

ARCHAEOLOGICAL EXCAVATIONS AT THE LATE NEOLITHIC SITE OF ASH-SHALAF IN NORTHERN JORDAN A PRELIMINARY REPORT ON THE 1999 SEASON

by

Hans-Dieter Bienert and Dieter Vieweger

with contributions by Katrin Bastert and Lothar Herling

Introduction

The second season of excavations at the late Neolithic site of ash-Shalaf in Wādī ash-Shallalah, approximately 10 km north-east of Irbid (Fig. 1), was conducted from March 20 to April 5, 1999. The fieldwork of this season aimed at clarifying the stratigraphy and the extent of the site. Moreover, the badly preserved architectural remains needed further study in order to specify the outlines of the huts. The excavation was carried out on behalf of the German Protestant Institute of Archaeology in Amman (DEI) and in cooperation with the Kirchliche Hochschule Wuppertal. The fieldwork was jointly directed by Hans-Dieter Bienert (Amman) and Dieter Vieweger (Wuppertal). The project was fi-

nanced by a grant from the German Protestant Institute of Archaeology in Hannover (Germany).

Previous Research and Excavation Strategy of the 1999 Season

Ash-Shalaf was discovered and identified as a Neolithic settlement by Siegfried Mittmann (Tübingen University, Germany) during archaeological excavations at nearby Khirbat az-Zayraqūn and documentation work at the so-called Roman bridge in Wādī ash-Shallalah in 1989. More detailed studies on the pottery collected by Siegfried Mittmann was undertaken by Jens Kamlah (Kiel University, Germany), who re-investigated the area during his survey of Khirbat az-Zayraqūn region (Kamlah 2000). The amount of Neolithic pottery found on the surface indicated a small settlement situated on a terrace approximately 90 m wide on the lower western slopes of the wadi at an altitude of about 420 m a.s.l. (Bienert and Vieweger *et al.* 1999:49-51). Archaeological research at 'Ayn ar-Raḥūb, a site with - apart from Natufian material - Neolithic layers contemporary to ash-Shalaf, was also undertaken in the framework of Khirbat az-Zayraqūn project in 1983 and 1985 (Kafafi 1989; 1993: 101-102).

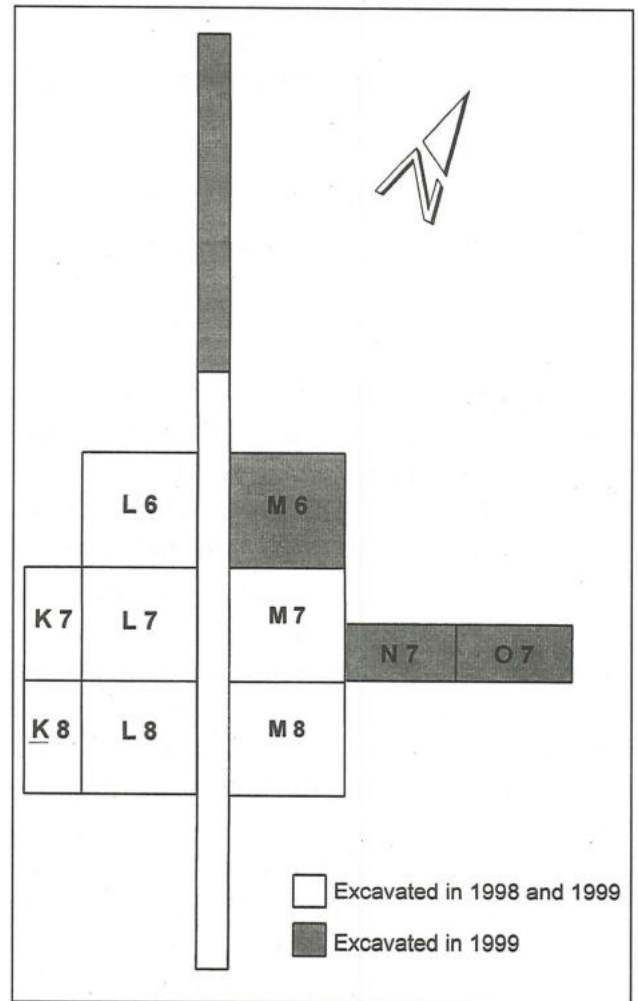
Due to the findings by Mittmann and Kamlah, it was decided to further investigate the nature of the site and - if possible - to determine its extent. The natural habitat must have been quite favourable, for there were not only the seasonally running waters of the wadi but also two perennial springs available for the Neolithic settlers. A first season of excavation was then carried out from Oc-



