

# ‘AWJĀ 1 - 3: NEOLITHIC AND CHALCOLITHIC OPEN SANCTUARIES IN SOUTHERNMOST JORDAN

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## Introduction

Along with excavations at the barrage site of Wādī an-Nu‘aydiyyah 1 (Fujii *et al.* this volume), the 2011 summer field season of the Jafr Basin Prehistoric Project (JBPP) conducted a rescue investigation in the ‘Awjā area near the Jordan-Saudi border. The targets of the investigation were three small sites (‘Awjā 1-3) located in the center of the area. We devoted a couple of days in the second week of September to fieldwork aimed at exploring their date, function and archaeological implications. As a result, it turned out that the sites contain unique features common to Neolithic to Chalcolithic open sanctuaries or symbolic cemeteries in the neighboring Jafr Basin. This discovery has proved that the Jafr chronology (Fujii n.d.), a key to tracing the process of pastoral nomadization in southern Jordan, is applicable to the border area as well. The following is a brief summary of the results of the investigation.

## The Site and its Setting

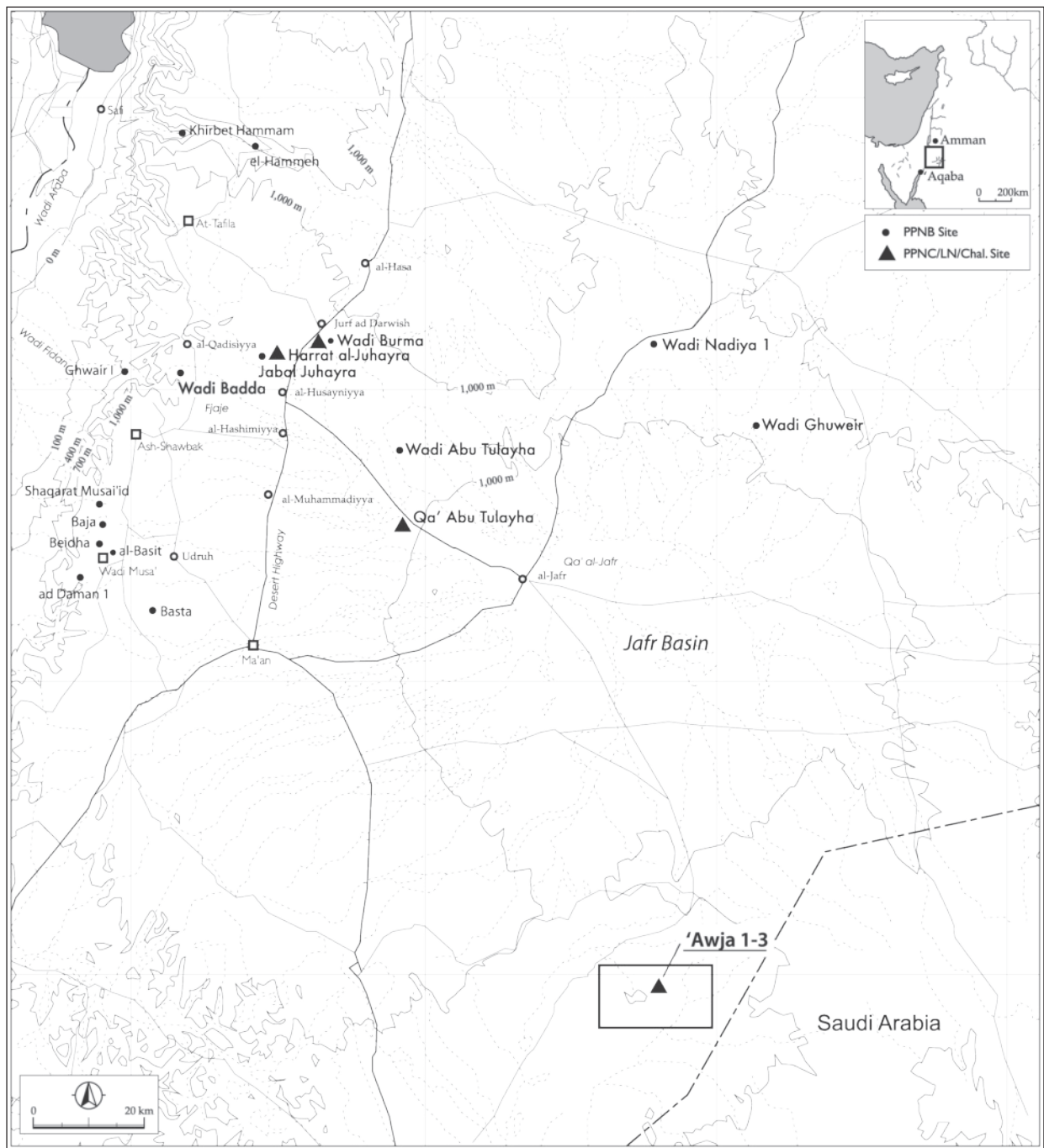
The ‘Awjā area is situated below the escarpment forming the southern watershed of the Jafr Basin and abuts the Jordan-Saudi border (**Fig. 1**). A large, flat-topped sandstone hill – known locally as Tall ‘Awjā – is situated in the center of the area and serves as a prominent landmark. The three small sites, ‘Awjā 1-3, are located in flat terrain extending north-east of the mesa-like hill (**Fig. 2**). The surrounding landscape consists of gently undulating reddish sand desert, dotted small playas or *qī‘ān* (pl. of *qā‘*), meandering *awdiya* (pl. of *wadi*) and isolated sandstone rises and hills, including Tall ‘Awjā. The local hydro-environment is very harsh; while recent mean annual rainfall is less than 50mm, the potential mean annual evaporation is over 2000mm

(Royal Jordanian Geographic Center 1986: figs 14, 41). For this reason, neither perennial natural water sources nor traditional settlements exist, and local land use has been limited to sporadic pasturing. It is no wonder that aside from the ath-Thulaythawāt area to the west (e.g. Abu-Azizeh n.d.a, n.d.b, n.d.c.; Abu-Azizeh *et al.* n.d.) and the Wādī Rumm drainage basin (e.g. Henry 1995; Rollefson and Matlock 2007), southernmost Jordan has been poorly investigated.

