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# The Excavations at Abū Sunaysilah with Particular Consideration of Food Related Organisation

### Introduction

The site of Abū Sunaysilah is situated in central Jordan around 15km east of 'Amman and 8km north of Sahāb, between the desert and the sown. The site is at the confluence of Wādī Qaṭṭār and its tributary Wādī Irmaydān (FIG. 1). Its core settlement area is ca. 3000 square meters, mostly on the northern side of Wādī Irmaydān in front of a limestone outcrop, but structures (not excavated) can also be seen on the southern side of that wadi. Another 80m to the east of the core settlement is a long damlike structure, which closes a smaller side wadi that runs into Wādī Irmaydān. The area is at an elevation of around 780m, receives between 200 and 250mm rainfall per year and consists of low hills just east of the modern limestone quarries, which have significantly affected the whole area in modern times. Further to the west are the better soils of the foothills around 'Ammān, while the desert starts further to the east of the site. Abū Sunaysilah itself sits on a triangle above the wadis on reasonably good land, which permits small-scale irregular farming and seasonal herding (the site has been regularly visited by sheep and goat herders in recent years).

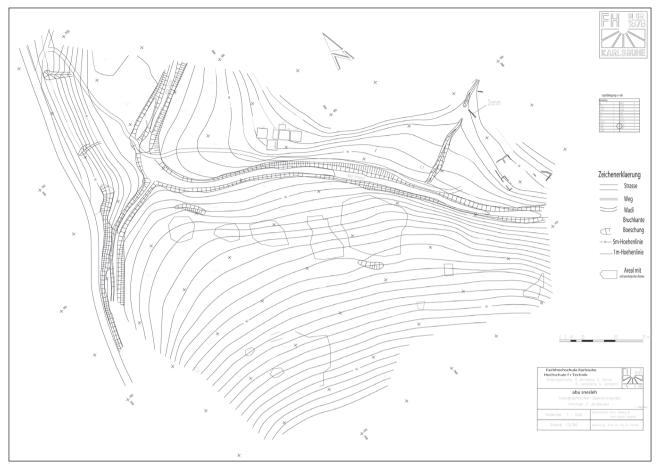
The reasons for choosing Abū Sunaysilah were both its situation between the desert and the sown and the time periods known from

the surface (Kerner *et al.* 1992) that promised information about the urbanization processes that took place both in the fifth (Late Chalcolithic [LC]) and third (Middle Bronze Age [MBA]) millennia BC, both periods being present at Abū Sunaysilah. The Late Chalcolithic period saw the development of many villages and a number of larger sites, while the Middle Bronze Age was a period of renewed urbanisation after the changes of Early Bronze Age IV. A survey was carried out in the vicinity of the site to gain a wider picture about the development in the region and of nomadic or pastoral interaction with settlers in Abū Sunaysilah.

### **Excavation Results**

The excavations at Abū Sunaysilah consisted of two seasons, each of 5-6 weeks, in 1990 and 1992. During that time *ca.* 450m² (or 15 % of the northern half of the site) (FIG. 2) were excavated, but the site continues on the southern bank of Wādī Irmaydān, which was only surveyed.

The lowest levels of the excavation in the deep trench in area F12 yielded some late Neolithic material from the Yarmukian period (and possibly earlier), while the Late Chalcolithic period was present in the same deep trench and in the lower levels of most squares (G11; G12; G13; G14; E12). One Chalcolithic house