1. A selection of Late Neolithic sites in the southern Levant.

tober 3 to 22, 1998 (Bienert and Vieweger *et al.* 1999; Bienert and Vieweger 1998; 1999). Two test trenches were opened up, a smaller one northeast (Area B) and a second, larger one, southwest (Area A) of the Roman bridge. After having found remains of architecture in the 27 x 1.5 m test trench (T1) in Area A, five squares of 5 x 5 m (Squares L6, L7, L8, M7 and M8) and two squares of 5 x 2.50 m (Squares K7 and K8) were opened up adjacent to the test trench. The pottery found associated with the architectural remains pointed to a hamlet-like site of the late Neolithic, the so-called Yarmoukian.

During the 1999 season, the excavation area was enlarged in Area A (Figs. 2 and 3) by extending the long trench (T1) further northwest towards the ascending slope and by opening up three new squares, one 5 x 5 m (Square M6) and two of 5 x 2.50 m (squares N7 and O7). At the same time work in the other squares continued (Bastert *et al.* 1999; Bienert *et al.* in press). The excavation focused on the architectural remains, the site stratigraphy and its original area. It aimed at defining the outline of single hab-



2. Schematic plan of Trench 1 and squares excavated in Area A in 1998 and 1999.



3. View of Area A after the excavations in 1999.

itation units or shelters/huts to get a better understanding of the internal settlement pattern. Furthermore, it was intended to investigate a possible pre-Neolithic occupation of the site location. However, due to insufficient carbon, no radiocarbon date could be obtained. No further fieldwork was conducted in Area B, north of the Roman bridge, and as in 1998 hardly any occupation debris was found (Bienert and Vieweger *et al.* 1999:53, Fig. 2).

Architecture

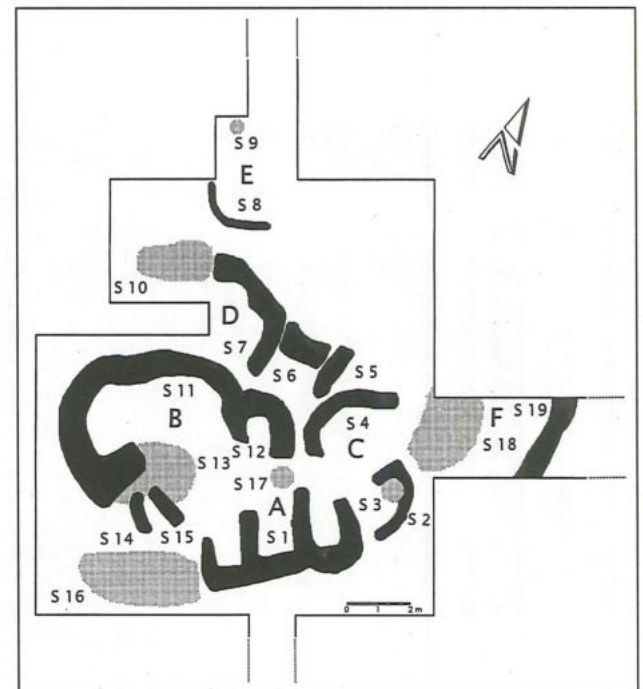
As already pointed out in the first preliminary report (Bienert and Vieweger *et al.* 1999:53), the architecture of ash-Shalaf was less standardised and the construction technique far simpler than at sites of the preceding PPN period. Remains of architecture (Fig. 3) were found close to the surface, and modern ploughing has been rather destructive: during the first season in 1998 in “most cases only the lower-most course” of walls was found. However, it was quite obvious that even though the preservation of architecture was very fragmentary, originally, structures must have been constructed in a very simple way. It seems that no proper houses were built. Instead, only hut-like structures were constructed, consisting of a lower course of stone of very different sizes, while the upper part was most likely made of wood, reeds or other organic material. This suggestion was supported by pieces of fired clay (the so-called “Hüttenlehm”) which showed reed impressions (Bienert and Vieweger *et al.* 1999:53). Within the new squares M6, N7 and O7, the density of architectural features diminished rapidly. Only in Square N7 were remains of a rather well-preserved wall and a cluster of fist-size stones unearthed. Squares O7 and M6 did not show any architectural elements. So it seems that the architectural features, concentrated in Squares L7, M7, L8 und M8 define a cluster of huts, which themselves might have constituted a small hamlet that was possibly only

