Tall Zira'a

Five Thousand Years of Palestinian History on a Single-Settlement Mound

Dieter Vieweger and Jutta Häser

The Wadi al-'Arab lies roughly five kilometers to the southwest of the ancient Decapolis city of Gadara (today Umm Qays). It was part of an ancient trade route, and a number of springs, fertile soils, and a moderate climate all provided for excellent living conditions. The economic success and industriousness of the wadi's inhabitants have left plenty of traces over the millennia. Over one hundred sites mark out the distinguished history of human settlement in the region from the advent of sedentism to the Islamic period. With settlements, canals, water mills, cisterns, oil presses, wine presses, watch towers, graves, and, above all, Tall Zira'a with over five thousand years of settlement activity, the wadi offers archaeologists countless opportunities for research activity.

The mound of Tall Zira'a can be seen in the center of this photo, which is taken from the site of Gadara. The site is situated between the Wadi az-Zahar (above) and the Wadi al-'Arab (below).

The German engineer Gottlieb Schumacher was the first European to visit the region since the crusades when he explored Transjordan in 1885 and happened upon Wadi al-ʿArab. The valley, which had prospered for millennia, had, however, changed a great deal since the Ottomans arrived. The Bedouins told Schumacher that the wadi had degenerated into a "favourite hideaway for fugitives and criminal riffraff" (Steuernagel 1926:A467).

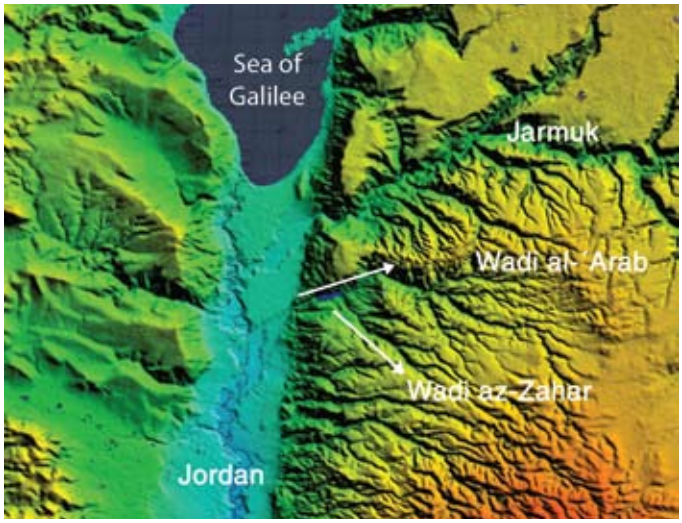
Parts of the valley became military areas as a result of the creation of Israel and the Six Day War in 1967. The Gadara region, at the intersection of Jordan, Syria, and Israel, became the northwestern extremity of the Hashemite Kingdom. The area, which had been open in all directions for thousands of years, was now cut off from most of its natural hinterland.

The scholars who began work in the wadi in 2001 saw a dramatically different scene to what Schumacher found: the plentiful springs had been redirected to provide water for the nearby city of Irbid, and the evergreen resting spots for migratory birds were dried up and barren. Only since the building of the Wadi al-ʿArab Dam (which inundated a number of prehistoric settlements) has the wadi recovered some of its fertile character.

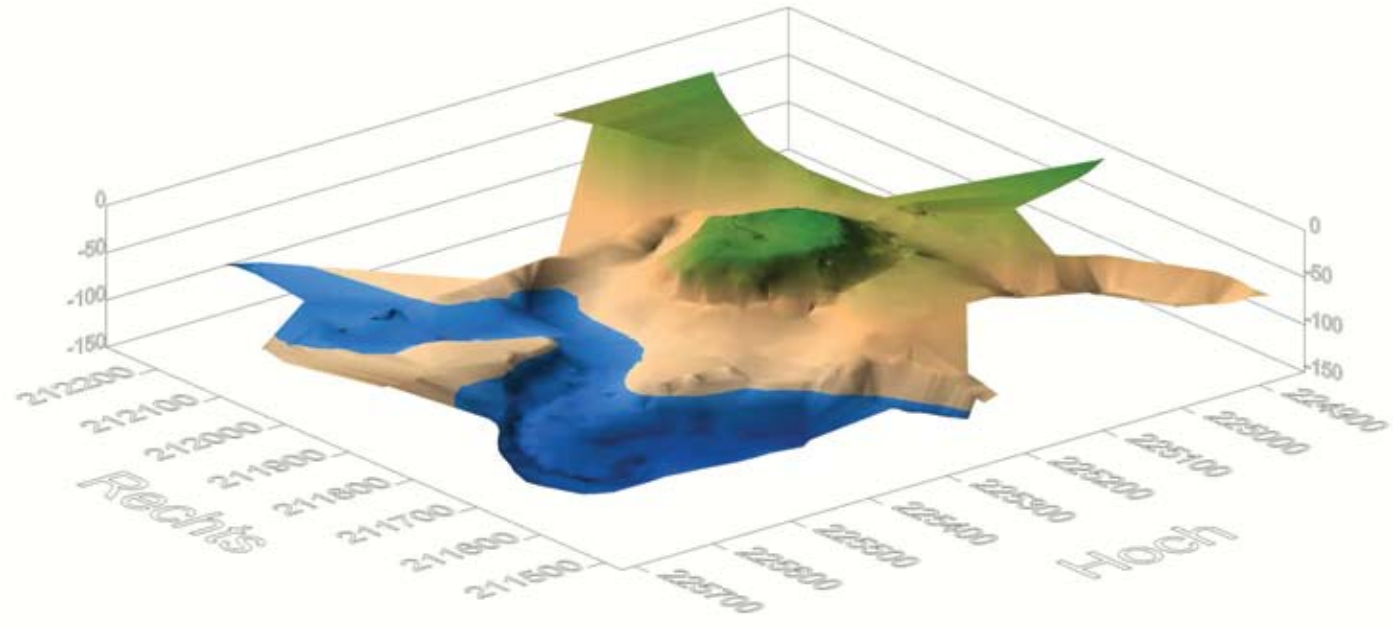
Between Cultures

The variety in settlement history in the Wadi al-ʿArab is a fortunate circumstance for archaeology. At the point of overlap between Palestine and Syria-Mesopotamia, the area (known as Gilead during the Old Testament period) was seen by both as belonging to its sphere of influence, and thus played a key role in cultural and political interaction. The frequent cultural developments and political upheavals of the ancient period in Palestine—usually triggered by the northern cultures—can be observed particularly well in this wadi.

The wadi formed part of a trade route that was used for thousands of years between Egypt and the Mediterranean in the south and west and Syria and Mesopotamia in the north and east. The unique topography of the valley enables the traveler to climb from the Jordan Valley at 290 meters below sea level to the Transjordan Highlands at 550 meters above sea level completely without steep inclines or narrow passages at an average gradient of 3 percent over thirty kilometers. The steep and craggy Yarmouk Valley immediately to the north could not be used in the same way, and the valleys to the south were also considerably more



The Wadi el-ʿArab's, seen in this satellite image, was part of an ancient trade route, and a number of springs, fertile soils, and a moderate climate all provided for excellent living conditions. *Courtesy of Jens Kleb.*



A survey conducted in 2001 and 2002 revealed over one hundred sites in the Wadi el-'Arab, which date from the Palaeolithic to the Islamic periods. The data collected during this survey also resulted in this three-dimensional terrain model of Tall Zira'a, from the southwest. Courtesy of Jens Kleb.

difficult with their average gradients of 10 percent. Moreover, the southern valleys led directly into the Ajlun Range, involving much greater differences in altitude. The Wadi al-ʿArab's unique topography destined it to be the preferred route through the Transjordanian Highlands, which is why the modern four-lane highway from the Jordan Valley to Irbid, built in 2006 along the path of an earlier road, uses this route.

In 2001, Dieter Vieweger of the Biblical Archaeological Institute in Wuppertal began to investigate the history of the hitherto forgotten region around Gadara. First, in 2001 and 2002, he intensively examined the twenty-five-square-kilometer surface of the area using the most advanced methods such as remote sensing, photogrammetry, and GPS-aided terrestrial measurements. Over one hundred sites were discovered and recorded that date from the Palaeolithic to the Islamic periods. These data produced a digital terrain model of the tall.

A Never-Ending Spring

Tall Zira'a is the most central and strategic place in the wadi. It lies at the confluence of the Wadi al-'Arab and its largest tributary, the Wadi az-Zahar, and rises impressively twenty-two to forty meters above the surrounding countryside (depending on the direction). The circular-shaped hill has a diameter of 240 meters by 240 meters at its base and 160 meters by 160 meters at its plateau, and boasts an artesian spring in its center. It was used for farming up until very recently, as expressed in the name "hill of agriculture."