1. Plan of Abū Sunaysilah at the confluence of Wādī Irmaydān and Wādī Qaṭṭār.

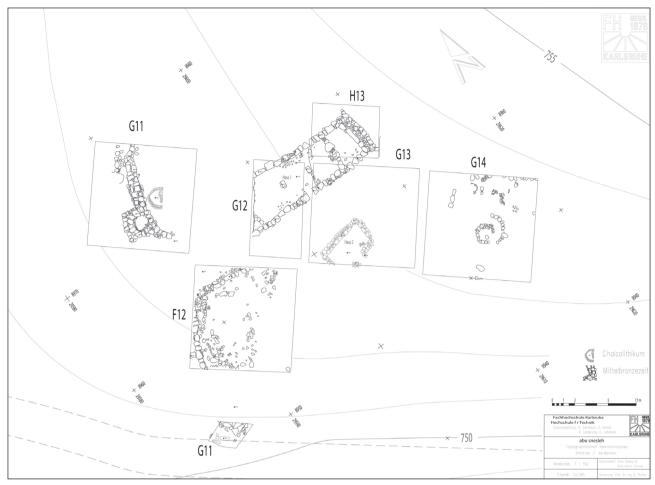
of  $4.8 \text{m} \times 3 \text{m}$  was excavated in G13 (FIG. 3); it was built of flat, angular limestone blocks as they are locally available. Small stones and stone chips were put in the gaps between the larger stones and thus created a very even surface to the face of the walls; mortar was hardly used at all. The entrance is emphasised with a niched pilaster, excavated on one side but most likely also present on the other side. The entrance is however only 0.7m wide. For the first time, it proved possible to reconstruct the roof of a Late Chalcolithic house, as large stone slabs were found inside the house. It was most probably constructed using a corbelling technique, being constructed of large stone slabs with counterweights on top of the walls (Lamprichs 1998: abb. 21).

Pottery, flint tools (e.g. adzes; fan-scrapers) and ground stone were found on the pisé floor of the house. A second house of identical construction and dating could be seen in a

section in E12. A cut had been created by the *wadi* and was cleaned and slightly cut back during the excavation.

Other Late Chalcolithic structures included a circular (or spiral) building in G14, whose function is not clear (Lamprichs 1998), and a pit in G11. The area seems to have been terraced before the Late Chalcolithic settlement was built.

The Middle Bronze Age II (FIG. 2) followed a hiatus at Abū Sunaysilah and is best represented by the large rectangular house in G12 / G13 and H13. The orientation of the house follows that of the Chalcolithic houses. The rounded wall in G11 also dates mostly to the MBA, but has an older layer underneath. The complete House 1 was, at  $14m \times 4.5m$ , much larger than the Chalcolithic house and was built of large stone boulders. At least two more houses (F13 / E12; F 14) were visible and have been partly excavated. They seem to have



2. Plan of excavation squares in Abū Sunaysilah.



3. House 2 (Late Chalcolithic).

had large courtyards between them. In House 1, the entrance was again marked, this time by two large standing stones. Even larger stones (1.3m high) stood upright along the central axis of the house and were probably meant to support the roof. In a later phase, the house was divided into a smaller eastern and larger western room (FIG. 2). The fill of the smaller Room 1 ( $3m \times 3.3m$  internally) contained the incomplete skeletal

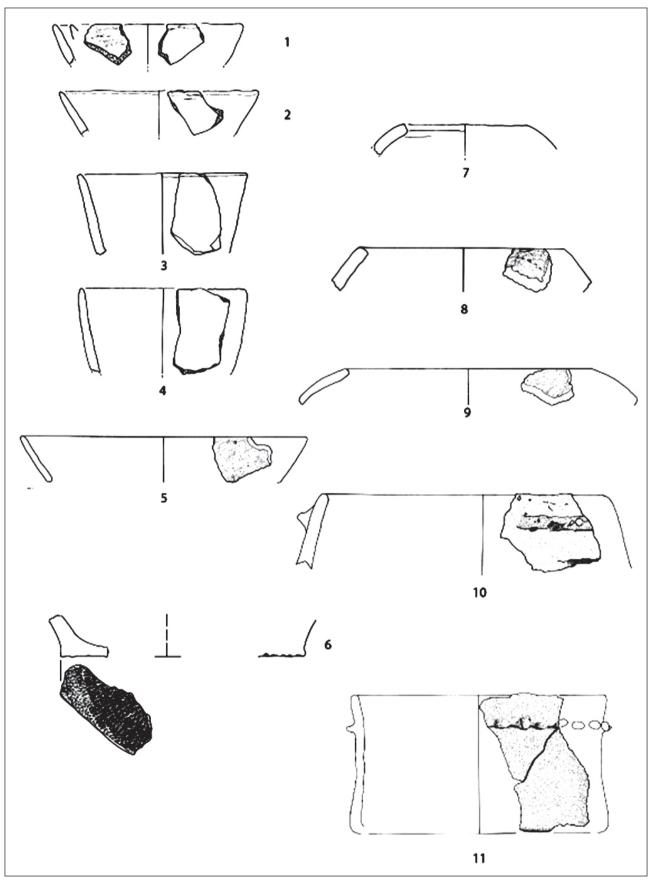
remains of seven individuals. Two skulls show signs of a violent death (one hole and one cut [Shafiq unpublished]). In square G11 there was a small tower-like structure of unclear purpose.

