I-3: Material remains: excavations

Both east and west of the River Jordan numerous sites have been excavated, many of which have revealed remains from the Late Bronze and Early Iron Ages. Unfortunately only a relatively small number of these sites have been published, and many of these only partly. Only the published results are being presented here, as far as they are relevant for the period under study. The division into four different areas that has been introduced in Chapter 2 is maintained here. The boundaries between the regions were politically significant only in the Later Iron Age. However, both settlement patterns and material culture in these areas show that already in the Late Bronze Age each region had its own cultural, social and political history.

Moab

Moab's northern neighbour was Ammon, but where exactly in the area north of the Wadi Mujib the boundary between the two ran is still not clear, although much research on it is being done currently and some of the mist seems to be clearing (Daviau 1997). It is evident that the northern border of Moab was disputed territory, and changed over time. In fact, in the period under study, the Late Bronze and Early Iron ages, there was no clear border, although the name Moab may have been used by Egypt as a designation for this region already in the Late Bronze Age (Ch. 1). Usually the area immediately north of the Wadi Mujib, where most of the sites are found, is considered to be part of Moab, and this convention is followed here.

All the sites in Moab that can be identified with a biblical place name lie north of the Wadi Mujib (MacDonald 2000, 171). So do most of the excavated sites, suggesting that this area was more settled than the Plateau south of the Wadi Mujib. This may be true, at least partly. The northern Plateau has always been more open to the outside world and was a bone of contention between Ammon, Israel and Moab (Miller 1997, 195 ff). These struggles over territory are likely to have left their traces in the material record. On the other hand, because of its associations with ‘biblical’ place-names this region has always received more attention from archaeologists and other researchers than the region south of the Wadi Mujib, and so may have distorted the picture.

Medeinet el-Mu'arradjeh

Medeinet el-Mu'arradjeh, south of the Wadi Mujib, was excavated by Olàvarri (1983). Its location is strategic, on the edge of the Kerak Plateau and the eastern half of the Wadi Mujib, where it is easiest to cross (Golding 1938, 325). On the top of the site was an enclosed area. The north and east walls of the enclosure, where the slopes are steep, were single, the west side had a double wall, with space between the walls. It had towers in strategic places, and a large gate with stone benches inside it. Inside the gate was a house with a courtyard and pillars. Olàvarri tried to interpret this as a four-room building, but the similarities seem superficial (contra Miller 1992, 78).
Fig. 3-1. Map of excavated and published sites
On the basis of the pottery (Chapter 7) this one-period site can be dated to the end of the Late Bronze and the beginning of the Early Iron Age. Near Medeinet el-Mu'arradjeh round structures were found, one of which was excavated by Menendez (1983). It was 18 m in diameter, built of standing stones, with a rectangular structure built against it. Some pottery was found in the rectangular structure, 90% of which was dated to the Early Iron Age. It was interpreted as a probable sheepfold. Miller (1991, 71, 74) believes that Medeinet el-Mu'arradjeh was a military post for the defence of the Kerak Plateau, because of its strategic location. It was certainly a well-defended site, possibly a stronghold, with an economy that was at least partly pastoral.

**Medeinet 'Aliyah.**

In his survey Miller (1989, 26-7; 1991, 71, 74) distinguished between Medeinet el-Mu'arradjeh and Medeinet 'Aliyah, about 4.5 km to the south, which he identifies with Glueck's site 141. Medeinet 'Aliyah overlooks the Wadi Lejjun, and it seems to have the same strategic advantage as Medeinet el-Mu'arradjeh, of sitting on the edge of the Kerak Plateau and the east side of the Wadi Mujib. The site has a total occupied area of 2.5 ha. (Routledge 1995a, 516). It was enclosed with a casemate wall and a moat. A gate, defensive towers and houses with pillars were found. The north-eastern central part of the site consisted of a large courtyard of a type that, according to the excavator, was paralleled in Palestine Iron Age I sites. He considers it a large agrarian settlement, with domestic, public and storage buildings, representative of a short-lived agrarian expansion in the Late Iron Age I.

