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An Image of Complexity: The Burnt Village at Late Neolithic Sabi Abyad, Syria

PETER M.M.G. AKKERMANS AND MARC VERHOEVEN

Abstract

The site of Tell Sabi Abyad in the upper Balikh valley of northern Syria is the focal point of a regionally oriented research project investigating the socio-economic organization of later Neolithic society in the region. Recent excavations at Tell Sabi Abyad have brought to light a well-preserved settlement dating from the late sixth millennium B.C. and heavily affected by a violent fire, the so-called Burnt Village. The village consists of rectangular, multiroomed houses built of pisé along very regular lines and surrounded by smaller circular structures. Thousands of finds were recovered in situ from the burned houses, including ceramic and stone vessels, flint and obsidian implements, ground stone tools, human and animal figurines, labrets, axes, and personal ornaments. Most exciting, however, are the hundreds of clay sealings with stamp-seal impressions and the small tokens, which point to a very early but well-developed system of recording and administration. The Burnt Village was part of extensive networks of long- and short-distance exchange, and its inhabitants maintained relationships with groups of people in distant areas, such as the coastal regions of the Levant, the piedmont of southeastern Turkey, and the plains of Mesopotamia. External resources were mobilized and exploited in a regular manner and to a considerable extent, i.e., beyond the level of incidental transactions.*

INTRODUCTION

Since the spring of 1986, four campaigns of archaeological investigation have been undertaken on

the site of Tell Sabi Abyad ("Mound of the White Boy"), situated in the upper Balikh valley of northern Syria, about 30 km south of the Syro-Turkish border (fig. 1). The site was primarily occupied in the sixth millennium B.C. and is the largest of a cluster of prehistoric mounds (locally known as Khirbet Sabi Abyad) located in a linear pattern at short distances from each other. Today the Balikh River flows about 5 km west of the various mounds but originally the Nahr Turkman, a branch of the Balikh, probably flowed beside the complex.

The work at Tell Sabi Abyad is part of a regional research project of survey and excavation that aims to explore the social and economic structure of later Neolithic society in the Balikh basin. The first two seasons of excavation at Sabi Abyad revealed a series of superimposed and generally well-preserved prehistoric settlements composed of multiroomed rectangular buildings and small circular structures, which could mainly be ascribed to the Early Halaf period, dated around 5100–5000 B.C.¹ The 1991 and 1992 field seasons have partly modified and expanded the earlier results. In addition, they have yielded wholly new and spectacular information on the Neolithic strata of occupation preceding the Halaf deposits at the site.

The history of cultural development in this area in the sixth millennium B.C. ranks among the least

* We wish to express our gratitude to the Directorate General of Antiquities and Museums of Syria, Damascus, for its continued assistance and encouragement concerning the excavations at Tell Sabi Abyad. Our sincere thanks go to Sultan Muhesen, Director-General, and Adnan Bounni, Director of Excavations. We also thank Murhaf al-Khalaf, Department of Antiquities, Raqqa, and our representative, Nauras al-Mohammed, for their much-valued assistance. Warm thanks are also due to Lorraine Copeland, Kim Duistermaat, Marie Le Mièrre, Olivier Nieuwenhuyse, and Willem van Zeist. The drawings were made by Pieter Collet and Kim Duistermaat. The excavations were conducted under the auspices of the Rijksmuseum van Oudheden (Netherlands National Museum of Antiquities), under the direction of Peter M.M.G. Akkermans.

The following abbreviations are used:
Akkermans P.M.M.G. Akkermans, *Villages in the Steppe: Later Neolithic Settlement and*

Subsistence in the Balikh Valley, Northern Syria (Ann Arbor 1993).

Akkermans and Le Mièrre P.M.M.G. Akkermans and M. Le Mièrre, "The 1988 Excavations at Tell Sabi Abyad, a Later Neolithic Village in Northern Syria," *AJA* 96 (1992) 1–22.

¹ For a general introduction to the site and an account of the 1986 and 1988 excavations, see the following works by P.M.M.G. Akkermans: "A Late Neolithic and Early Halaf Village at Sabi Abyad, Northern Syria," *Paléorient* 13 (1987) 23–40; "Tell Sabi Abyad: Preliminary Report on the 1986 Excavations," *Akkadica* 52 (1987) 10–28; "The Neolithic of the Balikh Valley, Northern Syria: A First Assessment," *Paléorient* 15 (1989) 121–33; Akkermans; and "Sabi Abyad," in H. Weiss, "Archaeology in Syria," *AJA* 95 (1991) 695–97. See also P.M.M.G. Akkermans ed., *Excavations at Tell Sabi Abyad: Prehistoric Investigations in the Balikh Valley, Northern Syria* (BAR-IS 468, Oxford 1989).

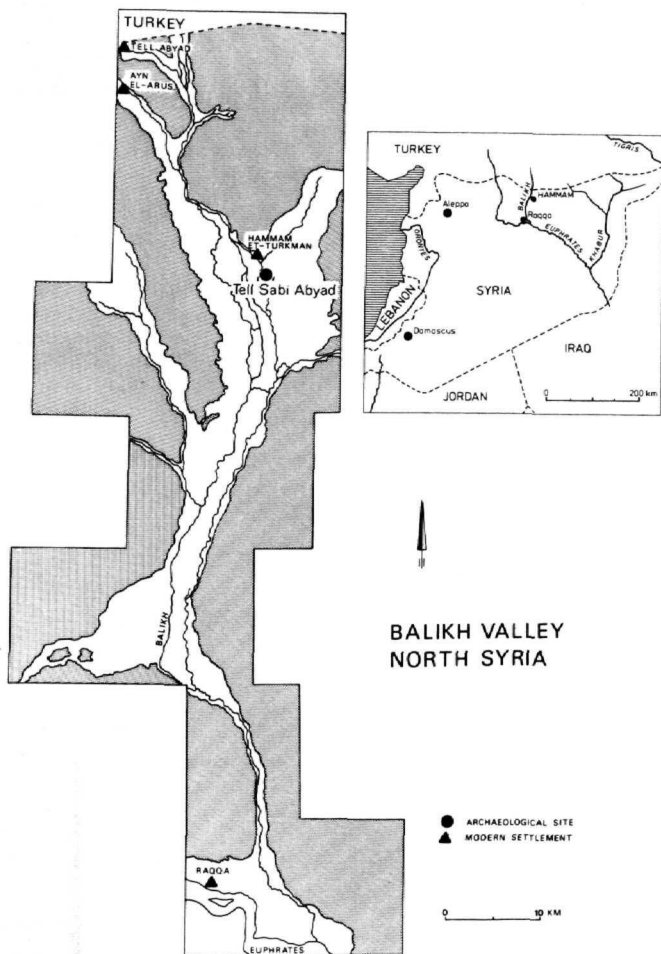


Fig. 1. Map of the Balikh valley and the location of Tell Sabi Abyad

well known in the Near East.² The collapse of Pre-Pottery Neolithic B (PPNB) society in the early sixth millennium seems to have ushered in an era of momentous change in the Levant and inland Syria. In areas long inhabited, like the fertile banks of the

Euphrates and its tributaries, a vast number of Neolithic village communities were deserted, perhaps due to an increasing aridity or degradation of the environment;³ the remaining sites can be expected to have faced major socioeconomic changes and al-

² Recently, Stuart Campbell correctly pointed out that prehistoric research in the Near East mainly seems to concern the two great "revolutions," i.e., the introduction of agriculture and the emergence of urbanism, with only little attention given to the intervening Late Neolithic. Interest in the Halaf culture has increased in recent decades but active research in the preceding cultures is still of a most intermittent nature. See S. Campbell, *Culture, Chronology*

and Change in the Later Neolithic of North Mesopotamia (Edinburgh 1992).

³ This phenomenon is generally referred to as the *hiatus palestinien*; see, e.g., J. Mellaart, *The Neolithic of the Near East* (London 1975) 67–69; A.M.T. Moore, "The First Farmers in the Levant," in T.C. Young, P. Smith, and P. Mortensen eds., *The Hilly Flanks and Beyond* (Chicago 1983) 99; I. Köhler-Rollefson, "The Aftermath of the Levantine Neolithic

terations in settlement organization. Recent archaeological research in the Balikh valley clearly indicates an ongoing trend toward decreased settlement area and density of population in the sixth millennium. For example, whereas it is assumed that around 6000 B.C. up to 1,000 individuals inhabited the valley (with a floor of ca. 450 km²) on a permanent basis, some six or seven centuries later the population density in the area appears to have been reduced to a mere 300 or 400 persons.⁴ Only five settlements seem to have existed in the Balikh region at this time, all with an area of occupation of less than 2 or 3 ha and all located in the northern, rainfed part of the valley. Only two of these sites, however, Sabi Abyad and Mounbatah, provide evidence of durable, long-term occupation, whereas the others were probably all newly founded in the late sixth millennium and should be regarded as offsprings of the ancestral communities at Sabi Abyad or Mounbatah.⁵

Survey evidence from the Balikh area has made it clear that the trend of site desertion and contraction of occupation to a few larger mounds came to a halt at the latest at around 5300/5200 B.C. and was followed by an attempt to recolonize the lands earlier abandoned. Perhaps ecological conditions were improving at this time but other, culturally defined determinants must have been at work as well. The recent excavations at Tell Sabi Abyad suggest the development of an increasingly complex society in the Balikh basin toward the end of the sixth millennium, which successfully coped with local environmental and societal constraints and incorporated external influences to a considerable extent. Local later Neolithic society seems to have abandoned more and more its earlier autonomous character⁶ and instead established wider, interregional modes of communication and exchange networks.

Ultimately these developments gave rise to the Halaf, characterized by an astonishing cultural uniformity over very great distances and often considered to be the first widespread cultural tradition

in the Near East.⁷ This diffusion of cultural traits over much of the northern Fertile Crescent is commonly dated to a time late in the Halaf period⁸ but recently it has been suggested that the trend toward increasing cultural unity started much earlier, ca. 5200 B.C.⁹ In this respect, the rather sudden and widespread distribution of Samarra-like ceramics, prior to the appearance of Halaf pottery, is of the utmost importance. At Sabi Abyad the emergence of Halaf was the result of a gradual and continuous local process of cultural change but the occurrence of many painted or painted-and-incised ceramics closely resembling Samarra pottery from north-central Iraq in the so-called transitional levels at the site suggests interaction between the local, late sixth-millennium communities and those found further east.¹⁰ It may not be without significance that this apparent adoption of foreign styles and further local elaboration followed a period of instability; affiliation and conformation to new cultural norms from the east may have provided considerable social or economic benefits.¹¹

STRATIGRAPHY AND CHRONOLOGY

The 1986 and 1988 seasons of excavation at Sabi Abyad revealed a stratigraphic sequence consisting of eight major building phases or levels.¹² Virgin soil had not yet been reached, however, and an extension of the sequence further back in time was expected. The most recent campaigns of excavation (1991–1992) have indeed yielded three more levels (11–9) until virgin soil was finally reached at a depth of 4 m below the level of the surrounding fields in a narrow trench (P15) laid out along the south slope of the mound.

Levels 9 and 10 are each represented by the remains of a wall and oven as well as by deposits of grayish to orange-brown loam and ashes. Most likely these deposits represent mainly domestic refuse dumped over a considerable period of time. In contrast, the lowest level (11) consisted of a compact and

Revolution in the Light of Ecological and Ethnographic Evidence," *Paléorient* 14 (1988) 87–93 and the various contributions in S. Bottema, G. Entjes-Nieborg, and W. van Zeist eds., *Man's Role in the Shaping of the Eastern Mediterranean Landscape* (Rotterdam 1990).

⁴ These estimates refer only to the populations permanently settled at the various mounds and do not include any nomadic groups that may have existed; cf. Akkermans 186–91.

⁵ Akkermans 175.

⁶ See Akkermans.

⁷ E.g., S.A. LeBlanc and P.J. Watson, "A Comparative Statistical Analysis of Painted Pottery from Seven Halafian Sites," *Paléorient* 1 (1973) 117.

⁸ The so-called Middle Halaf; see T.E. Davidson, *Regional Variation within the Halaf Ceramic Tradition* (Edinburgh 1977) 341; I.M. Hijara, *The Halaf Period in Northern Mesopotamia* (London 1980) 264.

⁹ Campbell (supra n. 2); S. Campbell, "The Halaf Period in Iraq: Old Sites and New," *BA* 55 (1992) 182–87.

¹⁰ P.M.G. Akkermans, "The Prehistoric Pottery of Tell Sabi Abyad," in Akkermans ed. (supra n. 1) 140; Akkermans 126ff; Akkermans and Le Mièr 10.

¹¹ Campbell (supra n. 2) ch. 11; see also I. Hodder, "Social and Economic Stress and Material Culture Pattern," *AmerAnt* 44 (1979) 446–54.

¹² Akkermans; Akkermans and Le Mièr.



Fig. 2. The Burnt Village, the well-preserved house remains low on the slope of Sabi Abyad (view from the south)

rather homogeneous, waterlogged deposit, grayish in color. Within level 11 hardly any clear microstratigraphy was recognized, which indicates a rapid rate of deposition, uniform in nature. A hiatus in occupation at Sabi Abyad between levels 10 and 11 is not excluded.¹³ Not only the stratigraphic evidence but also the considerable differences in pottery assemblages from both phases point in this direction. In contrast to the level 10 pottery, the ceramics from level 11, characterized by simple hole-mouth vessels and tall, straight-walled pots with loop handles, show close similarities to those from the nearby sites of Tell Assouad and Tell Damishliyya.¹⁴ Both sites were deserted around 5800/5700 B.C. as part of the general abandonment of communities in the Balikh re-

gion at this time; most likely a similar date should be attributed to level 11 at Sabi Abyad. If Sabi Abyad indeed has to be added to the list of sites abandoned in the early sixth millennium, it appears that the Balikh valley as a whole must have been virtually devoid of permanent settlement at this time.¹⁵

In addition to these stratigraphically oriented investigations in narrow and deep trenches, considerable attention has been given to the broad-scale exposure of the more easily accessible upper levels of occupation. Our main efforts of work during the 1991–1992 seasons concerned the so-called “transitional” levels (6–4), which represent an intermediate stage between the lower, pre-Halaf Neolithic (levels 11–7) and the topmost Early Halaf (levels 3–1). Excavation was continued in areas first excavated during previous campaigns but, additionally, new trenches were opened nearby. Part of the transitional levels 4 and 5 had been excavated before but a coherent building plan could not be recognized while level 3 house remains were still standing to a considerable height.¹⁶ Consequently these level 3 structures were removed but, surprisingly, no additional level 4 or 5 features were found below. Instead, a series of well-preserved structures appeared that could be ascribed to a much older phase of occupation (level 6, i.e., the earliest of the transitional levels) and that had been heavily affected by a violent fire: the Burnt Village (fig. 2). Apparently, in order to construct the level 3 buildings, the mound had been partly leveled and earlier strata of occupation largely removed.