# Material Culture from the Neolithic and Late Chalcolithic Periods

Although the following section gives a general overview of the material culture at Abū Sunaysilah, the focus is on items that can be related to the production, preparation, cooking and serving of food and drink.

The Yarmukian / Wādī Rabāḥ periods (Strata 7-9) were evidenced by a few pieces of incised and painted, as well as red-slipped and burnished, pottery and some stone-tools, such as burins and one Herzliya point.

The material from the Late Chalcolithic (Horizon I; Strata 6-5) consists mainly of pottery, including v-shaped bowls (FIG. 4.1-2, 5), hole-



4. Late Chalcolithic Pottery and Middle Bronze Age pottery (1-5: LC bowls, 6: LC base with mat-impression, 7-10: LC Hole-mouth-jars, 11: MBA cooking pot).

mouth jars (FIG. 4.7-10) and globular pots. No cornets or churns, which are often viewed as being typical of the Late Chalcolithic, were found. These particular shapes might well have chronological significance, as indicated at Tulaylāt al-Ghassūl (Lovell 1999), which would point to a very late date for Abū Sunaysilah in the Late Chalcolithic period, a hypothesis that is supported by C14 dates from the site. The chipped stone material consists of blades, scrapers (fan-scrapers), sickle blades and axes. These formal tool types are far from standardised at Abū Sunaysilah. Ground stone was found in the form of grinding slabs, mortars, pestles and hammerstones, made mainly on basalt and limestone. Other finds included one v-shaped basalt vessel, a stone macehead fragment and a polished stone adze.

The Late Chalcolithic pottery consists mostly of the typical reddish and buff fabrics (*ca.* 75 %) that are well-known from Saḥāb (Ibrahim 1975: S.81)¹ and Tulaylāt al-Ghassūl (Ghassul IV [Hennessy 1969: S.8-9; Lovell 1999: 72). The number of pottery sherds was relatively low; only 161 of a total of *ca.* 2500 were diagnostics.

Most vessels have open forms as is usual in Late Chalcolithic material. The open vessels are mostly v-shaped bowls; a few are *ca.* 30cm in diameter, while the majority have diameters of between 10 and 24cm. The walls tend to be very regular and thin, with slightly pointed rims. Steep bowls are less common (FIG. 4.3-4).

Hole-mouth jars comprise the largest category of restricted vessels; diameters vary widely between 8 and 26cm, but with a concentration around 14cm. Only large handles point towards the existence of larger jars. One miniature vessel and one spoon complement the assemblage. Many bases (FIG. 4.6), particularly from square G11 (where a Late Chalcolithic pit was situated), show mat-impressions.

The pottery has very little decoration, the most common types being thumb-impressed

applications and very occasional thin red bands along the rim or incisions.

