

## **Middle and Late Bronze Age Domestic Architecture from Tall Dayr 'Allā: Recent Discoveries**

### **Introduction**

Tall Dayr 'Allā<sup>1</sup> stands in the base of the long north-south Rift Valley, in a part which is called Ghawr Abū 'Ubaydah. Here, the valley floor is in general 4 to 5km. wide, i.e. extending from the Jordan River bed (*zor*) to the slopes of the eastern mountains. The surrounding landscape has good agricultural soil in most places and the extremely variable, but generally limited, rainfall (av. 260mm. at the site) can be supplemented with irrigation water supplied from the az-Zarqā' River. The Jordan Valley is very suitable for winter grazing, largely because of its mild temperatures during that season (FIG. 1).

The summit of Tall Dayr 'Allā stands almost 30m. above the local plain, which is about 230m. below mean sea level and slopes gently down (2%) to the west-south-west. The oval base of the mound of Tall Dayr 'Allā measures approximately 250m by 200m (FIG. 2).

The excavations conducted at Tall Dayr 'Allā in 1994 and 1996 exposed evidence concerning the south-western limits of the final Late Bronze Age (LB) settlement, including an extra-mural metal-working area and commercial storage facilities, and yielded data associated with preceding LB phases. In 1998, 2000 and 2004 excavations to the east of these trenches, on a protruding part of the tall, revealed additional remains dating to the LB and beginning of the Iron Age, including large buildings and several enigmatic clay tablets. The exposed LB buildings on the southern slope of the tall provided us with information about use of space and their development over time (FIG. 3).

### **Chronology**

The archaeological excavations conducted at Tall Dayr 'Allā have shown that it was occupied from ca. 1700BC to 350BC (Van der Kooij 2006: 224). This chronological determination is based on the study of the stratigraphy of the site in parallel with the study of excavated archaeological materials, especially pottery. In addition, a number of excavated written sources, including a cartouche of the Egyptian queen Tawosert, stamps and cylinder seals of Ramses II and bulla carrying the name of Thutmose III, are taken into consideration (Van der Kooij 2006: figs 12:4; 15). Unfortunately, radiocarbon dates are unavailable at present, but we await the results of analysis of samples collected for this purpose.

### **Domestic Architecture from Tall Dayr 'Allā**

This paper examines the recently excavated LBA architectural remains in order to shed light on the urban character of the site, apart from the religious quarter on the northern slope. In addition, excavated buildings dating to the Middle Bronze Ages (MB) II-III and the LB / Early Iron Age (IA) periods are also discussed.

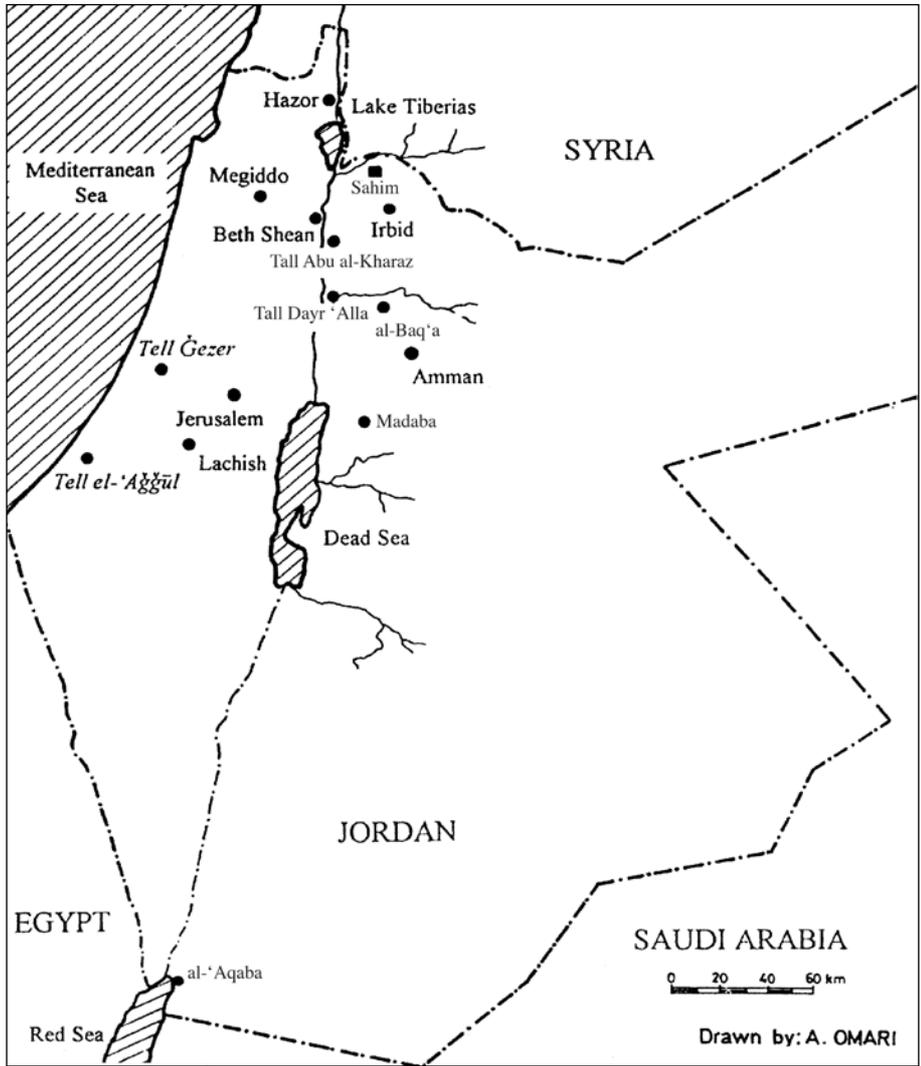
A preliminary study of LBA architecture found at Tall Dayr 'Allā during the most recent seasons (1994 - 2004) defined two types of structure:

1. Broad room (*breitraum*) houses.
2. Pillared houses.

These houses were built of mud-brick and, as demonstrated by the remains of a fallen ceiling,

<sup>1</sup> The Tall Dayr 'Allā Archaeological Project is a joint venture of Leiden University (Holland) and Yarmouk University (Irbid, Jordan). It started in 1960 as a Leiden University excavation project, directed by H. J. Franken. After a gap following the fifth season in 1967, excavations were resumed by Franken in 1976. From

1979 they were co-directed by G. Van der Kooij and M. Ibrahim, first in collaboration with the Department of Antiquities of Jordan and, since 1980, with Yarmouk University. Excavations resumed in 1994, with a series of five seasons ending in 2004 (co-directed by G. Van der Kooij and, since 1996, Z. Kafafi).

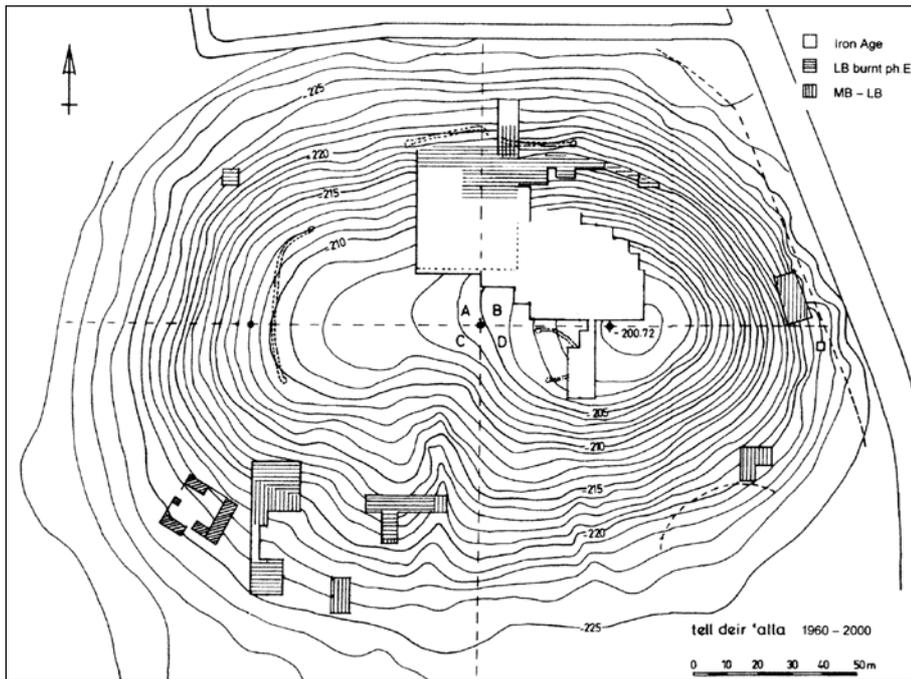


1. Map showing location of Tall Dayr 'Allā



2. Aerial view of Tall Dayr 'Allā (after G. Van der Kooij 2006).

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3. Excavated areas at Tall Dayr 'Allā (after G. Van der Kooij 2006).

were roofed with reeds covered with a mud layer.