It has also been suggested that Medeinet 'Aliyah was a military post, among other reasons because its location is not very well suited for agriculture. The pottery, which has not been published, is dated to the late eleventh century, but the settlement has been dated to the tenth century by the excavator (Routledge 1995b, 236). It is later than Medeinet el-Mu'arradjeh, and it may well have taken over that site’s strategic function of controlling the eastern crossing of the Wadi Mujib.
Balu'a
Balu'a lies south of the Wadi Mujib, guarding the entrance of one of the tributary wadis on its southern side. Crowfoot (1934) was the first to dig a trench here. He found a casemate wall and pottery which he dated to the Late Bronze and Early Iron Ages. Worschech excavated a few squares in 1984 (Worschech et al. 1986, 1989) but he never reached the Early Iron Age levels. A survey on the tell, however, produced Late Bronze and Early Iron Age pottery. In 1997 Worschech started renewed excavations on the site (Worschech and Ninov 1999), and for the first time found some stratified Late Bronze – Early Iron Age transitional pottery, at the bottom of a pit dug in bedrock. There were many painted body sherds, none of which has however been published. If Crowfoot was right, and the site was a fortified settlement in the transitional Late Bronze – Early Iron Age, it may well have had the same function as Medeinet el-Mu’arradjeh, that of guarding one of the entrances into the Wadi Mujib. The dating on the basis of the pottery, however, is still inconclusive (Chapter 7).

Lehun
Lehun (Homès-Frédericq 1992, 1997) is situated on the edge of the Plateau north of the Wadi Mujib, 7 km east of the later King's Highway, and 3 km east of Ara'ir. A track leads west from Lehun, following the southern edge of the Plateau and passing Ara'ir and Aqraba. Lehun was occupied from Palaeolithic times until the Islamic period. The oldest remains in Lehun consisted of an Early Bronze Age burial (Homès-Frédericq and Franken 1984, 91). Late Bronze – Early Iron Age occupation has been found mainly on the southwest side of the tell. This part of the tell enjoys a natural protection on all sides, and at the same time provides a good view over the surrounding valleys.

A casemate wall was found here, the earliest phase of which is dated to the transitional Late Bronze – Early Iron Age. It consisted of a precinct wall following the contours of the tell, with houses leaning against it on the inside (Homès-Frédericq 2000, 180). In the centre of the village two groups of houses were excavated, grouped around two courtyards. In the rooms were ovens, silos and grinding stones, cooking pots and storage jars, suggesting an agricultural background. One of the houses that formed part of the casemate wall, and that was interpreted as a ‘pillared house’ by the excavator, has been published fully (Homès-Frédericq 2000). Although clearly domestic in function, it was richer and better built than the other houses of the village. One room, with no visible entrance, was paved with flat stones, and has been interpreted as a granary. This type of ‘granary’ has been found in other houses in the village as well. Homès-Frédericq points out the extreme fertility of the region, and suggests that the site may have been a storage station. In another house an imitation Egyptian scarab was found, dated to the twentieth dynasty. The village was divided into four quarters (Homès-Frédericq 1997, 65).
Homès-Frédericq suggests that there may have been a crossing of the Wadi Mujib between Balu'a and Lehun. Members of the expedition have followed the path that connects the two sites. According to them the distance can be covered by an average caravan in 5-7 hours, following the contours of the Wadi Balu'a. This path is still in use with the local population. Homès-Frédericq suggests this may have been part of the King’s Highway.

Somewhere during the Early Iron Age the doors of the houses were blocked and the village was abandoned by its inhabitants. In Iron Age II the remains of the houses were partly cleared to make space for a fortress.

**Ara’ir**

Olàvarri (1965, 1969) has conducted excavations at Ara’ir, on the north bank of the Mujib, generally identified with Biblical Aroer “which is upon the bank of the river Amnon” (Joshua 12, 20). No structures have been found from before the time of Mesha, but there was Late Bronze and Early Iron Age pottery. Both Ara’ir and Lehun may have guarded the northern passes through the Wadi Mujib, while Balu'a and Medeinet el-Mu'arradjej guarded the south side. The pottery repertoire seems to confirm this (see Chapter 7).