# **Food Production, Preparation and Presenta-**

Abū Sunaysilah is a small rural site, which cannot easily be compared to the much larger Late Chalcolithic sites of Tulaylat al-Ghassul or Pella; it is also situated in an area, where not much research has been done (other than at Saḥāb). This means that not many sites are available for comparison that is oriented aspects other than chronology. towards The socio-political organisation of the Late Chalcolithic points to a low-scale hierarchy, both on the intra- and inter-site level. Intrasite, no large differences in wealth or importance are expressed in architecture, although some differences can be seen in grave goods from cemeteries and burial sites (Rowan and Golden 2009). The existence of possible prestige goods (e.g. metal; ivory) might show socio-economic differences in society, but this might not be the case in all regions of the southern Levant, as most of these finds come from the Negev, Judean mountains and Jordan valley. Intersite differences certainly exist, with some sites (e.g. Tulaylāt al-Ghassūl in the Jordan valley; Ein Gedi in the Judean mountains) having cultic functions that might have formed a focal point for many smaller villages around. Tulaylat al-Ghassūl also shows functionally different quarters, which cannot be expected at smaller sites such as Abū Sunaysilah. The settlement pattern of the Late Chalcolithic thus displays a pattern of more central sites and smaller villages, without always displaying clear two-level, hierarchical settlement systems. Rural areas, such as the region in which Abū Sunaysilah is situated, show no evidence for social hierarchy, and it is important to realise that there were strong regional differences during the late fifth and early forth millennia BC.

One possible approach to reconstructing

In particular, the most common red-ware looks very similar to material from Sahāb.

Late Chalcolithic life might therefore be a greater focus on daily existence, particularly in terms of food production, consumption and storage. Academic research has concentrated on food production, owing to the importance of this subject in economic terms (highlighting the influence of processual questions in archaeology, and also the importance accorded to food production versus food collection in the Neolithic period). The consumption of food has been of lesser interest, but more intensive study of this issue might well shed further light on the social structure of society (Kennedy 2012). What follows is an attempt to start such a line of thought, notwithstanding the fact that the surface exposures at Abū Sunaysilah were too small for definitive answers. This discussion also suffers from the fact that no analyses of vessel contents were attempted<sup>2</sup>.

Late Chalcolithic architecture at smaller sites tends to consist of one-room structures, often with a fireplace, as in the floor of House 2. Some larger houses, such as those in the Golan, are so full of storage vessels that one has to assume that most activities went on outside the structures. Again, only Tulaylāt al-Ghassūl have clear evidence for buildings consisting of several rooms (Bourke 2008). At Tulaylāt al-Ghassūl, each house (consisting of three to four rooms and courtyards) has storage facilities and a hearth.

Pottery allows one to develop hypotheses based on aspects of form, *e.g.* size, openness or restrictedness of the vessel, stability of the base, relationship between base and vessel volume, depth etc.. These vessels can be categorised according to function, *e.g.* cooking and / or food preparation, drinking, eating, pouring, storing etc.. The following functions can be attributed to Late Chalcolithic pottery:

- Cooking: cooking pots; cooking bowls;
- Food preparation: large bowls; basins;
- Eating: smaller v-shaped bowls; wide, open bowls;

- Drinking: cups; cornets; goblets;
- Pouring: spouted jars; necked jars;
- Storage: storage jars; large jars; squat lughandled containers.

The forms in italics are not present at Abū Sunaysilah and are also uncommon at other small Late Chalcolithic sites. The ratio of open to restricted vessels, viz. 2:1, shows a decided preference for open vessels, which is quite a common phenomenon in contemporary material (Kerner 2001). Usually cooking pots are more restricted vessels, although there is a wide variety in the relationship between the diameter of the mouth and the widest diameter of the vessel. The open bowls at Abū Sunaysilah show no sign of having been in contact with fire; in most ethnographic accounts bowls are not used for cooking either. One therefore has to assume that the quantity of serving and preparation vessels at Abū Sunaysilah is much larger than actual cooking vessels. The cooking pots are also not very large, with a typical diameter of 12-15cm, even though they tend to be quite globular. This does not necessarily indicate a lack of cooking activity, but probably means that the methods used did not rely on pottery vessels.

There are very few vessels that are clearly associated with individual drinking, *e.g.* cornets, beakers etc., with the possible exception of one miniature pot. There are not even many small bowls, which might have been used for the same purpose. This means that drinking can only have been done by using either drinking vessels made of different materials, or by using larger jars as communal drinking vessels (one might think of Greek wine-drinking jars).