Considerable in-situ deposits were recovered from the houses of the Burnt Village, including ceramic and stone vessels, ground stone implements, flint and obsidian tools, human and animal figurines of unfired clay, labrets, axes, personal ornaments, tokens, and hundreds of clay sealings with stamp-seal impressions.

In chronological terms it is clear that the Burnt Village dates from the later sixth millennium, ca. 5200/5100 B.C. (uncalibrated). At present two radiocarbon dates are available, both taken from building II. One sample (GrN-19367) stems from the vast quantity of burnt cereals found on the floor in room 14 and yielded a date of 7075 ± 25 B.P., and the other (GrN-19368) was taken from charcoal found on the

¹³ In Akkermans 119 it was suggested that no such break in occupation existed at Sabi Abyad but this now seems questionable.

¹⁴ J. Cauvin, “Sondage à Tell Assouad (Djézireh, Syrie),” *AAS* 22 (1972) 85–88; M. Le Mièrre, “La céramique préhistorique de Tell Assouad, Djézireh, Syrie,” *Cahiers de l'Euphrate* 2 (1979) 4–76. P.M.G. Akkermans, “Excavations at Tell Damishliyya, a Neolithic Settlement in the Balikh

Valley, Northern Syria,” *AAS* 36/37 (1986/1987) 40–66; Akkermans, “The Soundings at Tell Damishliyya,” in M.N. van Loon ed., *Hammam et-Turkman I* (Istanbul 1988) 19–67.

¹⁵ This conforms to the view expressed earlier by L. Copeland, “Observations on the Prehistory of the Balikh Valley, Syria, during the 7th to 4th Millennia B.C.,” *Paléorient* 5 (1979) 269.

¹⁶ See Akkermans 52; Akkermans and Le Mièrre 5.

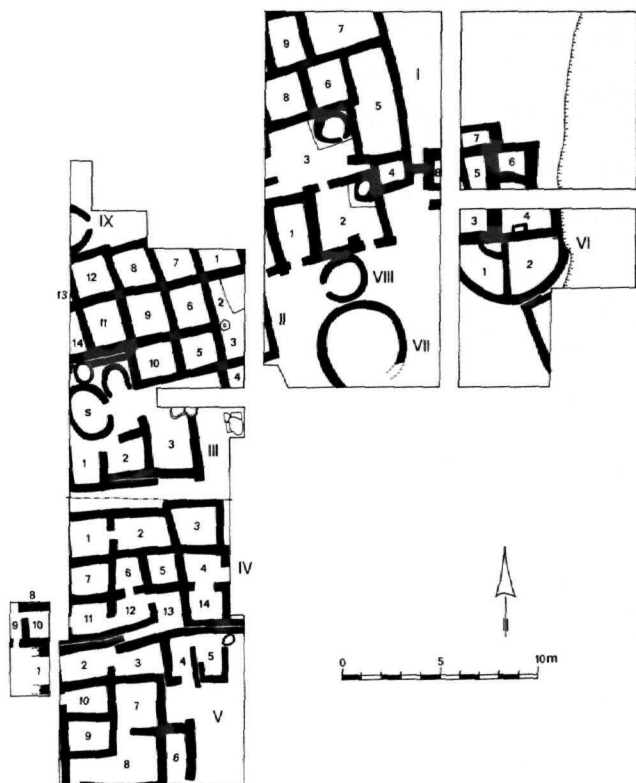


Fig. 3. Plan of the Burnt Village

floor in room 7 and gave a date of 7100 ± 60 B.P. These dates seem to be rather late when compared with the series of dates available for the upper levels (4–1) at the site¹⁷ but it should be taken into account that they refer to the final destruction of the Burnt Village, *not its founding*. Nevertheless, it seems that the various phases of occupation at Sabi Abyad succeeded each other rapidly.

ARCHITECTURE

The level 6 or Burnt Village remains, partially standing to a height of 1.40 m, have thus far been excavated over an area of about 560 m² (fig. 3). No doubt, future fieldwork will considerably enlarge the layout of the Burnt Village since its presence in other squares has already been confirmed by the appear-

ance of the reddish-brown or orange, ashy layer characteristic of the burnt house debris.

Apparently the Burnt Village was built in terraces: part of the mound had been dug away along the slope, and the floors and walls of the houses low on the slope were founded about 2 m below those of the buildings somewhat higher on the mound. Consequently it appears that the floors of the upper houses must have been more or less at the same level as the roofs of the lower houses; one could easily walk onto these roofs. Actually, we have some evidence that this was indeed the case and that various kinds of activities were carried out on the roofs (see below).

To date, the Burnt Village is represented by five rectangular, multiroomed structures (buildings I–V) and four circular ones (the so-called tholoi, buildings

¹⁷ Cf. Akkermans and Le Mièrre 4, table 1. For a detailed discussion of the chronology of Sabi Abyad, see Akkermans 110–37; P.M.M.G. Akkermans, "New Radiocarbon

Dates for the Later Neolithic of Northern Syria," *Paléorient* 17 (1991) 121–25.

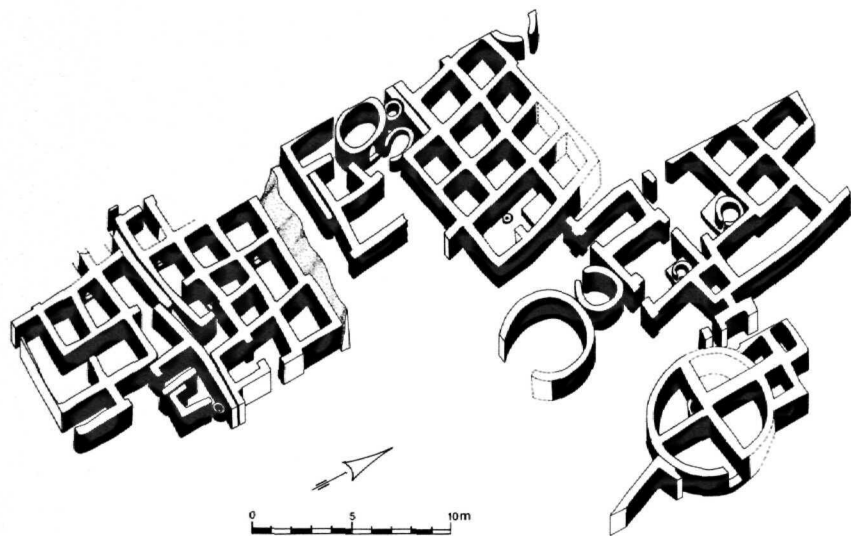


Fig. 4. Isometric reconstruction drawing of the Burnt Village

VI-IX). In addition, seven ovens were encountered in and between the various house remains (figs. 3-4). The dimensions of the rectangular buildings seem to have varied between more than 50 m² and 90 m² but none of the rectangular features has been completely exposed yet. Generally speaking, the houses of the Burnt Village were originally built along very regular lines and closely attached to each other, although all kinds of renovations and reconstructions took place in the course of time. Most houses seem to have had more than one floor (each consisting of hard-tamped loam layers ca. 1-3 cm thick), of which only the upper one has been exposed so far. Basically, the oblong structures seem to have been divided in three rows or wings, each of which consisted of a series of small rooms. Some of these houses must have had 15 or more rooms, all very small and varying in size between about 3 and 5 m².

The generally 40-cm-wide walls of the level 6 buildings were simply founded on earth and were all built of pisé, laid down in layers of various color and, most likely, various consistency. The order is always the same: a gray, 2- or 3-cm-thick loam band is followed by an orange-brown, ca. 2-4-cm deposit, in its turn covered by a buff layer, about 6-8 cm thick, and so

on. Apparently, various sources of clay were in use, which each must have had different qualities. Certainly the alternating banding did not have any "decorative" meaning, for the walls seem all to have been covered with mud plaster. The use of pisé instead of mudbricks for construction purposes is remarkable since mudbricks have a much longer history of use in the Balikh region.¹⁸ Apparently, the renewed cultural development at sites like Sabi Abyad somewhere around or shortly after the middle of the sixth millennium involved the introduction of wholly new building techniques.

Circulation through the various buildings was of a somewhat peculiar nature. Indeed, access to most rooms seems to have been enhanced by a series of rather narrow doorways but, interestingly enough, circulation was not always continuous. The best evidence in this respect comes from the well-preserved building IV. Rooms 9-13 are linked by doorways in a linear pattern; in addition, room 6 and, possibly, room 5 (cf. fig. 3) are also accessible from this chain of linked rooms. These southern and central rooms, however, are not linked to the northernmost and eastern series of chambers, rooms 1-4, 7, and 14 (moreover, these rooms are not all linked to each other

¹⁸ Mudbricks were the main building material at Tell Damishliyya and Tell Assouad, both dated to the later seventh to early sixth millennium B.C.; Akkermans (supra n.

14); Cauvin (supra n. 14). At Sabi Abyad mudbricks seem to have been first introduced in the transitional period, i.e., around 5200/5100 B.C.

either). Apparently, one could not simply enter building IV through a central or main gate and subsequently walk through the entire structure; in order to reach a particular room or wing of rooms one had to return and take another main entry. In some instances this even meant that one had to leave the building and walk not only around the building itself but also around the closely attached, neighboring structures, which, indeed, would be a most impractical and wearying procedure. In this respect, one wonders whether the present passages should not be considered of secondary importance and whether the main access to the various rooms was not actually organized in a wholly different manner, i.e., from the roof of the building. We do know that the roof of some structures was used for various kinds of activities, some of a ritual nature (see below), but the most convincing evidence for roof entrances is found in the fact that some rooms did not have a doorway at floor level and, consequently, were not linked to any other room at all; as a necessity, these rooms must have been accessible from a higher level only.¹⁹ Moreover, when taking into account that building IV stood immediately next to buildings III and V, it appears that the rooms on the ground floor of building IV must have been very dark; an opening in the roof may have provided not only access but the necessary light and air as well.

If in the case of building IV the roof indeed provided the main access, the various doorways at floor level may have been of lesser importance, perhaps constructed in a somewhat random manner according to need. Many rooms seem to have had doorways of such restricted size (diameter ca. 50 cm) that one had to crawl through them on hands and knees. These "portholes," earlier reported from sites like Bouqras, Umm Dabaghiyah, Beidha, Abu Hureyra, and Ganj Dareh,²⁰ are all situated at a somewhat higher level in the wall and have a rounded, almost arched superstructure. No traces of wooden jambs have yet been found, which suggests that these doorways were simply hewn out of the already existing walls. Portholes were also attested in building V and were most likely originally present in the other buildings as well.

On the other hand, it appears that building IV originally had at least two main entrances at floor level, both located in the south: one in room 9, the

other in room 13. The entrance in room 13 was blocked when building V was enlarged by the construction of rooms 3-5. Moreover, some chambers definitely had normal doorways, usually ca. 50 cm wide, as did other structures of the Burnt Village. In one case (the doorway between rooms 2 and 3 in building II), a pivot stone was present, indicating that this passage was originally closed by a wooden door. Normal doorways at floor level also provided access to building I (rooms 1 and 2). Apparently, access to the level 6 houses was arranged in a variety of ways.

Apart from some tholoi, all level 6 structures were heavily affected by an intense fire that penetrated the walls throughout and caused a considerable accumulation of orange to brown, crumbly loam, wall fragments, dark ashes, and charred wood in the buildings. The lowest 10 cm of these deposits, directly situated on the floors, virtually always consisted of fine and powdery black ashes; most likely, these ashes represent the burnt residue of the roof cover (reed mats). The common occurrence of charred beams and hard-burnt loam fragments with impressions of reeds and circular wooden poles in the various houses reveals that the roofs were all made in the same way: wooden rafters were laid at regular intervals and covered with reed mats, in their turn covered by a thick mud layer.

Building I

Building I, oriented northeast/east by west/southwest, is at least 12.50 m long and 7.50 m wide, and thus far consists of nine rooms constructed around a large, central room or, perhaps, courtyard (area 3; fig. 3). The southernmost series of rooms (1-4) was heavily affected by fire and filled with ashes, but the other areas seem to have been left largely undisturbed and contained a ca. 30-60-cm accumulation of gray to brown loam (probably wall debris).

Doorways, each marked by small buttresses, were only recognized in the case of the southern rooms 1 and 2; no passages were found in the northernmost areas, probably due largely to the rather poor state of wall preservation (some walls stood to a height of only 20 cm). Room 1 was accessible only from the open area to the south, whereas room 2 could be entered both from the south and from the north (figs. 2-3).

¹⁹ The same actually holds for some rooms in structures I, II, and V, although in the case of buildings I and II the general absence of doorways is undoubtedly partially due to the rather poor state of preservation of the various walls.

²⁰ See, e.g., P.A. Akkermans et al., "Bouqras Revisited:

Preliminary Report on a Project in Eastern Syria," *PPS* 49 (1983) 335-72; P.E.L. Smith, "Architectural Innovation and Experimentation at Ganj Dareh, Iran," *WorldArch* 21 (1990) 323-35.

A rounded, beehive-shaped oven, about 75–80 cm in diameter and built of pisé, was found in the north-eastern corner of room 2. The interior is lined with a ca. 6-cm-thick layer of mud plaster. The oven wall rests on a low platform, measuring ca. $1.40 \times 1.20 \times 0.20$ m; the hard-burnt interior base of the oven is sunk to a depth of about 35 cm into this platform.

