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Five Years (2003-2007) of Excavation on Tall Zar‘a

The ‘Gadara Region Project’

The Biblical Archaeological Institute in Wuppertal directed by Dieter Vieweger, started the ‘Gadara Region Project’ in 2001. After an intensive archaeological survey in the Wādī al-‘Arab and the Wādī az-Zaḥar southwest of Gadara in the first year, it was decided to undertake more detailed work on Tall Zar‘a, the most prominent archaeological site in this area. In 2002, the tall was scrutinized by a thorough survey and geophysical prospections (Vieweger 2003). A test trench dug by Karel Vriezen in the northwest part of the tall, completed the initial research (Dijkstra *et al.* 2005). In the following year, the excavations started on the north-west slope of the tall (Area I) north of the test trench (Vieweger 2002).

Tall Zar‘a

Tall Zar‘a (map reference 2119.2252) is a settlement hill 4.5km as the crow flies south-west of the ancient Decapolis city of Gadara. It is situated at the confluence of the Wādī al-‘Arab and its tributary, the Wādī az-Zaḥar. The tall rises about 25m above the surrounding area. Its highest point is situated at -17m below sea level. The settlements were built on top of a natural limestone hill, which has a diameter of about 240m at its base and 160m on the plateau. The ancient cities or villages on top of the hill were protected by sheer rock faces on its eastern and northern sides. The southern flank offers the best opportunity to overcome the 22–25m height difference comfortably via a 150m long, ascending track from west to east. The tall was inhabited from the Early Bronze Age up until about 1900AD. The cultural layers of these habitation activities are approximately 12m thick.

The importance of the tall stems from two facts: First, there is an active artesian spring on top of the

tall. Being an interesting and surprising aspect today, it must also have been an attractive, beneficial and wondrous phenomenon in the past. The other fact is the tall’s strategic position along an ancient and highly important trade route.

Two lower cities belonged to the settlement on the tall. One was located on a terrace on the western, the other on the northern base of the tall. Both areas were protected by deep truncations into the Wādī al-‘Arab. However, the north terrace was recently bulldozed for a new olive orchard, and the archaeological remains have thus been seriously disturbed.

The history of exploration, the historical background, the aims of the project, and the results of each campaign have been published elsewhere (Häser and Vieweger 2005, in press; Vieweger 2006; Vieweger and Häser 2005, 2007, in press).

This article shall give an overview of the results of five years of excavations on Tall Zar‘a between 2003 and 2007 which were carried out by the Biblical Archaeological Institute, and since 2004 as a joint project with the German Institute of Archaeology under the joint directorship of Dieter Vieweger and Jutta Häser.

Area I

Natural settings and geophysical investigations showed that the west slope of the hill was a promising site to rapidly expose the stratigraphy of the tall. Accordingly, Area I was opened in 2003 and enlarged to 825 sqm in the following campaigns. A depth of 4m of the proposed 12m of cultural layers has been reached in most of the excavated area. In terms of cultural layers, we are currently in the latest phase of the Late Bronze Age. For logistical and especially security reasons, the earlier strata can only be excavated after the whole area has been

exposed at this level.

In order to show the development of the architectural features from the Early Bronze Age to the Roman-Byzantine period, the excavation results will be explained, beginning from the lowest layer reached to the surface of the tall.

The Early and Middle Bronze Age

The survey of the tall showed a high concentration of Early Bronze Age pottery in Area I. However, only the outer layer of a massive Early Bronze Age fortification wall could be excavated in the step trench beyond the Late Bronze Age city wall.

So far, the remains of two Middle Bronze Age strata with residential buildings have been uncovered in the same part of Area I, 2m below the Late Bronze Age casemate wall. Actually, it is not possible to say anything definite about the Middle Bronze Age culture before the still unexcavated Late Bronze Age level and further strata have been exposed. It is a unique case in northern Jordan that we have the opportunity to observe the transition from the Middle to the Late Bronze Age culture.

The Late Bronze Age

In the Late Bronze Age (14th–13th century BC), at least two consecutive settlements existed on the tall. For the time being, only the latest Late Bronze Age stratum could be exposed (FIG. 1). Several facts indicate that the tall was the centre of a Late Bronze Age city state: The strong fortifications, the massive architecture, the high percentage (5 %) of imported pottery from Cyprus and Greece as well as the numerous noteworthy small finds.

The most remarkable building of this stratum is the massive casemate wall which fortified the settlement at the north-west flank. A charcoal sample from the collapsed walls gave a radiocarbon date between 1450 and 1300 BC with 95.4 % probability. Five rooms in the casemate wall could be excavated. A sixth room could be confirmed.