### A. Middle Bronze Age II-III / Late Bronze Age I Architecture

The MB II-III period settlement was established on a low natural hill of laminated Lisan clays, with about half a metre of reddish-brown loess on top (Franken and Ibrahim 1977-1978; Kooij 2006: 214). Van der Kooij (2006: 202) has argued that the centre of the site may have been settled prior to MB II, because Chalcolithic sherds were occasionally recovered from the MB and LB deposits at the site. Alternatively, these sherds could have been brought to the site from Tall Qa'dān, which is located a few hundred metres north-east of Tall Dayr 'Allā and also yielded Chalcolithic sherds (Kafafi 1982).

During the 1976 - 1978 seasons, part of an MB III building consisting of five rectangular rooms was uncovered on the south-eastern side of the tall. It was constructed of two rows of mud-brick walls on 1m. wide stone foundations, some of which stood up to 2-2.5m. high. The floors were made of hard-beaten dark grey soil mixed with pebbles and small stones. Owing to the small amount of pottery recovered, the excavators judged that this was not a domestic building. In Room I, a bench constructed of three rows of mud-bricks and a rounded stone-lined pit were exposed. MB II-III ceramic vessels, some of which were of the type known as bichrome ware (Franken and Ibrahim 1977-1978: Pl. XLII,

1) were found inside the building. Moreover, two MB II-III bronze tools were found directly on the floor of the pit (Franken and Ibrahim 1977-1978: 75-76).

Room III is the largest room, measuring ca. 5.5m. in width and more than 6m. in length. The excavators realised that this room was accessible from Room IV through a 1.15m. high doorway over which a wooden beam, presumably a lintel, was laid. In addition, there was no clear evidence to suggest that this room had ever been roofed. It is therefore probable that Room III was an open courtyard (Franken and Ibrahim 1977-1978: 78), meaning that this MB II-III building consisted of a large open courtyard surrounded by small rooms (FIG. 4).

At the beginning of the 1998 season, the excavators decided to cut back the eastern side of the tall, which had been partially bulldozed when the main road was widened and shops constructed. To this end, a step trench measuring 15m. north-south, that extended 5m. to the west, was excavated. This area was designated Area X. The excavations started 5m. from the southernmost part of the trench, where three squares (XB1+2, XC1+2 and XD1+2) were dug. Here, Lisan marl or clay was reached a few metres above modern street level. The archaeological deposits excavated in this trench attained, in some areas, a height of 6.5m. and produced remains dating to the MB II-III and LB I periods (Van der



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5. General view of the excavated step trench (Photo by G. van der Kooij).

and XD were constructed. In addition, courtyard accumulation associated with several walls occurred; a bronze axe was found here. The well-constructed buildings had several rooms, seemingly well-planned to judge from the layout of the walls; these were differently orientated in the two small areas of excavation (FIG. 6).

The most characteristic pottery found in these two phases is that which is decorated with chocolate-on-white painting, which dates to the end of the MB and beginning of the LB.

During the 2000 season further MB and LB archaeological remains were excavated in two squares (C/ P and Q9), each measuring 5 by 5m,

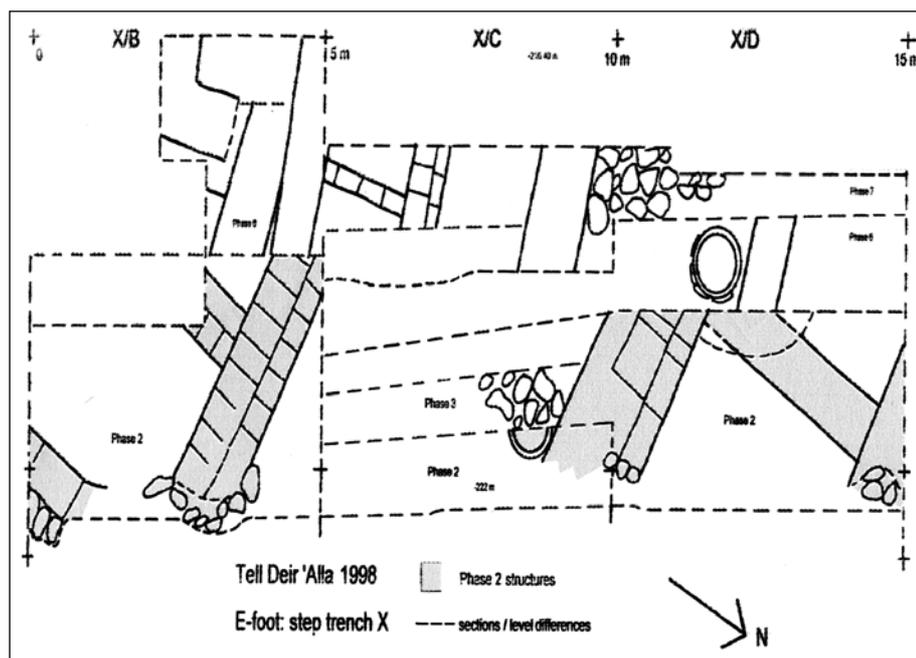
located on the southern slope of the tall (Van der Kooij and Kafafi 2002: 31).