The sites of ‘Awjā 1-3 were found for the first time during the 2010 summer field season, on the basis of patchy information from local workers who participated in the excavations at Wādī Ghuwayr 17 and 106 (Fujii *et al.* 2011b, 2011c). Our short visit confirmed that the area includes unique features reminiscent of Neolithic to Chalcolithic burial features in the Jafr Basin, and that they have been partly damaged by illicit diggings by local inhabitants. It is for the reason that we embarked on a rescue investigation in the subsequent 2011 summer field season.

## Investigations at ‘Awjā 1

The site of ‘Awjā 1 (N 29°42’100”, E 036°27’805”, elev. *ca.* 860m) is located *ca.* 5km north-east of Tall ‘Awjā on an isolated sandstone rise *ca.* 15m in diameter and *ca.* 3m in height. We identified a dozen archaeological features dotted within an area extending *ca.* 100m from east to west and *ca.* 70m from north to south (**Figs. 3-5**). They fell into the following three groups: (1) two complexes of rectangular structures (Complexes I-II) to the south-west of the sandstone rise, (2) a total of eight small features (Features A-H) concentrated on the north of the rise and (3) two large, platform-like features (Features I-J) occupying the western edge of the site. Owing to time constraints, we briefly

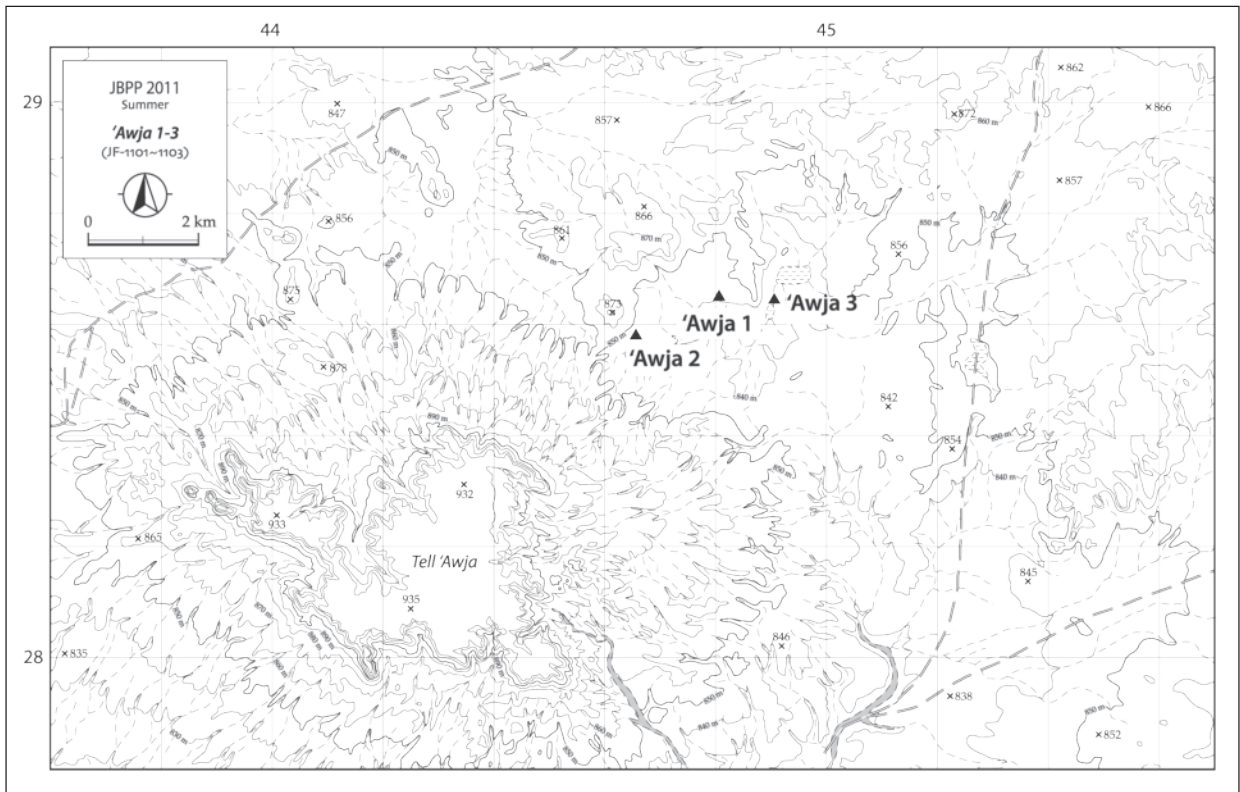


1. Neolithic to Chalcolithic sites in the Jafr Basin and surrounding areas.

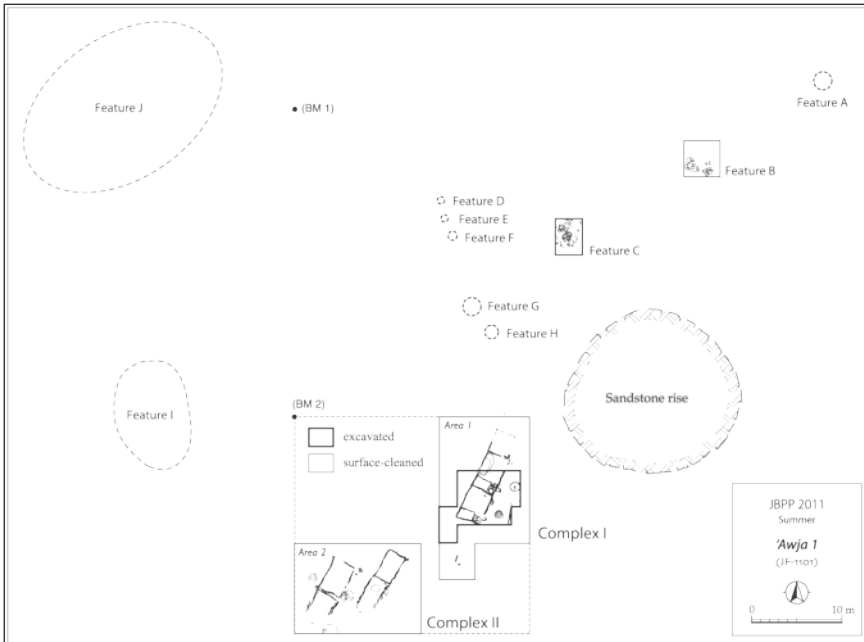
sounded part of the first and second groups only, leaving the others intact for future investigation.