The artesian spring on Tall Zira'a always supplied enough fresh water for the people who lived there. The neighboring wadis with their plentiful water supply, to which the many disused water mills in the area still bear witness, enabled the inhabitants to maintain a high standard of living and concentrated settlement activity, even in the Roman period when the tall was somewhat overshadowed by Gadara.

A Twelve-Meter-Thick History Book

With its twelve meters of cultural layers, Tall Zira'a is as yet the only place in northern Jordan where settlement history from the Early Bronze Age to the Islamic Period—a period of over five thousand years—can be investigated at a single site. The tall contains information on all of the most significant historical periods in Palestine since the fourth millennium BCE. As such, it sheds light not only on the local history of the area, but also on thousands of years of cultural developments in Palestine.

Paging through the History Book

The Biblical Archaeological Institute (BAI)'s first excavation campaign on the 5.88-hectare mound took place in the autumn of 2003 (Vieweger 2002; Vieweger with Eichner and Leiverkus 2002, 2003). The results inspired such optimism that the BAI and the German Protestant Institute of Archaeology (GPIA) in Amman agreed to a formal cooperation with the intention of continuing the project in future years on a much larger scale. The GPIA in Jerusalem joined this very successful collaboration

A view of Tall Zira'a from the north photographed from Umm Qays-Gadara. In the foreground, Area II is visible as it appeared in Spring 2007.

in 2006. Since 2004 the project has been running under the leadership of the two authors.

In order to gain an initial insight into the "inner life" of the tall, we applied various geophysical survey methods, such as geo-electric mapping and two- and three-dimensional tomography. The profile illustrated in the figure on page 148 (bottom) shows a measurement from east to west across the mound and sheds light on its geological structure.

This model shows a very thick cultural layer under a dried-out surface with extreme low conductivity that appears, as expected, on the diagram as a high-ohm area. In the west of the tall the layer is all of twelve meters thick. Because the entire hill slopes slightly to the east, the water from the spring also flowed in this direction. The peculiar double-cone-shaped form around 32 meters deep presumably relates to the shape of the artesian spring (Vieweger with Eichner and Leiverkus 2002:175).

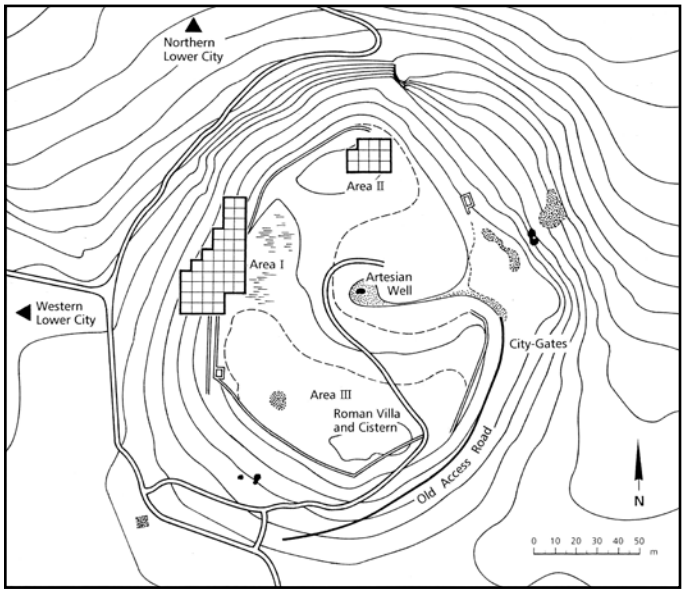
A Dutch team opened a four by eight meter test trench in 2001 and 2002, but only a preliminary report has been published about it at this stage (Dijkstra, Dijkstra, and Vriezen 2005; Vriezen 2002, 2003).

Opening the First Pages

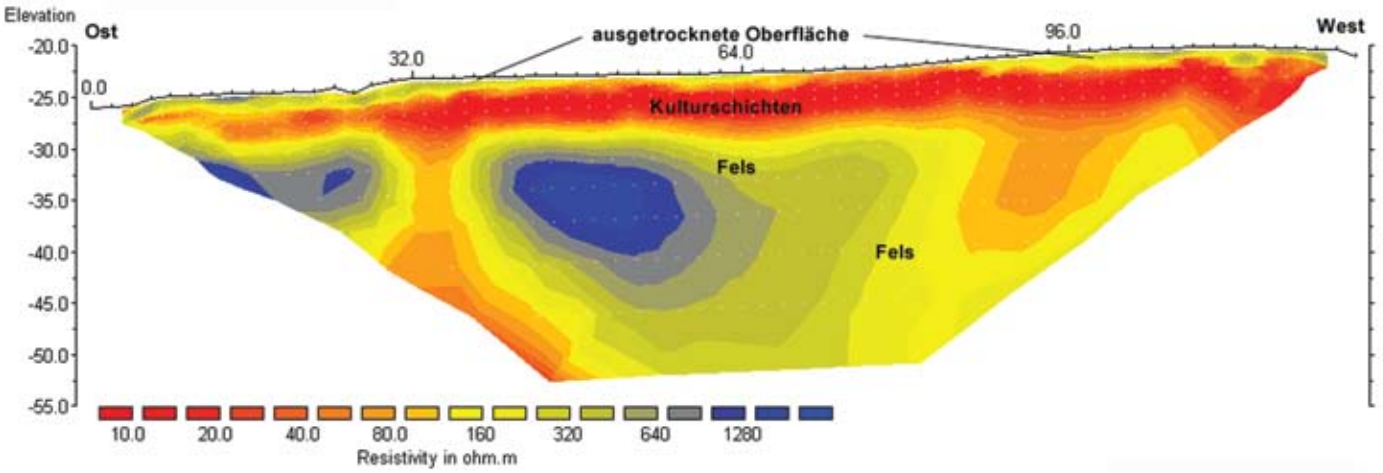
Our team opened the first excavation area in the northwest of Tall Zira'a. The preliminary investigations had shown that this was the best place to expect a comprehensive and long stratigraphic sequence and significant architectural remains. The topography on this part of the tall was also especially suitable as the natural slope of the hill is at its least gentlist in this spot, with only twenty-two to twenty-five meters height difference to the foot of the mound. For this reason we logically expected the inhabitants to have built fortifications on this side. The microclimate of this area also meant that a great number of domestic structures could be expected, as this is the point at which, from noon until evening, the thermal onshore winds from the Mediterranean hit the tall and provide a welcome cool breeze in the sweltering heat.

By spring 2007, we had opened one thousand square meters in Area I. The depth of the excavations at present is a mere four and a half meters of the presumed twelve. Chronologically, the latest period of the Late Bronze Age has been reached. For logistical and, more importantly, safety reasons, it is not possible to continue any deeper into the older strata until the Late Bronze Age stratum is excavated in the entire area and all the baulks are removed.

We opened a new excavation area—Area II—in the spring campaign of 2006 in the north of the tall. It lies at the highest and most prominent part of the tall's plateau, and was well protected from external enemies by the forty-four meter-high



Overview plan of the tall and the three excavation areas. *Sketch by Ernst Brückelmann, Brüggen-Born/BAI.*



This tomographic profile from east to west on the plateau of Tall Zira'a yields essential geological insights. In the profile, a package of cultural layers of eleven to thirteen meters thickness can be seen below the dried-up surface. In the east, bedrock reaches almost to the surface. Since the tall as a whole slopes slightly toward the east, drainage occurred in that direction. *Courtesy of Patrick Leiverkus, BAI Wuppertal.*

cliffs that form the slope to the north. We expect to find elite and/or administrative buildings in this part of the tall.

We identified Area III in spring 2007 for future excavations. It is an area of about five hundred square meters in the southern part of the tall that probably contains the remains of a Roman villa. The cistern alone, which is currently accessible through a hole in its roof, is impressive with its large dimensions (10.5 m long × 6 m wide × 5¾ m high) and eight-centimeter-thick plaster lining. The fact that such a large cistern was necessary a mere eighty meters away from a bubbling spring and that massive buildings can clearly be seen in the aerial photographs point to an imposing and significant installation.

Only a Few Pages are as Yet Decipherable

The initial surface surveys have already yielded considerable amounts of Early Bronze Age pottery on the northwest of the tall, suggesting that there will be considerable settlement remains from this period. This has been verified, but because it is below so many other cultural layers, we have only been able to investigate this stratum in the form of the outermost, and very large, city wall. The wall does, however, give an initial impression of the size and significance of the city, which suggests that it was a well-fortified settlement typical of the Early Bronze Age in Palestine.