**Dhiban**

Dhiban was first excavated by Winnett and Reed (1964), and is generally identified with Biblical Dibon. The Mesha stele was found here in 1868. Dhiban lies north of the Wadi Mujib, on a natural hill, surrounded by fertile land, but with no dependable water supply. This fact has led Tushingham (in Homès-Frédericq and Hennessy 1989, 206-210) to conclude that the site must always have been relatively dependent on pastoralism. Although Dhiban lies on the route of the later King’s Highway, no conclusions should be drawn from this, as it is unlikely that this route already existed in the Early Iron Age (Bienkowski, in press). Excavations at Dhiban have revealed little from the Late Bronze and Early Iron Ages, but some possible Early Iron Age pottery has been found in fill layers, with no stratigraphic context.

MacDonald (2000, 76) sees Dhiban as the capital of Moab and therefore identifies it with biblical Ar-Moab, the city of Moab. There is however little evidence for occupation of the site before the time of Mesha.

**Madaba**

Two multiple burial caves were found in Madaba. Tomb A was published by Harding and Isserlin in 1953. It had an opening at the top, and it had been used in the transitional Late Bronze - Early Iron Age (1200-1160, according to the excavators). Harding considered the presence of iron bracelets and toggle pins to be typical for the Iron Age. Tomb B was published by Piccirillo (1975) and H. Thompson (1986), who concluded that this tomb had been in use from the beginning of the Early Iron Age until the tenth-ninth century. The quantity as well as the quality of the pottery from both tombs suggested a moderate economy: some imported, and good, but not top quality pottery. Multiple burial caves such as these are generally considered to be representative of the Canaanite mountainous culture (Gonen 1992, 6). The two tombs seem to have been in use contemporaneously, at least for a certain period. This suggests that they must have belonged to different families, clans, or possibly tribal groups.

Excavations on the tell itself were started by Harrison in 1995. So far the earliest levels found belonged to the Iron Age II (Harrison 1997, 53-4; 2000, 579-81, Harrison et al. 2000, 211 ff).
Jalul
Excavations were conducted at Jalul by R. Younker and D. Merling from Andrews University in consortium with the Madaba Plains Project. These excavations revealed mainly Iron Age II remains, underneath which were debris fills containing pottery from the tenth and ninth century, as well as some sherds from the Early, Middle and Late Bronze Ages. No occupation layers from these periods have been excavated so far (Younker 2000).

Hesban
Hesban lies on the western edge of the Transjordanian Plateau, 10 km north of Madaba. It is a prominent tell that has been described by passing travellers from the nineteenth century AD onwards, including Seetzen in 1806, Warren in 1869 and Musil in 1902. Excavations have been conducted since 1968 by Andrews University, directed by Horn and Boraas, and by Boraas and Geraty. The earliest remains were found in a cleft between two vertical bedrock faces: two stone cross walls, with Early Iron Age pottery, which has, however, not been published. Part of the floor between these walls was paved with small cobbles, with ash layers on top. The bedrock faces were partly plastered. Large amounts of pig bone were found here (Sauer in Boraas and Horn 1975, Boraas and Geraty 1976, 1978).

LaBianca and Ray (1999) have re-excavated part of the trench and found much Early Iron Age pottery, including some Manasseh bowls1 (see Chapter 7), only one of which was published. According to Sauer the pottery from the earliest Early Iron Age layers in Hesban resembles that of Tell 'Umeiri (see below). It has been suggested that the trench was a defensive moat, since parallels for it have now been found in the vicinity at Khirbet Ayun Musa and Khirbet al-Mukhayyat, as well as south of Wadi Mujib, at Khirbet Al-Mudayneh al-Mraygha and Khirbet Medeinet 'Aliyah, which are dated to the Early Iron Age as well (LaBianca and Ray 1999, 120).

