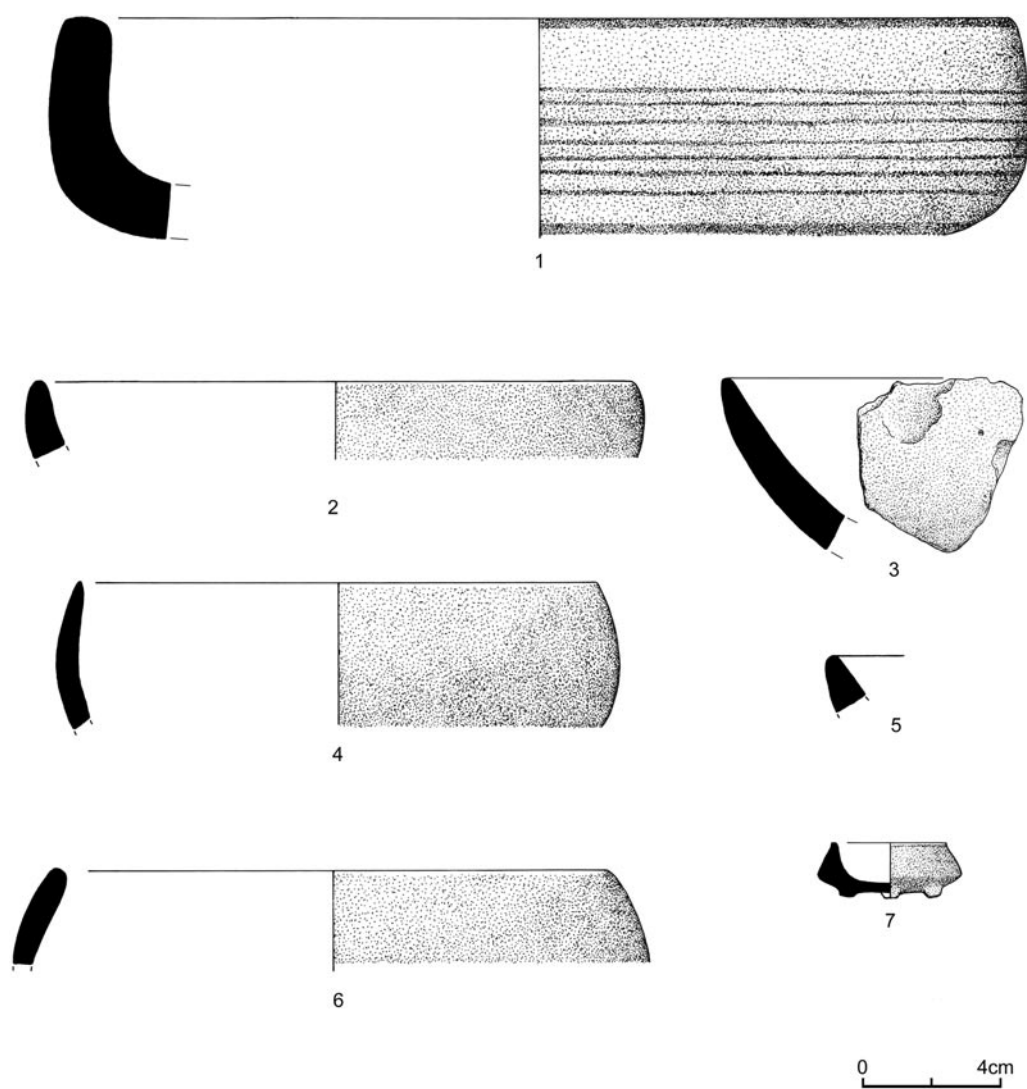


Fig. 9. Stone vessels.