Three drainage channels from the residential area ended in one of the casemates — originally covered with flat stone slabs. At this point, the water flowed into a semicircular basin from where it drained into a deep, almost circular shaft lined with undressed stones. The three channels substitute an older channel from the earlier Late Bronze Age stratum which was overbuilt by the casemates of the city wall of the later Late Bronze Age stratum.

South of the casemate wall, a large tower was un-

covered. This inward-built tower was divided into two rooms paved with small pebbles. The northern room was connected to the southern part of the casemate wall. It was probably used by a guard. In a later building phase, the southern room was divided by a small wall with two column bases. They probably originally supported wooden columns to carry the roof. A large stone — worked on its base and tapered at the top — found in this room might be a *mazzebe* (cultic stone). This find and the special layout of the room point to it serving as a small gate sanctuary.

South of the tower, a gate chamber with a width of 2.75m was discovered. It was the gateway to the two lower cities to the north and the west of the tall. To the south of the city gate is a room with a paved floor and, in it, the opening of a remarkable bell-shaped ‘pit’. The opening was covered by a round, carefully hewn stone, measuring 1.2m in diameter. The ‘pit’ has been excavated to a depth of 2.60m. However, the bottom has not yet been reached. Remarkably, a lot of interesting finds have been discovered in the surrounding area, including some bronze objects and sherds of a painted pottery jar. The layer with these finds can be dated between 1440 and 1300 BC with 95.4 % probability.

At the end of the 2006 spring campaign, remains of residential buildings of the Late Bronze Age period were found on Tall Zar‘a for the first time. Already now, it is possible to say that the architecture, which is different from that following in the Iron Age period, is remarkable in size and quality. The thickness of the walls warrants the assumption that the houses originally had a second storey.

Some very interesting objects were found in this stratum, e. g. 24 cylinder seals, two scarabs, a bronze pendant, and different kinds of beads.

The Iron Age I

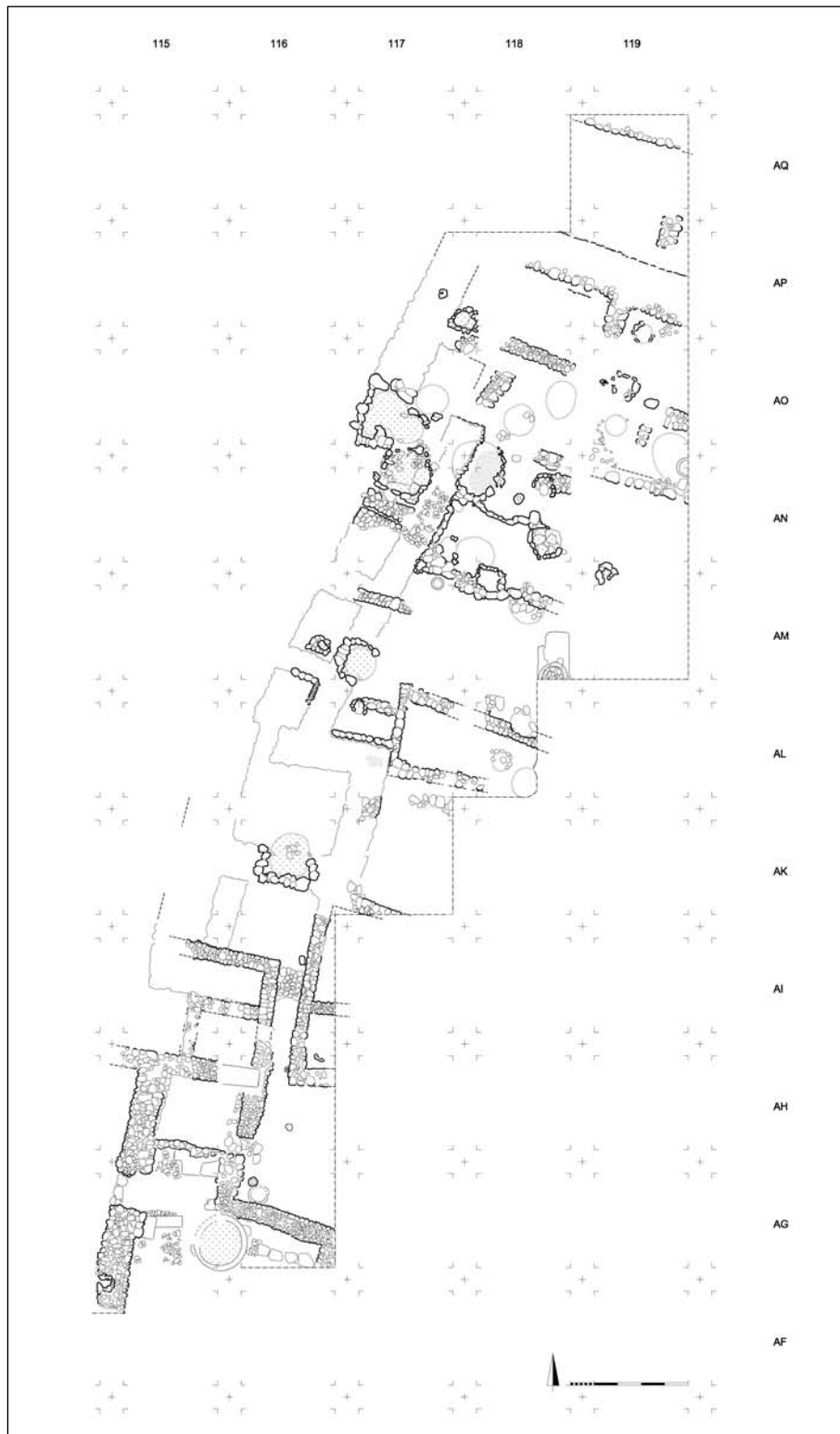
The Iron Age I (12th–11th century BC) settlement displays a very clear change of culture. We did not find fortifications for this period. It is obvious that the inhabitants of the Early Iron Age did not create their own settlement pattern, but used the walls of their Late Bronze Age predecessors.