The discovery of an infant burial in this oven, unfortunately rather poorly preserved (the left arm, feet, and lower parts of the legs are missing), was surprising. The dead child was laid upon a ca. 10-cm-thick layer of brown loam; a similar deposit, in its turn followed by burnt debris, was found on top of the skeletal remains. The dead infant was oriented north/northeast by south/southwest and laid on its back, with the head toward the southwest, the legs straddled, and the right arm in a flexed position. A small bowl was found near the feet of the child, perhaps offered as a burial gift.²¹

An oven similar to the one in room 2 was uncovered in area 3, in the center or, perhaps, court of building I. The oven, ca. 1.90 m in diameter and preserved to a height of only 10 cm, has a clay wall 20–40 cm thick, lined on the interior by ca. 8 cm of mud plaster. A 25-cm opening or ventilation hole is present in the southeast. The oven rests upon a low platform measuring $1.80 \times 1.60 \times 0.20$ m. Intensive domestic use of the area around this oven is demonstrated by the presence of considerable quantities of artifacts of various kinds (ceramics, stone mortars and pestles, bone awls, clay sling missiles), apparently all in situ. Another in-situ find consists of three vessels, found together on the floor in the southeastern corner of room 8. A large but brittle, red-burnished and impressed bowl (see below, fig. 10: 15) was found lying upside down, covering a solidly red-burnished jar with a globular body and a flaring neck (fig. 10: 14). Next to these vessels stood a rather coarsely finished pot with a low neck (fig. 10: 16). In shape these vessels closely resemble some of the ceramics found in the topmost Early Halaf levels (3–1) at Sabi Abyad but the decoration is characteristic of the mid- to late sixth millennium B.C. and is no longer found in Halaf times.

The stone construction found in the northern part of room 5 is rather curious and as yet unexplained. It consists of cobbles and gypsum boulders, carefully placed in line with the surrounding mud walls. The stones seem to constitute a kind of platform, ca. 3.50 m^2 large and about 30 cm high.

Building II

Building II, like building I, is oriented northeast/east by west/southwest. The structure is at present 11.50 m long and about 7.50 m wide, and consists of at least 13 small and square rooms, each virtually identical in size, measuring ca. 1.75×1.75 m, and arranged in three rows (figs. 2–3). Its very regular layout stands in sharp contrast to that of building I and may suggest that the features served different purposes.²² Domestic installations other than a low platform in room 2 are absent from building II but are found in the subsidiary structure III built along its southern facade. As in the neighboring features, the rooms of building II are all of very restricted size and one wonders whether they were truly used for living. Actually, the finds in these rooms suggest that storage and related activities were their main function. Storage seems to have been undertaken in several ways. The considerable quantities of charred grain found in building II, particularly in its westernmost rooms (11, 12, and 14; in addition, some grain was found in room 7), suggest that cereals were stored in bulk. In room 14 the grain lay almost knee-high and was surrounded and partly covered by a layer of ashy white fibrous material of vegetable origin (probably burnt chaff). Other products seem to have been stored in large ceramic vessels, placed in small groups in various rooms, or in containers made of more perishable materials, i.e., baskets and sacks. The abundant presence of perishable containers is proved by marks on the reverse side of the numerous sealings found in buildings II and V. Baskets seem to have been used in massive numbers.

The common occurrence of grinding slabs, mortars, and pestles on the floors of some rooms suggests that cereal or food processing took place in building II as well. The low and rectangular feature found in the northeast corner of room 2 may have served as a working platform. It was built of hard brown loam and measures about $1.60 \times 1.25 \times 0.20$ m. The top surface is slightly concave with rounded edges.

The finds in room 6 are most remarkable. In contrast to the sparse artifactual remains other than ground stone tools and pottery in most other areas of building II, room 6 yielded hundreds of small objects of all kinds, e.g., ceramics, stone bowls and axes, bone implements, labrets, and clay figurines of both women and animals. Most exciting, however, are the more than 150 clay sealings with stamp-seal impres-

²¹ It remains doubtful whether this is truly the case: the bowl was found on the oven floor, below the loam layer upon which the dead child had been laid.

²² On the other hand, the layout of building I can

hardly be defined at present, due to its incomplete exposure and later additions and modifications. It is not excluded that building I has a ground plan similar to that of the neighboring building II.



Fig. 5. Large, beehive-shaped oven S with its vaulted roof partly still intact

sions and the small tokens, which point to a very early but well-developed system of recording and administration (see below). Apparently, room 6 was not used for common domestic activities or storage in the usual sense but instead served as a kind of archive. A similar hoard of tokens and sealings was found in building V, situated somewhat lower on the mound.

Unfortunately no evidence for doorways has been found in building II apart from the passage between rooms 2 and 3. A small pivot hole ca. 13 cm in diameter and 7 cm deep was hollowed out in a rounded loam boulder, suggesting that this doorway was once closed by a wooden door. In all other instances the walls (which, admittedly, are preserved to a limited height only) were uninterrupted, and apparently these rooms were accessible either through a passage situated at a higher and now eroded level in the wall (i.e., portholes) or from the roof of the building.

Finally, a well-preserved infant inhumation was found just along the northern wall and below the floor of room 10 (actually, the floor was renewed after the interment). The child was lying on its right side in a tightly flexed position in a shallow pit ca. 45 cm in diameter and 22 cm deep. The body was oriented east-west (atlas to sacrum), with the head facing south. No burial gifts were found.

Building III and the Ovens

Immediately to the south of building II are a small rectangular structure (building III) and a series of ovens of various sizes and layout that had been constructed within a walled enclosure (figs. 2-3). The various rooms ascribed to building III were undoubtedly roofed but whether this is also the case for the oven area is unclear.

Building III measures ca. 7.00 × 3.50 m and stands to a height of about 80 cm. It consists of three rooms, all accessible from the north. Most likely these rooms were related to the nearby ovens and served for subsidiary purposes, e.g., the storage of fuel and the preparation of food. The latter is indicated by the presence of pestles and mortars in rooms 2 and 3. Other domestic activity is represented by some bone awls and spindle whorls in these areas.

The ovens, concentrated in the area in front of rooms 1 and 2, were not conceived and raised at a single time but built in at least three stages. Apparently, when an oven went out of use, the feature was leveled and a new installation constructed. The largest oven (S), however, seems to have been used continuously for a considerable period of time. This impressive, beehive-shaped feature stands to a height of almost 1.50 m, with its vaulted roof partly intact (fig. 5). The oven is oval in shape and has a maximum diameter of 2.90 m. Its wall is ca. 35 cm wide and is constructed of layers of orange-brown clay, heavily tempered with straw. The interior is considerably sooted. Cross-sections revealed that the heat penetrated the wall as much as 4 cm, thereby gradually blackening the orange-brown clay. The oven was accessible through a tapering opening in the east (at its base ca. 70 cm wide) and contains several floors of hard-tamped, burnt loam, varying in thickness between 2 and 7 cm and all sloping toward the south. The various floors are separated from each other by layers of gray and black ashes. Upon the upper floor orange-red and gray-brown loam had accumulated, most likely part of the collapsed superstructure. The lowest floor was laid against a ca. 10-cm-wide, protruding strip of clay, which ran along the

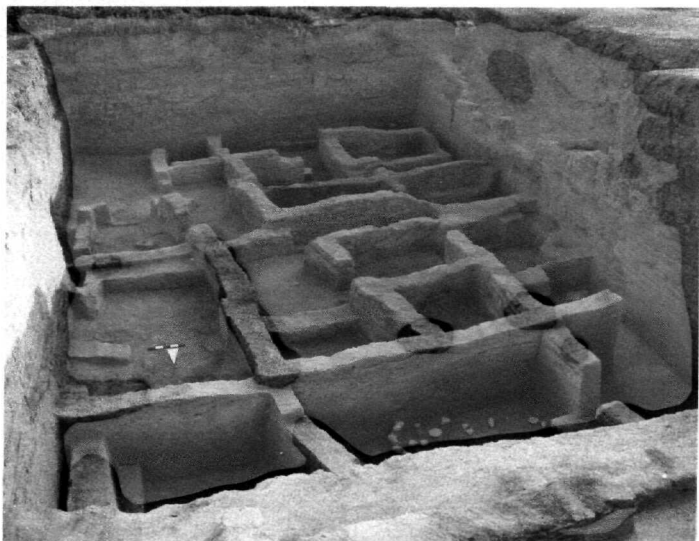


Fig. 6. The well-preserved remains of houses IV and V low on the slope of Sabi Abyad (view from the north)

inner facade and, possibly, below the oven wall. Perhaps this strip of clay and the earliest floor are part of an older oven that was incorporated in oven S at some point.

Two other types of ovens were constructed immediately to the north and northeast of oven S. A horseshoe-shaped oven or hearthplace is ca. 1.75 m long and 1.35 m wide. Its wall is ca. 20 cm wide and made of orange-brown clay. Like oven S, this feature had been used intensively: seven floor levels were recognized, each ca. 1 cm thick and made of hard-burnt clay. When this hearthplace went out of use, a circular *tannur*-like oven, ca. 75 cm in diameter, was built upon its remains. Another *tannur*, about 1 m in diameter, is located to the west.

Other ovens, again of various shapes and sizes, were found elsewhere in front of building III or in the open area to the east of it. A small keyhole-shaped oven, measuring ca. 75 × 35 cm, is present in the north of room 3, built against the eastern wall. It is made of ca. 3-cm-wide coils of hard, orange-brown clay. Part of the oven (and of the associated eastern wall of room 3) was disturbed by a pit sunk from an upper level of occupation. Another oven or hearth-like construction, more or less square in layout and measuring 1.10 × 1.00 m, was found in the open area to the east of building III. It consists of a shallow pit, of which the edge seems to have been

lined by mudbricks. The interior of the pit is paved with fragments of a large ceramic vessel. Most sherds had undergone secondary firing and were covered with fine charcoal and ashes.

Building IV

The remains of the east-west building IV, partially standing to a height of 1.40 m, are (with building V) among the best preserved of the Burnt Village (fig. 6). Building IV measures at least 11.00 × 7.00 m and consists of minimally 14 rooms. As in building II, these rooms are arranged in three rows (figs. 3–4). The building was severely burned, with the exception of the northernmost series of rooms (1 to 4). Whereas most rooms were entirely filled with ashes and other burnt building debris, the latter areas had evidence of loam only. Some of the walls in these northernmost rooms are not straight but lean to the north and east, probably due to the pressure of the collapsed upper walls and roof covering.

Most rooms seem to have had normal doorways but portholes were found as well. Some rooms do not have a passage at floor level at all and were apparently accessible from the roof. In terms of passage, the construction of building V, immediately to the south of building IV, must have had a considerable impact: it blocked the main entrance in room 13 to building IV (and, perhaps, the one in room

9 as well) and passage thus must have shifted to another area.

The function of building IV remains somewhat enigmatic. In terms of shape, size, and room partitioning the structure closely resembles the nearby building II, which seems to have served largely for storage and food processing. Similar activities may have been pursued in building IV. The absence of ovens, bins, or other domestic installations may point in this direction. Other evidence is provided by the finds in the small room 6 in the center of the building, which yielded eight jar necks upside down on the floor along the eastern wall. Most likely they originally served as potstands. The necks, most of which still had part of the shoulder of the original vessel for proper placement, are about 10 cm high except for one that has a height of 18 cm, and all have diameters of ca. 10 cm. Two are painted, and two others incised.

Most finds in building IV stem from the large room 2 (measuring ca. 2.70×1.70 m) in the north wing of the structure. Pestles and grinding slabs were found in considerable numbers on the floor in this area, as were some ceramics, clay labrets, pierced discs made of sherds, and a flint core. As in building II, the heavy ground stone tools illustrate the processing of food or other raw materials and the manufacture of various kinds of artifacts.

Building V

Building V measures at least 10.50×8.00 m and consists thus far of 10 rooms of varying dimensions.²⁵ The structure suffered severely from the fire sweeping over the village in the late sixth millennium and all rooms were filled in with ashes and other burnt building debris. The walls are generally preserved to a height of about 1.00 m but stand much lower in the heavily eroded westernmost area 1. Fragments of charred wooden poles ca. 10 cm in diameter and up to 1.50 m long (undoubtedly part of the roof cover) were found in various rooms as were burnt impressions of reeds. Remnants of the roof were most clearly recognized in rooms 2 and 3: these oblong chambers were originally covered by timbers oriented north-south, laid at regular intervals and covered by a thick layer of reeds oriented east-west. The reeds were subsequently covered with mud.

Basically building V seems to consist of room 2 and rooms 7-10. The other parts (rooms 3-6) were added to the main structure at a somewhat later stage. The walls of this added part are not bonded with

those of the original structure but abut them instead. Moreover, some rooms (3-5) were raised upon debris that had accumulated in the open area or court in front of both buildings IV and V, blocking the southern doorway of the former structure. The various rooms have either normal doorways (rooms 2-8) or portholes (room 10). Direct access to room 2 was blocked when the neighboring rooms 3-5 were constructed; apparently, access to room 2 (and to the newly built room 3) then shifted to the roof. Room 9 in the center of building V yielded no passage at floor level either and must also have been accessible from the roof only.

No domestic installations were found in building V except in room 5. Here a small tannur-like oven appeared, ca. 70 cm long and 50 cm wide. Its wall is about 1-2 cm wide and the base of the oven is plastered with sherds. The oven is somewhat peculiarly placed in what originally may have been a passage from area 5 to either the court or another room situated further east. In addition to this oven, room 5 contains a large stone mortar partly sunk into the floor and solidly cramped by a stone lining. Pestles and grinding slabs were found in considerable quantities, as were large numbers of animal bones on the floor, including the jaws of both bovids and caprines. Grinding equipment was also encountered in other rooms but it was rare or completely absent in rooms 2, 3, and 9, i.e., the areas accessible from the roof only. The presence of large ceramic vessels in room 3 may indicate that at least some of these closed chambers were used for storage, in contrast to the easily accessible rooms around the court, which seem to have served mainly for the daily preparation of food.

The most noteworthy finds came from rooms 6 and 7. Here, in addition to ceramics and various kinds of stone tools, hundreds of small objects of sun-dried clay were found, including jar stoppers, loomweights, sling missiles, figurines, tokens, and sealings that usually carried stamp-seal impressions. These finds closely resemble those in room 6 of building II. In room 7 of building V the clay objects were mainly found on or just above the floor but in the case of the nearby room 6 this seems to hold for part of the finds only; many objects appeared in the dark ashes and other room fill high above the floor. In this respect, it may well be that the various objects in room 6 had originally been placed on shelves or the like along the walls and had subsequently fallen. It is also possible that the objects fell from a much higher level,

²⁵ More rooms will surely be found in the area to the west and probably also to the south of building V.