A few meters above the Early Bronze Age wall, we have also excavated the remains of two strata of Middle Bronze Age structures (in layered trenches because of the gradient). They are domestic houses whose outermost walls have eroded down the slope. The tall will not only give insights into Early Bronze Age urban culture, but also the period of reurbanization in the Middle (1800–1550 BCE) and Late (1550–1200/1150 BCE) Bronze Ages, the periods generally labeled Canaanite in both biblical and non-biblical sources. For the first time, Tall Zira'a will enable archaeologists to investigate whether there was a seamless continuity of Middle Bronze Age material culture into the Late Bronze Age in Transjordan (as was the case in the West Bank), or whether there were cultural changes in this transition. Nonetheless, it will take more than a decade to open these "pages of the history book."

International Trade, Cultural Exchange, and Prosperity: The Late Bronze Age

The earliest layer that we have excavated extensively is the end of the Late Bronze Age stratum (Häser and Vieweger 2007; Vieweger and Häser 2007). The most significant structure uncovered so far is the massive casemate wall that once protected the city on its northwestern edge. The pottery dates it to the Late Bronze Age and the scientific analysis of charcoal remains confirms this, giving an approximate dating of somewhere between 1450 and 1300 cal. BCE. We have excavated six casemate chambers thus far. In peacetime they were used as storerooms; in wartime they could be filled with earth and stones to produce an enormously thick wall that would protect the inhabitants of the city from attack. Behind the wall was a large courtyard with three covered channels. These collected the rainwater that accumulated behind the city wall into a settling basin in one of the casemate chambers, and from there into a vertical chute.

In the south, the casemate wall ended in a large, inward-facing tower in two parts. In the southern half we found a large room that had seen a number of changes, the latest of which involved a low partitioning wall in the west, creating behind it a small room only one meter wide. On this wall were two large basalt column bases that once supported wooden columns that held up the roof. The peculiar character of this small partitioned structure calls to mind the Bronze Age gate sanctuaries found elsewhere. A large stone, cut flat on the bottom and with a symmetrical peak towards the top, which lay toppled beside the column bases, calls to mind the *massebot* (standing stones) found elsewhere in Palestine.

To the south of the "gate sanctuary" we uncovered a 2¾-meterswide-gate opening with four wide steps. This gate would have provided the most direct access to the lower cities to the north and west.

If the gate installation is symmetrical, we can expect another large tower on the southern side. This would make the entire gateway 52 meters wide. We still need to excavate an Iron Age I house (see below) in this area before we can go any deeper and test our theory. To the south of the gateway we have also uncovered a mysterious, bottle-shaped, stone-lined "hollow" in the ground, the entrance to which was covered by a meticulously worked, disc-shaped stone with a diameter of roughly one meter and bearing a 15-centimeter-wide hole in its middle. It has been excavated to a depth of 2.6 meters. For fear of it collapsing, we will not be able to investigate this structure further until the surrounding layers have been removed.

Among the objects that were found on the paving surrounding the hole were the remains of a large red-and-black-on-beige painted jar with two handles bearing a number of animal scenes, one of which includes a human. Further pieces were found in the area in spring 2007, so that we have now been able to reconstruct almost completely the neck and base of the jar. The animal scenes in the middle frieze have now also been joined by a lizard. The images may depict scenes from legends or mythology, but we will need further research to know for sure. This jar, its context, and the other pottery sherds found with it date to the Late Bronze Age. A charcoal sample from the layer of loam in which the sherds of the vessel were situated dates to between 1440 and 1300 cal. BCE.

In the spring campaign of 2006, we found the first domestic structures inside the casemate wall. Unlike their Iron Age counterparts, these houses have sizable ground plans. The width of their walls suggests that they possessed a number of floors. To date we have excavated two courtyard houses and part of a third elaborate building north of the casemate wall.

We have also uncovered part of another room or courtyard of a larger building, but its structure and function will only be clear once we have excavated it in its entirety. In any case, the building in question was immediately attached to the casemate wall and its context is Late Bronze Age. Two radiocarbon

Aerial photograph of Area I of Tall Zira'a from the east. The casemate wall (right) and a large, inward-facing tower (center) in two parts are the visible structures from the Late Bronze Age stratum. The left part, which contains two basalt bases that once supported wooden columns that carried the roof, is probably a sanctuary. To the south (left) of the "gate sanctuary," a gate opening has been uncovered with four wide steps. Walls to the left of the Late Bronze Age architecture belong to the Iron Age I (houses with a large, round silo) and, further to the left, to the Iron Age II strata.

This view of Tall Zira'a from the northwest was photographed from a helium balloon in August 2007. Area I is visible in the foreground. To its left is Area II, and in the center of the tall, surrounded by reeds, is the now almost completely dry spring.

Area III has yet to be excavated, but probably contains the remains of a Roman villa. A cistern below the villa is accessible through a hole in its roof. This photo of the eastern wall of the cistern reveal its large dimensions and thick plaster lining.

The Late Bronze Age casemate wall is the most significant structure so far uncovered at the site. In peacetime the casemate chambers were used as storerooms; in wartime they were filled with earth and stones to produce an enormously thick wall that would protect the inhabitants of the city from attack.

samples from this context have yielded datings of 1450/1440 and 1300 BCE with a probability of 95.4 percent. The valuable finds that were made in this structure suggest it may have had a special function. Among these is a cylinder seal measuring 3 centimeters in height and 1.3 centimeters in diameter. It is made of faience, covered with a green glaze, and engraved with the image of two stags colliding and looking over their backs. They are divided by a further line and the seal also bears an interlaced border. The seal belongs to the western group of the so-called Common Style of Mitannian glyptic and can be dated to the fourteenth to thirteenth centuries BCE.[1] Examples of the western version of this style have mainly been found in Palestine and Syria.

On the floor, very close to where the seal was found, in an area of 1.5 meters by 1.5 meters, we found another twenty-three cylinder seals of varying quality and decoration. It would seem that the seals, together with a silver pendant decorated with a standing figure (5.8 × 3.4 cm), a large scarab (3.7 × 2.4 × 1.4 cm), and dozens of beads, fell to the ground from a higher surface (a table, cupboard, or shelf) during the destruction of the house and were left scattered over the floor.

Cylinder seals were used both to identify and to certify. Because each seal had a different engraving, the seal's impression could be used to identify the seal's owner over large distances. Clay seals with such impressions were used, for example, to seal the knots tying various documents together or around the lids of closed containers of goods to protect their contents from unauthorized use, alteration, or removal. Seals were an important part of legal procedure for thousands of years and played such a central role in the economy, communication, and politics that they were seen as signs of authority and worn as jewelry.

Most cylinder seals from Tall Zira'a are made of faience ("Quarzfritte") and are green-glazed. This material contains 90 percent ground quartz or natural sand with added lime and alkaline carbonates. Burning this produces a sintered material that is not completely melted, and, as such, is not quite glass. The motifs were engraved using a cutting wheel and a drill with a spheroidal head (Salje 1990:103).

The wealth of the city and its wide-reaching trade links are reflected in the manifold finds of this period, among them two additional scarabs. One of them (1.3 cm high) is inscribed with the praenomen A-wsr-re, a Hyksos ruler

In a small room near a tower that formed part of the casemate wall, two large basalt columns bases once supported wooden columns that held up the roof. The peculiar character of this small partitioned structure calls to mind the Bronze Age gate sanctuaries found elsewhere. A large stone, cut flat on the bottom and with a symmetrical peak towards the top, which lay toppled beside the column bases, calls to mind the *massebot* (standing stones) found elsewhere in Palestine.

Architectural plan of the Late Bronze Age stratum, which dates to the fourteenth and thirteenth centuries BCE. *Drawing by Jürgen Kröpsch, BAI Wuppertal.*

This Late Bronze Age jar in black-and-red on beige depicts images of animals and a human figure sitting on a chair and playing the lyre. Height 40 cm. *Drawing by Ernst Brückelmann, Brüggen-Born/BAI.*

Among the sherds of the Late Bronze Age jar was one with the depiction of a lizard.

with the throne name Apophis, who reigned from about 1590 to 1550 BCE. As a product of the Second Intermediate period, it must be seen as an heirloom. The modest workmanship of the piece suggests that a non-Egyptian craftsman made it.

The excavations found a middle section of a terracotta figurine of a naked, standing woman, with her arms hanging down the sides of her body in one of the courtyard houses alongside numerous sherds of imported pottery from Mycenaean Greece, Cyprus, and Egypt, bronze fragments, and a decorated bone tool handle. The figurine is of the type usually associated with the Syrian-Palestinian fertility goddess Ashtarte/Asherah. Among the more interesting of our bronze objects was an arm of an originally wooden (?) figurine. Also noteworthy is a calcite vessel carved with figures of birds. Imported faience wares from Egypt include vessels with papyrus images and rings with seals.