The architecture is very distinctive (FIG. 2). In the northern part of the excavation area, the inhabitants of the tall dug several large pits for grain storage, built small walls for stables with some installations and joined simple huts to older walls. In the southern part of Area I, an exceptionally large storage pit made of mud was found in the centre of the

FIVE YEARS (2003-2007) OF EXCAVATION ON TALL ZAR'A



1. Plan of the latest Late Bronze Age stratum (drawing by J. Kröpsch).



2. Plan of the Early Iron Age stratum (drawing by J. Kröpsch).

area. In addition, there is one large building with carefully constructed walls, made of two or more rows of undressed stones. Its entrance was paved with stones. Larger areas have to be uncovered before we can confirm the assumption that this build-

ing was either used for administrative purposes or as a residential building for a high-ranking person. Two charcoal samples give a radiocarbon dating for this stratum of 1220 to 970 BC and 1270 to 1040 BC with 95.4 % probability.

Iron Age IIA and IIB

The architecture of the Iron Age IIA/B stratum (10th–8th century BC) suggests that the tall’s population increased in this period and that the settlement developed an urban character. Even though the fortifications are not as strong as those of the Late Bronze Age, the Iron Age II settlement was protected by a city wall. During the Iron Age II, various modifications to the houses were made so that two building phases (an early and a late one) can be distinguished. Until now, building remains of the Iron Age II settlement give the impression that the architecture was densely agglomerated. There are not only residential buildings but probably public buildings as well. The outer walls of the houses are connected to the zigzag-like settlement wall.

There are two exposed areas that show that the Iron Age houses were separated from one another by a double wall so that the boundaries of buildings and property are clearly visible. One of these houses — house 2 — had a workshop area comprising of four longitudinal rooms/courtyards. They yielded interesting finds: a stone built fire place with a crucible — probably for glass melting — still *in situ* in the south-eastern room, and a well-constructed fireplace and work surface in the north-eastern room. In the south-western room a *ṭābūn* was discovered, and the north-western part contained some clay loom weights and four more ovens which might have been used simultaneously. Close to a paved courtyard and another room with three, high column bases made of field stones a large storage vessel and a cultic stone (*mazzebe*) were standing *in situ*. A radiocarbon sample gives a dating between 1270 and 980 BC with 95.4 % probability.

The building layout of the later phase of Iron Age II is characterised by an obvious re-arrangement of the houses, though not the city wall. In the public area the depot for oil *pithoi* of the older phase had apparently been closed and the large storage pit changed into a paved courtyard with a massive working stone. A radiocarbon sample from this layer gives a dating between 1120 and 900 BC with 95.4 % probability.

In the northern and the southern squares, the architecture is densely agglomerated. At least four houses have been identified so far. One of them can be identified as a workshop. It was furnished with a bench along the wall and a large cylindrical,

very carefully cut limestone workbench (60cm in diameter). Very close to this stone, a semi-circular stone basin, two ‘industry pots’, a spindle whorl, and an egg-shaped tool of clay were found on the ashy floor.

Some small finds from this stratum are quite noteworthy like a small bronze figurine of the god El. The burnt layer could be radiocarbon dated to between 1270 and 980 BC with 95.4 % probability. This is the *terminus ante quem* for the deposition of the El figurine.