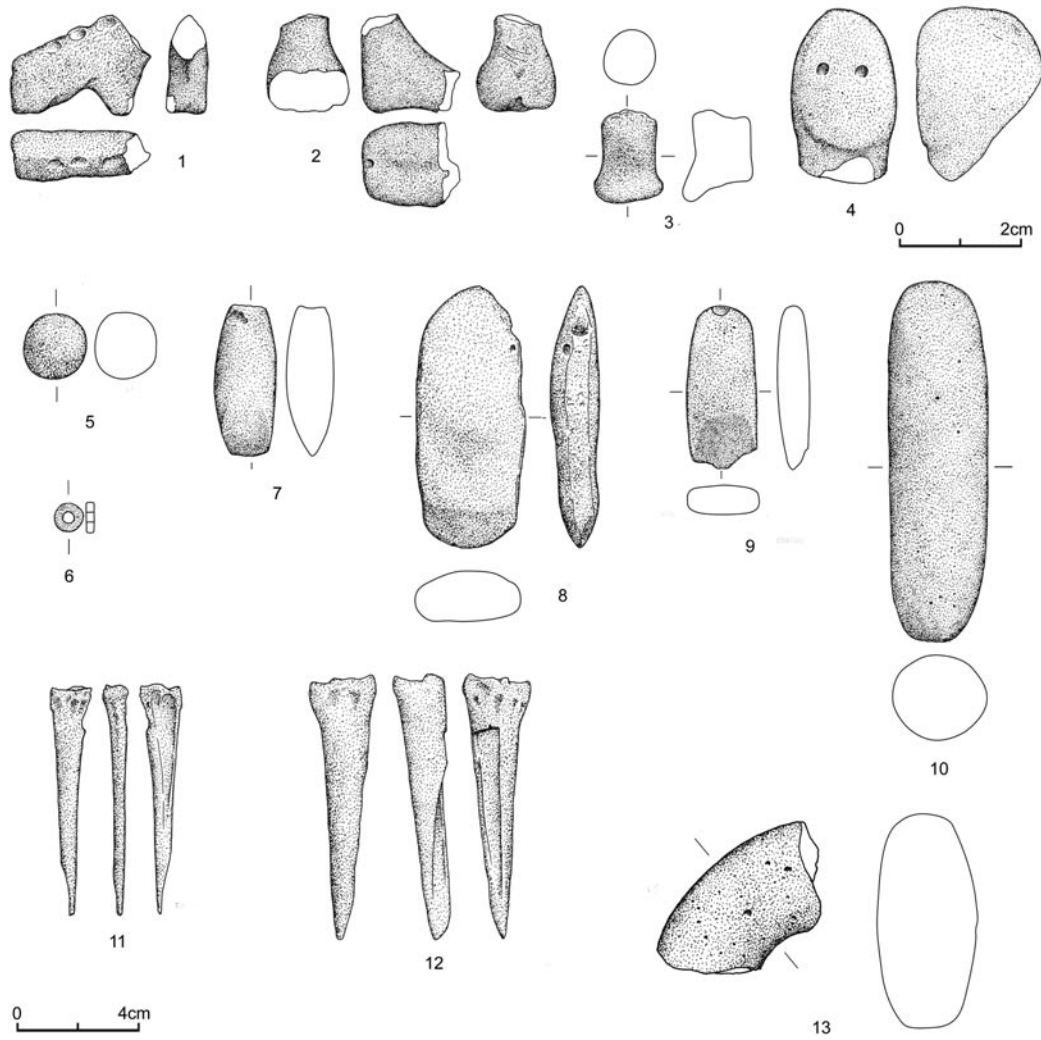


Fig. 10. Various small finds.