El-'Al
El-'Al lies about 1 km north of Hesban on a natural hill. It was excavated in 1962 by Reed (Reed 1972). Reed made four trenches on the westside. The lowest levels consisted of walls made of rough boulders, with Early and Late Iron Age pottery, none of which was published, however. Reed thinks the site may have been part of the King’s Highway (but see above).

Tell el-'Umeiri
This site has been excavated more or less continually between 1984 – 2000, by Andrews University, under the directorship of L. Geraty and L. Herr as part of the Madaba Plains Project (Herr et al., eds. 1991, 1997; Herr 2000). The excavation at 'Umeiri was preceded by a survey on the tell, using and testing Portugali's tell survey method (Portugali 1982). All in all the site has revealed strata dated from the Early Bronze Age to the Persian period. Its importance may partly be due to the fact that the only water source between

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1 The Manasseh bowl acquired its name because of its frequent occurrence in the Manasseh area. It is a large open bowl, 40 cm in diameter, with a thickened, inverted, rounded rim (Zertal 1987, 125). Zertal considered it characteristic of early Israelite sites and postulated a Canaanite prototype, somewhat smaller in diameter, 10-15 cm. This type of bowl has now been found on several sites east of the Jordan as well (quite a large number of them have been found in Deir ‘Alla), and seems therefore much more widespread, although its largest concentration is still the area of Manasseh.
Amman and Madaba is located at the base of the site. The site was abandoned at the end of the Middle Bronze or the beginning of the Late Bronze Age. It was resettled towards the end of the Late Bronze Age, with the new settlement covering a surface of 1.5 ha. On the northern slope much Late Bronze Age material was found, as well as some Early Iron Age material. Hard surfaces were found here, but also ash and soft soil, suggesting “extra-urban activities involving heavy burning” (Geraty et al. 1990, 270).

In the 2000 season an impressive Late Bronze Age building was found with walls of more than a metre wide (Clark et al. 2001, 439). There was no sign of a break between the Late Bronze and the Early Iron Age occupation. The phase immediately following that of the Late Bronze Age contained transitional Late Bronze – Early Iron Age pottery. Many collared rim jars were found, and cooking pots with everted triangular rims. A rampart and possibly a defensive wall were built during this phase, on top of the Middle Bronze II remains. This phase was destroyed by an earthquake, and immediately rebuilt in an impressive manner. A possible casemate wall was built, the earliest known so far in the region. The casemates were integrated in house plans, one of which was a four-room house.

The suddenness of the attack and destruction is demonstrated by the large amounts of food remains that were still found inside the Settlement. This destruction is dated by Herr in the early twelfth century. Altogether the excavations have revealed one of the best preserved Early Iron Age towns in Jordan. It is also one of the earliest, dated on a par with Mount Ebal and Giloh in the west. The pottery repertoire is largely utilitarian (75% consisting of simple household wares) and has close parallels with that of Mount Ebal: the Manasseh bowl (see Ch. 7) is a common type at both sites, and identical potter’s marks appear on jar handles on both sites (Herr 2000, 176). East of the Jordan only Madaba tomb A and the Baq'ah valley have revealed remains that are contemporaneous with these phases in 'Umeiri. According to Herr remains from the same period have been found at Hesban, Jawa and Jalul (Herr 2000, 177), but these have not been published.

Herr interprets the village of 'Umeiri as belonging to nomadic tribal groups settling into towns and villages, suggesting that they may have belonged to the tribe of Reuben (Herr 1999).

In the immediate surroundings of 'Umeiri towers have been found, which were dated to the Late Iron Age, and which Younker (in Geraty et al. 1990, 179) interprets as guard posts in local vineyards. The analysis of the plant remains showed a high percentage of grapes (29%, which is more than the percentage of cereals). Younker refers to Redford’s identification of 'Umeiri-west with Abel Keramin (Keramin meaning 'vineyards') in the Late Bronze Age, and suggests a continuation of this function from the Late Bronze Age into the Late Iron Age. (see also Herr 1992).
Ammon

The region north of Moab corresponds with the later kingdom of Ammon, and forms part of the Biblical 'mountains of Gilead'. From the west it is approached through the Wadi Zerqa. The largest part of this region, the highlands, lies on the Transjordanian Plateau.