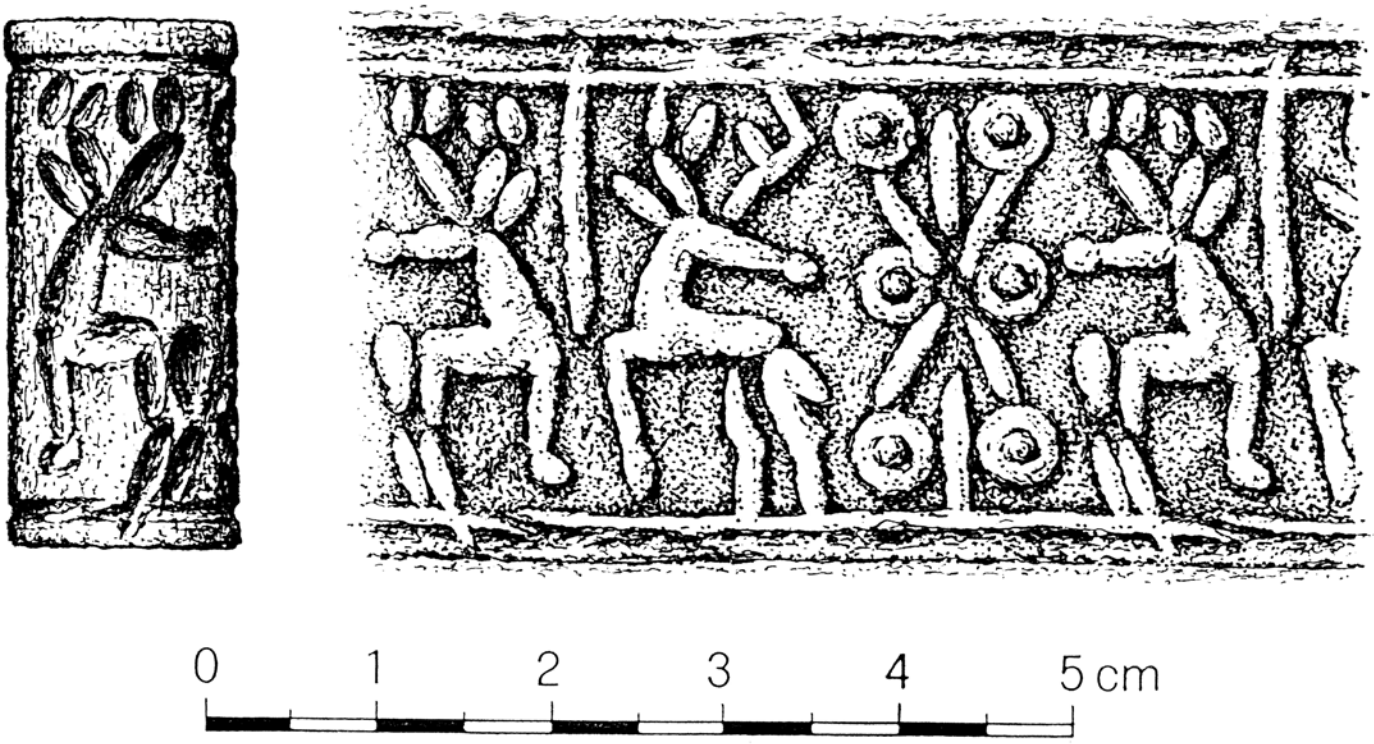
The solid architecture, outstanding finds, and high percentage of imported pottery from Cyprus and Mycenaean Greece (5 percent) all suggest that Tell Zira'a was an important urban center in the Late Bronze Age. It is thus highly probable that it was the center of a Palestinian city-state. We have discovered additional Late Bronze Age strata in other parts of the excavation and plan to uncover them over the next few years, allowing us to gain further insights into the structure and culture of the Late Bronze city.

The Beginning of the Old Testament Period: The Iron Age I Period

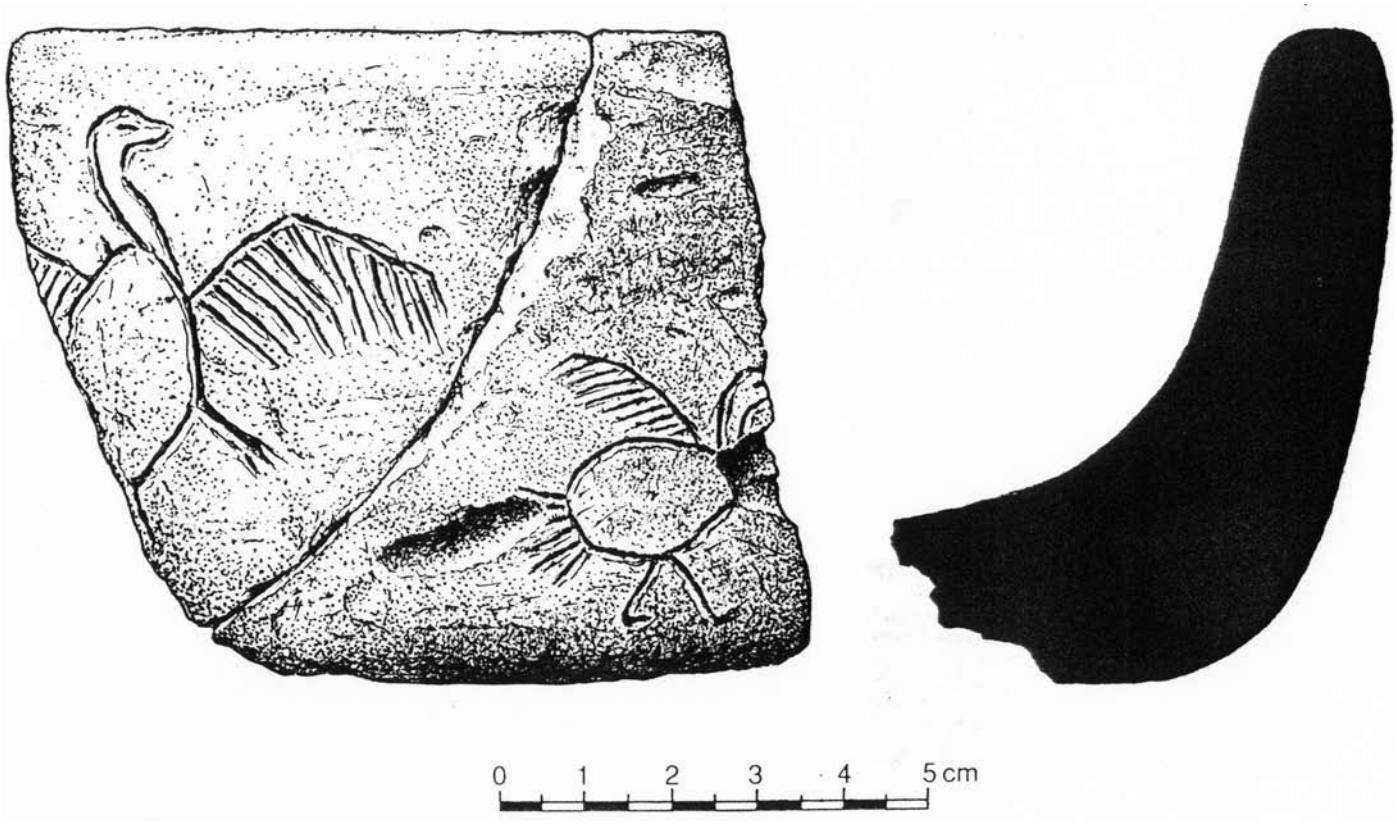
The settlement on Tall Zira'a appears to have experienced a dramatic cultural upheaval in the period that followed the Bronze Age (twelfth to eleventh centuries BCE). This is directly or indirectly related to the disintegration of the Late Bronze Age Canaanite city-state system. In place of the fortified city now stood an open village without even an outer wall inhabited by farmers.

The inhabitants of Tall Zira'a in the twelfth and eleventh centuries BCE used the Late Bronze Age ruins for their own settlement. The remaining foundations of the city wall were furnished with storerooms and workrooms for various agricultural activities. The walls of stables and simple sheds were built against the remains of the Bronze Age walls. What has been found corresponds to the traditional scholarly view of the beginnings of other settlements to the east of the Jordan, such as Ammon, and of Israelite and Judaean settlements in the highlands west of the Jordan, as being small and village-based.