Storage facilities are also meagre, as there are neither many storage jars (evidenced only by handles and some pottery concentrations) nor *pithoi*. On the other hand, some pit-like features that might have been used for storage were found in F12 and G11, which would have placed them at some distance from House 2.

This is still a problem in modern excavations, as such analyses slow down pottery analysis.

Pottery was found on the actual floor of the LC house at Abū Sunaysilah, but the only diagnostic was a large handle. Additionally, some stone tools (1 × adze; 1 × cortical tool / fan-scraper) were on the floor, as well as some groundstone items including grinding slabs. These finds, and the very small area of the house (just one room), might indicate that it was not primarily used for sleeping. On the contrary, it seems to have been used for food preparation and possibly other work.

The fact that many more open than restricted vessels are represented at Abū Sunaysilah is a phenomenon typical of most Late Chalcolithic sites. At a few sites, e.g. Ein Gedi, practically 90 % of all vessels were either cornets or bowls which, of course, supports the interpretation that Ein Gedi was a special site most likely related to ritual (Usshishkin 1971). Tulaylāt al-Ghassūl, as shown by Lovell (1999), has ca. 60 % bowls in level C, ca. 53 % open vessels in level B (45 % bowls and 8 % basins) and 35 % open vessels in level A (25 % bowls and 10 % basins), while at the same time the number of hole-mouth jars increases. The hole-mouth jars at Tulaylat al-Ghassūl were not all used for cooking, but also include larger varieties that might have been used for storage, thereby limiting the amount of actual cooking pots at that large site. Other sites follow the same pattern.

The most likely reconstruction for the daily practice of food and drink preparation is that a large amount of cooking was not done in cooking pots, using methods that might have included roasting over fire, cooking underground or use of other materials. Future excavations at Late Chalcolithic sites should bear this in mind and devote particular attention to this question. The question of serving portions is also very interesting, as the general scarcity of very large open bowls at Abū Sunaysilah and other contemporary small sites is indicative of smaller servings. meaning that portions were more for individuals or very small groups of people than for larger groups eating from a single plate. This

contrasts with the lack of individual drinking vessels, as described above.

Although a recent study (Namdar *et al.* 2008) seems to indicate that cornets may have been used as lamps, this author still prefers to interpret cornets, goblets etc. as drinking vessels, taking the view that their frequency on larger sites, particularly in cultic contexts (Kerner in press) as at Tulaylāt al-Ghassūl, might indicate their use in cultic and / or feasting circumstances.

The question of storage seems to have been dealt with very differently in different areas during the Late Chalcolithic, depending very much on local conditions. This resulted in large quantities of storage vessels in the Golan for example, where it is difficult to cut pits into the basalt bedrock, while sites such as Pella and Abū Ḥāmid are characterised by very large storage *pithoi* set into the ground and pits, the latter also having been used at Abū Sunaysilah.

## Middle Bronze Age Material Evidence

The MBA chipped stone tool material looked rather similar to the LC material; in many cases the tools seem to have been re-used. The same can also be said of the ground stone tools. The pottery consisted mainly (roughly one-third) of coarse hand-made cooking pots with thumb-impressed bands applied below the rim (FIG. 4.11). Jars and other shapes from different common wares all appear in small numbers, along with a very few pieces of finer ware. Brown-burnished and chocolate-on-white wares have also been excavated.

This presents a very different picture of the cooking and commensal habits of the inhabitants of the Middle Bronze Age village of Abū Sunaysilah. The number of cooking pots is much larger, both in relative and absolute terms, while there are very few vessels that are clearly for preparation and serving. Storage in the MBA is clearly evidenced by some large jars, while no pits have been found. The differentiation between pottery fabrics is much more apparent; the fine wares display a clear

functional or social differentiation which was much less obvious in the earlier material. This is interesting, because MBA Abū Sunaysilah was still a small village.

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