There are no contemporary literary sources mentioning the region in the Late Bronze Age. Redford (1982) has suggested that some place-names on the topographical list of Thutmose III may refer to places in Ammon, but his arguments are not convincing (Ch 1). This lack of sources does not necessarily mean that the region fell outside the Egyptian sphere of influence (Hübner 1992, 162), but it is unlikely that it was part of the Empire at any stage, although the archaeological record shows Egyptian influence.

Younker suggests that the Egyptian sources referring to Šasu, mentioning Syria, Moab, Edom and Palestine as their habitat, can be interpreted as indirect literary evidence that Šasu must have been roaming the Ammon region as well: “If the inhabitants of LB IIA Ammon were not Šasu, they must have strongly resembled them” (Younker 1999b, 199). Biblical passages relating to the region are some geographical references in Deuteronomy 2 and 3, and the story of Jephta (Judges 11-12), which were composed much later (Kaiser 1984, 150).

According to Younker (1999b, 189-218, with references) there is little archaeological evidence for actual settlement in the first part of the Late Bronze Age. The evidence does show that the area was not devoid of human activity, but only the latter part of Late Bronze IIB witnessed a surge in occupation of the highlands. Twenty sites in Ammon are dated to the Late Bronze-Early Iron Age, as well as a number of tombs.

Sahab

Sahab lies 12 km southeast of Amman on the Plateau, in the transitional zone between the highlands and the desert. A multiple-burial cave, dated to the Late Bronze - Early Iron Age, was found: Tomb C (Dajani 1970, Ibrahim 1972). From 1972 onwards Sahab has been excavated by the Jordanian Department of Antiquities, under the directorship of M. Ibrahim (1972, 1974, 1987). In 1983 the excavations were supplemented by a survey in the area, also directed by Ibrahim.

In the Late Bronze Age the occupied area was larger than in the Middle Bronze Age. It had an oval-shaped town wall, with a deep stone-lined foundation trench, which may have served as a hidden passage, according to the excavator. A seal impression on a storage jar handle dates this wall to the time of Thutmose III, at the beginning of the eighteenth dynasty. A seal in tomb C was from the same period. The pottery confirms these dates. This makes it one of the first walled towns in the Late Bronze Age. A building with walls constructed of dressed stones was found which was dated to the fourteenth-thirteenth century on the basis of the pottery. The outer walls were 1.20 m wide and the east - west walls had a minimum length of 17 m. Outside one of the walls was a tower-like projection. The walls of the building were plastered with red clay, and it had clay floors, with a layer of occupation accumulation. Its function is not clear, but it seems likely that it was some kind of public building (Ibrahim 1974, 61). Relations with the Aegean can be seen in the presence of imported and imitation pottery.

No cultural break is attested in the transition from Late Bronze to Early Iron Age: the tomb remained in use, and there was no break in the repertoire of burial gifts (Ibrahim 1987, 78; Dornemann 1983, 32). Part of the town wall was re-used as a house wall. The occupied area in the Early Iron Age was larger than that in the Late Bronze Age, but the Iron Age town had no town walls. According to R. Younker (1999a, 13) this continuity
is “of special significance......, since this is the period when the Ammonites emerge in the land”. The settlement appears to have been destroyed in the twelfth century. The houses were rebuilt after the destruction, but the settlement remained smaller than before the destruction (Ibrahim 1972). Ibrahim (1987, 76) suggests that Sahab in the Late Bronze Age may have been a military post, possibly part of a limes, meant to counter attacks from the desert.