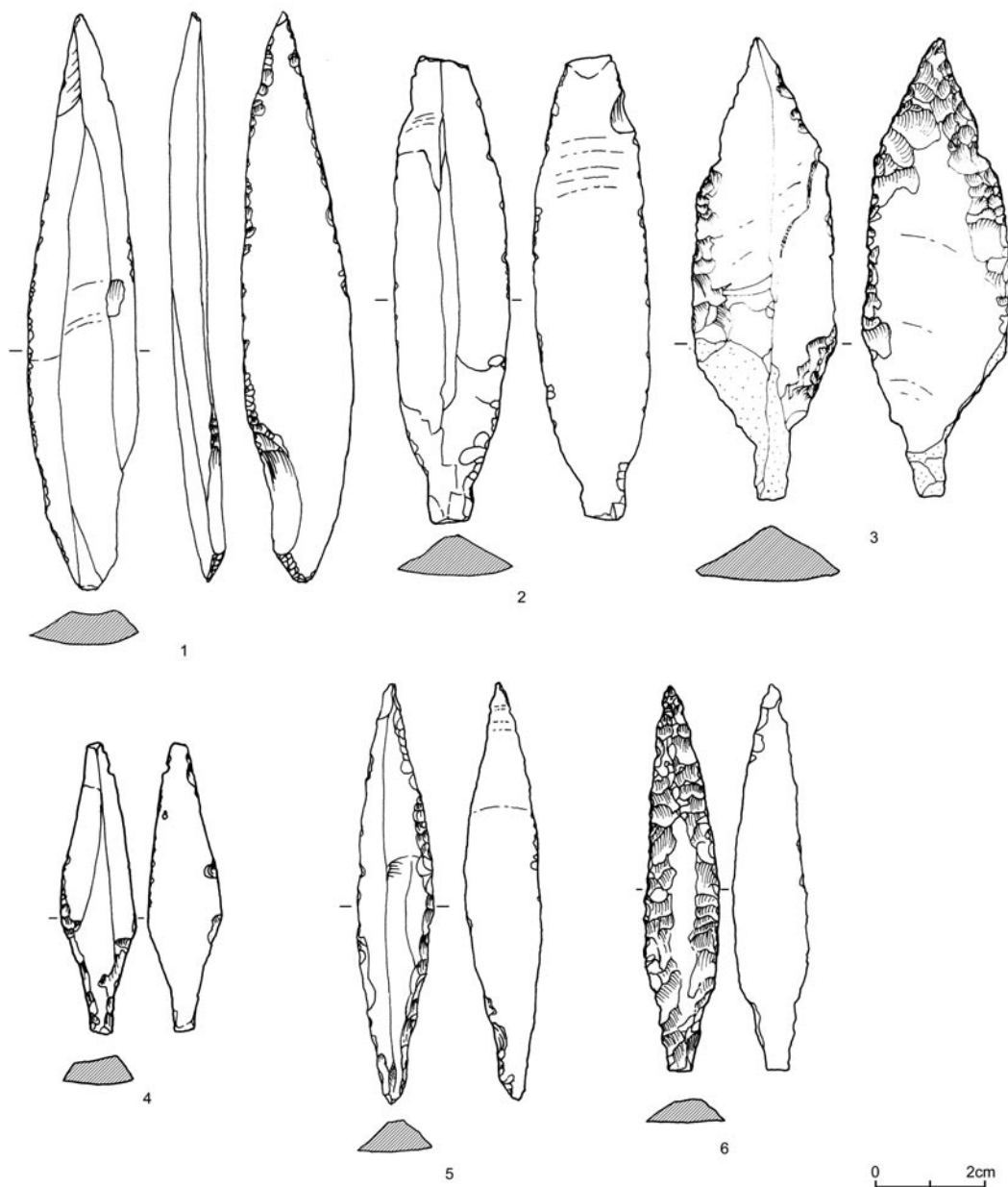


Fig. 11. Flint artefacts: projectile points.