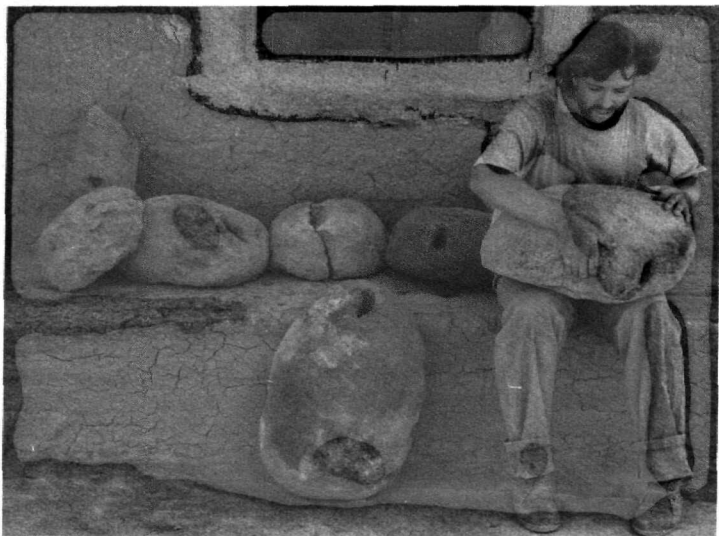


Fig. 7. Selection of large clay objects from building V

i.e., from the roof; a number of pestles and grinding slabs were found in the upper part of the room debris, ca. 70 cm above the floor and, most importantly, above charred timbers that must have been part of the roof.

In addition to this possible domestic use, it seems that some sort of ritual activity took place on the roof of building V. Eleven large and rather curiously shaped clay objects (fig. 7) were found in the fill of the house,²⁴ sometimes high above the floor and amid charred roof beams and impressions of reed mats; in view of their position, these heavy objects must originally have been on the roof and fallen when the building collapsed. Virtually all are oval in shape, with a flat base and a rounded, convex body. These objects vary in length between 29 and 62 cm and in width between 16 and 41 cm. Their height ranges between 10 and 28 cm. Most of them have

one or two shallow holes along each of the long sides, whereas another hole is often found on top. In at least two cases this hole on top contains the horn of a wild sheep, the larger part of which is hidden from view (fig. 8). Another of these objects contains the lower leg bone of a bovid, again largely hidden in the clay. The precise meaning of these objects remains puzzling but should most likely be looked for in a ritual context. Possibly these objects represent animals in a very stylized manner. If so, the shallow holes along the sides may originally have held wooden sticks or the like, representing the legs, or, alternatively, served as grips to allow transport. It is interesting to note that in the fill of room 7 and amid some of these clay "animals," the skeletal remains of two adults were found, with the bones completely crushed and burnt. These persons, too, must have fallen from the roof.²⁵

²⁴ In addition, one was found in the upper fill of room 11 of building IV.

²⁵ One may wonder whether these persons were simply trapped on the roof of the house and subsequently died in the fire or whether other variables must be taken into consideration. In none of the other houses were human skeletal remains uncovered that could be associated with the fire; apparently, most of the inhabitants of Sabi Abyad escaped from the disaster in time. When furthermore taking into account that building V yielded not only these

dead persons but the clay "animals" as well, it can be argued that both features should be associated and viewed in a ritual context. Although wholly speculative, it may be the case that both persons were already dead at the time of destruction but were deliberately laid on the roof for defleshment and awaiting final interment. Mellaart has suggested a largely similar custom of secondary burial for the sixth-millennium site of Çatal Hüyük in central Anatolia; see J. Mellaart, *Çatal Hüyük, a Neolithic Town in Anatolia* (London 1967) 204.



Fig. 8. Horn of a wild sheep placed in the center of one of the large clay objects from building V

Circular Buildings VI-IX

In addition to the rectangular structures, four circular buildings, or tholoi, were found (figs. 3-4). The largest one is building VI, situated to the east of building I. It has an interior diameter of about 6.75 m and is divided into a series of smaller compartments. Very small rectangular rooms (5-8) seem to have been added to the circular chamber at a somewhat later date. Another rectangular structure can be found immediately south of the tholos but was partly destroyed by a large pit sunk from a late second-millennium layer of occupation.

The main entrance to tholos VI is in the northeast corner of compartment 2. This doorway has a low clay threshold and contains a stone door socket, indicating that the passage was originally closed by a wooden door. No other doorways were recognized, perhaps due to the fact that the walls are preserved to a very limited height, only about 20 cm.

The presence of some pestles, spindle whorls, loomweights, and bone awls in the main compartments 1, 2, and 4 suggests that these areas served for common domestic activities such as food preparation or cloth manufacture. Other evidence pointing in this direction includes a small, low bin made of clay slabs found in the northeast corner of compartment 1 and a ca. 15-cm-deep basin found along the wall in area 4. The basin is rectangular in plan and measures about 45 × 30 cm. Its interior facades are coated with a ca. 1-1.5 cm layer of mud plaster, in its turn covered by a thin white coating. The other rooms (3-8) are each very restricted in size and can hardly have served purposes other than storage. The sole exception may have been room 8, added to the tholos at a somewhat later stage. This area appears to have been built upon the remains of a large but

leveled oven; the hard-burnt oven floor, however, was incorporated and reused in the newly constructed room 8. In this respect, room 8 perhaps should be seen as a modification of the earlier oven.

Two other circular structures (VII-VIII) were found in the open area to the southwest of tholos VI. Building VII has an interior diameter of about 4.50 m and stands to a height of ca. 70 cm. Its wall, covered with a thick white plaster on the exterior facade, curves slightly inward already at floor level, thus suggesting a domed superstructure. The southeastern part of the tholos was disturbed by later building activities but, interestingly, in the southwest the tholos wall seems to bend to the south instead of completing its circular course: perhaps a rectangular antechamber lies in the still unexcavated area to the south (square R14).²⁶

Tholos VIII stands immediately to the north of building VII but is much smaller: it has an interior diameter of only ca. 2.50 m. The structure is preserved to a height of ca. 80 cm and was accessible through a ca. 50-cm-wide doorway in the eastern facade. This small tholos seems to have been in use for a considerable period of time: at least five superimposed floor levels of tamped loam were found, each separated from the other by a series of thin and compact gray-brown layers of loam. The lower floors all sharply incline toward the west, i.e., to the entrance of the building; the topmost surface, however, had been leveled. Evidently, the construction of a new floor in the tholos must have been related to a heightening of the open area or courtyard around the structure. Considerable quantities of domestic debris, ultimately about 80 cm in depth, must have been deposited deliberately in this court, requiring a continuous modification of the area and the associated structures. Tholos VII apparently had only one floor and must have stood in a ramshackle state or even have been deeply buried below later debris when the small tholos VIII was still in use.²⁷

The fourth tholos (IX) in the Burnt Village is located along the northern wall of building II. Only a part of it has been excavated so far but the building is estimated to have had an interior diameter of 2.50 m. The tholos was accessible from the east through a narrow, ca. 50-cm-wide doorway. The exterior facade is covered by a mud plaster layer. The interior, on the other hand, reveals a twice-renewed, hard-burnt mud plaster layer ca. 4-8 cm thick on

²⁶ A tholos with an antechamber was found earlier in square Q15 at Sabi Abyad and is ascribed to level 4; see Akkermans 54; Akkermans and Le Mièvre 5-8.

²⁷ Clearly, the heightening of the court did not only affect the tholoi. The entrances and floors of rooms 1 and 2 of the neighboring building I were raised as well.

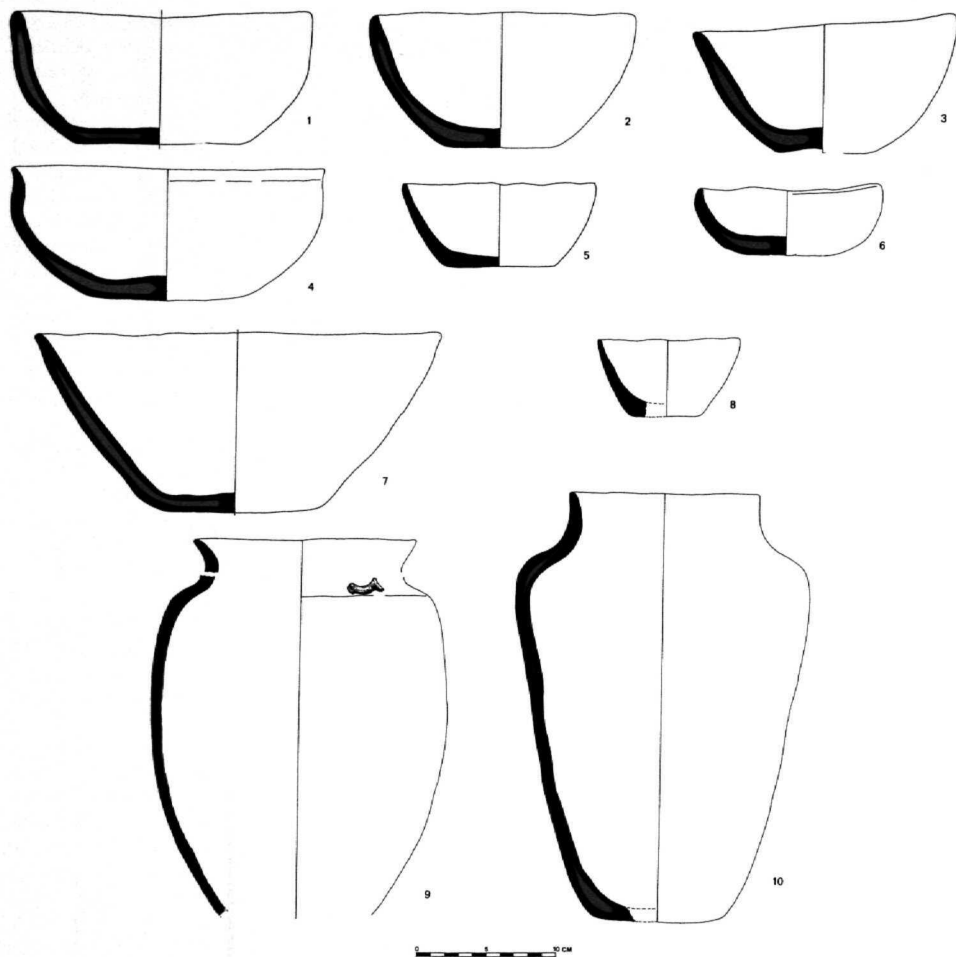


Fig. 9. Examples of Coarse ware found on floors of houses of the level 6 Burnt Village. Chaff-tempered but with occasional mineral inclusions as well (8): 1) reddish-brown fabric, burnished (building II); 2) orange-brown (building II); 3) buff, burnished (building II); 4) cream-buff (tholos VI); 5) orange-brown, roughly finished (building IV); 6) orange-brown, burnished (building IV); 7) reddish-brown, burnished (building I); 8) orange-buff (tholos VI); 9) reddish-brown, burnished (reused as wall cover of hearth east of building III); and 10) buff (building II).

both the floor and walls. The plaster seems to have carried a thin, whitish coating. Tholoi with a similar burnt interior are commonly found in upper levels 3–1, ascribed to the Early Halaf period.²⁸

It is interesting to note that none of the circular buildings, with the exception of tholos VI, seems to

have been directly affected by the fire that ruined the level 6 settlement, despite the fact that some of them stood very close to the burnt buildings. The reason for this apparent distinction should probably be looked for in the roof cover of the various structures. The rectangular buildings appear to have

²⁸ Akkermans 1987, *Paléorient* (supra n. 1) 26; P.M.M.G. Akkermans, "Tell Sabi Abyad: Stratigraphy and Architect-

ture," in Akkermans ed. (supra n. 1) 59.

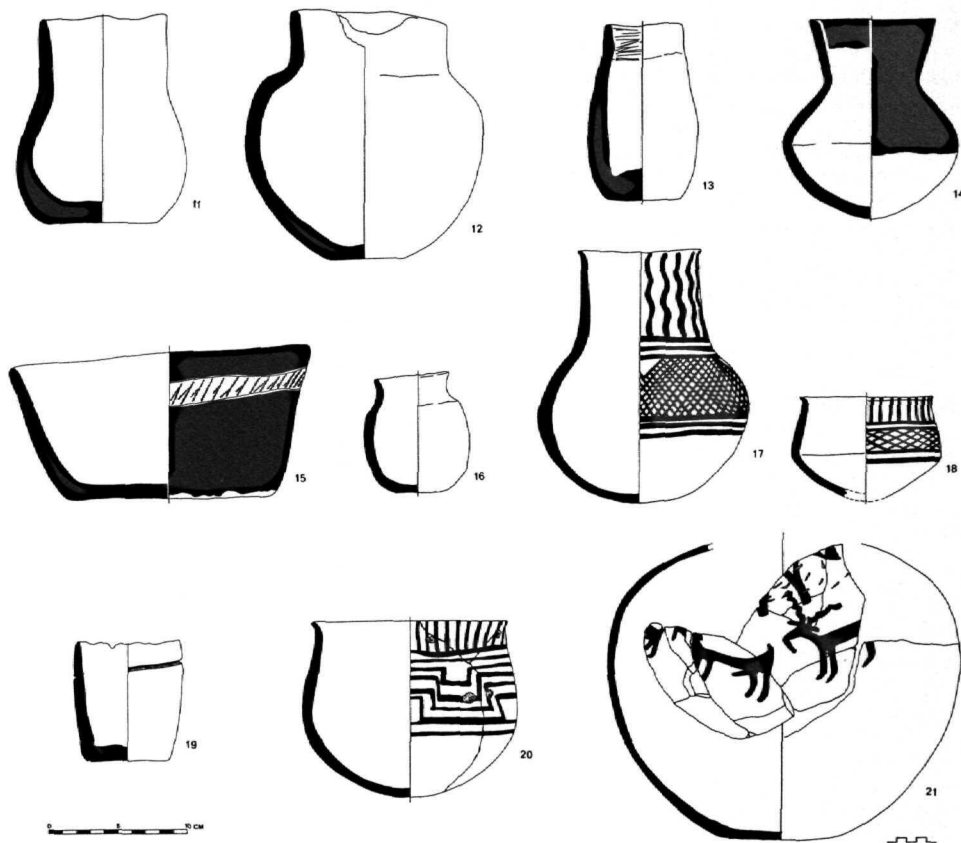


Fig. 10. Examples of Coarse ware (11–13, 16–19), Gray-Black ware (15), Dark-Faced Burnished ware (14), and Fine ware (17–18, 20–21) found on floors of houses of the level 6 Burnt Village. Coarse ware and Gray-Black ware are chaff-tempered, and the other wares are exclusively mineral-tempered: 11) reddish-brown (in courtyard between buildings II and III); 12) buff, burnished (in courtyard southeast of building V); 13) brown, burnished (building II); 14) brownish, red slip and burnished (building I); 15) grayish with red slip, burnished and impressed (building I); 16) reddish-brown (building I); 17) buff with black matt paint (building IV); 18) buff with whitish wash and brown matt paint (building I); 19) orange-brown (building I); 20) buff with black matt paint, burnished, repair holes (building II); 21) buff with dark reddish-brown paint, burnished (tholos VI, remainder probably hidden in section balk).

had flattened roofs made of timber and reeds, i.e., highly inflammable materials. Although this is speculative, the same may have been true for the large, multiroomed tholos VI.²⁹ The other circular build-

ings, however, have clay walls that curve in at floor level: these buildings seem to have been beehive-shaped and carried a superstructure made entirely of pisé.³⁰

²⁹ This building closely resembles a large, multiroomed tholos found in a Halafian level at Yarim Tepe III, which, according to its excavators, seems to have had a simple, flattened roof: R.M. Munchaev, N.Y. Merpert, and N.O. Bader, "Archeological Studies in the Sinjar Valley, 1980," *Sumer* 43 (1984) 33. A flat roof has also been suggested for the tholoi of Halafian Shams ed-Din on the Euphrates: H.