The Hellenistic and Early Roman Period

So far, no signs of habitation were found on Tall Zar‘a for the latest phase of the Iron Age and the Persian period. During the Hellenistic-Early Roman period (4th century BC–1st century AD) Area I was used but not inhabited. It was predominantly utilized for waste disposal facilities. Three large pits had also been dug and carefully lined out with stones for the storage of grain.

The Roman-Byzantine Period

In the following time of the Roman and Byzantine periods (2nd–7th century AD), there are again intensive building activities recognisable on the tall. Five houses can be distinguished, some of them with elaborate room arrangements. A stone-paved street following the contour line of the slope divided the buildings into a western and an eastern section. This street was blocked by the construction of a house in a later building phase.

A thick wall of dressed stones constructed with stretchers and headers which is visible halfway down the slope to the east of the tall, might suggest that the settlement was fortified during the Roman and Byzantine period. In fact, it is possible that the fortification of such a densely inhabited settlement was necessary from the 3rd/4th century onward when the political situation in Palestine became more unstable. Two coins from this stratum have been dated, one to the time of Hadrian (117–138 AD), the second to between 400 and 450 AD.

The Umayyad Period

During the spring campaign in 2007, Area I was extended to the north and south. In the southern part directly at the edges of the original test trench, two layers of an Umayyad stratum were uncovered. In small areas, the remains of houses with paved floors and an oven could be excavated.

Area II

A second area (Area II) was opened in spring 2006 and measures 400 sqm after two seasons of excavation. It is located on one of the highest points of the plateau and is protected by a steep slope to the north. This prominent position is the most outstanding location on the tell. It was chosen for digging because of its potential for yielding administrative and/or cultic buildings.

After two campaigns, an Umayyad and a Roman-Byzantine stratum could be distinguished. In the Roman-Byzantine era different building phases are recognizable. So far, two large courtyards of an enormous building with adjacent rooms have been exposed. This shows already the immense importance of this habitation place.

The Finds

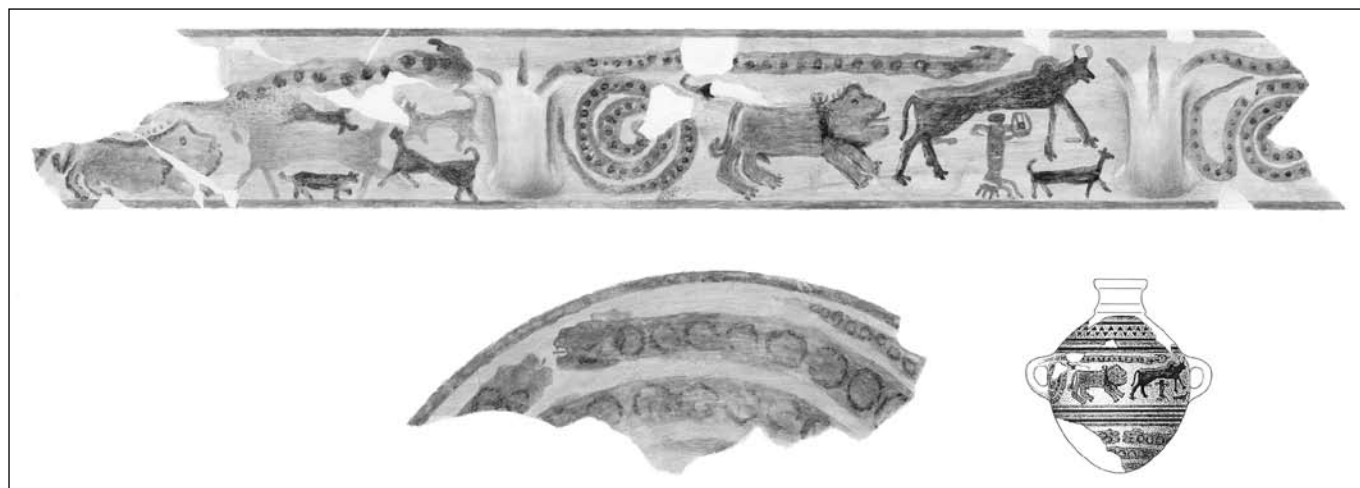
According to the subject of the conference entitled 'Crossing Jordan', some finds shall be presented below which demonstrate exemplarily the special location of Tall Zar'a in a contact zone between the Levant and Egypt to the west and south and Syria and Mesopotamia to the north and north-east.