seasonally occupied. However, due to the limited scale of the excavation, the possible existence of additional similar clusters could not be verified.

Within the cluster, single structures (Fig. 4: S1-S19) can be defined. Due to the destruction caused by agricultural activities, it is difficult to define the original relationship that existed between these structures. Nevertheless, some of the structures can be linked to larger units (A-E):

Unit A

Rectangular structure (S1), consisting of three small “rooms” which seem to have had no northwestern walls (Fig. 4). Whether structures S2 and S3 are related to that unit is unclear. There was no stratigraphical evidence which allowed further assumptions. S3 adjacent to wall S2 is a circular feature, very likely the bottom of a hearth, consisting of a layer of stones, covered by fired clay (Fig. 5). A similar feature was reported from Ṭabaqat al-Būma (Banning *et al.* 1996:34, Fig. 4). Rectangular structures of different size are well-known from other late Neolithic sites, such as Abū Thawwāb (Kafafi



4. Schematic plan of structures and units in Area A after excavations in 1999.



5. Bottom of a hearth (S3) in Square M8.

1985a; 1985b; 1988; 1993:102-103), Ṭabaqat al-Būma (Banning 1993; 1999; Banning and Siggers 1997; Blackmann 1997) and 'Ayn Ghazāl (Rollefson and Kafafi 1997: 40-45; Kafafi 1993:103-104). On the western side a larger pebble platform (S16) was found.

Unit B

Oval-shaped structure (S11) with a large opening towards the south-east and a small