Seeden, "Ethnoarchaeological Reconstruction of Halafian Occupational Units at Shams ed-Din Tannira," *Berytus* 30 (1982) 74–75 and fig. 79.

³⁰ The large oven S found south of building II clearly demonstrates that the technique of dome construction was known to the inhabitants of the Burnt Village.

POTTERY

Thousands of sherds as well as considerable numbers of complete or, at least, reconstructable vessels have been recovered from the Burnt Village. An early account of these ceramics and those of the associated strata of occupation has been presented elsewhere, and until now little could be added to that account.³¹ In many respects—wares represented, technique of manufacture, and shapes—these ceramics closely resemble those of the levels preceding the Burnt Village. The bulk of the pottery (up to 85%) still consists of plant-tempered and often burnished Coarse ware (figs. 9–10: 1–13, 16, 19). Occasionally these Coarse ware ceramics carry a red slip or have incised or impressed patterns of crosshatching, oblique lines, and herringbone. Other examples are decorated with bands of dark red paint, sometimes in combination with incision, or, very rarely, have knobs in appliqué.

The Coarse ware shows a restricted variety of shapes, mainly consisting of simple, plain-rim bowls with rounded or occasionally straight vessel walls, hole-mouth pots, and jars with flaring or straight necks. Some of these jars are of considerable size, i.e., up to 1.00 m in height. It is interesting to note that many of the bowls have a distinct oval shape. Flattened, oval-shaped discs, simply made of sun-dried clay, are often found in association with these vessels and may have served as lids. The oval shape is not restricted to pottery only but is also recognizable in vessels made of stone. Around 5100 B.C., with the beginning of the Halaf period, oval-shaped vessels seem to have gone out of use.

In addition to Coarse ware, small quantities of locally manufactured Gray-Black ware and imported Dark-Faced Burnished ware were found. The gray pottery (e.g., fig. 10: 15) has a very fine paste, is mainly mineral-tempered (occasionally small amounts of vegetable inclusions are found as well), and is purposefully blackened. Usually these ceramics are burnished overall but crosshatched pattern-burnishing occurs as well. In addition, they sometimes carry incised patterns of crosshatching or herringbone. Shapes are simple and consist mainly of small bowls and angle-necked jars. The Dark-Faced Burnished

ware (e.g., fig. 10: 14) differs from the gray pottery in both technological and typological terms, and clay analyses have made it clear that these vessels are imported from western Syria or southeastern Turkey.³² In shape and finish, the ceramics closely resemble those found at sites like Tell Judaidah, Mersin, Sakçe Gözü, and, more recently, Tell Aray.³³ The pottery has a reddish-brown to grayish or black paste and surface color, contains mineral inclusions of rather large size, and is carefully burnished (an unburnished variety occurs occasionally as well). Some vessels are incised or have broad bands of red paint. Shapes mainly consist of rather large angle-necked jars.

Of special interest is the small sample of so-called Fine ware, comprising around 6% of the ceramic bulk. This pottery is absent from the lower levels of occupation at Sabi Abyad and seems to represent a true innovation in local ceramic production.³⁴ The finely textured and mineral-tempered pottery consists of various kinds of bowls and small jars of the angle-neck type (fig. 10: 17–18, 20–21), which have a brown to orange or buff surface color and are often burnished. The majority of these ceramics (ca. 66%) are decorated, either painted or, less commonly, incised or painted and incised. The paint is matt, and reddish-brown to black in color. The emphasis of decoration is on the vessel's neck and upper body and mainly consists of horizontal bands enclosing geometric designs in narrow zones (crosshatching, chevrons, zigzags, herringbone, etc.). Naturalistic designs, showing horned animals, are found in very small numbers (e.g., fig. 10: 21).

In general terms, the pottery found in the Burnt Village at Sabi Abyad has its best counterparts in western regions such as coastal Syria and southeastern Turkey. The busily painted Fine ware, however, shows close parallels with that of the Samarra and, perhaps, Hassuna cultures of northern Mesopotamia.³⁵ At Sabi Abyad, this pottery antedates the appearance of genuine Early Halaf ceramics and is seen as a transitional kind of pottery, intermediate in context between the lower Neolithic strata of occupation and the upper Early Halaf levels. In this respect, Sabi Abyad provides the first clear evidence for the origin of Halaf pottery and shows that the Syrian Jezirah formed part of the Halaf homelands.

³¹ See Akkermans, "Prehistoric Pottery" (supra n. 10) 77–213; Akkermans, Akkermans and Le Mièrre 8–10.

³² See M. Le Mièrre, "Clay Analyses of the Prehistoric Pottery: First Results," in Akkermans ed. (supra n. 1) 233–35. For a detailed discussion of the Syrian Dark-Faced Burnished ware, see R.J. Braidwood and L.S. Braidwood, *Excavations in the Plain of Antioch I* (Chicago 1960) 49–52.

³³ Cf. Braidwood and Braidwood (supra n. 32); J. Gar-

stang, *Prehistoric Mersin* (Oxford 1953); J. du Plat Taylor et al., "The Excavations at Sakçe Gözü," *Iraq* 12 (1950) 53–138; and T. Iwasaki and H. Nishino eds., *An Archaeological Study on the Development of Civilization in Syria* (Tsukuba 1991).

³⁴ See Akkermans and Le Mièrre 8.

³⁵ For a detailed account, see Akkermans ed. (supra n. 1) 129–30; Akkermans 125–28, 293–98; Akkermans and Le Mièrre 8–10.

Most recently, surveys and restricted soundings in the Iraqi part of the Jezirah have yielded ceramics that are virtually identical to the transitional wares found in excavation at Sabi Abyad.³⁶ The identification of these transitional wares over an apparently large area suggests a widespread sharing of cultural traits and a considerable degree of interregional communication and interaction prior to the full onset of the Halaf. Consequently, the commonly assumed spread of the Halaf cultural tradition from one region to another in the form of migration, trade, or "cultural diffusion"³⁷ in the early fifth millennium finds little or no further support; it seems more likely that the Halaf arose locally and more or less simultaneously out of Neolithic cultures found over much of its later range.³⁸

LITHIC INDUSTRY

In 1991–1992, very rich samples of flint and obsidian artifacts from level 6 were recovered that are still under study, so the following report is only an interim evaluation. The flint material is in very bad condition due to burning, while this does not appear to have affected the obsidian element. In certain areas large numbers of flints are blackened, calcined, and fractured or shattered into tiny fragments and dust. For this reason precise counts of artifacts in level 6 as a whole are subjective. Counts for the tool types are also subjective given the fact that damage caused by heat as well as trampling in a village situation could account for many of the artifacts classified as having "fine or semi-abrupt retouch."

In the flint samples the debitage consists mainly of flakes, with blades being markedly fewer and almost always broken into sections. The cores are worked down and often reshaped, suggesting that the tools were fashioned and repaired on the site. The flint tools are classified conventionally, using a list of types published earlier.³⁹ It is already clear that the tool-kit consists of "domestic" types such as scrapers, borers or drills, burins, notches, and denticulates, as well as composites of the same; these together form almost half of the tools. In the scraper group the tabular scrapers, or "tile knives," are notable for their extreme thinness (3 mm on average).

Agricultural tools such as picks are scarce, and lustered sickle-blade elements are neither common nor well made. Weapons are virtually absent but a javelin fragment, expertly pressure-flaked on both faces, is worthy of note.

The obsidian industry consists mainly of numerous irregularly retouched or unretouched small blades, most often deliberately broken into sections. In contrast, certain types are present that, as we now begin to recognize, are northern Fertile Crescent specialties. Side-blow blade flakes (SBBF) and cores form almost a third of the obsidian tools. SBBFs appear to characterize Pottery Neolithic assemblages in northeastern Syria and northern Iraq, e.g., at Kashkashok (mainly on the surface), Bouqras, and Umm Dabaghiyah (upper levels). At Sabi Abyad, SBBFs begin before level 6 and continue to be plentiful in the upper transitional layers, levels 5 and 4. Another early type occurs, although very rarely: the corner-thinned blade (CTB), as defined by Nishiaki.⁴⁰ Its presence in level 6 forms a link with the underlying earlier Neolithic phases at Sabi Abyad, e.g., level 11 of trench P15, where this tool type forms about 40% of the obsidian tools. CTBs were numerous at earlier Neolithic Jezirah sites, such as Kashkashok, Assouad, and Abu Hureyra. The presence of these "special" obsidian types in level 6 may indicate that they were popular for a longer span here than in the east. Interpretations differ as to whether they are tools or waste, and if tools, what their function was.

SEALINGS AND TOKENS

Among the most exciting finds from the houses of the Burnt Village are the ca. 275 clay sealings with stamp-seal impressions and the small tokens that may have served as calculi. The earliest sealings in clay previously known stem from the final stage of the Halaf period, i.e., from the early fifth millennium B.C., and have been found at very few sites only.⁴¹ Arpachiyah produced 26 sealings in and around the TT6 Burnt House, whereas three examples were found in the trenches in area A and the Northeast Base at Tepe Gawra and another 40, in a very late Halaf context, at Khirbet Derak.⁴² In general the origin of true sealings has been looked for in the Ubaid

³⁶ Campbell (supra n. 2); Campbell (supra n. 9).

³⁷ See, e.g., Davidson (supra n. 8); Hijara (supra n. 8) 259; Mellaart (supra n. 3) 277; A.L. Perkins, *The Comparative Archaeology of Early Mesopotamia* (Chicago 1949) 44–45; I. Thuesen, *Hama: The Pre- and Protohistoric Periods* (Copenhagen 1988) 187.

³⁸ Campbell (supra n. 2); Campbell (supra n. 9) 183.

³⁹ L. Copeland, "The Flint and Obsidian Artifacts of Tell Sabi Abyad," in Akkermans ed. (supra n. 1) 237–84.

⁴⁰ Y. Nishiaki, "Corner-Thinned Blades: A New Tool-type

from a Pottery Neolithic Mound in the Khabur Basin, Syria," *BASOR* 280 (1990) 1–14.

⁴¹ Cf. A. von Wicke, *Prähistorische Stempelglyptik in Vorderasien* (Munich 1990).

⁴² M.E.L. Mallowan and J.C. Rose, "Excavations at Tell Arpachiyah, 1933," *Iraq* 2 (1935) 98–99; A.J. Tobler, *Excavations at Tepe Gawra* (Philadelphia 1950) 177; C. Breniquet, *La disparition de la culture de Halaf ou les origines de la culture d'Obeid dans le nord de la Mésopotamie* (Paris 1990) 165; see also von Wicke (supra n. 41) 94–125.

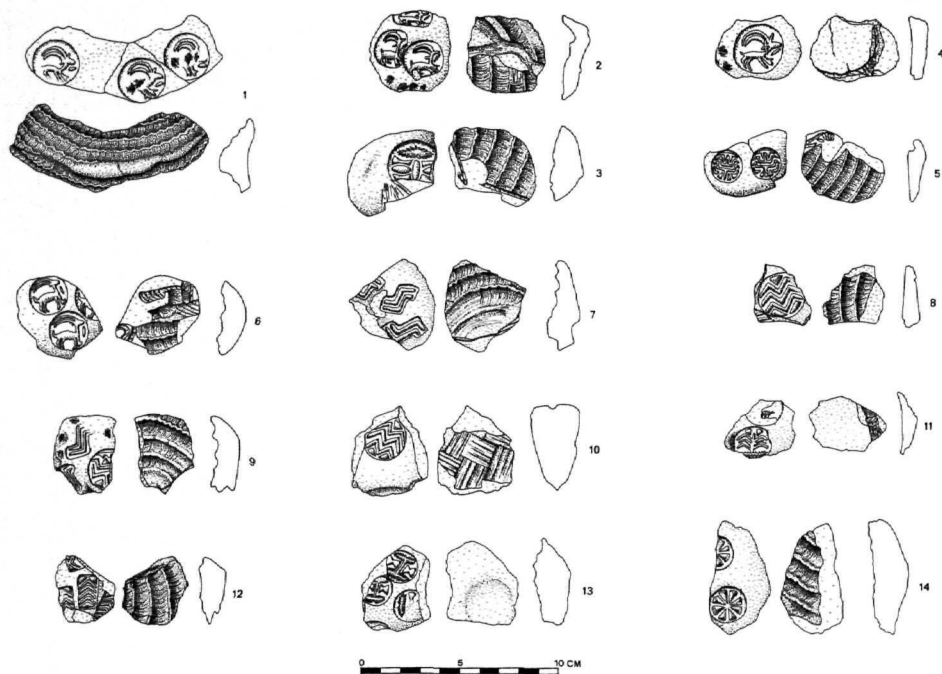


Fig. 11. Selection of clay sealings with stamp-seal impressions, all from room 6 in building II

culture of northern Iraq⁴³ but this now appears to be incorrect: these items were already extensively used in the later sixth millennium B.C.