To conclude, the MB II-III archaeological remains so far excavated at the site of Tall Dayr 'Allā may demonstrate that the earliest occupation of the site had an urban character. However, it is not clear how far the site originally extended owing to the small exposures of MB material.

*B. The Late Bronze Age Architecture*

It is not possible to establish use of space in the LB built-up areas on the basis of the fragmented data obtained from the early excavations, except for the temple in the northern quarter and probable domestic areas to the east and south-south-west. A study of the LB architecture exposed during the most recent (1996, 1998, 2000 and 2004) excavations at Tall Dayr 'Allā is presented below.

*1. South-south-west slope (Area C / I, J and P):* In the 1994 season, the excavators decided to begin the first excavations on the south-south-west slope of the tall with the aims of exposing pre-Iron Age archaeological remains and gaining a better understanding of the nature of the settlement. As a result of the excavations in Areas C / I and J, rectangular structures have been uncovered. The earliest of them is a curved wall, orientated east-west and 1.5m. wide. It was built of very hard mud-bricks using the local Lisan clay, with reed or wood between the courses. Additional mud-brick walls were exca-



6. Plan of Area X showing MB/LB architecture (after G. Van der Kooij 2006).

vated in this area and some of them were built on stone foundation (Ibrahim and Van der Kooij 1997: 106) (FIG. 7).

2. *South slope (Areas C / J and K)*: In the 1998, 2000 and 2004 seasons, the excavators decided to work on the central part of the southern slope, with the aim of examining the extent and character of the LB phases and the transition to the IA (Van der Kooij and Kafafi 1998, 2002). Thus, in 1998 season five squares (C / K6, L6, M6, K7, and K3) were opened (Van der Kooij and Kafafi 1998: 11). Excavations continued in this area during the 2000 and 2004 seasons with the aim of recovering further archaeological data relating to the last phase of the LB and the beginning of the IA. As a result of these excavations it became necessary to reconsider some of the conclusions reached on the basis of the 1960s fieldwork on the northern slope of the site. The 2000 and 2004 extensions were needed in order to understand the use of space in the two main excavation areas: the central part of the southern slope and the foot of the southern slope of the tall.

In the central area, a large broad room (*breitraum*) building measuring at least 10 by 6m. has been partially exposed (FIG. 8). It seems to consist of an open courtyard or main room surrounded by four small rooms — two each along the north and south sides — and an elongated room with a mud-brick platform extending along its western side



8. General view of the excavated *breitraum* building on the southern slope (photo by Y. Zu'bi).

(FIG. 8).

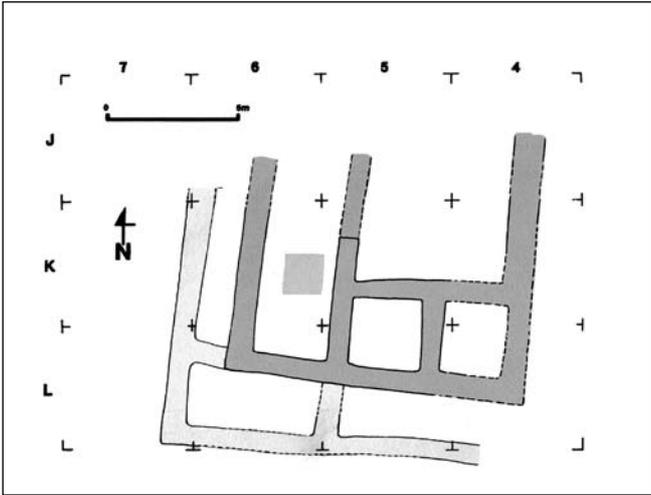
The walls of this building were constructed of very hard mud-bricks, each ca. 50-60cm. long, 25cm. wide and 10cm. high. A layer of mud mortar was used in the construction process. The outer walls range in width from 1.4 to 1.3m.; the inner walls are 0.8m. wide (FIGS. 9, 10).