The sounding confirmed the following site stratigraphy: Layer 1 – the surface layer – consisted of light buff, very loose, silty sand deposits *ca.* 2-3cm thick; Layer 2 contained reddish buff, slightly compact, silty sand deposits *ca.* 5-10cm thick; Layer 3 represented light brown, relatively compact, silty sand deposits at least 10cm thick.

In addition, Layer 4 (containing angular limestone cobbles) was partly exposed in the lower half of a round pit-like feature in front of Unit C of Complex I, but its details still remain unknown. Excavated features of the first group were constructed on the upper surface of Layer 3, while those of the second group appeared to overlay Layer 2. However, this is a tentative interpretation based on patchy information, which needs further investigation.



2. 'Awjā 1 - 3: location and surrounding topography.



3. 'Awjā 1: general site plan.

**Complex I (Area 1)**

The limited investigation at Area 1 revealed at least three rectangular structures, two round features and a few intermittent wall alignments (Figs. 6-7). All of them used standardized lime-

stone and sandstone slabs *ca.* 10-30cm long and *ca.* 2-8cm thick, placed on the upper surface of Layer 3. These construction materials were probably procured from neighboring rocky hills where similar slabs outcrop in abundance.



4. 'Awjā 1: distant view of the site (looking east).



5. 'Awja 1: general view of the site (looking north-east).

In terms of technology, the builders adopted the two-rowed upright slab wall technique, a unique construction method endemic to Neolithic desert sites in the southern Levant. The scarcity of fallen stones around the walls indicates that they consisted only of the foundation course and were not equipped with any solid upper structure.

The three rectangular structures, measuring *ca.* 2.5-4m by *ca.* 2-3m, were laterally connected to form an elongated structural entity (Continuum 1a) at least *ca.* 11 m in total length. Close scrutiny of joins, especially those between Units A and B, suggested that the continuum developed from north-east to south-west. Apart from Unit A, which was only surface-cleaned, Units B and C shared a similar division of space, being equipped with a 'vertically' long rectangular compartment at the rear left corner and a few small, rectangular or round features at the front left corner. Of significance is the existence of two round features in front of them. It appears that both of these belong to the adjacent structure, forming a unit similar to a pseudo-house burial cairn at Qā' Abū Ṭalayḥa West, a Late Neolithic open sanctuary or symbolic cemetery in the north-western part of the Jafr Basin (Fujii 2000, 2001).

A few slender corner stones *ca.* 15-20cm high still stood between some adjacent units. These were probably used for marking out the four corners of rectangular structures in advance of construction. A similar device has been found at Qā' Abū Ṭalayḥa West (Fujii 2001: 24). The excavation also confirmed a whitish, somewhat hardened floor in the rear half of Unit C, but it is still unknown whether this is natural or anthropogenic in origin. Also ambiguous is the attribu-

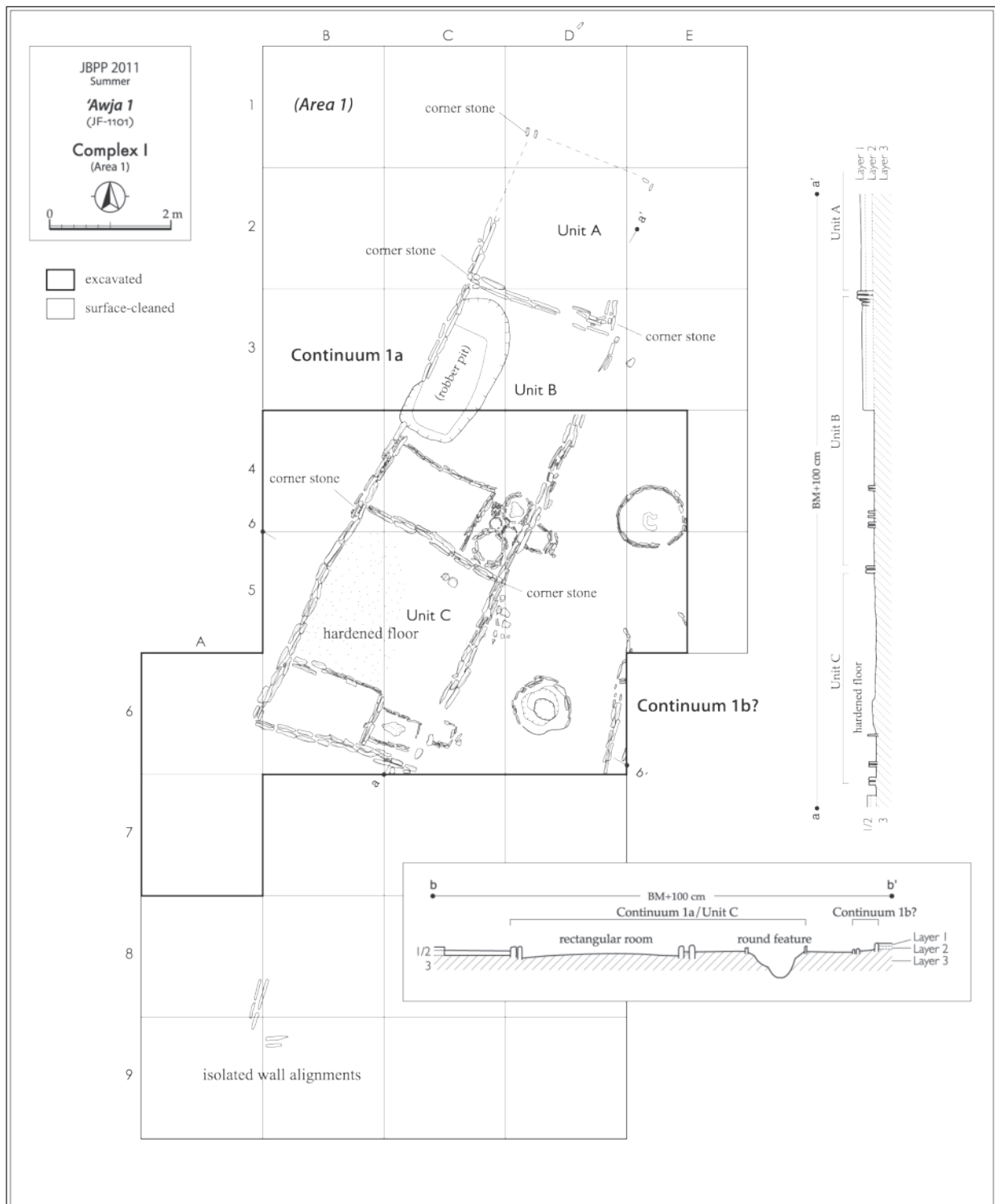
tion of the intermittent wall alignments dotted around the continuum. In view of the overall structure of Complex II described below, it is possible that the short wall alignment to the immediate east of Unit C represents a part of another continuum (i.e. Continuum 1b) running in parallel with Continuum 1a. However, nothing can be said about the other wall alignment at the south-western corner of the excavation area. Further investigation is required to clarify our overall picture of Complex I.