The sealings at Sabi Abyad (fig. 11) consist of lumps of clay originally placed on the fastening of various kinds of containers or covering their opening entirely. The reverse sides show that mainly ceramics and baskets were sealed but stone bowls, mats, and sacks originally carried sealings as well. The vast majority of the sealings were subsequently provided with one or more stamp-seal impressions. In this manner they secured the containers against unauthorized opening, whereas at the same time they may have carried information on the contents, destination, or ownership of the containers. One of the sealings fitted a small oval bowl made of gabbro (fig. 12); both were found in the same house but in different rooms.⁴⁴ The thick and roughly finished sealing, carrying several complete stamp-seal impressions of

rather complex design, hid the larger part of the bowl from view. Its interior clearly shows the incised bands of the bowl in negative. It is not known what was originally stored in this vessel but when taking into account that the contents were kept or transported in apparently very small quantities in a sealed and precious container, there can be little doubt that they were of high value.

The sealings show a wide variety of designs. Until now, 26 different motifs have been recognized, most of which are geometric (zigzag lines, triangles, concentric circles, diamonds, crosshatching, etc.), but naturalistic representations (animals and plants) are found as well. Some designs occur only once or twice, whereas others are found in considerable numbers. Very common are male goats or gazelles, depicted in a lively manner with long, curving horns and with great attention to detail (fig. 11: 1-2, 4, and 6). Deserving special attention are the repeatedly found

⁴³ See, e.g., D.H. Caldwell, "The Glyptic of Gawra, Giyan and Susa and the Development of Long Distance Trade," *Orientalia* 45 (1976) 227-50; B. Buchanan, "The Prehistoric Stamp Seal: A Reconsideration of Some Old Excavations,

Part I," *JAOS* 87 (1967) 265-79 and "The Prehistoric Stamp Seal: A Reconsideration of Some Old Excavations, Part II," *JAOS* 87 (1967) 525-40.

⁴⁴ House II, rooms 6 (the sealing) and 12 (the bowl).

human-like representations (e.g., fig. 13), which each feature an upright standing figure, up to 10.5 cm tall and characterized by a wide head and conical head-dress, rudimentary arms, and straight legs sometimes carrying a herringbone pattern. Facial features are not rendered except for the long-drawn, sharply delineated eyes with pronounced eyebrows.

It appears on the basis of the size, shape, and design of the various impressions that at least 61 different stamp seals were used for sealing purposes. Remarkably enough, however, not a single stamp seal was found in the houses of the Burnt Village.⁴⁵ Perhaps the actual seals were precious items carried by the owners, who had left the site at the time of

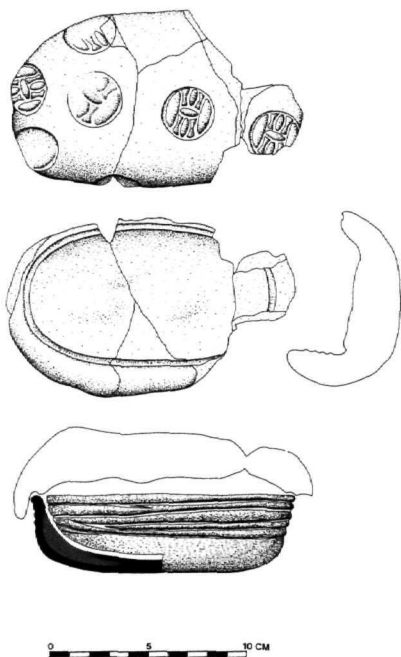


Fig. 12. Incised stone bowl and associated clay sealing with stamp-seal impressions from building II

⁴⁵ Thus far, stamp seals have appeared only in somewhat later levels of occupation at Sabi Abyad. Two examples were found in a level 4 context, whereas a third one stems from a pre-Halaf level in one of the trenches in the north-eastern area: Akkermans 85; Akkermans and Le Mièr 10, 21.

⁴⁶ Many stamp seals have perforated ridge handles or seem to have been used as pendants; see von Wickede (supra n. 41) for a detailed overview. Burials at third-millennium

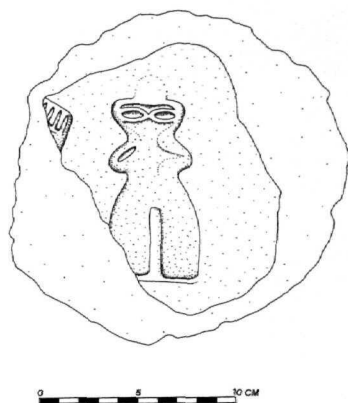


Fig. 13. Clay sealing with human representation from building II

its destruction.⁴⁶ It may also be the case that the seals were made of perishable materials such as bone or wood.⁴⁷ In this respect it is interesting to note that in one case cowrie shells had been used for sealing purposes. Although we have little doubt that stamp seals were indeed known to the Sabi Abyad inhabitants and used by them, it is most unlikely that the sealings found so far were locally produced. The seals and sealings were not meaningless features but, on the contrary, represented a mode of communication enabling the emission and reception of messages (e.g., origin, destination, contents) in a stylized, symbolic manner. Evidently, the smaller the distance in space and time between emitter and recipient of the messages, the more redundant the stylistically transmitted information would be. Within small social units, such as the site of Sabi Abyad, information exchange proceeds more effectively and at lower cost through other modes of communication (e.g., simple verbal agreements). The sealing of goods, therefore, is mainly of importance if these goods are transferred to different or remote spheres.⁴⁸ In the case of Sabi Abyad the actual sealing probably did not take place at the site itself but was carried out

Shahr-i Sokhta showed that at that site seals were originally worn around the wrist; see P. Ferioli, E. Fiandra, and S. Tusa, "Stamp Seals and the Functional Analysis of Their Sealings at Shahr-i Sokhta II-III (2700-2200 B.C.)," *South Asian Archaeology* 1975 (1979) 7-26.

⁴⁷ A few seals made of bone, paste, and terracotta were found earlier at Tepe Gawra; see Tobler (supra n. 42) 178.

⁴⁸ P. Charvát, "Archaeology and Social History: The Susa Sealings," *Paléorient* 14 (1988) 57.

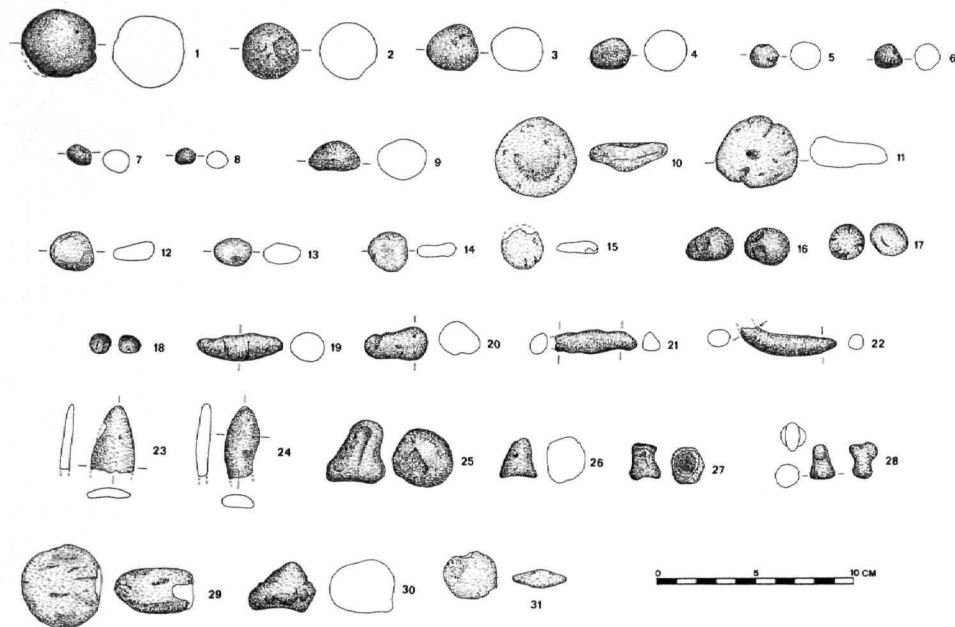


Fig. 14. Selection of unbaked clay tokens from building II (room 6: 1-4, 9, 11-25, 27-30; room 7: 26), building V (room 6: 5; room 7: 10, 31), and building VI (room 2: 6, 8; room 3: 7)

somewhere else, with the sealings arriving at Sabi Abyad along with exchanged products.⁴⁹ The existence of extensive exchange networks in the late sixth millennium has been well documented at Sabi Abyad: Samarra and Hassuna-like pottery was brought in from eastern Syria or north-central Iraq; so-called Dark-Faced Burnished ware and cedar wood came from the Levant; and copper ore, obsidian, basalt, and other stones were obtained from Turkey.⁵⁰

The numerous clay tokens found in association with the sealings seem to support this view. The tokens (fig. 14) are all very small and have simple geometric shapes, e.g., balls, cylinders, discs, and cones. Most likely they acted as counting devices expressing the quantities of objects exchanged or otherwise deployed.⁵¹

⁴⁹ An extensive program of clay analyses is planned to test this assumption. For a similar approach concerning the sealings of Tepe Gawra, see, e.g., M.S. Rothman and M.J. Blackman, "Monitoring Administrative Spheres of Action in Late Prehistoric Northern Mesopotamia with the Aid of Chemical Characterization (INAA) of Sealing Clays," in N.F. Miller ed., *Economy and Settlement in the Near East: Analyses of Ancient Sites and Materials* (MASCAP 7, suppl., 1990) 19-45.

⁵⁰ See Le Mièvre (supra n. 32) 233-35; M. Le Mièvre and

The sealings and tokens were found in three buildings: the rectangular features II and V and the circular structure VI. They were not mere refuse randomly distributed throughout these structures but seem to have been deliberately taken out of circulation and stored, together with numerous other small items, in specific rooms (room 6 in building II, rooms 6 and 7 in building V, and compartments 2, 3, and 4 in tholos VI). The abundant occurrence of sealings at Sabi Abyad and their careful storage in "archives" suggest that these objects were part of a widely accepted, standardized system of administration and recognition, involving well-developed concepts of ownership and the presence of bureaucratic means to control it. Many of the sealings have impressions made by the same seal and, most likely,

M. Picon, "Productions locales et circulation des céramiques au VI^{ème} millénaire au Proche-Orient," *Paléorient* 13 (1987) 137-51; and Akkermans.

⁵¹ See, e.g., D. Schmandt-Besserat, "An Archaic Recording System and the Origin of Writing," *SMS* 1 (1977) 31-69; Schmandt-Besserat, "An Ancient Token System: The Precursor to Numerals and Writing," *Archaeology* 39:6 (1986) 32-39; S.A. Jasim and J. Oates, "Early Tokens and Tablets in Mesopotamia: New Evidence from Tell Abada and Tell Brak," *WorldArch* 17 (1986) 348-62.

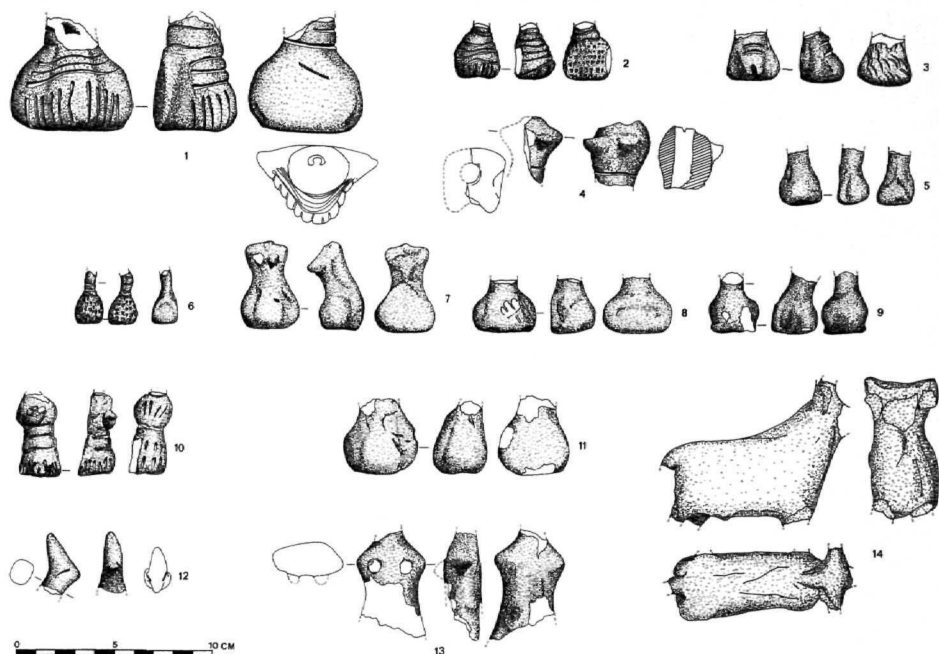


Fig. 15. Selection of unbaked clay human and animal figurines from building II (room 6: 2-3, 5-8, 11), building V (room 7: 1, 4, 9, 12-13), and tholos VI (compartment 2: 10)

the same person or institution. It therefore seems that each sealing agency repeatedly sent goods marked with its seal to Sabi Abyad. In this instance, the sealings may have served as markers of origin or dispatch but, alternatively, it may be the case that these identical seal impressions should be seen as markers of address identifying the site receiving the sealed products⁵² or as indicators of contents.⁵³

The small area excavated discourages any far-reaching conclusions but it may very well be that the present distribution of sealings is part of a more extensive, community-wide pattern, implying that access to the trade network was not restricted to a few individuals only but was open to the community at Sabi Abyad as a whole. In other words, receipt of the sealed goods or objects at Sabi Abyad seems not to have been centrally organized but, on the contrary, was in the hands of many persons. The wide variety

of seals apparently in use also suggests that numerous people were involved in the sealing and the associated consignment of commodities.⁵⁴ Consequently, it is unlikely that the Sabi Abyad sealings served in some kind of status or prestige contexts or were the product of elite relationships.

HUMAN AND ANIMAL FIGURINES

Dozens of very schematically rendered human figurines were found, together with some animal representations (fig. 15). With very few exceptions, these figurines all came from the "archive room" in building II and from rooms 6-7 in building V. Apparently, they formed part of the more valued or intimate belongings of the house owners but, curiously, in the case of the human figurines it is usually only the lower body that has been preserved. The upper part and the head seem often to have been intentionally

⁵² Cf. Charvát (*supra* n. 48) 58.