The ceiling, which may have been carried on wooden posts, was constructed of wooden beams



7. Squares C/I and J14 on the lower south-west slopes of the tall (photo Y. Zu'bi, after Ibrahim and Van der Kooij 1997).

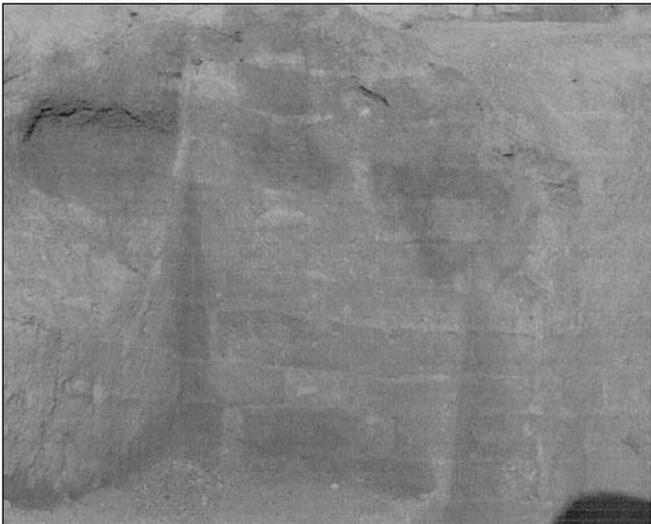
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9. Plan of the *breitraum* building (drawn by Ali Omari).

underlying a layer of reeds, which in turn lay under a layer of mud.

In this building clay tablet fragments, with an



10. General view of a mud-brick wall (photo by Y. Zu'bi).

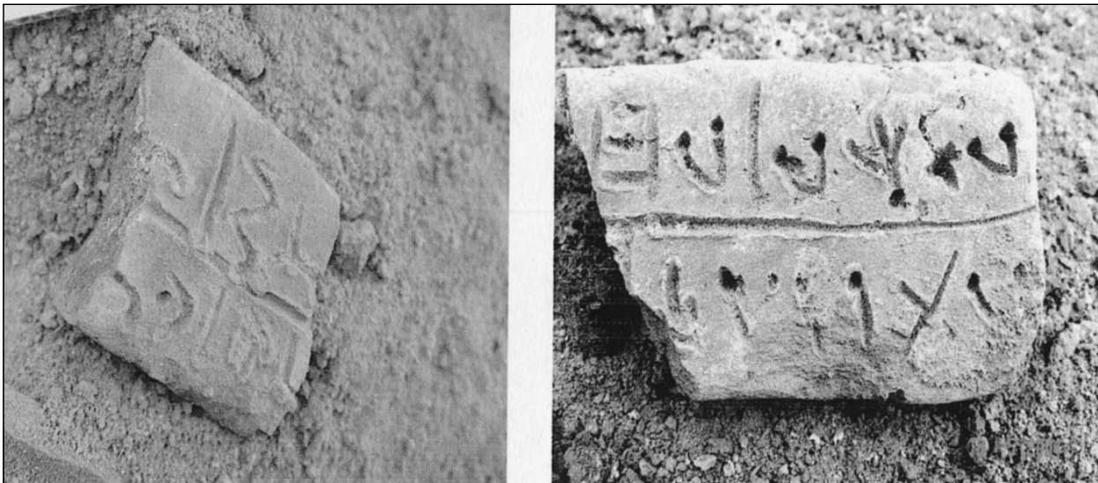
unknown script, were found; two of them fitted with three fragments recovered the previous season, thereby making up two complete tablets. With these finds a new attempt to decipher them may be successful (see FIG. 11).

Much better understood are the rooms of a subsequent rebuilding, still just before the IA. These rooms included space for food storage and preparation, with large jars that contained an oily liquid and a large saddle quern with complete with grinding stone, both of the local (Zerqa bed) sandstone (FIG. 12).