Neither artifacts nor faunal / botanical remains were recovered from the excavation area. Even hearths and ashy deposits were not found. As described below, exactly the same applies to Complex II in Area 2. This suggests that the two complexes were not foci of domestic life. Given this, it seems more reasonable to assume that they functioned as an open sanctuary or symbolic cemetery, for example. The total absence of traces of economic activity is shared with Qā' Abū Ṭalayḥa West, corroborating the chrono-functional correlation between the two.

#### *Complex II (Area 2)*

Area 2, which was laid out to the south-west of Area 1, explored the general character of the other complex by means of surface cleaning (Figs. 8-9). This brief inspection confirmed a total of four rectangular structures, forming a pair of continua extending north-east, south-west with a gap of *ca.* 2m between them. Unlike Complex I, both continua appeared to consist only of two units. It would follow that they each measure *ca.* 7-8m in total length.

The four structures of Complex II had much in common with those of Complex I, including



6. 'Awja 1: plan and section / elevation of Complex I.

use of the two-rowed upright slab wall technique and a standing corner stone at every nodal point. However, they were slightly smaller than the three structures of Complex I, with a floor area

of ca. 3-4m by ca. 2-2.5m. Another possible difference between the two was the presence / absence of internal divisions of space. While the two excavated units of Complex I incorporated

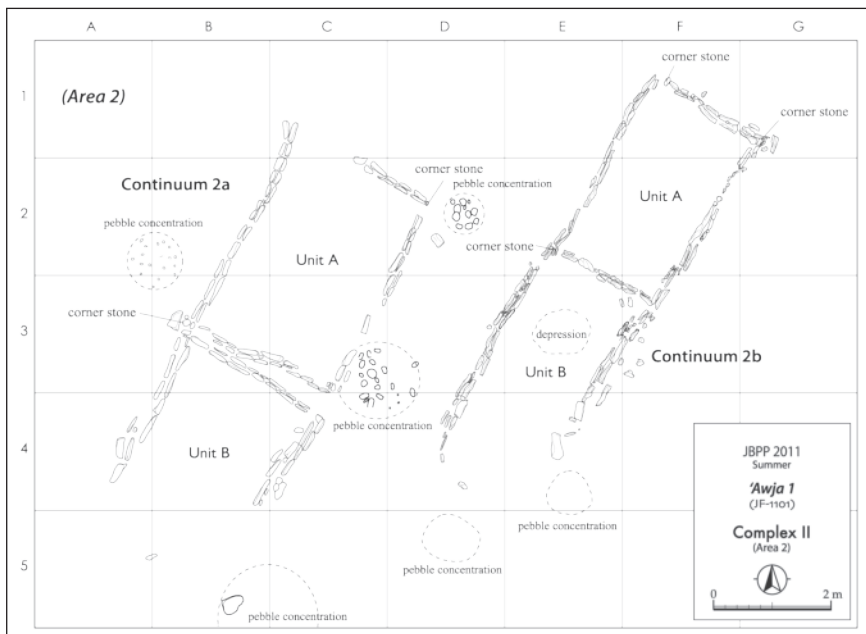


7. 'Awjā 1: general view of Complex I (looking north).

a rectangular compartment and a few small features, the four structures of Complex II appear to lack any division of internal space. In addition, they lacked clear evidence for adjacent round features, although several pebble concentrations and / or a shallow depression dotted in and around the structures are potential candidates. Neither artifacts nor hearths were found.

*Adjacent Small Features*

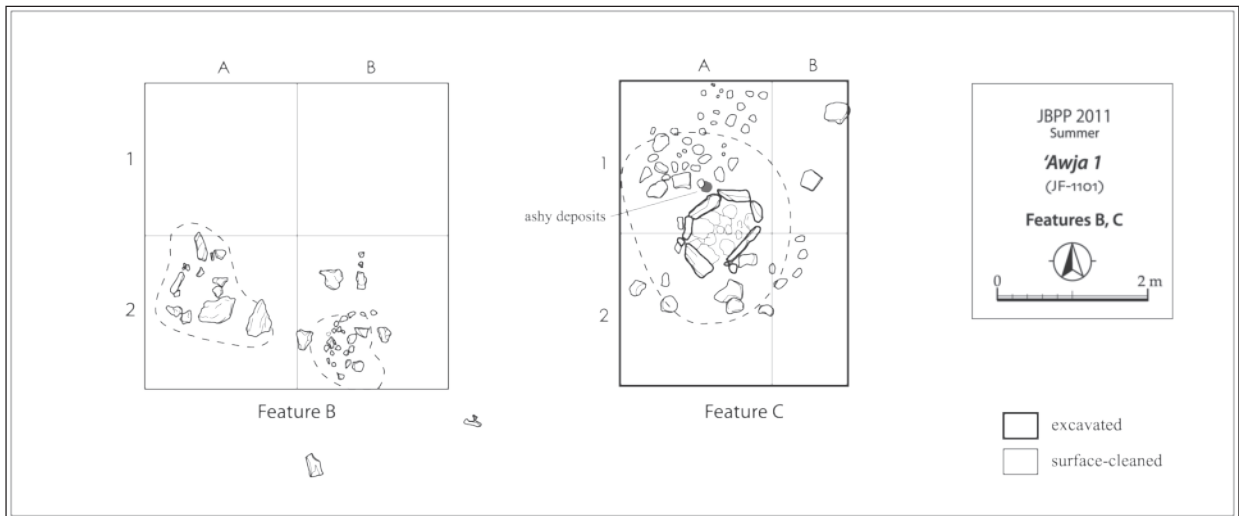
Of the immediately adjacent small features, we cleaned Feature B and excavated Feature C (Fig. 10). However, no details of the former