On the other hand, in the southern part of Area I, a very large building with a paved floor at one of the entrances and with thick and elaborately constructed stone walls has come to light. A door-hinge stone was found in its original position. This structure was either two dwellings in one, or a single dwelling with two separate entrances. The excavated part of



This green-glazed faience cylinder seal was found in 2006 and belongs to the Common Style of Mitanni glyptic. *Drawing by Ernst Brückelmann, Brüggen-Born/BAI.*

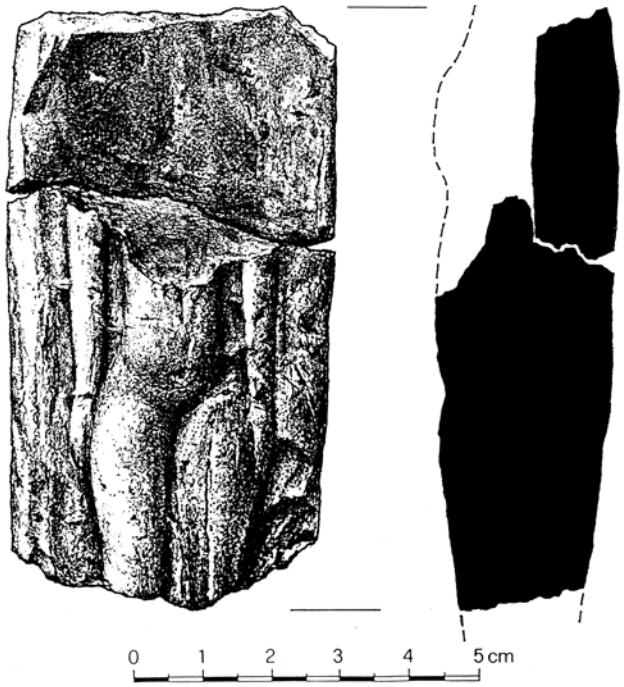


This calcite vessel from the Late Bronze Age stratum is carved with figures of birds. 7.8 cm high. *Drawing by Ernst Brückelmann, Brüggen-Born/BAI.*

▲ The colonnaded *decumanus maximus* was Hippos' main street, bisecting the city from east to west. Note the two re-erected columns in the central section of the street on the left bottom.

◄ This silver pendant decorated with a standing figure was found with the cylinder seals.

◄ ◄ This Egyptian scarab was found in the youngest Late Bronze Age stratum with the cylinder seals and silver pendant.



The excavations in the Late Bronze Strata found this middle section of a terracotta figurine of a naked, standing woman, with her arms hanging down the sides of her body, in one of the courtyard houses alongside numerous sherds of imported pottery. The figurine is of the type usually associated with the Syrian-Palestinian fertility goddess Ashtarte/Asherah. 8.1 cm high x 4.9 cm wide. *Drawing by Ernst Brückelmann, Brüggen-Born/BAI.*

This scarab, engraved with the throne name of the Hyksos ruler Apophis who ruled from about 1590 to 1550 BCE, is testimony to the city's wide-ranging trade links. *Drawing by Ernst Brückelmann, Brüggen-Born/BAI.*

This bronze arm is from a figurine from the Late Bronze Age stratum. 4.3 cm high x 4.9 cm long.

Imported faience wares from Egypt in the Late Bronze Age include vessels with papyrus images and rings with seals. 7.0 cm high x 1.3 cm thick.

the house is a courtyard house, which is typical for the Late Bronze Age. It shows clearly the continuity between Late Bronze and Iron Age architectural styles.

In summary, Tall Zira'a in the Iron Age I period was an agricultural settlement without fortifications, albeit with some larger buildings. Two charcoal samples from this stratum give a dating of between 1220 and 970 cal. BCE, and 1270 and 1040 cal. BCE respectively.

Between Israel and Aram: The Iron Age II Period

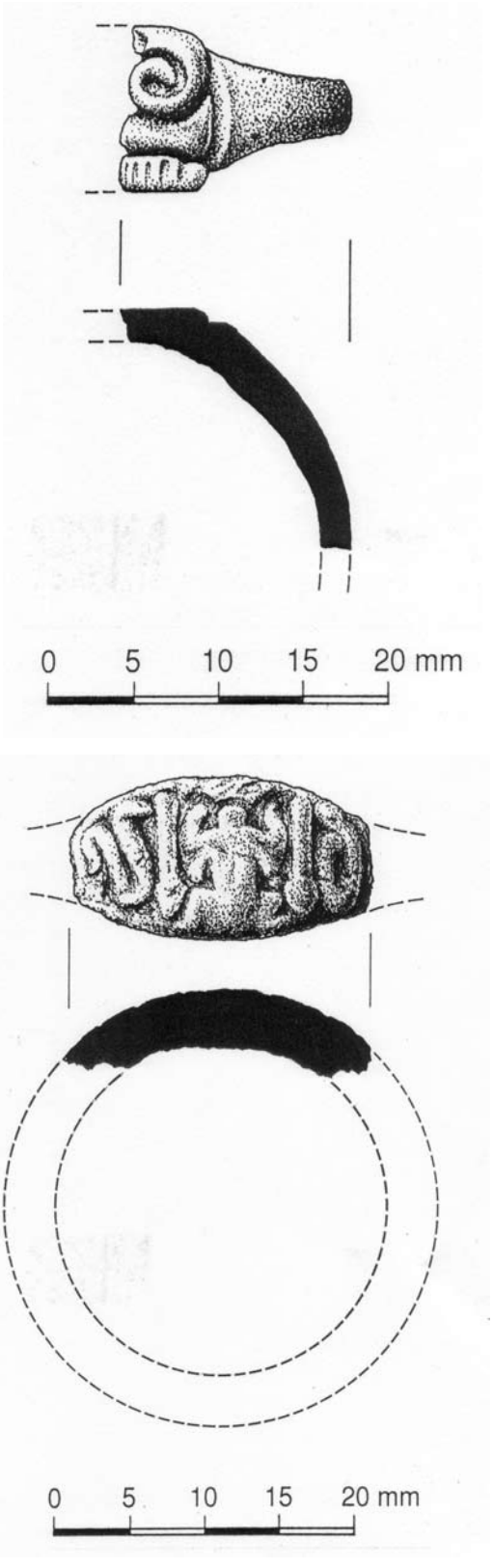
According to the Old Testament, during the classical Old Testament period in which the territorial kingdoms of Ammon, Moab, and (somewhat later) Edom developed further south, Tall Zira'a belonged to the sphere of influence either of Israel (at that time ruled from Samaria) or of Aram-Damascus. In this period—Iron Age IIA/B (tenth to eighth century BCE)—the Israelite kings are claimed to rule "sixty great cities with walls and bronze bars" in Gilead[2] (1 Kgs 4:13; (cf. also Num 32:39–42; Deut 3:13–15; Josh 13:29–31; Judg 10:3–5; 1 Chr 2:21–23). The excavations at Tall Zira'a will show whether the image painted by the Old Testament corresponds to reality. What needs to be clarified is the extent of influence of the Aramaeans from Damascus in this period.

The architecture of the Iron Age IIA/B period points to a considerably larger population on the tall than in the Iron Age I period. The settlement takes on an urban character and is once again protected by a town wall, albeit this time in zigzag form and a great deal less solid than its Late Bronze Age counterpart. Altogether the settlement appears to have developed in an agglomerate pattern, with houses built very close together and domestic and administrative structures standing directly adjacent to one another. House and property boundaries are signified in many cases by double walls.