⁵³ The last two possibilities imply that each sealing agency may have had many seals, each for different purposes (if, that is, one assumes that exchange took place on a considerable scale, involving numerous sites, which

each produced or received various commodities, and, furthermore, that access to a specific product was not restricted to a specific sealing agency only).

⁵⁴ But see n. 53.

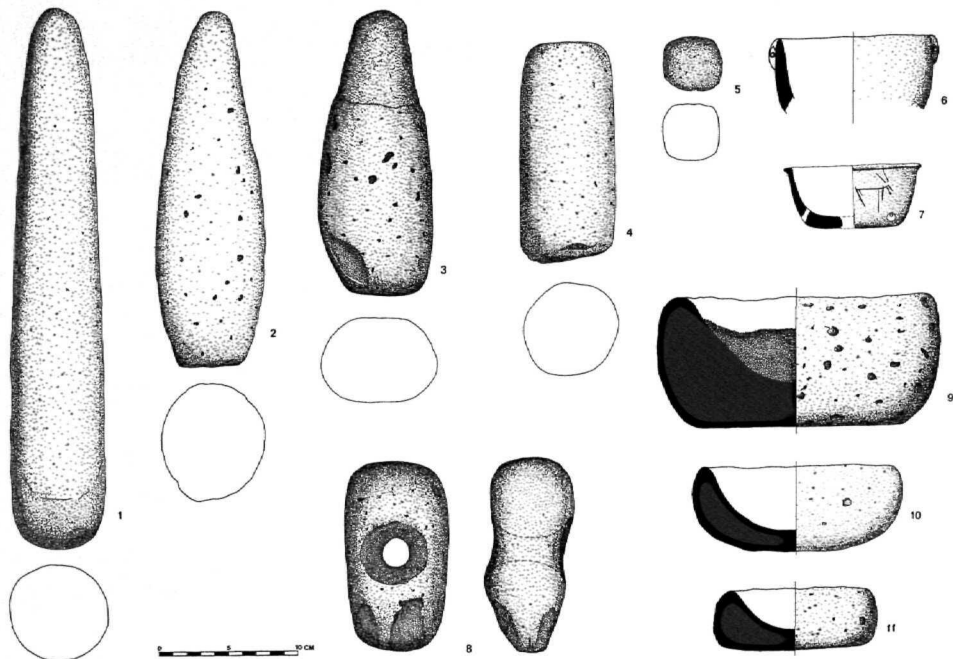


Fig. 16. Selected basalt ground stone implements (1-5, 8-11) and two vessels of fine-grained limestone (6) and chlorite (7)

broken off, perhaps for ritual purposes, and were either subsequently discarded or stored elsewhere. So far, only one head has been recovered, long-drawn and conical in shape with oblong eyes set obliquely (fig. 15: 12). Some figurines had a hole in the neck (fig. 15: 1, 4, 7), suggesting that the head was separately added and fitted onto the body by means of a dowel.⁵⁵

The human figurines are all made of sun-dried clay and invariably depict women. Virtually all show a thin vertical incision near the base, indicating the vulva, and in some cases the breasts are clearly marked. Most figurines have a narrow waist, whereas the hips and belly are of a considerably exaggerated size. The limbs are rarely indicated. In one case the right arm is rendered and seems to support the breasts (fig. 15: 10). Horizontally incised bands and other impressions perhaps served to indicate

clothes. So far, the closest parallels for these figurines have been found at the Hassunan site of Yarim Tepe I in northern Iraq.⁵⁶

In addition to the anthropomorphic representations, crudely shaped animal figurines, all made of sun-dried clay, were found in small numbers (fig. 15: 14). All figurines were considerably damaged but the heads, legs, and tails are still clearly recognizable. Some of the animals seem to have had horns and perhaps represent bulls.

OTHER SMALL FINDS

Small objects other than figurines, sealings, and tokens were found in large quantities in the houses of the Burnt Village. Hundreds of stone objects of all kinds appeared, made of a wide variety of raw materials, some of which were locally available (e.g., limestone, gypsum, sandstone, quartzite),⁵⁷ whereas

⁵⁵ Earlier a somewhat similar but painted figurine with a removable or revolving head was found in one of the Early Halaf levels at Sabi Abyad: Akkermans 1987, *Paléorient* (supra n. 1) 33, pl. IV.2.

⁵⁶ See, e.g., N. Merpert and R. Munchaev, "The Investigation of the Soviet Archaeological Expedition in Iraq in the Spring 1969," *Sumer* 25 (1969) 128, pl. III; Merpert and

Munchaev, "Sites des agriculteurs anciens dans la Mésopotamie septentrionale," *SovArch* 3 (1971) 141-69, pl. 6.

⁵⁷ These materials can be obtained in various parts of the Pleistocene terraces bordering the Balikh flood plain, at distances of 5 to 30 km from Sabi Abyad; cf. M. Mulders, *The Arid Soils of the Balikh Basin* (Utrecht 1969); Akkermans 274.

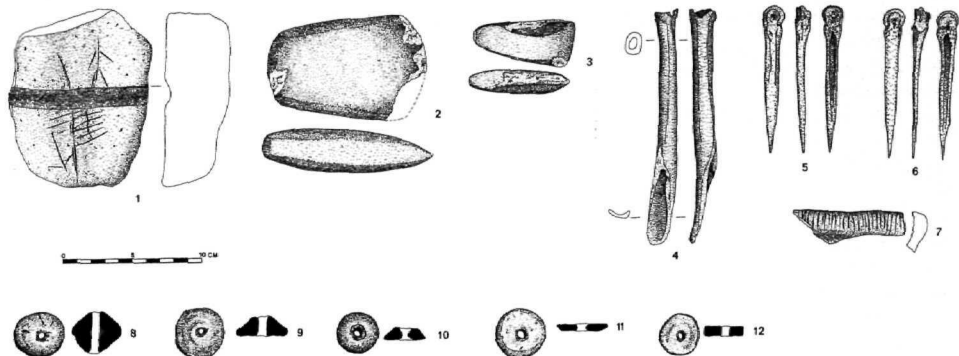


Fig. 17. Selected stone (1-3), bone (4-7), and clay (8-12) objects: 1) reused basalt grinding slab, grooved and incised; 2-3) limestone and dolerite celts; 4-7) bone spatula, awls, and incised implement; 8-10) clay spindle whorls; 11-12) ceramic pierced discs.

others must have come from regions far away, such as the Euphrates valley or the Turkish piedmont near Urfa (e.g., basalt, dolerite, granodiorite, serpentinite, chlorite, granite, and steatite). Apart from basalt, which was commonly used for the production of ground stone tools (such as flattened grinding slabs, pestles, and grinders of varying sizes and shapes, and rather thick-walled mortars), the non-indigenous materials were each found in minute quantities and seem to be largely restricted to "luxury items" like small, carefully finished bowls and personal adornments (beads, pendants, and labrets). Carving or manufacturing debris was entirely lacking, thus suggesting that these items reached the site in finished form (perhaps as part of the exchange network) or that production was restricted to specific and as yet unexcavated parts of the site.

Grinding implements, made of basalt and to a lesser extent limestone, granodiorite, flint, and sandstone, are among the most commonly found items in the Burnt Village (fig. 16). The grinding slabs have an oval or rounded shape, a convex base, and a flat or slightly concave working surface. Pestles and handstones come in many different dimensions and shapes (fig. 16: 1-5). Most are conical but cylindrical or spherical ones were found as well. Mortars appear in two varieties, one portable and consisting of simple bowls with thick, slightly incurving sides and flat bases (fig. 16: 9-11), and the other more irregularly shaped and sunk into the floor. These grind-

ing tools often show very smoothed and polished surfaces resulting from intensive use. In addition to these worked items, a number of unworked but very smooth stone objects were found, which, according to their wear marks, seem to have served as grinding slabs or working platforms. At least one of these was used as a palette, as shown by the traces of red ochre and dark-blue pigment on its surface. The common occurrence of ochre traces on pestles, mortars, and grinding slabs and the presence of small pieces of ochre on the floor in some rooms suggest that this kind of pigment was widely used at Sabi Abyad, perhaps for body embellishment or the decoration of ceramics and other artifacts.⁵⁸

Shallow to deep carefully finished stone bowls were found in rather small quantities⁵⁹ and were made of a wide variety of raw materials, such as limestone, alabaster, gypsum, dolerite, serpentinite, chlorite, and steatite. The natural banding of some of these materials seems to have been sought for its decorative effects. One bowl carried an incised pattern, displaying a horned animal (fig. 16: 7). The various vessels have flat or concave bases and flaring straight or rounded walls (occasionally slightly curving inward at the rim), with plain, flat, or beaded rims. In one case a small, horizontally pierced lug is present (fig. 16: 6). Some bowls have evidence of repair holes or of bitumen adhering to the interior surface.

Thirteen small celts (fig. 17: 2-3) were recovered from the various buildings, most of them (8) made

⁵⁸ Ochre may have had ritual connotations as well, as is suggested by its presence in a child burial ascribed to level 5 at Sabi Abyad.

⁵⁹ In view of the specific nature and preservation of the Burnt Village, one would expect the stone bowls recovered from the various houses to be complete or, at least, wholly

restorable but, curiously, all vessels except one were in a fragmentary state. Perhaps these fragments should be considered as household waste or even as intrusive elements included in the clay used for wall construction. Post-depositional disturbance is another possibility.

of fine-grained gray-black dolerite, the remainder of quartzite, serpentinite, and limestone. The celts are wedge-shaped and heavily polished, with the sharp cutting edge in all but two cases seriously damaged from domestic use. The two exceptions are very small (hardly 3 cm thick), carefully finished, and in perfect condition, perhaps suggesting that these objects served in luxury or ritual contexts.

Some types of stone objects occurred only once or twice, such as a carefully finished gypsum mace-head or a palm-sized and reused grinding slab fragment of fine-grained basalt with a wide, shallow groove and finely incised linear and arrow-like patterns on both sides (fig. 17: 1). A somewhat similar grooved implement, but made of soft limestone and displaying a deeply incised zigzag pattern, came from level 5 at Sabi Abyad. Elsewhere, too, such grooved stones with or without decoration have been found, e.g., at sixth-millennium Tell Judaidah in the Amuq or, from a much earlier time, at eighth-millennium Çayönü in Anatolia.⁶⁰ Perhaps these objects served for the production of some kinds of stone tools or for the straightening of arrow shafts.

Implements made of bone consist of simple awls and, to a lesser extent, spatulas and burins (fig. 17: 4-6). The awls were all made of caprid metapodia, and the other tools of the ribs or tibia of sheep, goat, or cattle. A small piece of worked bone from building IV shows cut marks of varying length at small intervals and perhaps served as a rattle or counting device (tally; fig. 17: 7). Similar items were recovered from other levels at Sabi Abyad and are also reported from sites such as Yarim Tepe I and Yarim Tepe II in Iraq.⁶¹

Objects serving for personal adornment, such as beads, pendants, and labrets, were often found in isolation and in rather limited numbers; most of these items were probably worn on the body and left the site at the time of destruction together with their owners. The small beads, disc-like or cylindrical in shape, are all made of fine-grained stones, like serpentinite, obsidian, breccia, or, perhaps, turquoise, and varied in color from black to red-brown, green, and white. The shells of small land snails were

occasionally used as pendants, as was a fragment of a freshwater mussel (*Unio*). The latter is more or less rectangular in shape with a rounded, protruding top, carrying two tiny perforations. Labrets, most likely serving as lip or ear ornaments,⁶² are made of both stone and sun-dried clay. Dolerite is the kind of stone most often used but other fine-grained materials like calcite, serpentinite, and chlorite were in use as well. Some of these labrets have a squat appearance with a flat, slightly protruding top and flattened base, whereas others are taller in shape with a somewhat protruding flat or convex head and pointed base.

Other small finds include oval-shaped discs or lids, biconical sling missiles, and either conical or, more often, biconical spindle whorls, all made of sun-dried clay and found in considerable quantities (fig. 17: 8-10). Very common, too, are small perforated discs (3 or 4 cm in diameter) made of chipped sherds or occasionally stone (fig. 17: 11-12). A unique find is a small clay "whistle" fragment found in the upper fill of building V. This hollow and cylindrical object, with at least one small, circular hole, is somewhat comparable to the cigar-shaped item found at Has-sunan Yarim Tepe I and interpreted by its excavators as a whistle.⁶³

A most interesting find are two small pieces of copper ore (malachite), which must have come from mountainous southeastern Anatolia. One of these fragments was found in the fill of room 3 of building III, the other in a debris layer west of this room. These finds may indicate that copper was processed at Sabi Abyad as early as 5200 B.C., albeit on a very modest scale.

DISCUSSION AND CONCLUSIONS

The Burnt Village is among the most important discoveries made so far at prehistoric Tell Sabi Abyad. Its contents and unique circumstances of preservation allow not only a detailed insight into late sixth-millennium settlement layout and associated material culture but they also provide exciting new clues to the general development of later Neolithic society in a hitherto poorly known region of the Near

⁶⁰ Braidwood and Braidwood (supra n. 32) 90, fig. 66.2; and M.K. Davis, "The Çayönü Ground Stone," in L.S. Braidwood and R.J. Braidwood eds., *Prehistoric Village Archaeology in South-Eastern Turkey* (Oxford 1982) 110-11, figs. 3.12-3.13.

⁶¹ N. Merpert and R. Munchaev, "Excavations at Yarim Tepe 1970: Second Preliminary Report," *Sumer* 27 (1971)

pl. VI, fig. 6c; N. Merpert, R. Munchaev, and N. Bader, "The Investigations of Soviet Expedition in Iraq, 1973," *Sumer* 32 (1976) 39, 53, pl. XXIX.

⁶² F. Hole et al., *Prehistory and Human Ecology of the Deh Luran Plain* (Ann Arbor 1969) 235-36.

⁶³ Merpert and Munchaev (supra n. 61) 16-17, pl. V, fig. 5b.