8. 'Awjā 1: plan of Complex II.



9. 'Awjā 1: general view of Complex II (looking north).



10. 'Awjā 1: plan of Features B and C.

were confirmed owing to its poor state of preservation, except that it contained two small, ill-defined pebble concentrations *ca.* 1-1.5m across. Feature C, on the other hand, consisted of a rectangular, cist-like space under a small sand pile *ca.* 2-2.5m in diameter and *ca.* 0.2m in height (Fig. 11). This space, *ca.* 1m by *ca.* 0.6m in floor area, was slab-lined and pebble-paved. Although no clear evidence for plundering was confirmed, neither artifacts nor human skeletal remains were discovered within it.



11. 'Awjā 1: general view of Feature C (looking north).

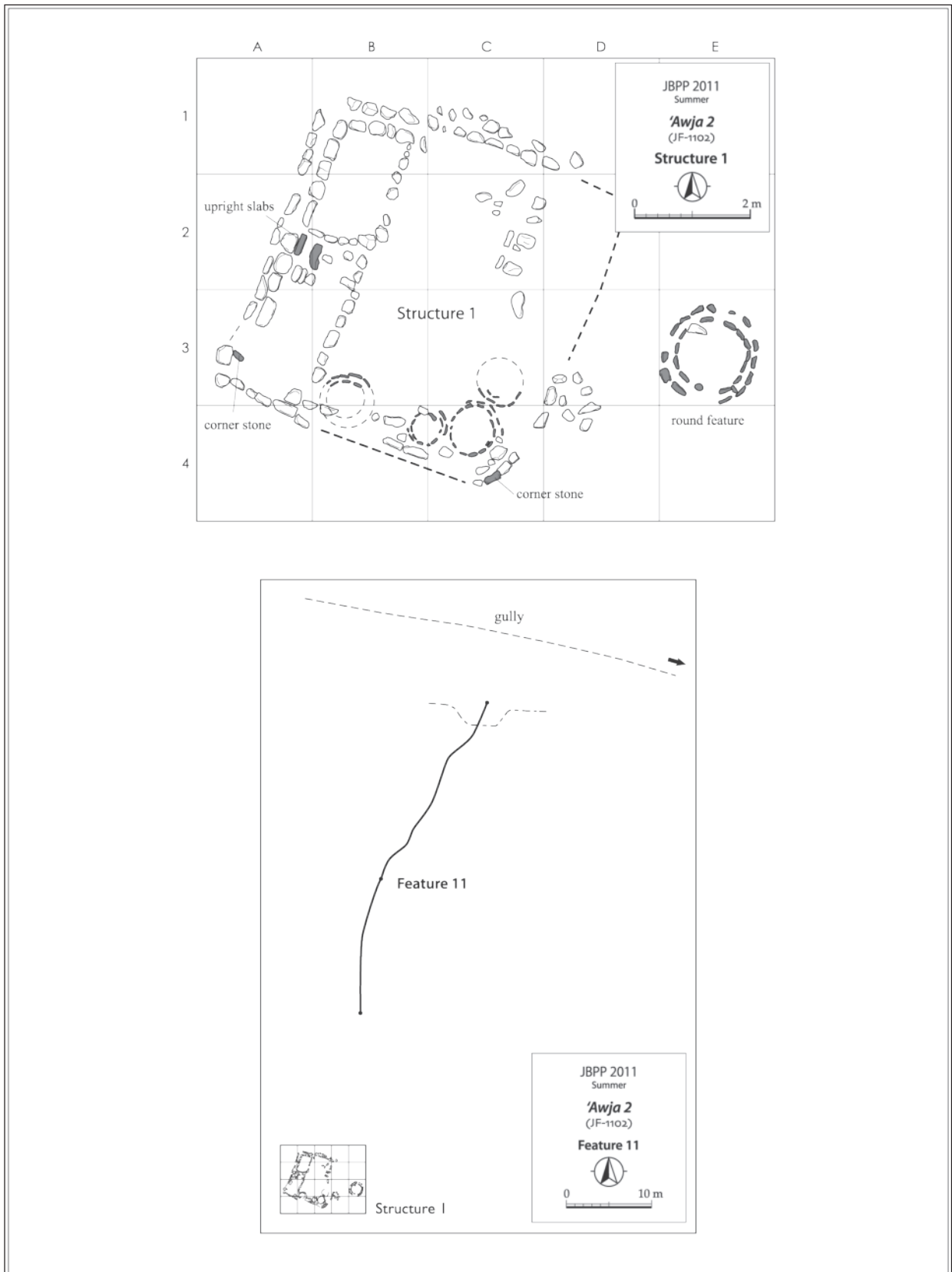
It appeared that these two small features were constructed on the upper surface of Layer 2. Additionally, they did not adopt the two-rowed upright slab wall technique that characterizes the two complexes described above. Both observations seem to suggest that they are later in date than the complexes. Their function is also obscure. Leaving to one side the poorly preserved Feature B, Feature C appears to resemble a mound tomb equipped with a small cist, but a fi-

nal conclusion must await further investigation. All we can say is that there seems to be no clear chrono-functional correlation between the two complexes and the small features around them.

