

Excavations at Tall al-Ḥammah

In 1996 and 1997 a small scale excavation was conducted at Tall al-Ḥammah, on the north bank of Wādī az-Zarqā' (van der Steen 1997). The *tall* lies on a natural hill, and rises about 7m above its surroundings. It was noticed by Glueck (1951: 313), by Gordon and Villiers during their Wādī az-Zarqā' survey (Gordon and Villiers 1983), and also by the Jordan Valley survey (Ibrahim *et al.* 1988). Based on the survey results the site was believed to be settled in the Early Bronze Age, and the Early Iron Age up to the Persian period. Excavations revealed occupation layers from the Chalcolithic and Early Bronze Age, and, after a gap, from the end of the Middle Bronze Age to the end of Iron Age II.

The most surprising find was that of a number of what seem to be iron furnaces, dated to the eighth or seventh century BC, and large amounts of slag. Analysis of this slag has proved beyond doubt the presence of an iron production centre at Tall al-Ḥammah. Its discovery has solved a riddle that has long kept archaeologists occupied. The site lies close to an extensive source of iron ore. It has always been presumed that iron industry must have been conducted somewhere in the area from a very early period, and several sites have been put forward as possible iron working centres, Dayr 'Allā among them. Nothing was found however on any of these sites that pointed to iron industry on any scale, until the slag and furnaces on Tall al-Ḥammah were excavated. The iron industry of Tall al-Ḥammah will be the subject of a separate publication.

The excavations are integrated in the Dayr 'Allā regional project, and are part of a larger scale research project which focuses on the transitional Late Bronze-Early Iron Age in this area.

Based on the information from several sources it is suggested that there was a trade route between the Jordan Valley and the Transjordanian plateau during the Late Bronze Age (van der Steen 1996). This route was either part of, or linked to the Egyptian-controlled trade network that extended from Egypt itself, through Palestine to the

east and north.

Although it seems inevitable that Egypt was involved in this trade, there is no evidence that this part of the route, from the Jordan Valley to the Transjordanian Plateau, was actually controlled by Egypt. The question of how far eastward the Empire stretched, still remains unsolved. But if Egypt was not in control of this trade, who was? Who organized it, and who profited? Answers to these questions, if any, can be found only in archaeology, since the written sources of the period are conspicuously silent about this area.

Based on the results of an ethnoarchaeological study (van der Steen 1995 and 1998) and on the published results of several excavations, the Baq'ah valley (McGovern 1986), and Dayr 'Allā (Franken 1969 and 1992), both of which are well-known, a hypothesis is formulated. It is suggested that there was a trade market on the Plateau, possibly in the shape of a small city state, centered around Saḥāb. It formed the link to the north, to Syria and further. It was basically independent, and, due to its nature, multicultural. The local population was Canaanite and contained a large nomadic component. These people conducted the trade between the Dayr 'Allā area and the Plateau and were dependent on it. At the end of the period, with the collapse of the Egyptian empire, and therefore of the trade, the new society that emerged was formed largely by these local people, who found means to survive in a changing world.

One of the phenomena of this new society was a string of new settlements along az-Zarqā', where formerly there were none. One of these new sites, according to the survey results, was Tall al-Ḥammah, which was our main reason for excavating it. We wanted to find out who the inhabitants were, where they came from, and what kind of life they lived.

In the second season, remains were found of the Early Iron Age and the Transitional Late Bronze - Early Iron Age. Surprisingly also remains of the Late Bronze Age I and II and even from the end of the Middle Bronze Age

were found, whereas all the survey results had suggested that this site was newly founded in the Early Iron Age.

Late Bronze age material was so far only excavated in two squares. It is possible therefore that further excavations, which we hope will take place shortly, may change our outlook on the history of the *tall*. However, so far the remains suggest that people lived a very basic life here: no structures of any importance were found. Some cobbled floors and a partition wall consisting of only one, very irregular, course of boulders, were the only 'architecture' found. The installations that were found, mainly bread ovens and hearths, suggested household activities.