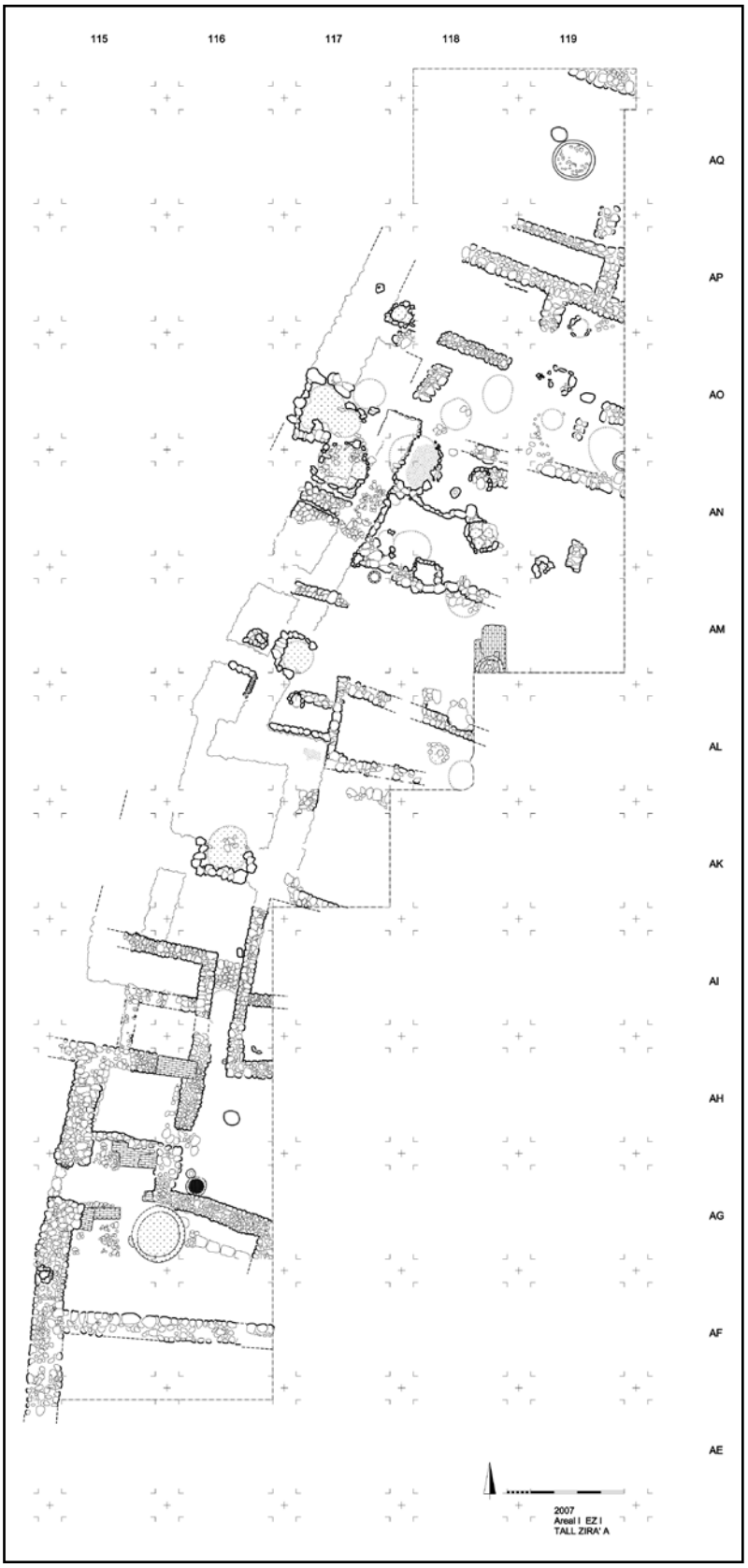
Presumably an earthquake, fire, or military attack damaged parts of the town in about 900 BCE, as many buildings have two construction phases. The reconstruction work involved some adaptations within some of the houses. If the damage was indeed the result of conflict, the Israelite-Aramaean struggles that are documented in the book of Kings and on the Tel Dan Stele come to mind, but we have no proof of this as yet.

The houses, with their large courtyards, were used not only for habitation but also for storing supplies and producing food and wares. In one of the houses, three column bases of piled field stones divided a roofed space from a courtyard area with an oven and a large storage vessel. At the end of the row of column bases stood a *massebah* in its original position. The adjoining part of the house to the south was divided into four rooms that were used as workshops: in the southeasternmost room, which was partially paved, we found a (metal or glass?) smelting furnace with a crucible. After careful removal, the furnace is now being examined in the German Mining Museum in Bochum. Further to the north was a room or yard with an elaborate fireplace and five baking ovens that were once in simultaneous use.

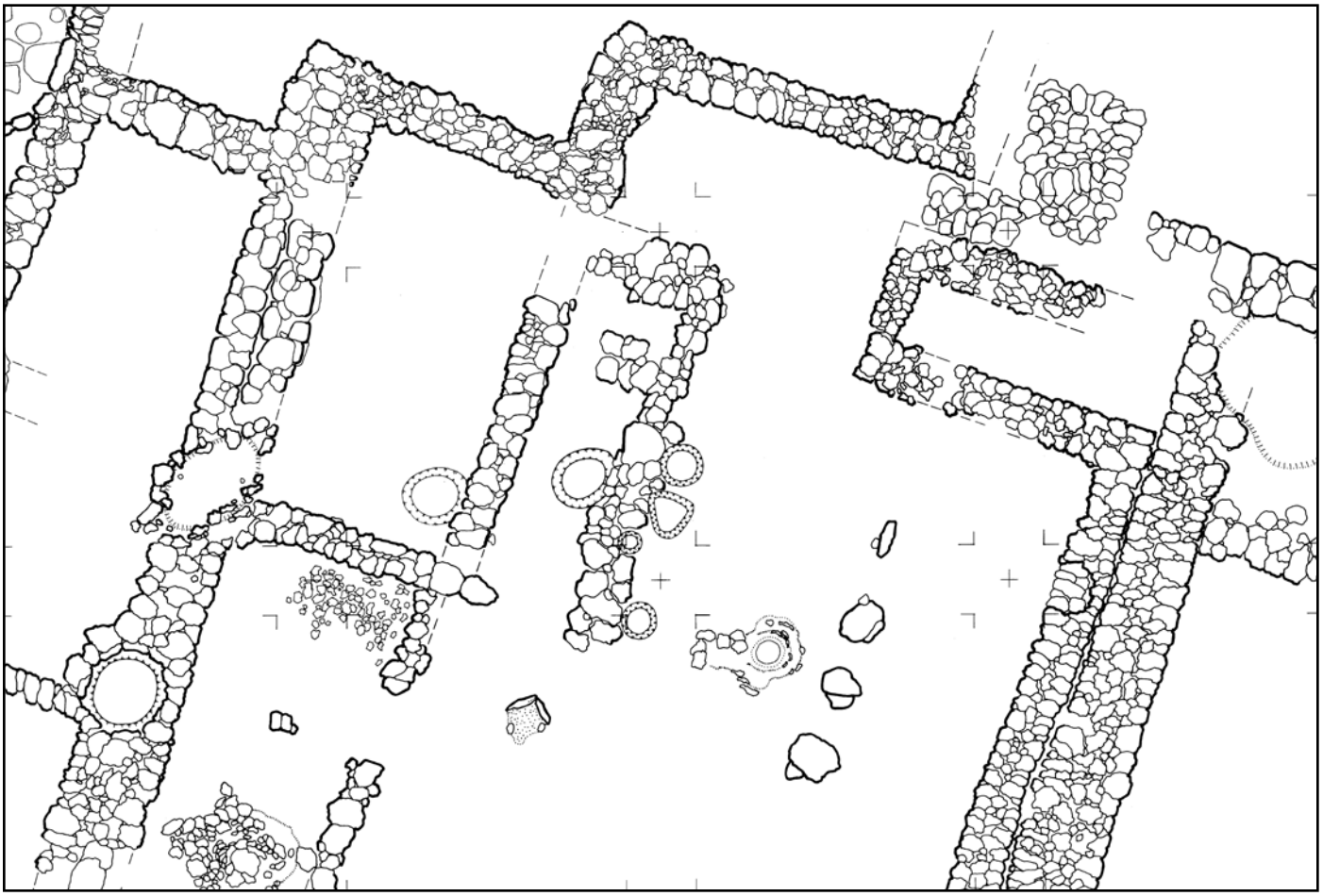
Other remarkable finds were excavated in the Iron Age II layer, including a cylinder seal (2.4 cm long) similar to the one



These faience rings were also imported from Egypt in the Late Bronze Age. Left: 2.1 cm long x 1.3 cm wide x 0.4 cm thick; right: 1.0 cm wide x 0.2 cm thick. *Drawings by Ernst Brückelmann, Brüggen-Born/BAI.*