#### Investigations at 'Awjā 2

The site of 'Awja 2 (N 29°41'690", E 036°26'850", elev. *ca.* 864m) is located on a gentle slope lying *ca.* 3km north-east of Tall 'Awjā, or *ca.* 2km west-south-west of 'Awjā 1. The site consisted only of a roughly square structure (Structure 1) *ca.* 6m by *ca.* 5m in floor area (Figs. 12-14). We cleaned it and briefly examined its general layout. This limited fieldwork demonstrated that, as at 'Awjā 1, the structure was originally delineated by two-rowed upright slab walls and that, again as at 'Awjā 1, it was accompanied by a round, double-lined feature in front of the entrance space. It should also be added that small round features were incorporated into the front left corners and that standing stones were used for marking the four corners. There is little doubt that the two sites shared a similar date and function.

There were however a few notable differences between them. First, the structure at 'Awjā 2, unlike those at 'Awjā 1, existed as an independent feature and was not part of an elongated continuum. Second, it incorporated a pair of 'horizontally' long rear compartments instead of a single 'vertically' long lateral compartment. Also of interest is a concentration of upright slabs or 'mini-ashlars' sandwiched between the two rear compartments, which is suggestive of

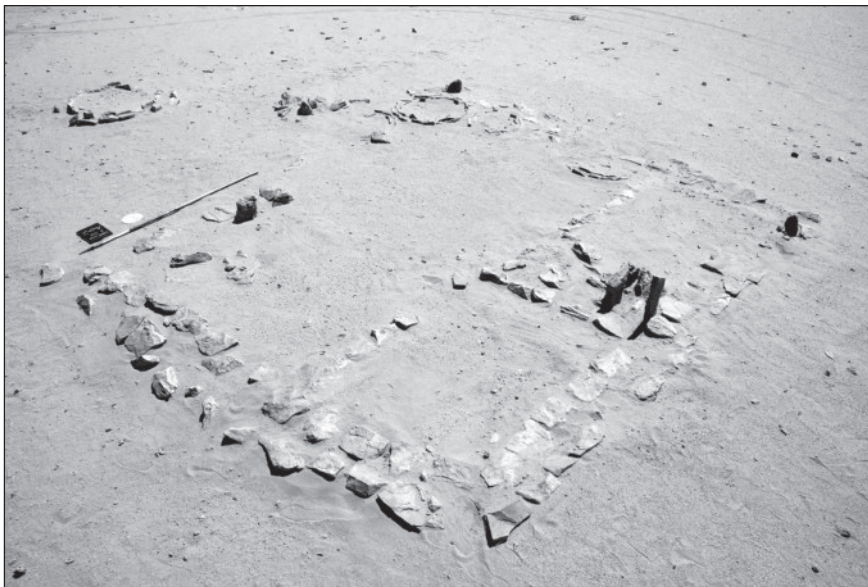


12. 'Awjā 2: plan of Structure 1 (above) and Feature 11 (below).





13. 'Awjā 2: general view of Structure 1 (looking north).



14. 'Awjā 2: general view of Structure 1 (looking southwest).

a ritual aspect for the structure. Third, the structure had a nearly square plan. These differences all seem to suggest that a minor chronological gap existed between the two sites. Again, with the exception of several non-diagnostic flint flakes, no artifacts were recovered.

Incidentally, the site included a freestanding wall (Feature 11) constructed of a single row / course of upright limestone slabs (Fig. 15). It started at a point *ca.* 30m north-north-east of Structure 1 and extended northwards in a gentle curve for *ca.* 40m as far as the south bank of a small gully. The chrono-functional correlation with the neighboring structure is unknown, but

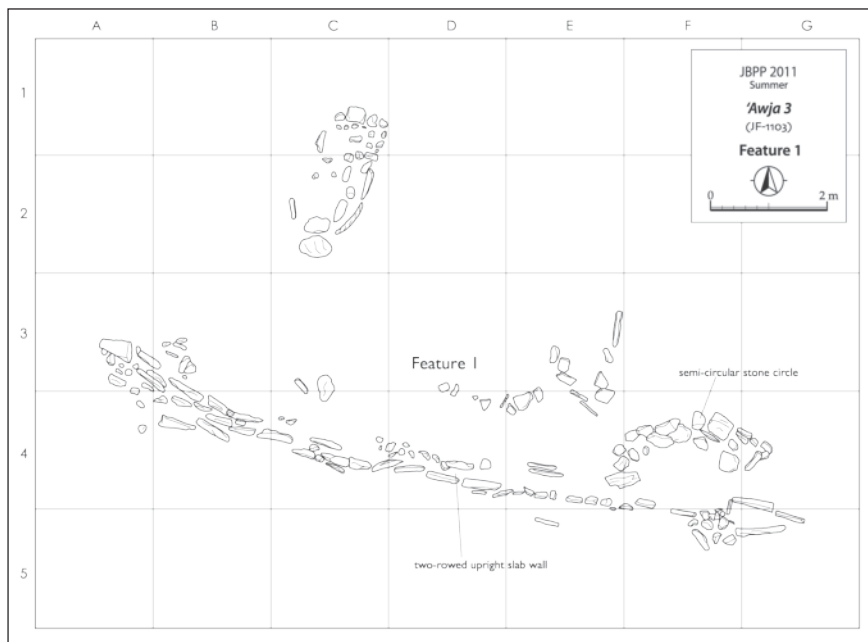
it reminds us of a similar stone alignment at Qā' Abū Ṭulayḥa West (Fujii 1999: fig. 13).

### Investigations at 'Awjā 3

This site (N 29°41'952", E 036°28'417", elev. *ca.* 848m) occupies the north bank of a small playa lying *ca.* 6km north-east of Tall 'Awja, or *ca.* 1km west of 'Awjā 1. Surface cleaning confirmed an elongated stone-built feature (Feature 1) that consisted of a hollow semi-circle *ca.* 2m in diameter and a two-rowed upright slab wall *ca.* 12m long and up to *ca.* 0.5m high (Figs. 16-17). The combination of a cairn-like round feature and a two-rowed upright



15. 'Awjā 2: general view of Feature 11 (looking north-east).