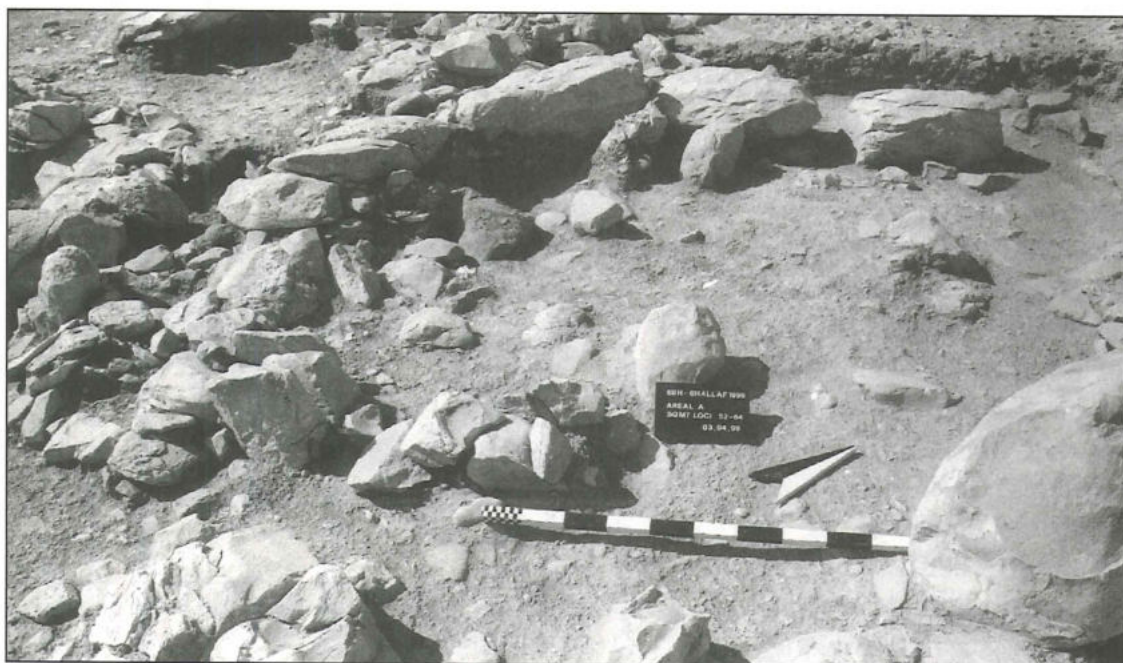
semicircular annex (S12) on its eastern side. How walls S14 and S15 relate to that unit is not yet clear, for there is no reliable stratigraphical evidence.

Unit C

Remains of a probably small semicircular structure (S4) (Fig.6).

Unit D

Remains of a probably large semicircular



6. Architectural features (S4) in Square M7.

structure (S7), which could have been cut by the later construction of Unit B; however there is no stratigraphical proof. S7 could have also been another annex to Unit B. Walls S6 and S5 were either built to close off a little space between Units D, B and C or are the remains of earlier structures that originally extended further north and were destroyed by Units D, B and C and by modern ploughing.

Unit E

Remains of a probably small semicircular structure (S8).

Unit F

Remains of a probably oval-shaped or semicircular structure (S19). There is no stratigraphical relation to the nearby stone cluster (S18).

Within the cluster of huts, a few installations were found such as silo (S9) discovered in 1998 (Bienert and Vieweger *et al.* 1999: 56, Fig. 12) with its bottom and

walls made of stone slabs. A fire place with a base of fist-sized stones was discovered in Square M7 (Fig. 7), lying adjacent (south) to walls S6 and S5. A distinction in different activity areas was not observed. The inside as well as the outside floor level could hardly be found, due to the modern agricultural activities. In some instances it did seem, however, that the floor level inside the huts was slightly lower than the outside surface.

The settlement structure of ash-Shallaf, being a small hamlet, resembles that of other sites of the late Neolithic in Jordan (Rollefson 1993: 104); however there is a clear distinction to larger sites such as 'Ayn Ghazāl (Rollefson and Kafafi 1997: 40-45; Kafafi 1993:103-104) and Ṭabaqat al-Būma (Banning 1993; 1999; Banning and Siggers 1997; Blackmann 1997), where well-built rectangular houses and circular structures were found.

The amount of animal bones is very low and - as in 1998 - only a few fragments were recovered. This might be due to the soil and



7. Fire place (S16) in Trench 1, adjacent to Square M7.

the exposed nature of the site itself. Nevertheless, this fact might support the idea of a settlement that was used only on a temporal/seasonal basis and/or only as an outlier of a larger settlement, still to be discovered.

Pre-Late Neolithic Occupation

Some evidence for a pre-late Neolithic presence of hunters and gatherers at ash-Shalaf was discovered during the first season. In a deep sounding in Trench 1 (close to the northeastern corner of Square L6) a cultural layer consisting of ash lenses and lithic artefacts was found, sealed off from the overlying late Neolithic layer by thick layers of sterile soil. A very few of the lithic artefacts (bladelets and a backed blade), at first glance, might be dated to Natufian.¹ A further detailed study of the obtained material will be necessary to prove this hypothesis.