The pottery, on the other hand, was of good quality, well made and sometimes very fine in nature. It was clearly imported from elsewhere. A few small fragments of chocolate-on-white ware were found, but the most conspicuous feature was a large number of cooking pots, belonging to a type that is generally rare on the east side of the Jordan, but is well attested on sites like Baysān/ Beth Shean, Megiddo and, most recently, Khirbat Bal'amah (van der Steen, forthcoming). Two small fragments of this type were recently found on Tall Dayr 'Allā. This cooking pot is generally dated to the end of the Middle Bronze Age. At Dayr 'Allā the context in which one of the fragments was found, was dated by the excavator to the beginning of the Late Bronze Age (van der Kooij, pers. comm.).

Much of the other pottery found was slipped with a cream to pink slip, sometimes in two layers, and often decorated. A fragment of a milk bowl was found. The repertoire is generally comparable to that from Dayr 'Allā in the Late Bronze Age (Franken 1992).

These earliest layers were cut by pits in which pottery from the end of Late Bronze Age II and the Transitional Period was found. This pottery can be compared to that of the Latest Sanctuary phase at Dayr 'Allā (phase E and F, Franken 1992). The presence of large numbers of pits is often related to activities by farmers or farmers/pastoralists. The pits were covered by surfaces where industrial or household activities had been performed, leaving ash, burnt surfaces and large numbers of sherds. There was an irregular flimsy wall or boundary consisting of a north-south row of stones. A fire-place was found associated with one of the surfaces, consisting of a circle of stones in which the remains of a fire were found. Beside it was a smaller stone circle that may have been used as a potstand.

On another of these surfaces the remains of a *tannūr* were found, and a kind of burnt round clay platform, 30cm in diameter, that may also have had a function in the preparation of food. Many cooking pots were found here, of types common in the Transitional and Early Iron Ages in Dayr 'Allā. A layer of wash covered this activity area. This phase is dated to the Transitional Late Bronze

- Early Iron Age.

Over it were more occupation layers showing the same type of occupation: surfaces with cobbles and activity area's, dated to the first part of the Early Iron Age. The pottery is more or less contemporaneous with the first phases of Iron Age Dayr 'Allā (Franken 1969).

The nature of the architectural remains, if one may call them so, points to a very simple type of occupation: a partition between two open spaces, a cobbled floor and a few pits. It seems justified to interpret it as farmer, or farmer/pastoralist occupation. What is at odds with it, however, is the nature of the pottery. There were some chocolate-on-white sherds from the earliest layers. And also in the later phases much of the pottery was made of fine ware, often decorated. Apparently, although the people who lived here, or camped here, may have led a primitive, simple life, they were in contact with the greater culture that surrounded them, and possibly were less primitive, or rural, than their architecture, or lack of it, suggests.

We can think of several explanations for this phenomenon. In the light of Tall al-Ḥammah's proximity to the Dayr 'Allā market area, and its position on the trade route to the east, it seems well possible that this was, at least during the Late Bronze Age, a temporary camp used by people involved in the trade during their stay in the Dayr 'Allā area, and revisited whenever they came here. It had the basic requirements for a temporary camp: water was near at hand, and cobbles and boulders were lying everywhere around to quickly build temporary structures and installations. They obtained their pottery from either centre, at Dayr 'Allā or at the plateau.

The pottery from the earliest layers shows that this camp already existed at the end of the Middle Bronze Age or the very beginning of the Late Bronze Age. That does not implicate automatically that the trade route also existed already, although the presence of luxury pottery, as well as possible relations with the west, suggested by the presence of a certain type of cooking pots that has its parallels mainly west of the Jordan, make it at least a serious possibility.

Bibliography

- Franken, H. J. 1969. *Excavations at Tell Deir 'Alla I*. Leiden.
 ——— 1992. *Excavations at Tell Deir 'Alla: the Late Bronze Age Sanctuary*. Leuven.
 Glueck N. 1951 *Explorations in Eastern Palestine IV. Annual of the American Schools for Oriental Research* 25-28. New Haven
 Gordon R. and Villiers, L. 1983. *Tell edh-Dhahab and its Environs. Surveys of 1980 and 1982, a Preliminary Report. ADAJ* 27:285-289.
 Ibrahim M. M., Sauer, J. A. and Yassine, K. 1988. *The East Jordan Valley Survey, part two*. Pp. 189-207 in K. Yassine, *Ar-*

chaeology of Jordan, Amman.