The tomb contained a number of double pithos burials using collared rim jars (Ibrahim 1972, 32). There were also two wooden coffins, older than the collared rim jar burials. Burial gifts consisted of oil lamps, small bowls, jars, locally produced alabaster ware, Egyptian objects (Ibrahim 1987), weapons, jewellery, and artefacts made of bronze and iron, all pointing to a date in the twelfth century. Seal impressions on some of the jars suggested Syrian influence (Ibrahim 1972, 34; 1987, 78). Some of the bones were burnt.

At Mabrak, 4 km southeast of the Amman Airport Building, a rectangular building was found, measuring 18 x 24 m (Yassine 1983), with a cistern. It had a central courtyard, accessible from most rooms. The outer walls were 2 m wide and constructed of large boulders. In the bedrock on which the building stood was a depression several metres deep, below the courtyard, that may have been connected with a depression outside the building, suggesting a use as cistern for the depression inside the building. The architecture of the building strongly resembled that of the Amman Airport Building (see below), although it is unclear whether it had the same type of foundation. There are also strong resemblances to the Rujm al-Henu building (see below). According to the excavator it was an unfinished residential building.

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**Amman Airport Building**

Excavations at the Amman Airport Building were conducted in 1955 by the Department of Antiquities of Jordan, under the direction of Lancaster Harding (1958), in 1966 by the British School for Archaeology, directed by Hennessy (1966), and in 1976 by the American School for Oriental Research, directed by Herr, before the building was removed in 1978.
A square building was found, 15 x 15 m, with walls 2 m wide. According to Lancaster Harding it was a temple (1958, 10). It was situated centrally in an oval plain, 1 km east of the Zerqa river. There was much imported material: Mycenaean pottery, an Egyptian khepesh sword, bronze weapons and vessels, jewellery of gold and other materials, and scarabs and cylinder seals. The scarabs were of an Egyptian type, dated by Ward (1964) between 1900-1350, the seals were in the Syrian - Mitannian tradition.

Hennessy distinguished three occupation phases: The outer walls were built in the first phase, in a foundation trench. Inside these walls was a layer of yellow clay and red earth, 15 cm thick, in which were concentrations of burnt clay, ash and bones, interpreted by the excavator as foundation deposits. There were also personal luxury items: jewellery, golden objects, beads, Egyptian scarabs and Syrian-Mitannian cylinder seals, artefacts made of bone and ivory. The imported pottery has been analysed by Hankey (1974). It consisted of Mycenaean IIA - IIIB and Simple Style pottery, dated to the second half of the fifteenth century. The plan of the building consisted of a square central space with six surrounding rooms. In the centre of the central space stood two stone cylinders on top of each other in a separate foundation trench, in which many spear- and arrowheads were found. This structure was interpreted by the excavator as an altar. Its top was charred. On top of the fill of the foundation trench was a 2-5 cm thick accumulation. In this accumulation isolated remains of fires were found, and bone fragments. The concentration of finds in the central space was striking, especially the concentration of spear- and arrowheads. Many fragments of Egyptian stone bowls were also found. A two metre wide strip on the northern and northeastern side of the building was covered with crushed limestone. (Hennessy in Homès-Frédericq and Hennessy 1989:167 ff).

The second occupation phase consisted of a pavement of large slabs inside the building. Everything above this floor was removed in the 1955 excavation.

The third phase saw a fundamental change in the lay-out of the building: the central space was divided into two rooms, and the ‘altar’ became incorporated in the division wall. The old entrance was closed, and a new one made elsewhere. Since in none of the excavations mention has been made of roof constructions, Hennessy suggests that the whole building may have been open to the sky (Hennessy 1985).

92 percent of the bone fragments found in the building were identified as human. They consisted of small, partly burnt fragments. Excavations outside the building on the north side (Herr 1983a, 22; 1983b, 226) uncovered a structure consisting of two parallel rows of stones four metre apart, the space between them filled with rubble and smaller stones. Many stones were discoloured by fire. This installation has been reconstructed as a square plateau, two rows high, with a flat top on which something has been burned. Many lamps were found around this installation, as well as a large amount of Egyptian stone bowl fragments, with traces of burning. Again many small fragments of partly
burnt human bone were found. Analysis of the bone material shows that most of the burnt bones came from the upper part of the body, suggesting that the bodies were articulated when burnt. Little (in Herr 1983a:47 ff) tentatively suggests the possibility that they were Indo-Europeans.