Sherds of a **Painted jar** were found scattered around a stone lined pit in the later Bronze Age stratum which can be dated between the middle of the 15th and the 13th century BC. The painting on the jar shows a scene with two lions with upraised mane, a bull, a flock of goats, a scorpion, a fish, as well as coiled-up and stretched-out snakes and a human figure resting on a chair and playing a lyre (FIG. 3). These interesting scenes probably depict a story, maybe a legend or myth. The only comparison can be drawn to the so-called 'orpeus vase'

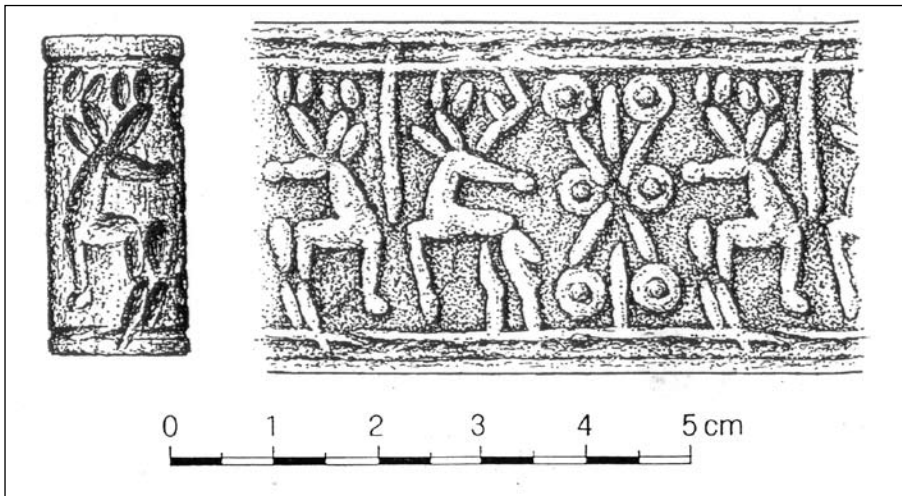
which was found in Megiddo and which has been dated to the 11th century BC.

26 **cylinder seals** were found in the Late Bronze Age stratum in 2006 and 2007. 24 of them are of the so-called 'Common Style' of the Mitanni glyptic. Only few seals of this type have been found in Jordan before. 20 seals were discovered very close together in a large building with massif walls of the latest stratum of the Late Bronze Age city. The first one has been detected in a stone-lined pit in 2006 (FIG. 4). It measures 3cm in height and 1.3cm in diameter. It is made of faience and covered with a green glaze. It shows two stags which are slightly reared up with their heads turned backwards. They are separated by a vertical line and turn their back on a plaited band. The seal belongs to the western group of the so-called 'Common Style' of the Mitanni glyptic and can be dated to the 14th-13th century BC. (Salje 1990: 103). A very close parallel is a seal from Gezer which was also manufactured in faience and has a green glaze (Salje 1990: 219 Nr. 15, Tafel VII 124). This piece has been dated by the excavators later than the 16th century BC.

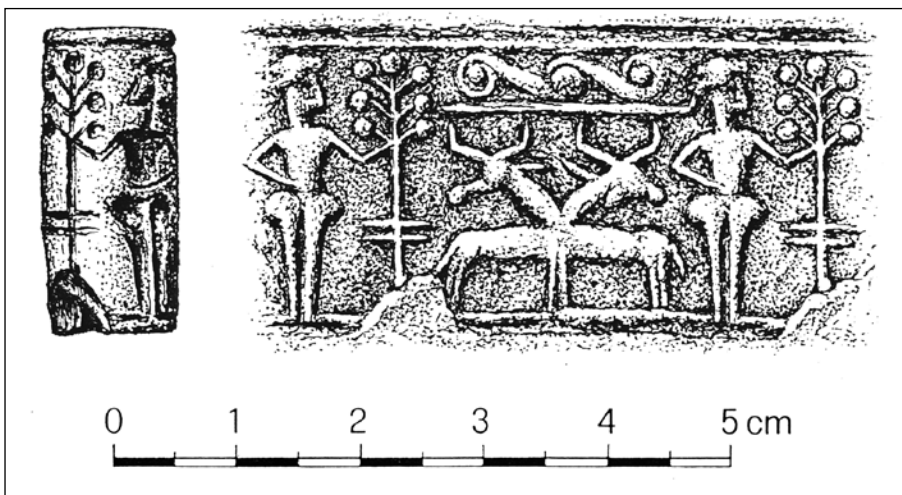
Another cylinder seal of this type was found in a layer of the earlier phase of the Iron Age II stratum (FIG. 5). It is 2.4cm high and has a diameter of 1.0cm. Two stags are depicted which are confronting each other. The upper parts of their bodies are merged and the heads are turned back. A standing person holds a so-called 'bouquet tree' (Salje 1990: Tafel XIV,271). Like the cylinder seal mentioned above, this seal can be classified as part of the western group of the 'Common Style' of the Mitanni glyptic. It can be dated to the 14th-13th century BC. Since it was found in an Iron Age II context,



3. Bichrome painted jar of Late Bronze Age date (drawing by E. Brückelmann).



4. Seal of the Mitanni glyptic (drawing by E. Brückelmann).



5. Seal of the Mitanni glyptic (drawing by E. Brückelmann).

we are probably dealing with an ‘heirloom’.