East. In this respect the research at Sabi Abyad contributes considerably to the current debate concerning the rise of the Halaf culture somewhere around 5200/5100 B.C., which has long been considered to be of crucial importance as an intermediate stage between early village economies and the formation of cities and states. As pointed out above, the Burnt Village is the earliest of the so-called transitional levels at Sabi Abyad, intermediate between the lower Neolithic phases of occupation and the topmost levels thought to represent the very beginnings of the Halaf era in the region. The Burnt Village, with its dense agglomeration of houses largely identical in layout and alignment, is the most outstanding example of local community organization known for this period, but it represents only one phase within a long and continuous sequence.⁶⁴

The houses are each of considerable size and have many small rooms, which seem to have been used for various purposes. The size and composition of the groups inhabiting or using each of these buildings can only be guessed at for the moment. The rather large amount of available space may have exceeded the needs of small, nuclear family groups and should perhaps be taken as an indication that the houses gave shelter to extended households. Furthermore, the restrictions placed on circulation through the buildings and the partitioning of the structures into many small rooms may suggest that each of these extended families was divided into two or three domestic units, each occupying a particular area for living or performing special activities.

The striking regularity and careful planning underlying the construction of the Burnt Village seem to adhere closely to late seventh- and early sixth-millennium settlement organization found elsewhere in northeastern Syria, most notably at Tell Bouqras on the Euphrates, where the highly struc-

tured buildings, conceived of and raised along certain fixed principles, were seen as indicators of emerging social control.⁶⁵ A direct relationship has often been emphasized between architectural design and complexity of society⁶⁶ but others have argued that apparently sophisticated and regular patterns of building may easily have been a derivative of very simple structuring principles.⁶⁷

If the architecture at Sabi Abyad can be taken as typical of the settlement as a whole, however, and if furthermore the highly uniform layout of the houses indeed reflects some sort of control, such control must have served to emphasize traditional values and social coherence. The houses reflect little idiosyncratic variability but instead were constructed according to shared principles or traditions focusing on repetition and invariance. Such traditions are not random but serve to organize and bind together a society; at the same time they allow the immediate recognition of deviating social behavior. In this sense tradition is a device of social control, which, however, in the hands of the elite may easily become an instrument of power: a tradition is always based upon past experiences that subsequently can be used to legitimize and naturalize the present status quo. Any unequal social relationship may thus be presented as part of the natural order; it attains the status of ever-existing and non-discussable.⁶⁸ The uniform character of the houses of the Burnt Village thus may have been the mere facade of an imaginary social equality, protecting a much more complex and non-egalitarian society from evaluation.

The very richness of the materials recovered from the Burnt Village at Sabi Abyad suggests that socioeconomic diversity and complexity in the late sixth millennium B.C. considerably surpassed that of earlier Neolithic communities in the Balikh region. The excavations at late seventh- to early sixth-

⁶⁴ Earlier it was pointed out that there seems to have been a hiatus in occupation between the lowest level 11 and the subsequent level 10 at Sabi Abyad. From level 10 onward, however, settlement was continuous and uninterrupted.

⁶⁵ Cf. P.A. Akkermans, H. Fokkens, and H.T. Waterbolk, "Stratigraphy, Architecture and Layout of Bouqras," in J. Cauvin and P. Sanlaville eds., *Préhistoire du Levant* (Paris 1981) 500.

⁶⁶ See, e.g., K.V. Flannery, "The Origins of the Village as a Settlement Type in Mesoamerica and the Near East: A Comparative Study," in P.J. Ucko, R. Tringham, and G.W. Dimbleby eds., *Man, Settlement and Urbanism* (London 1972) 23-54; P.M.M.G. Akkermans, "Tradition and Social Change in Northern Mesopotamia during the Later Fifth and Fourth Millennium B.C.," in E.F. Henrickson and L. Thuesen,

Upon This Foundation: The 'Ubaid Reconsidered (Copenhagen 1989) 339-64; S. Kent ed., *Domestic Architecture and the Use of Space* (Cambridge 1990).

⁶⁷ E.g., W. Hillier et al., "Space Syntax," in D. Green, C. Haselgrove, and M. Spriggs eds., *Social Organisation and Settlement* (BAR 47, Oxford 1978) 343-84; W. Hillier and J. Hanson, *The Social Logic of Space* (Cambridge 1984).

⁶⁸ See, e.g., M. Shanks and C. Tilley, "Ideology, Symbolic Power and Ritual Communication: A Reinterpretation of Neolithic Mortuary Practices," in I. Hodder ed., *Symbolic and Structural Archaeology* (Cambridge 1982) 129-54; S. Shennan, "Ideology, Change and the European Early Bronze Age," in I. Hodder ed., *Symbolic and Structural Archaeology* (Cambridge 1982) 155-61; and D. Miller and C. Tilley eds., *Ideology, Power and Prehistory* (Cambridge 1984).

millennium Damishliya and Assouad have made clear that these sites were largely autonomous, self-supporting entities, with only limited socioeconomic ties outside the community.⁶⁹ The Burnt Village, on the other hand, was part of extensive networks of long- and short-distance exchange, and its inhabitants maintained relationships with groups of people in distant areas, such as the coastal regions of the Levant, the piedmont of southeastern Turkey, and the plains of Mesopotamia. Moreover, the finds from the Burnt Village have made it clear that its inhabitants were able to mobilize and exploit these external resources in a regular manner and to a considerable extent, i.e., beyond the level of incidental transactions. The hundreds of sealings found in the small area thus far excavated, probably representing only a minor part of the overall settlement at Sabi Abyad, suggest that foreign commodities came in very large numbers, either the result of reciprocal exchange or as tributes and gifts.⁷⁰ Ethnographic evidence emphasizes the importance of gift-giving in patron-client relationships⁷¹ but the likelihood that gifts contributed significantly to the wealth of the Sabi Abyad population is doubtful: where would the gifts have come from, after all? Evidence for control of territory other than the immediate surroundings of the site is poorly documented; if the community at Sabi Abyad was able to exercise some sort of political power allowing the extraction of tribute, such control can hardly have extended beyond the limits of the Balikh basin. Survey evidence from the region of concern suggests that only four or five sites existed around 5200 B.C. and any evidence for a hierarchical order or pattern of dependency among these sites is absent.⁷²

If politically defined gifts, then, seem to have played a minor role only, it appears that it was mainly exchange networks that underlay the prosperity of the community at Sabi Abyad. A key innovation accompanying this prosperity is the use of seals and sealings, which served to mark property and thus allowed a certain degree of control over the exchange

networks. It has been argued above that this control mechanism emerged much earlier than currently assumed, most likely around the middle of the sixth millennium B.C. or shortly afterward, in the centuries following the intermittent disruption of settlement in the first half of the millennium. Potentially, all groups at Sabi Abyad could participate equally in the exchange transactions. In our discussion above of the Sabi Abyad sealings, we suggested that many people must have been involved in both the consignment and subsequent receipt of the sealed goods, and that access to these commodities was not necessarily restricted to a specific segment of society only. On the other hand, it seems obvious that any elite group would pursue differentiated access to the exchange networks; exclusion of the commoners enables leaders to mobilize considerably more wealth and prestige to their economic and social advantage and transforms the networks in devices of social power.⁷³ In the case of Sabi Abyad, however, solid evidence for this kind of power struggle, based on differences in access to exchange commodities and the associated rise of an increasingly hierarchical organization within the site, is absent. The lack of evidence for obvious institutions of power at the site suggests that social differentiation was of a more modest level.

The exchange network must have involved some sort of reciprocity; received goods had to be counterbalanced by local items given in return. The local economy, then, must have surpassed mere subsistence needs and enabled the generation and extraction of a surplus. Given the virtual absence of natural resources other than fertile lands and extensive pasture areas, the origin and nature of this surplus most likely should be sought in the returns of agriculture and animal husbandry. Such returns have been discussed elsewhere in detail for the Early Halaf settlement at Sabi Abyad.⁷⁴ Agriculture alone, however, was hardly sufficient to fulfill even the basic subsistence needs of the local population, much less support the production of surplus.⁷⁵ Stockbreeding,

⁶⁹ Akkermans 320.

⁷⁰ Recently Charvát has commented on the possible relationship between the practices of sealing and gift-giving; see P. Charvát, "The Seals and Their Functions in the Halaf and Ubaid Cultures (A Case Study of Materials from Tell Arpachiyah and Nineveh 2-3)," in R.-B. Wartke ed., *Handwerker und Handwerkertechniken im Alten Orient* (Berlin, in press).

⁷¹ E.g., M. Sahlins, *Stone Age Economics* (New York 1972).

⁷² Akkermans 175-76.

⁷³ See, e.g., M. Friedman, "Tribes, States and Transformations," in M. Bloch ed., *Marxist Analyses and Social Anthropology* (New York 1975) 161-202; and the various contributions in T. Earle ed., *Chiefdoms: Power, Economy and Ideology* (Cambridge 1991).

⁷⁴ Akkermans 204-68.

⁷⁵ Agriculture on a *dry-farming* basis is unlikely to yield a surplus. If, on the other hand, irrigation or restricted

then, must have been of ultimate importance; only extensive animal husbandry, in combination with agriculture, could have provided the local economy the much-wanted surplus for exchange purposes. Even if it were not the basic subsistence products (cereals, meat, wools, hides, etc.) that were traded but the results of local craftsmanship instead (e.g., textiles or ceramics), a surplus from farming and animal husbandry surely provided the means to produce these craft items.⁷⁶ Long-distance exchange can hardly have been based upon staple goods, given the later Neolithic technology of transport. More likely it involved the circulation in small quantities of luxury goods and raw materials—exclusive ceramics, precious stones, metal ores, and various finished articles of perishable nature.⁷⁷ The sealings make it clear that in many cases it was not (or not exclusively) the containers but their contents that were exchanged. Whereas some of these products entered daily life in the form of domestic utensils, others perhaps hint at attempts to gain prestige by conspicuous consumption.⁷⁸

It is not yet clear what caused the final destruction of the level 6 community at Sabi Abyad. Was it merely a tragic accident or was it perhaps due to a deliberate act of violence imposed by outsiders? There is no evidence for a skirmish or massacre nor does it appear that the village was plundered and emptied of its riches. The inhabitants do not appear to have tried to recover possessions buried in the ruins, as one would expect in the case of an accident. On the other hand, we have the impression that some categories of material, particularly luxury items such as personal adornments, seals, and finely painted pottery, are present in much smaller quantities than one would expect in the case of a fully preserved domestic context. Perhaps the Sabi Abyad inhabitants were able to remove part of the

original inventory before destruction, on the whole leaving only the least valuable or least portable items behind. Subsequently, the remains of the Burnt Village seem to have been abandoned, and replaced later by a new settlement partly founded upon the still standing remains of the earlier one. Occupation then gradually lost its aggregative character, becoming more open and dispersed in nature, with one or two rectangular buildings on the top of the mound and surrounded by auxiliary structures on the slopes. For example, the large building ascribed to Early Halaf level 3, enforced by buttresses along its exterior facade and possibly with a second story,⁷⁹ stood in an isolated, almost fortified manner and has little in common with the very regularly built, tripartite houses of the Burnt Village. The changes in house plan are associated with an increasing use of stone⁸⁰ and, remarkably, mudbrick instead of pisé for construction purposes. At Sabi Abyad mudbricks were first introduced in the transitional level 4, dated around 5100/5050 B.C., but, as pointed out above, their occurrence is not so much a genuine innovation as a reintroduction of a much older and already existing building practice in the region.⁸¹

In this respect it seems that the appearance of Halaf in the Balikh region induced a break in local building traditions. New materials were used for the construction of new types of houses that entirely replaced the earlier ones and more properly fulfilled the apparently changing needs of society. On the other hand, it is clear that this break with the past was not fully sustained. The best evidence for architectural continuity is presented by the tholoi. These structures, long considered to be one of the main characteristics of Halaf society, were not a Halafian "invention" but belong to a much older Neolithic tradition. Excavations at sites such as Tell Hassuna and Yarim Tepe I had already yielded tholoi in early sixth-

intensified cultivation on naturally flooded land was practiced, a considerable surplus may have been generated. At present, however, there is no evidence for irrigation or the like in the late sixth-millennium Balikh valley: Akkermans 223–25.

⁷⁶ A surplus from farming allows at least part of the community to spend time on activities other than hard labor in the fields.

⁷⁷ A good example is the small sealed stone vessel found in building II (fig. 12) but ceramic containers, too, seem to have been rather small, judging from the impression of their rim diameters on the sealings.

⁷⁸ Or, in the words of Robert Drennan, "trade or exchange at long distance . . . provided the plumes of the

chiefly peacock, not its basic diet"; R.D. Drennan, "Pre-Hispanic Chiefdom Trajectories in Mesoamerica, Central America and Northern South America," in Earle (supra n. 73) 281.

⁷⁹ See Akkermans 56ff; Akkermans and Le Mièrre 11–18.

⁸⁰ Particularly gypsum blocks, which must have come from the Pleistocene terraces 5–10 km east of Sabi Abyad.

⁸¹ At present, it remains unknown whether the use of mudbricks was wholly abandoned in the Balikh region in the first half of the sixth millennium or whether its absence is limited to Sabi Abyad. If the former, the Halafian people themselves may have seen the renewed use of mudbricks as a truly innovative procedure.

millennium Hassunan contexts.⁸² Sabi Abyad, with its level 6 tholoi, now wholly confirms this picture.⁸³

In addition to the altering pattern of settlement and building tradition, profound changes took place in artifact assemblages, of which the foremost is the rapidly increasing importance of fine painted pottery.⁸⁴ On the basis of the stratigraphic evidence and the available radiocarbon dates, it appears that this transition, which must have had a considerable im-

pact upon the overall organization of society, took place fairly rapidly and was completed within a few generations, between ca. 5200 and 5100 B.C.

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⁸² S. Lloyd and F. Safar, "Tell Hassuna: Excavations by the Iraq Government Directorate General of Antiquities in 1943 and 1944," *JNES* 4 (1945) 272; Merpert and Munchaev (supra n. 61) 15; R. Munchaev and N. Merpert, "The Archaeological Research in the Sinjar Valley (1971)," *Sumer* 27 (1971) 25ff; Merpert, Munchaev, and Bader (supra n. 61) 25-27.

⁸³ The main difference between the level 6 circular structures and those of the Halafian levels at the site is that the later tholoi all were lined with a hard-burnt in-

terior plaster, whereas this lining was attested only once (tholos IX) in the Burnt Village. Another tholos without the characteristic burnt interior was unearthed in the final transitional level 4. Moreover, this building has a rectangular antechamber; see Akkermans 52-56; Akkermans and Le Mièrre 5-8.

⁸⁴ The changes and developments in ceramics have already been reported in detail elsewhere; see Akkermans 68-79; Akkermans and Le Mièrre 4-21.

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