Pottery (by Katrin Bastert, Hans-Dieter Bienert and Dieter Vieweger)

During the second season of excavations, a total of 1020 pottery sherds were found, out of which 1014 (99,41%) could be dated to the late Neolithic (Tables 1 and 2). Five sherds belong to the Roman or Byzantine periods and one sherd is of Islamic age. As in 1998, almost all of the sherds were covered by a thick layer of

Table 2. Distribution of undecorated and decorated sherds according to squares (field season 1999).

	undecorated sherds		decorated sherds		Σ
	total	%	total	%	
surface	9	64%	5	36%	14
K7	22	73%	8	27%	30
L6	2	67%	1	33%	3
L7	91	87%	14	13%	105
L8	50	87%	7	13%	57
M6	186	81%	43	19%	229
M7	34	79%	9	21%	43
M8	171	80%	44	20%	215
N7	70	90%	8	10%	78
O7	108	86%	17	14%	125
TR 1	91	89%	11	11%	102
TR 1a	8	62%	5	38%	13
	842	83%	172	17%	1014

sinter which had to be cleaned by hydrochloric acid before it was possible to further study the material.²

Deep and shallow bowls, jars and hole-mouth jars accounted for most of the vessel forms; plates were rather rare. Two-thirds of the Neolithic sherds are of a handmade coarse ware while 33% can be attributed to a handmade fine ware (Table 3). As found in the 1998 pottery assemblage, the coarse ware bears a high percentage of organic (straw) and inorganic (fragments of limestone, quartz, basalt, cinders, and sherds) temper material. The consistency of the fabric is porous and coarse-grained. The thickness of the walls vary between 1.1 and 2.0 cm. Despite their thickness, the sherds appear rather light and soft. The slip on the sherds is usually orange, reddish or yellow.

Table 1. Distribution of pottery sherds in excavated squares of Area A (field season 1999).

surface	TR 1	TR 1a	K7	L6	L7	L8	M6	M7	M8	N7	O7	Σ	period
14	102	13	30	3	105	57	229	43	215	78	125	1014	Neolithic
0	0	0	0	0	0	1	2	0	1	0	1	5	Roman-Byzantine
0	0	0	1	0	0	0	0	0	0	0	0	1	Islamic ?
102	10	13	31	3	105	58	231	43	216	78	126	1020	

Table 3. Distribution of sherds type according to coarse and fine ware (field season 1999).

	body sherds		rim sherds		bases		handles		Σ	
	total	%	total	%	total	%	total	%	total	%
coarse ware	598	59%	46	4%	21	2%	19	2%	684	67%
fine ware	255	25%	57	6%	9	1%	9	1%	330	33%
Σ	853	84%	103	10%	30	3%	28	3%	1014	100%

1. For comparison see Muheisen *et al.* 1988: Fig. 6.

2. Pottery from the first season (1998) and the current

season (1999) are under study by Katrin Bastert (Dresden).

The carefully made pieces of fine ware are tempered by the same materials. Their walls vary between 0.35 and 0.8 cm (Bienert and Vieweger *et al.* 1999: 57-58).

No decoration occurred on 83% of all sherds, while 17% did bear different kinds of decoration (Tables 2, 4 and 5), such as colour spots, painted stripes, red polish or the well-known incised "herring-bone" motif. The motifs of the incised decoration can be divided into nine different groups (Fig. 8): There are single line incisions (1), as well as single and double bands of parallel lines (2 and 3). The characteristic Yarmoukian chevron incisions could be found in five different designs, as single lines (right- or left-looking) (4), in double parallel bands (5), double bands divided by one straight

line (herring-bone) (6), double bands composed with (single or double) rectangular corners (7 a and b), and in special formed lines (8). Finally there are also bands with small short lines and chevrons (9). A thorough study of the pottery of both seasons is in progress and will appear within the final publication of the excavation.