All other cylinder seals of this type as well as two seals of Mesopotamian origin are still under study.

Another interesting find comes from a layer of collapsed walls. It is a 1.3cm large scarab (FIG. 6). It is inscribed with the premen (A-wsr-re) of the Hyksos-ruler Apophis (ca. 1590-1550 BC). We are certainly dealing with a product of the Second Intermediate period and therefore, it can be seen as heirloom. On account of the modest workmanship, it can be assumed to have been made by a local craftsman.

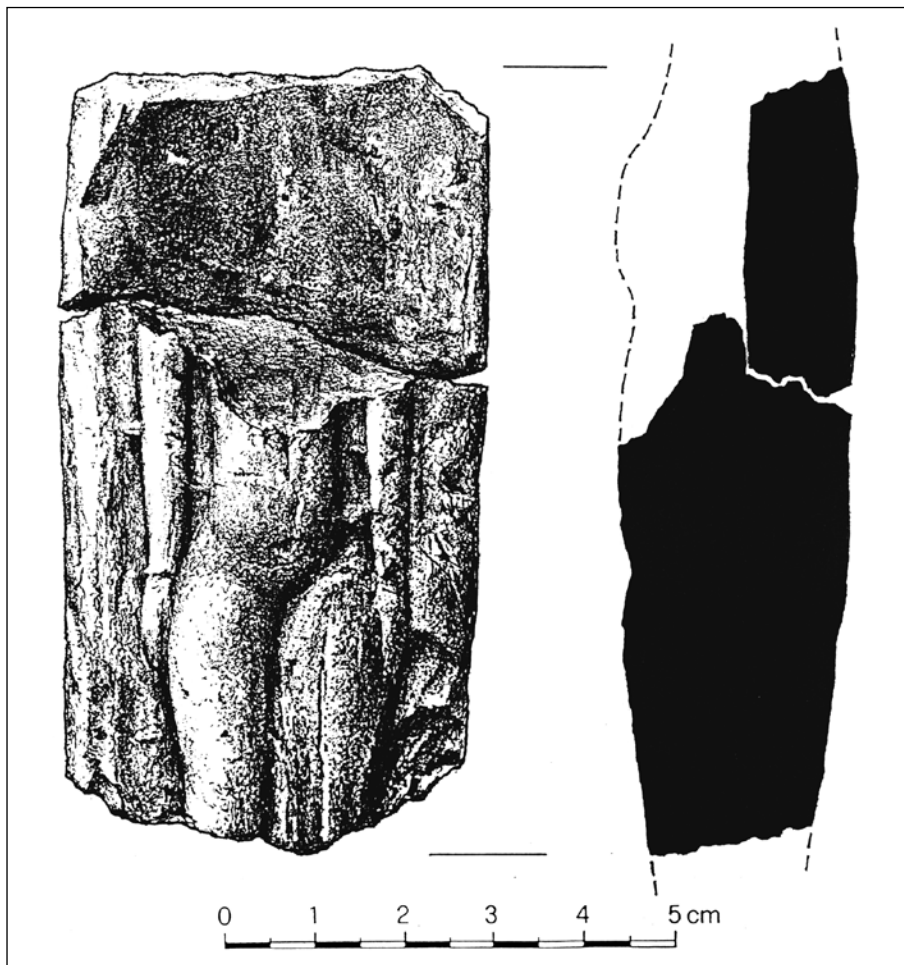
Several fragments of terracotta figurines were found. The **middle part of a terracotta figurine** was found on a floor together with many pottery sherds, bones, fragments of bronze objects, and a broken bone handle of a tool. This figurine depicts the fertility goddess Ashtarte/Ashera in upright position with her arms hanging down along the sides