Herr dates the building in the thirteenth century, on the basis of Hankey's pottery analysis. The local pottery (Kafafi in Herr 1983a) suggests a later date, in the transitional Late Bronze - Early Iron Age period. The function of the building is a matter of debate. It has been alternatively described as a temple for human sacrifice (Hennessy, among others), or a crematorium (Herr). Fritz, writing before the bone material was analysed as human, argued convincingly against a temple-function (Fritz 1971). Herr suggested the building might have been a crematorium, possibly of a Hittite group (1983b, 228). Cremation was not unusual among Hittites, although it is found among other groups as well (in Hamath, Azor and Qasile in the Early Iron Age evidence of cremation has been found; see also Zwickel 1994, 77-78). The finds showed more affinity with Mesopotamia than with the west. In the first phase of the building a cylinder seal has been found with a Babylonian text relating to Marduk and Sarpanitu, the main deities of the Kassite pantheon in the time the building was in use. Bodies were burnt on the outside installation, and the remains and funerary gifts were kept inside the building, which was, therefore, fortified in order to defend it against robbers and thieves. The bone material consisted of very small fragments, which may well have come from a large number of different people (Little gives only a minimum number of individuals, but the tiny fragments may have been the remains of a large number of individuals as well). In general it is not unusual for the remains from a cremation to be crushed after burning, in order to fit them into a container of some kind. This would result in a residue of bone splinters from many different individuals around the place where the bones were crushed. No containers have been found, so they may have been taken by relatives, or have consisted of some organic material which has disappeared. This would explain the fragmentary state of the bone material, and still be an argument in favour of the crematorium theory. The presence of (even then) very old Egyptian stone vessels (dated by Herr to the Early Dynastic period in some cases) also point, according to Herr (1983b, 226), to a funerary function.

A site with related pottery was found several hundred metres to the east (Harding 1958:10-12; Hennessy 1966:159).

**Jebel Nuzha**
In a burial cave at Jebel Nuzha, Amman, Late Bronze to Early Iron Age pottery was found (Dajani 1966). According to Dornemann (1983, 31 ff.) almost every Early Iron Age pottery shape that has ever been found has parallels in the Jebel Nuzha repertoire, and its quality is better than usual in the twelfth and eleventh century. He dates the tomb in the Early Iron Age, mainly because the repertoire lacked imported pottery.

**Safut**
Safut lies 12 km northwest of Amman, south of the Wadi Suweileh, on the south side of the Baq'ah Valley. Excavations here started in 1982 and still continue, under the direction of D. Wimmer (Wimmer 1987, 1997). According to him the site was already occupied in the Middle Bronze Age. On the south side of the tell Late Bronze occupation was found: a stone wall, that may have surrounded a sanctuary. A chalice was found here, a large amount of charred two-row barley and a bronze, partly gilded statuette of a seated male deity flanked by two terracotta pillar figurines. Elsewhere on the tell remains
of a Late Bronze defence wall were found, surrounding the acropolis. According to the excavator Safut was an ‘agricultural administrative centre, where fertility religious beliefs undoubtedly prevailed’ (Wimmer 1997, 449). This occupation continues uninterrupted into the Late Iron Age, according to the excavator. The Early Iron Age population seems less dense or prosperous than that of the earlier and later periods, but there is no break or substantial change in occupation. A curved mudbrick installation was found in which the mudbrick appeared to have been baked in situ (Wimmer in Homès-Frédericq and Hennessy 1989, 514), with a number of collared rim jars inside, suggesting that this was a kiln for the production of collared rim jars. The site was destroyed towards the end of the Early Iron Age.