Lithic Industry (by Lothar Herling)

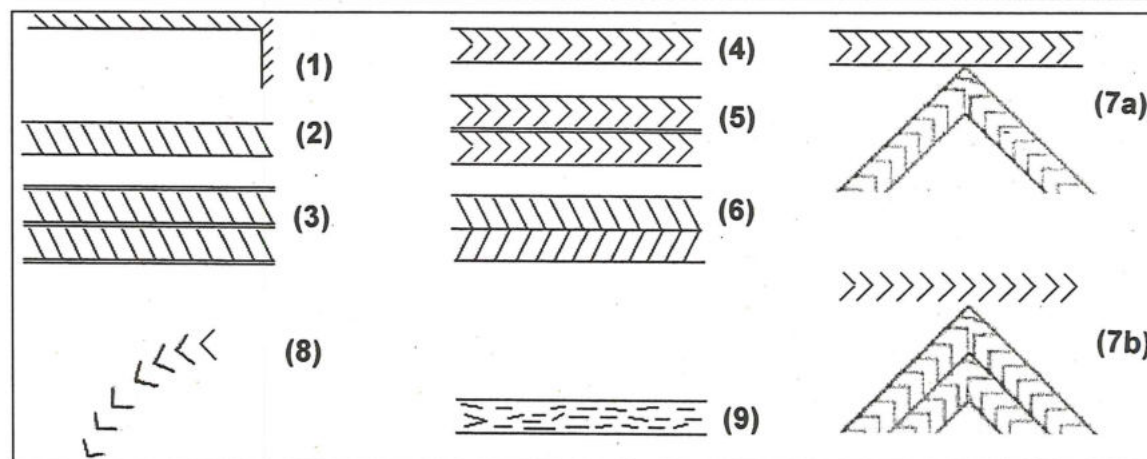
The 1999 season at ash-Shalaf revealed abundant lithic finds, among them several glossed pieces. Two of these sickle elements are presented here. Both were prepared from blades by bifacial retouches all around the artefact, thus obtaining a nearly rectangular outline. The working edges, indicated by the very intensive gloss, are denticulated.

Table 4. Distribution of undecorated and decorated sherds according to coarse and ware (field season 1999).

	coarse ware		fine ware		Σ	
	total	%	total	%	total	%
undecorated	668	79%	174	21%	842	83%
decorated	16	9%	156	91%	172	17%
Σ	684	67%	330	33%	1014	100%

Table 5. Neolithic sherds, distribution by type, ware and decoration (field season 1999).

	body sherds		rim sherds		bases		handles		total			total in %		
	coarse ware	fine ware	coarse ware	fine ware	coarse ware	fine ware	coarse ware	fine ware	coarse ware	fine ware	total	coarse ware	fine ware	total
undecorated	584	154	46	11	19	4	18	4	668	174	843	66%	17%	83%
Colour spots	14	26	0	4	2	1	0	2	16	33	48	1%	3%	4%
polished	0	45	0	25	0	1	0	1	0	72	72	0%	7%	7%
incised	0	22	0	10	0	1	0	1	0	34	34	0%	4%	4%
Painted	0	8	0	7	0	1	1	1	0	17	17	0%	2%	2%
Σ ₁	598	225	46	57	21	9	19	9	684	330	1014	67%	33%	100%
Σ ₂	853 (84%)		103 (10%)		30 (3%)		28 (3%)		1014 (100%)					



8. Different incised patterns on pottery found at ash-Shalaf.

The first piece,³ nearly complete (Fig. 9:1), shows a deep and quite regular dorsal and ventral denticulation. There is no backing. The prominent gloss runs along the entire length of the sickle element. Contrary to this, the gloss on the second piece (Fig. 9:2),⁴ which is in other ways quite similar to the first, is limited mainly to the projecting teeth of the denticulation. The piece has been subject to a later resharping, marked by the lack of gloss on the retouches between the teeth. This indicates the intensity of reaping tool usage at ash-Shalaf.