16. 'Awjā 3: plan of Feature 1 and surrounding features.

slab wall is characteristic of Chalcolithic burial cairns at Qā' Abū Ṭulayḥa West (Fujii 2001: fig. 13, 2003: figs 11-12), suggesting a chronological correlation between the two sites. Again, no artifacts were recovered with the exception of a few heavily abraded flint flakes scattered on the present ground surface.

A slab-lined rectangular feature, *ca.* 2m long and *ca.* 1m wide, existed near the western edge of Feature 1. In addition, several round features and stone concentrations, *ca.* 1-2m in diameter, were also dotted to the east of Feature 1 (**Fig. 18**). However, nothing is known about their

chrono-functional correlation with neighboring Feature 1, except that the rectangular feature was most likely constructed of building material robbed from Feature 1.

### Discussion

The 'Awjā sites are enigmatic in many aspects, including their date and function, but available evidence is extremely limited. As they yielded neither artifacts nor charcoal samples, all that remain are techno-typological comparisons of the structural remains themselves in a broad context. As suggested above, our previous



17. 'Awjā 3: general view of Feature 1 (looking north-east).



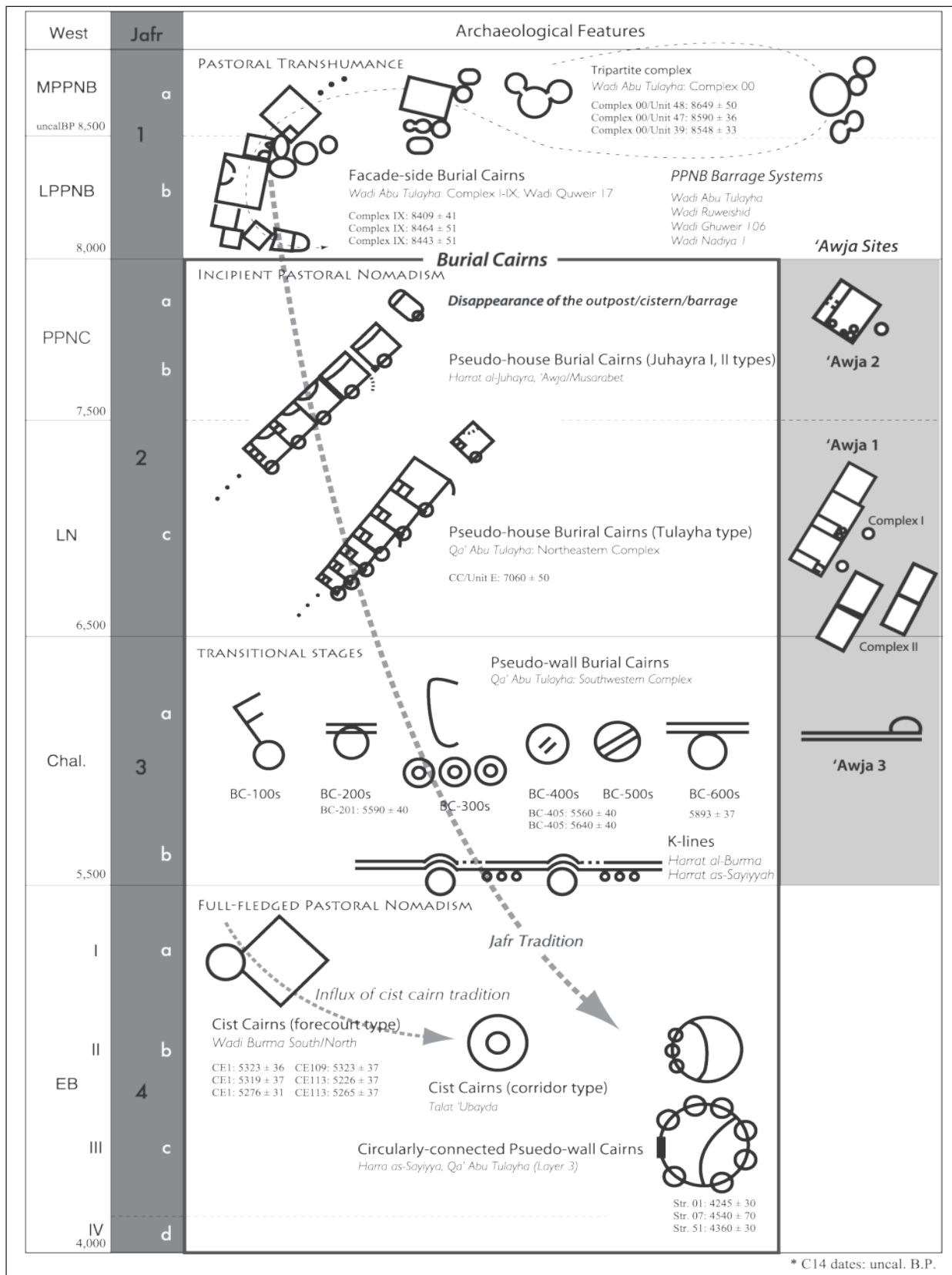
18. 'Awjā 3: partial view of surrounding features (looking south-east).

investigations in the neighboring Jafr Basin may provide valuable keys with which to tackle the essential issues (**Fig. 19**).

#### 'Awjā 1

As noted above, Complex I has much in common with the Late Neolithic pseudo-settlement (or laterally-connected body of pseudo-house burial cairns) at Qā' Abū Ṭulayḥa West (Fujii 2001: fig. 2, 2002: fig. 5). Affinities between the two sites cover a broad spectrum of characteristics, including (1) their isolated location in the middle of the desert, (2) the presence of a unit consisting of a rectangular structure and a cairn-like round feature, (3) the lateral connec-

tion of units and consequent formation of an elongated structural entity extending north-east - south-west, (4) use of the two-rowed upright slab wall technique, (5) incorporation of a rectangular compartment(s) in the rear left corner of a unit and (6) use of standing corner stones. Furthermore, both sites are devoid of traces of domestic activities, e.g. artifacts and hearths. There is no doubt that they share a similar date and function. Thus, Complex I at 'Awjā 1 can be tentatively defined as an open sanctuary or symbolic cemetery of Late Neolithic pastoral nomads who migrated around the Jafr Basin. If this interpretation is correct, it would follow that the small round feature in front of each struc-



19. Tentative chronology of burial features in the Jafr Basin and 'Awjā area (revision of Fujii n.d.: fig. 38).

ture represents a symbolic (and therefore usually empty) burial cairn in line with the Jafr pseudo-settlement.