Leonard, A. Jr. 1989. *Late Bronze Age Settlement Satterns in Transjordan*. Lecture at the fourth conference on Studies in the History and Archaeology of Jordan.

McGovern, P. E. 1986. *The Late Bronze and Early Iron ages of Central Transjordan, the Baq'ah Valley Project 1977-1981*. University Museum Monograph 65. Philadelphia.

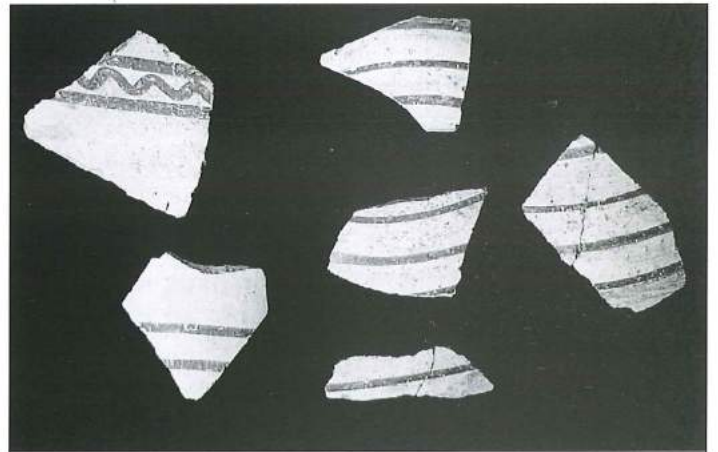
van der Steen, E. J. 1995. Aspects of Nomadism and Settlement in the Central Jordan Valley. *PEQ* 127: 141-158.

—1996. The central East Jordan Valley in the Late Bronze and Early Iron Ages. *BASOR* 302: 51-74.

—1997 Excavations at Tell el-Hammeh. *Occident and Orient* 3.

—1998. Adaptation and Survival. *PEQ*.

—forthcoming. Excavations at Khirbet Bal'amah, Field B, Preliminary Report. In prep.



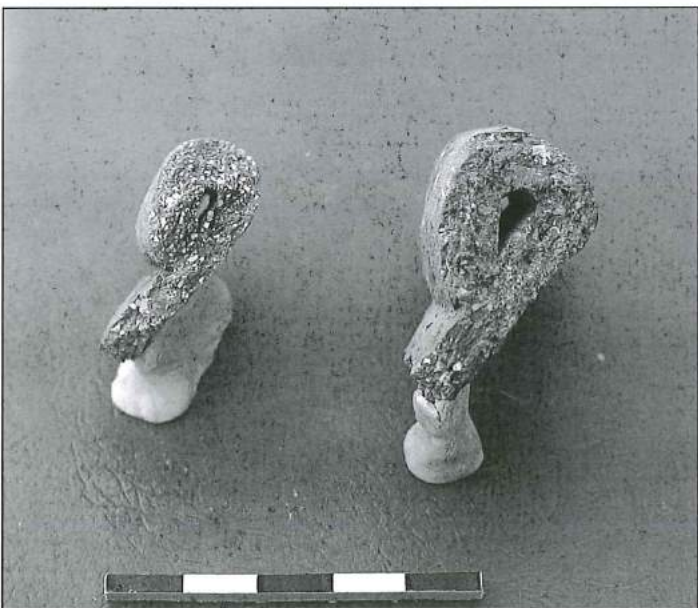
3. Middle - Late Bronze Age decorated pottery from Tall al-Hammah.



1. Middle Bronze Age IIB-C cooking pot rims from Tall al-Hammah.



4. Middle - Late Bronze Age decorated pottery from Tall al-Hammah.



2. Middle Bronze Age IIB-C cooking pot rims from Tall al-Hammah.



5. Middle - Late Bronze Age decorated pottery from Tall al-Hammah.



6. Middle - Late Bronze Age decorated pottery from Tall al-Ḥammah.



8. Pottery sherds from the Late Bronze Age IIB layers at Tall al-Ḥammah.



7. Pottery sherds from the Late Bronze Age IIB layers at Tall al-Ḥammah.



9. Pottery sherds from the Late Bronze Age IIB layers at Tall al-Ḥammah.