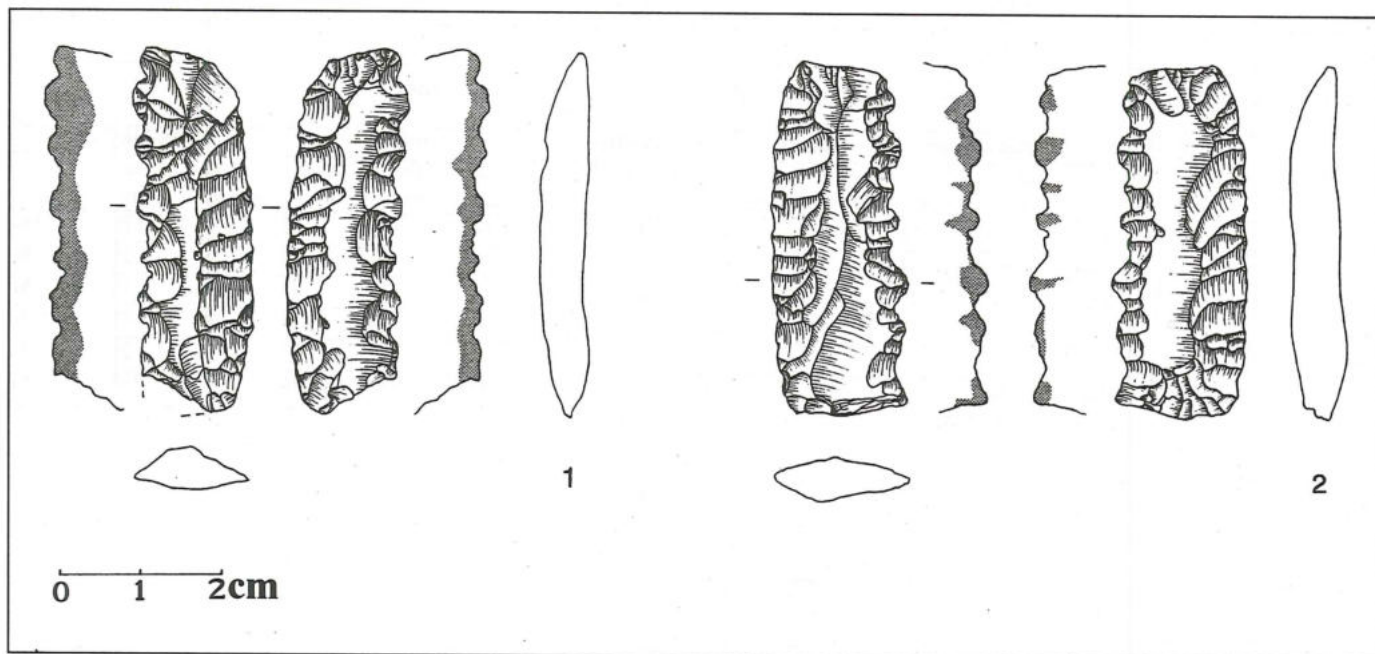
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Hans-Dieter Bienert
 German Protestant Institute of
 Archaeology in Amman
 P.O.Box 183
 Amman 11118
 Jordan

Dieter Vieweger
 Kirchliche Hochschule Wuppertal
 Dietrich-Bonhoefferweg 20
 42285 Wuppertal
 Germany



9. 1-2: Sickle elements from ash-Shalaf.

3. Field No. 2094, Area: M 6, Locus: 2; Colour: 5 YR 6/1, Weight: 3.7 g, Length: 4.6 cm, Width: 1.45 cm, Thickness: 0.6 cm

4. Field No. 2139, area: L 7, locus: 90; colour: 10 YR 6/3, weight: 4.9 g, length: 4.4 cm, width: 1.7 cm, thickness: 0.65 cm.

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