This excavators realised that this large building has two LB III structural phases. Its final use was during the latest phase of the LB, when it was destroyed by a fire that was caused by an earthquake at around 1180BC. The excavated clay tablets suggest that its first phase should be dated to LB III (ca. 1300 – 1200BC) (FIG. 13).



12. One of the small rooms in the large building (photo by Yousef Zu'bi).



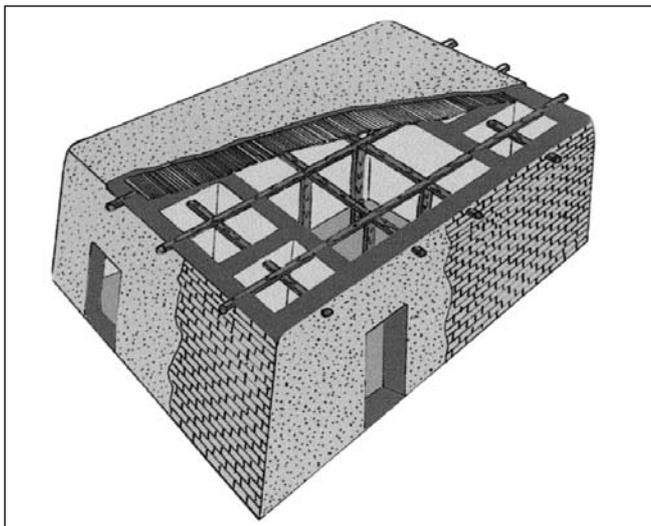
11. Inscribed clay tablets fragments found in the *breitraum* building (photo by Yousef Zu'bi).



13. The burned layer, which separates the two phases (photo by Yousef Zu'bi).

To sum up, despite the fact that this architectural complex has not been completely uncovered, its plan and the archaeological finds recovered from within it suggest that it was used for domestic purposes, or perhaps as an administrative building. A reconstructed plan of this *breitraum* building is presented in Figure 14.

3. *The South Foot of the Tall*: In 1982 a narrow ditch was dug along the south foot of Tall Dayr 'Allā in order to divert run-off water from the modern town. The north section of this cut contained heavily burned mud-brick structures including, perhaps, a kiln. The excavators therefore decided to investigate this area by opening a very small trial trench. Three occupational phases were recog-



14. Reconstruction of the *breitraum* building (drawn by Ali Omari).

nised: an upper one represented by several pits of different sizes, a middle one comprising the re-use of a building that was constructed during the lower and earliest phase, which dates to the latest phase of LB III (Ibrahim and Van der Kooij 1997: 108) (FIG. 15).

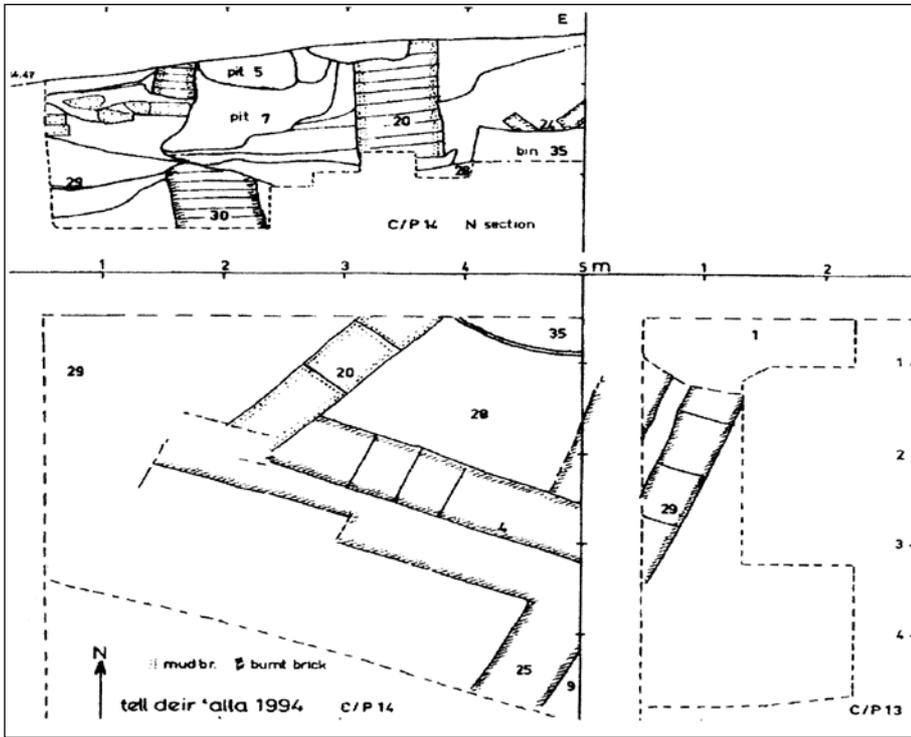
Furthermore, in 1994 two more squares (C / P13 and 14) yielded a complex of mud brick walls and burnt debris in their earliest phases. Both the roof debris and mud-bricks are heavily burned, giving them a red-brown colour (FIG. 16). Unfortunately, the floor of this building was not reached, but in the meantime fragments of corroded copper alloy, together with crucible fragments, may indicate metal-working activities nearby. The finds in this complex included a spindle, flint blade, basalt pestle, small haematite stone, large Egyptian clay-seal impression and a clay tablet. The excavators have suggested that this area functioned as a place for metal-working and storage (Ibrahim and Van der Kooij 1997: 108).