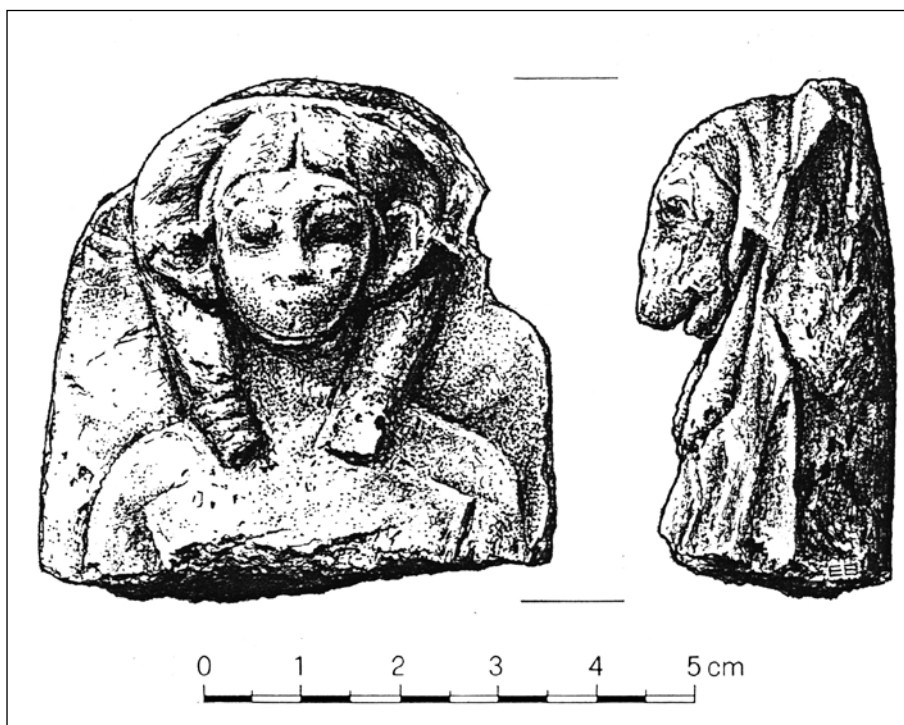
6. Scarab with the premen of the Hyksos ruler Apophis found in Late Bronze Age context (drawing by E. Brückelmann).

of her body (FIG. 7)

Another very intriguing find is the head of a terracotta figurine (FIG. 8) found in the earlier phase of Iron Age II-stratum. It is a depiction of the **goddess Ashtarte with a Hathor wig**. A specific feature is the shape of its face. The frontal view shows



7. Terracotta figurine of a standing Ashtarte/Ashera (Late Bronze Age) (drawing by E. Brückelmann).



8. Head of a terracotta figurine depicting Ashtarte/Ashera with Hathor wig and Shehmet's face of a lioness in side view (Late Bronze Age) (drawing by E. Brückelmann).

the face of a woman, while the side view shows the profile of a lioness. This kind of presentation is unique in Palestine. The closest parallels are two Ashtarte figurines with Hathor wigs which, however, do not have the face of a woman but of a lioness. They were found in Tall Massad al-Jisl (Rahmani 1959, 184-185 Pl. XXIV 1-3) and in Bayt She'an (Rowe 1940, Pl. LXVIII, 3). These figurines present a combination of the goddess Ashtarte with the Egyptian goddesses Hathor and Shekhmet.