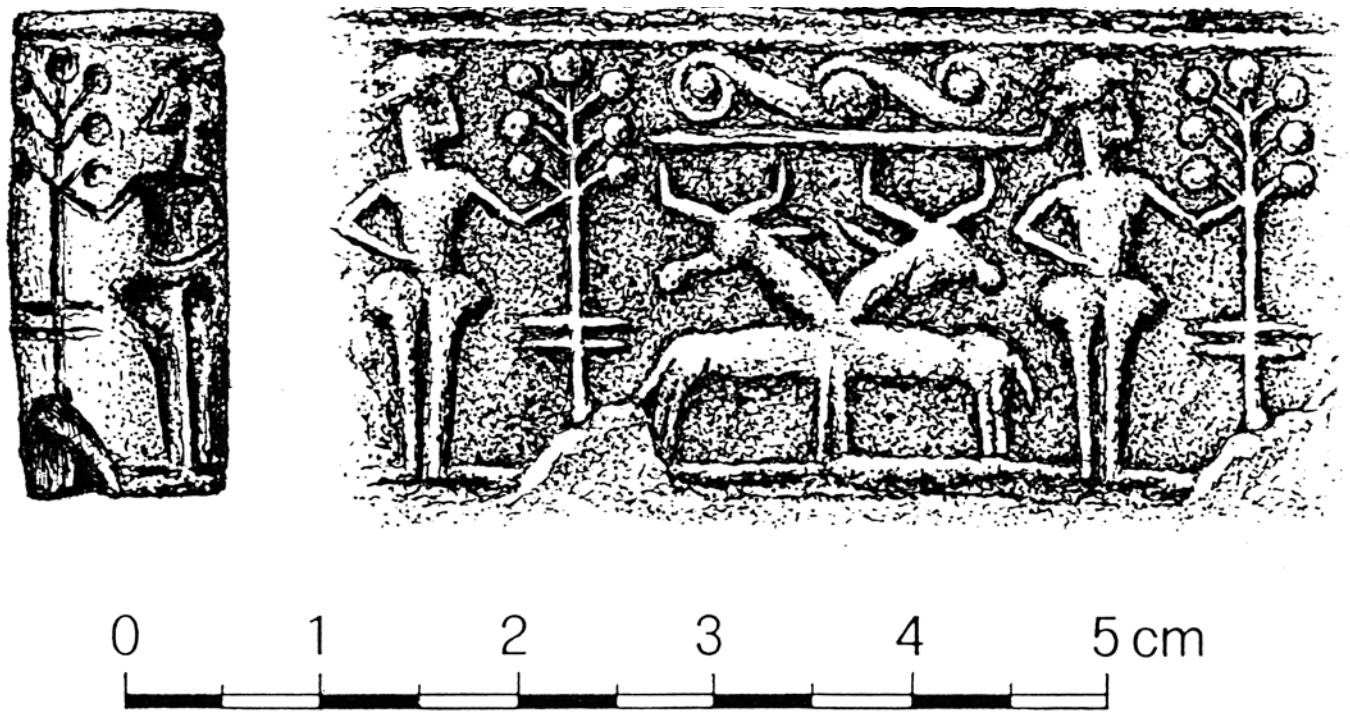


Architectural plan of the Iron Age I stratum in Area I. *Drawing: Jürgen Kröpsch, BAI Wuppertal.*



This Iron Age II house, with its large courtyard, served not only for habitation, but also for storage and the production of household items. *Drawing by Jürgen Kröpsch, BAI Wuppertal.*

A *massebah* (left) stands in its original position at the end of a row of column bases of piled field stones that divided a roofed space from a courtyard area in the same Iron II period house.



This faience cylinder seal in the so-called Common Style of Mitanni glyptic shows two stags facing each other with their heads turned backwards and their bodies partly fused together. A naked man stands next to them holding a so-called bouquet tree. Found in an Iron II period context, the seal must have been an heirloom.

Viewed from the front, this terracotta figurine is the head of a goddess with a Hathor wig. Viewed from the side, however, the head is that of a lioness, representing the goddess Sekhmet. 5.0 cm high x 5.1 cm wide. *Drawing by Ernst Brückelmann, Brüggen-Born/BAI.*

described above from the Late Bronze period. It shows two stags facing each other with their heads turned backwards and their bodies partly fused together. A naked man stands next to them holding a so-called bouquet tree. This depiction is also in the style of Mitannian glyptic and therefore we date it to the fourteenth or thirteenth century BCE, but as it was found in a later Iron Age context, it would appear to have been an heirloom.

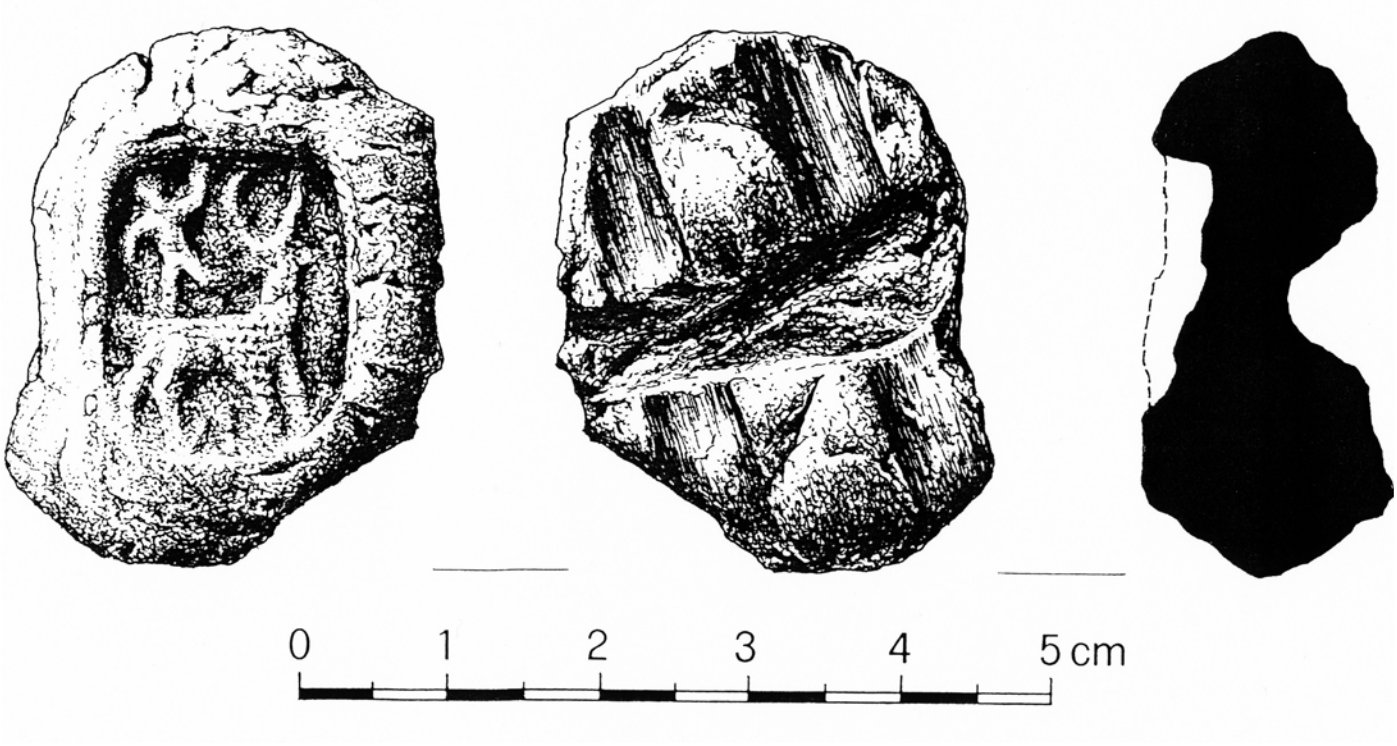
Hathor and Sekhmet: Two Goddesses in One

In a tale from Middle Kingdom Egypt, Sekhmet is characterized as literally bloodthirsty. Ra deceitfully gives her huge quantities of blood-colored beer. She becomes too drunk to continue the slaughter and humanity is saved. As a result Sekhmet becomes gentle, loving, and kind by the end of the tale. Therefore Sekhmet was dualistically identified with Hathor, making them one goddess, Sekhmet-Hathor. Hathor held a dual personality in a new cult that arose during the Middle Kingdom: one goddess with two sides. It is for this reason that Hathor, as Sekhmet-Hathor, was sometimes depicted as a lioness.

In one of the houses we also found the head of a terracotta figurine portraying Ashtarte/Asherah with a so-called Hathor-hairstyle. It is a remarkable piece due to the working of the face and profile; from the front it is the face of a woman, while from the side it is the profile of a lioness. Such a representation is, as far as we know, unique in Palestine. The closest parallels are two Ashtarte figurines with Hathor wigs, which, however, do not have the face of a woman but only of a lioness. They were found in Tall Massad al-Jisl (Rahmani 1959:184–85, pl. XXIV, 1–3) and in Beth Shean (Rowe 1940:pl. LXVIII, 3), and present a combination of the goddess Ashtarte with the Egyptian goddesses Hathor and Sekhmet.

The later Iron Age II stratum, the layer of rebuilding after the catastrophe, turned up additional interesting finds, including a small, seated gold- and silver-plated bronze figurine (7½ cm high) depicting the Syrian god El in a pose of blessing. The figurine was found above a burn layer beneath the wall of an Iron Age dwelling, and perhaps served as a foundation sacrifice. The previous building was destroyed sometime between 1270 and 980 cal. BCE, so the deposition of the figurine was later. An oval seal impression in clay (3.6 cm × 2.7 cm × 1.7 cm) also depicts a deity, this time Hadad or Baal, standing on a bull. Impressions of tie fastenings can still be seen on the back of the piece.