The 2000 and 2004 excavations at the foot of the tall, partly exposed an extension of the industrial activities discovered in 1994, and also a poorly understood mud-brick construction about 10m. wide and at least 10m. long, that was associated with the burned phase but which was not, for the most part, burned itself (FIG. 17). On top of this construction were the burned remains of a row of four thick pillars, spaced 70-80cm. apart from each other. Unfortunately the space behind them, to the west, remains unexcavated. To the south of this row of wooden pillars was a stone pavement with a step at



15. General view of the area of the south foot of the tall (photo by Yousef Zu'bi).

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16. Plan of the excavated structures in Squares C/P 13 and 14 (after Ibrahim and Van der Kooij 1997).



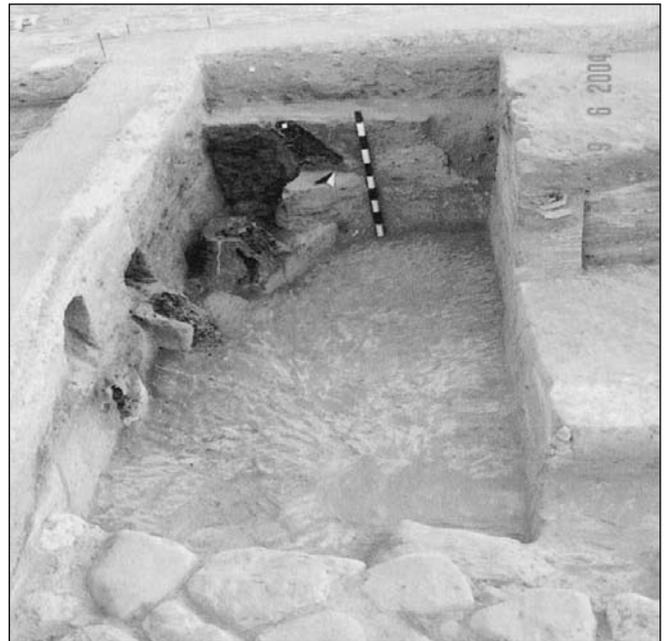
17. General view of the burned phase at the south foot of the wall (photo by Yousef Zu'bi).

its southern edge that leads to the top (FIG. 18).

The plan of this building and its method of construction is indicative of the so-called 'pillared house', known from several parts of the ancient Near East. Despite the fact that the western part of this building still unexcavated, a tentative reconstruction is presented in Figure 19.

This type of building is dated to ca. 1250 - 1150BC (Herr 1997: FIG. 20); it seems that the house was destroyed in a major fire.