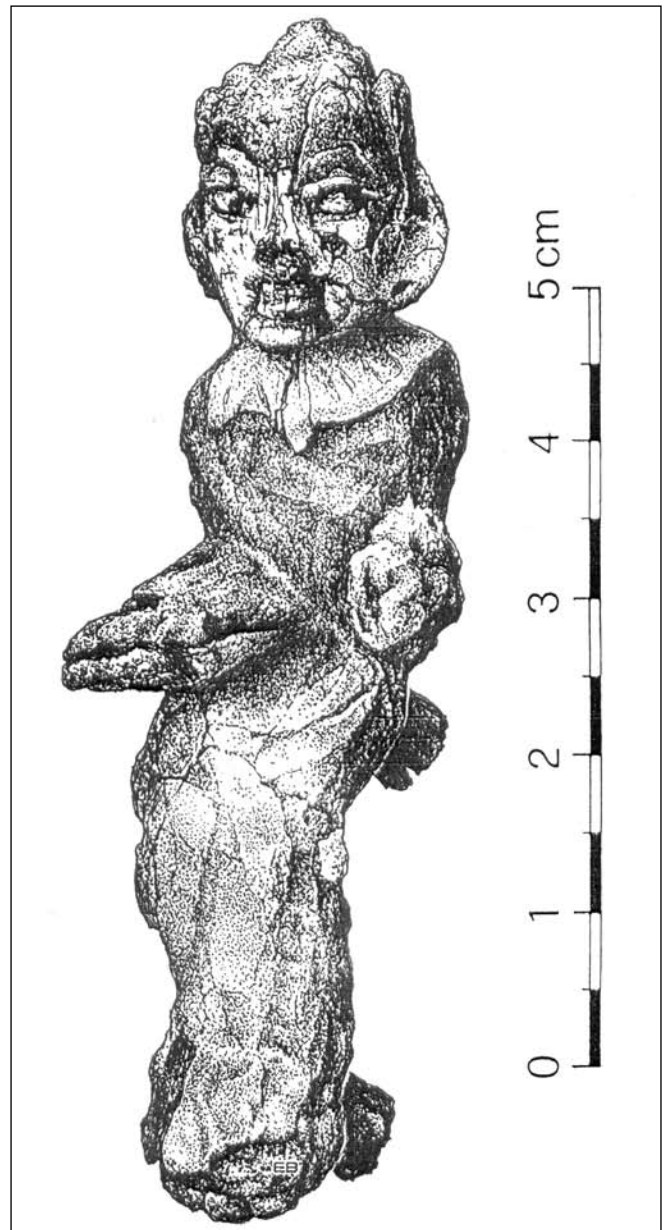
Another interesting object is a c. 7.5 cm high, seated **bronze figurine** with gold application (FIG. 9). It belongs to the so-called El-type. It was discovered beneath a wall of the Iron Age IIB-stratum above a burnt layer. Maybe it was a building offering, no offering pit was recognizable, however. Due to its stratigraphic position, the figurine can be dated to the earlier phase of Iron Age II. Now, the burnt layer could be dated by radiocarbon to between 1270 and 980 BC. with 95.4 % probability. This is a *terminus ante quem* for the deposition of the El figurine.

A **seal impression** (3.5cm x 2.7cm) was found in the same square above the burnt layer. It shows a male figure standing on a bull, lifting its left arm (FIG. 10). The figure depicts the weather god Ba'al or Óadad. Neither seal impressions nor seals with such a motif have been found in Jordan before. However, it is a typical motif of the Aramaic culture of Damascus area. The reverse bears three impressions of a perpendicular fastening. Due to its stratigraphic position, the find can also be dated to the earlier phase of Iron Age II, i.e., the 10th/9th century BC. This piece came probably attached to a tightly closed vessel with a special content to Tall Zar'a.

These finds give insight in the intensive exchange of objects and ideas on Tall Zar'a and here especially in the religious diversity in a contact zone of different cultures.

Conclusions

The excavations on the Tall Zar'a have shed new light on the settlement and economic history the Early Bronze Age to the Islamic period in Jordan and beyond. The prominent tall is one of few in northern Jordan with such a continuous habitation, and therefore, with an extensive range of stratigraphy. The excavated building phases from the Late Bronze Age to the Umayyad Period show the change of settlement layout and the changing im-

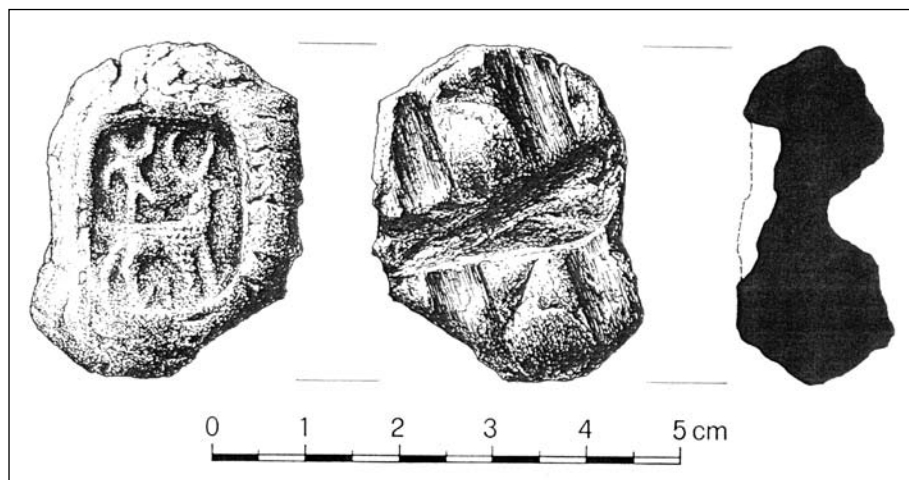


9. Bronze figurine of the god El found in the Iron Age II stratum (drawing by E. Brückelmann).

portance of the site. Many finds demonstrate the influence of different cultures and political entities and the tall's location in a contact zone between the Levant, Syria, Mesopotamia and Egypt.

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10. Seal impression with the depiction of the god Ba'al standing on a bull (Iron Age II) (drawing by E. Brückelmann).

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