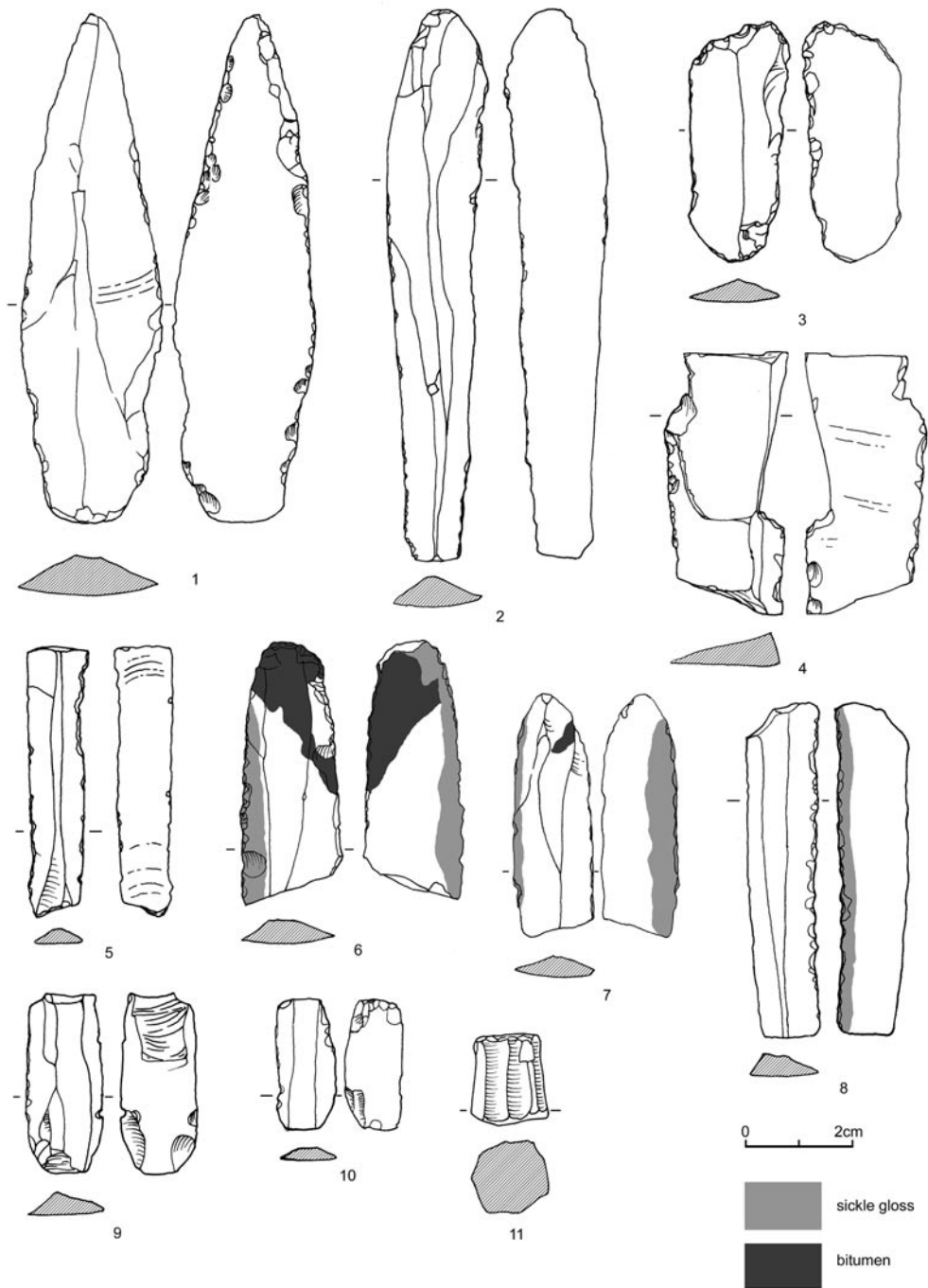


Fig. 12. Various flint and obsidian artefacts.

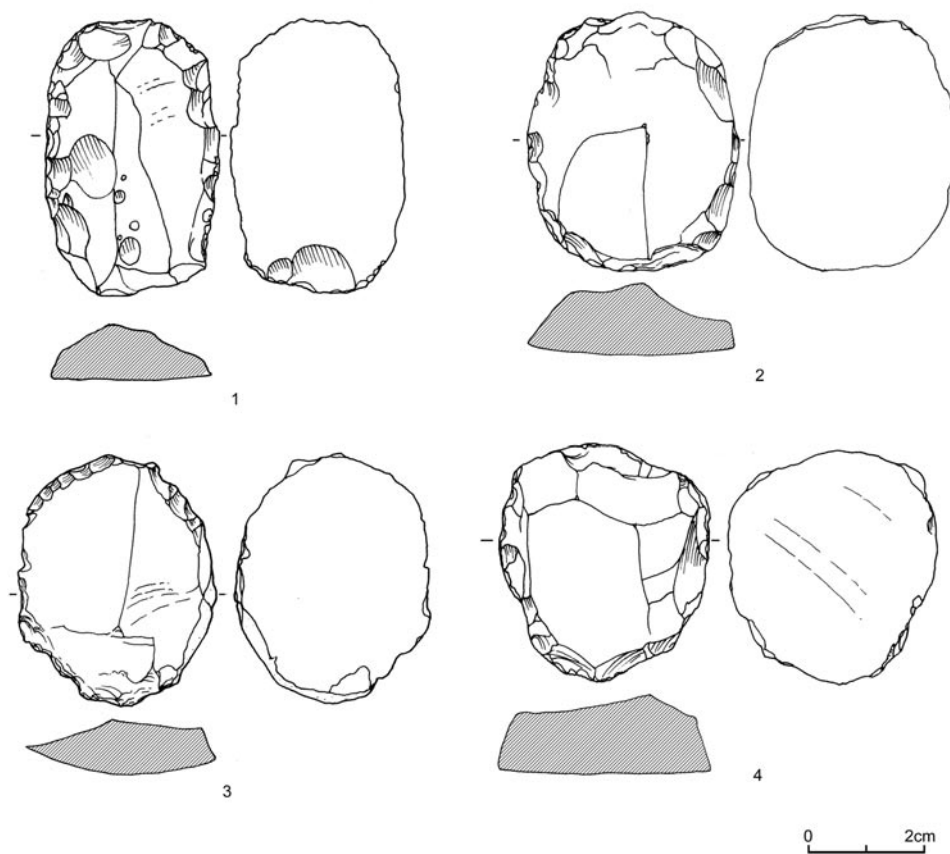


Fig. 13. Flint artefacts: scrapers.