Complex II, on the other hand, is marked by the formation of twin short continua and the absence of internal divisions of space. To date, no parallel examples have been found in the Jafr Basin. Similar features from the Negev and Sinai have been interpreted as open sanctuaries; a few of them have been attributed to the Late Neolithic on the basis of C-14 dating (Eddy and Wendorf 1999: figs 3-34, 3-42, 11-5; Beit-Arieh 2003: 430; Rosen *et al.* 2007: fig. 4). This dating is consistent with our tentative perspective that Complex II represents a subsequent, simplified form of Complex I. Taken together, it would follow that the complex represents an open sanctuary or symbolic cemetery of Chalcolithic pastoral nomads who migrated around the Jafr Basin.

#### 'Awjā 2

'Awjā 2 differs significantly from 'Awjā 1, both in site-form and in division of internal space. While 'Awjā 1 contains several continua and incorporates a 'vertically' long compartment at the rear left corner of a unit (in the case of Complex I) or nothing (in the case of Complex II), 'Awjā 2 consists only of a single, independent structure equipped with a 'horizontally' long rear compartment. Parallel examples for the latter have been excavated at Ḥarrat al-Juhayra, a PPNC pseudo-settlement on the north-western margin of the Jafr Basin (Fujii 2005: figs 1-4). Several units occupying the north-eastern edge of this site have similar traits, suggesting chronological synchronism with Structure 1 of 'Awjā 2. If this is the case, the site may date back to the PPNC. As for function, it can probably be defined as an independent form of a pseudo-house burial cairn, a fundamental component of a pseudo-settlement. It is our tentative perspective that the structure represents a prototype of Complex I at 'Awjā 1, both in terms of morphology and date.

#### 'Awjā 3

The unique feature at 'Awjā 3 is the combination of a hollow stone circle and an elongated freestanding wall, both constructed using the two-rowed upright slab wall technique. There is little doubt that the feature is in some way related to pseudo-wall burial cairns, espe-

cially their later forms (i.e. the BC-600s and -700s) as confirmed at Qā' Abū Ṭulayḥa West and Wādī Burma (Fujii 2003: figs 11-12, 2005: fig. 3). Thus, it can be tentatively dated to the Late Chalcolithic. The typological sequence at Qā' Abū Ṭulayḥa West indicates that the pseudo-wall burial cairn is a subsequent, simplified form of a pseudo-house burial cairn (Fujii 2001: 29-32, Fujii n.d.: figs 19, 22). Thus the stone-built feature of 'Awjā 3 can probably be understood as a symbolic cairn tomb or open sanctuary of Late Chalcolithic pastoral nomads, who inherited this unique funerary ritual from their ancestors who had been involved in the construction of 'Awjā 1 and 2.

#### Cultural Sequence and Regionality

From the above, we can tentatively interpret the three sites as open sanctuaries or symbolic cemeteries of Early Neolithic to Late Chalcolithic pastoral nomads who migrated around the Jafr Basin. In view of the series of common traits noted above, there is little doubt that they belonged to the same cultural tradition.

The aforementioned typological comparisons with other sites in the region suggest that the 'Awjā sites evolved from 'Awjā 2 (*viz.* an independent structure with a 'horizontally' long rear compartment), into Complex I of 'Awjā 1 (including an elongated continuum retaining division of internal space), then into Complex II at the same site (consisting of two pairs of shorter continua without any division of internal space) and finally into 'Awjā 3 (represented by a pseudo-wall cairn). Although there might still be a minor hiatus between Complex II at 'Awjā 1 and the pseudo-wall cairn at 'Awjā 3, the sequence suggested above is a good match with the Jafr chronology. In view of the fact that a similar sequence has been confirmed in central Syria as well (Fujii *et al.* 2011; Fujii n.d.: fig. 45), we can propose that the Jafr chronology has the potential to provide a common means of tracing the process of pastoral nomadization in various inland areas of the Levant.

It goes without saying, however, that the Jafr chronology has its own limitations. This is because, first, it still has a few minor chronological gaps and, second, it is based on Jafr datasets and therefore does not fully incorporate all regional characteristics of the inland Levant. A

good example of the first issue is Complex II at 'Awjā 1, which has no parallel examples in the Jafr chronology. The complex might fill a minor typological gap between the pseudo-house burial cairn and the pseudo-wall burial cairn of the Jafr chronology. The issue of regionality, on the other hand, is best illustrated by the series of typological differences between the Jafr and 'Awjā pseudo-settlements. To begin with, while the Jafr pseudo-settlements are characterized by linear development, the 'Awjā pseudo-settlements prefer parallel arrangements of shorter continua. The second difference consists of the division of internal space, which also highlights the regionality of both areas. It should also be added that while the Jafr sites apply the two-rowed upright slab wall technique to the pseudo-house only, the 'Awjā sites extend it to the attached cairn-like features as well. These regional differences indicate that both areas shared the same cultural tradition but differed in minor aspects.

### Concluding Remarks

The rescue investigation of the 'Awjā sites has enabled us to confirm anew the versatility of the Jafr chronology as a key to tracing the process of pastoral nomadization in southern Jordan. The discovery of the three open sanctuaries or symbolic cemeteries near the Jordan / Saudi border has demonstrated that the chronology is applicable to southernmost Jordan, or even parts of the Negev and Sinai. Taking the results of our recent investigations in central Syria into consideration, the geographical applicability of the Jafr chronology would be enlarged still further. However, as noted above, much still remains obscure, including assessment of regional characteristics. Further work is needed to consolidate the reliability of the Jafr chronology.

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