Another fascinating find is the basalt head of a man (19 cm × 12.5 cm × 8.5 cm). Although the facial features are not very clearly worked, one can easily make out the mouth,



An oval seal impression in clay (3.6 cm x 2.7 cm x 1.7 cm) also depicts a deity, this time Hadad or Baal, standing on a bull. Impressions of tie fastening can still be seen on the back of the piece. *Drawing by Ernst Brückelmann, Brüggen-Born/BAI.*

Among the finds of the Iron II period was this seated gold-plated bronze figurine depicting the Syrian god El in a pose of blessing.

This basalt head of a man or deity was buried face down in a wall of an Iron Age II house.

Bronze head of a bear from the Hellenistic period. 1.3 cm high x 1.8 cm wide.

the nose, the eyes, and the ears. On the forehead is a small protrusion that suggests the head once had some sort of cap. The figure was buried face down in the wall of an Iron Age house. Since it has been reused as building material, it must be older than the house. It is unclear who is portrayed. Perhaps it also represents a god or one of the city's important men.

Everything changed dramatically with the Neo-Assyrian occupation of the eighth century BCE; the cities of northern Transjordan ceased to exist. Tall Zira'a also lost its urban character in this period. While the kingdoms of Ammon and Moab further south flourished under Assyrian control, northern Gilead became a rural backwater.

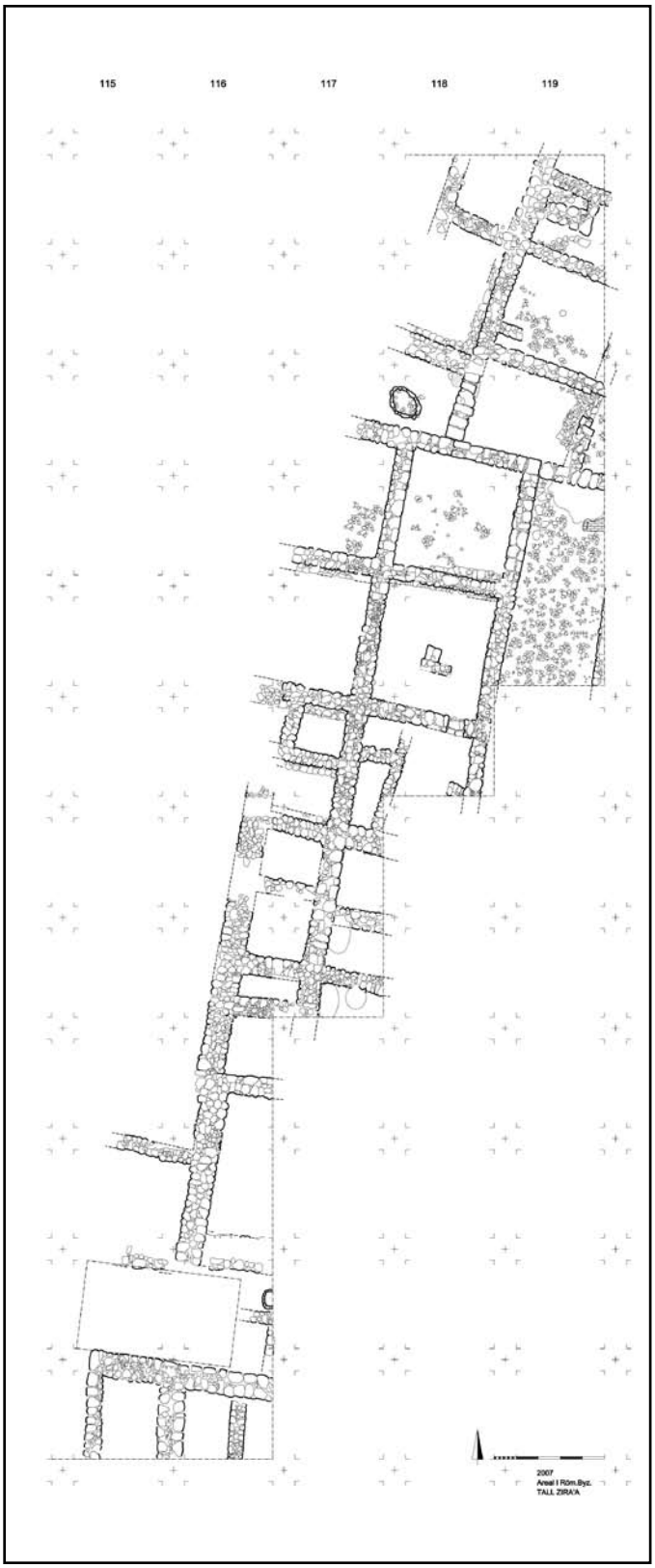
In the Shadow of the Decapolis City of Gadara

During the Early Hellenistic period (fourth to second century BCE) Area I was used—mainly for waste disposal—but not inhabited. The people lived in other parts of the tall. Three large pits had also been dug and carefully lined with stones for storing grain. Among the more interesting objects of this era is the bronze head of a bear.

In the last Hellenistic strata, the settlement pattern on the tall changed fundamentally once again. Wadi al-'Arab and its settlements now lay in the hinterland of Gadara, a Hellenistic city that thrived under the Romans as one of the famous "Ten Cities." Even the Roman roads ignored the topography and aligned themselves with the new urban center. The tall ceased to be the central urban settlement of the region, but it was not deserted. On the contrary, it remained densely settled, probably due to its excellent water supply and fertile soils.

We have uncovered five large houses from this period in Area I along a cobbled street that follows the contour of the hill. The pottery attests to the continuity of the settlement

In the Hellenistic period, Tall Zira'a was a part of the hinterland of Gadara (modern Umm Qays), a city of the Roman Decapolis. This photo shows the colonnaded *decumanus*, or main thoroughfare, of Gadara. In the background, the upper city of the Hellenistic-Roman-Byzantine town is visible.



Architectural plan of the Roman–Byzantine stratum in Area I. The site was continuously settled from the first to the eighth centuries CE. *Drawing by Jürgen Kröpsch, BAI Wuppertal.*

from the second century BCE to the sixth century CE. The coins found in the houses could be dated from the second century BCE to the sixth century CE.

A large building with two courtyards and adjacent rooms was also excavated in Area II, and the new Area III is likely to yield a large and prestigious villa. This all points to the fact that a very densely populated village existed on the tall in the Roman, Byzantine, and early Islamic periods. We discovered a surrounding wall made of worked rectangular stones and using header and stretcher construction in the eastern part of the tall half way up the slope. Whether this protective wall continues around the entire tall remains to be seen. Perhaps it was built in the third or fourth century CE, when the village needed added protection from its increasingly insecure surroundings in Palestine.

The Islamic Period

A catastrophic earthquake in the eighth century CE spelled the end of the flourishing city of Gadara. It was not rebuilt and was very soon abandoned and forgotten. Added to this were fundamental political alterations and a climatic shift to much drier conditions in the Early Islamic period. The Wadi al-'Arab again gained importance, albeit only locally, perhaps

The project's future plans include the conducting of experiments, such as the reconstruction of an ancient bread oven and kiln—similar to this traditional kiln in Zerqa near Amman functioning in the Roman style—to shed light on everyday life on Tall Zira'a.

due to its continued excellent conditions for settlement and agriculture. The height of the tall offered its inhabitants natural protection and the water supply was constant and accessible. During the ups and downs of the Islamic Middle Ages and the Ottoman period, Tall Zira'a remained an ideal village settlement location.

and that's just the beginning...

The excavations on the tall are only really in their first phase. At this stage, only a glimpse of what it contains is visible. Two-thirds of the cultural layers are still untouched, even in the largest and deepest section, Area I, which is now one thousand square meters. The project will continue for another twenty years. In addition to excavations and landscape surveys, the "Gadara Region Project" will also continue to include the history of technical knowledge. Archaeometric analysis of the pottery from Tall Zira'a and its surrounding area will yield information as to the nature of both imports and local pottery production. Experiments, such as the reconstruction of an ancient bread oven and kiln, will transfer theoretical knowledge into practice and shed light on the more precise details of everyday work in the ancient periods on Tall Zira'a.

Notes

1. The authors thank Beate Salje for her kind help with identifying the cylinder seals.
2. Gilead is the area of Transjordan north of the river Jabbok, named as such in the Old Testament and in Neo-Assyrian texts.

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