By way of comparison, several LB III / IA I

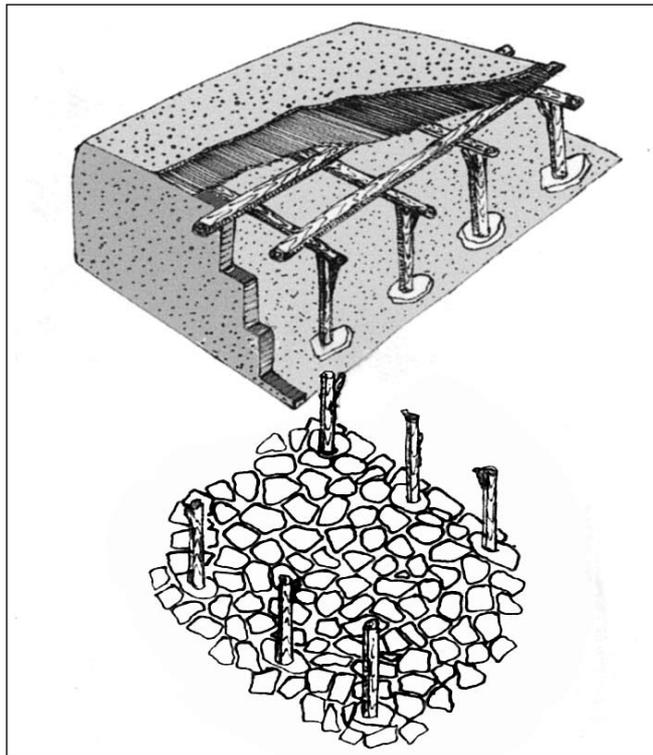


18. General view of the four burned wooden pillars and the stone pavement south of them (photo by Yousef Zu'bi).

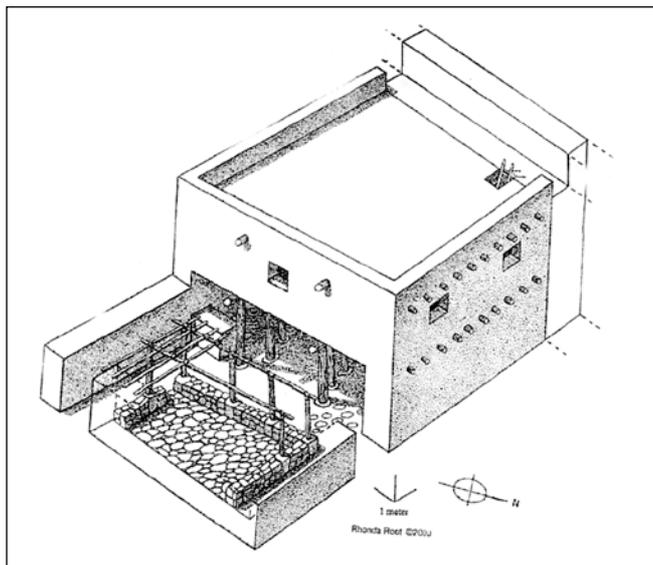
sites in Jordan and Palestine have yielded architecture interpreted as domestic structures. In Jordan, the sites of Tall Irbid, Tall al-Fukhār, Tall al-'Umayri, Saḥāb, al-Lajjūn, Jāwā South, Mudayna al-Mu'arraḡah, Mudayna al-'Ūlyah and Gharah have all produced buildings described either as 'four-room houses' or as 'pillared houses' (Kafafi

2002; Herr and Najjar 2001).

At Tall al-'Umayri, a four-room house and a larger building have been excavated, yielding several objects inside them (Clark 2004; Herr 2000; Herr and Clark 2007). Two houses dating to the LBIII / IA I period were exposed within the city walls. One is a two-storey building, having the



19. Reconstruction of the 'pillared house' at Tall Dayr 'Allā (drawn by Ali Omari).



20. Reconstruction of the 'pillared house' at Tall al-'Umayri (after D. Clark 2004).

ground plan of a four-room house with pillar bases dividing the long room. Collared-rim jars were positioned along the side walls of the 'broad room'. On top of this LBIII / IA I construction was a store room dating to IA I. The excavator dates the house to the period 1250 - 1150BC (Herr 1997).

The site of al-Lajjūn is located approximately 80km. south of 'Ammān, on the northern edge of the Wādī al-Mūjib. The excavator has argued that a pastoral group had settled in this fertile spot and established a village with casemate wall by the end of the second millennium BC. One of the excavated structures, measuring ca. 10m. in width by ca. 8m. in length, is of the so-called 'pillared-house' type. It was constructed at the summit of the north-western part of the site and consists of three parallel walls running north-south, which were interrupted by transverse east-west walls. The house consists of six rooms and had a single entrance in the east wall. It has been suggested that this 'pillared house', which has been dated to IA I, may have been the residence of a village *shaykh* (Homes-Fredricq 2000).

### Conclusion

The LB domestic structures described above demonstrate that Tall Dayr 'Allā was a large site or a city by the end of the period under discussion. This contradicts the published results of the first excavations on the north side of the tall, which convinced H. Franken that it functioned as a place of ritual, serving transhumant groups who lived in the vicinity of the site.

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