Khirbet Umm ed-Dananir

The survey in the Baq'ah valley, northwest of Amman, revealed four sites with Late Bronze and Early Iron Age material, which have subsequently been excavated (McGovern 1986). Khirbet Umm ed-Dananir was the most important site in the region, situated on and against the Jebel al-Qesir, near the largest spring in the region. The site is located at the beginning of the Wadi Umm ed-Dananir, which leads into the Wadi Zerqa. Excavations uncovered a pit with Late Bronze II pottery and bone material. The pottery was domestic in character, but nevertheless the excavator sees a cultic function for the site, based on parallels with pits in Palestine “which are very often in the vicinity of cultic installations” (1986, 63). A building was found, which according to the excavator shows a strong resemblance to the Amman Airport building in layout and architecture. It had a central space with small rooms around, and walls of over a metre wide. In the centre of the central space was a heavy stone pillar (the base of the pillar was a hewn part of the bedrock itself), and opposite it against the back wall a square block, which may have been an altar. Bedrock was covered with a layer of earth about 60 cm deep, in which animal bones were found and broken and complete pottery, interpreted as foundation deposits. Trenches for the walls were dug into this layer. Most of the foundation deposits were found in the trenches. The pottery was dated to Late Bronze IB-IIA. It was destroyed in Late Bronze IIB. No remains of domestic occupation were found around this building, but pottery, as well as animal and plant remains point to a sedentary society. Pottery and bones have been found in pits in the destruction layers (McGovern 1986, 130).

Close to the site several burial caves were found. In Cave B3 pottery has been found of the same kind and ware as that from Khirbet Umm ed-Dananir. This was the only cave with exclusively Late Bronze II pottery. There were two layers of burials, with a minimum of 64 individuals, men and women of all ages. Three individuals lay around a bichrome painted bowl. Another individual was burned. There were also the usual burial
gifts. Remains of fish and wheat have been found. Cave A4, dated to the Early Iron Age, contained a minimum of 227 individuals. Burial gifts included 21 copper and 32 iron bracelets or ankle rings. According to Glanzman (1983, 168) the manufacturing techniques of the pottery in the two caves remain basically the same, although an improvement in techniques can be noticed in the Early Iron Age repertoire. According to Rast (1990) some of the pottery in the upper levels of this cave must be dated to the tenth century.

**Rujm al-Henu**

The excavation of Rujm al-Henu, east of Khirbet Umm ed-Dananir (McGovern 1986, 11-13), revealed a rectangular building, measuring 24 x 31 m, similar in architectural type to the Amman Airport Building. Dating of the building on the basis of the pottery is difficult, since the pottery varied from Middle - Late Bronze to Persian. However, analysis of the architectural features in combination with the results of a limited sounding have led the excavator to suggest a function as an isolated, fortified farm from the Late Bronze to Early Iron Age.

**Fig. 3–9. Plan of Rujm al-Henu.**

**Khirbet el-Hajjar**

Khirbet el-Hajjar is situated at a strategic location west of Amman, with a wide view to the north, east and south. According to the excavator it “stands at the headwaters of the Wadi Kefrein, which flows west to join the Wadi Rama (Hesban), forming the Wadi Abu Gharaba” (H.O. Thompson 1972, 1977). This forms a major route to the Jordan Valley, “a route followed today by the Amman-Naur-Jerusalem road” (H.O. Thompson 1972, 48). The excavations in 1972 showed that the site was first occupied in the Early Iron Age, as some walls standing on bedrock were dated to that period. No indications of violent destruction are mentioned, but the site was deserted for some 200 years, before being reoccupied again, after which a small *rujm* (fortress) was erected on the site. Sauer (in H.O. Thompson 2000, 483) dated the earliest pottery to the Early Iron Age (Iron Age IA and IC, according to him), but none of this early pottery has been published.

**Rujm el-Malfuf South**

This site was occupied in the Early Iron Age, as shown by the presence of pottery from that period. However, no architecture was found during the one season of excavation, and no pottery has been published. In Iron Age II a *rujm* was erected on the site (H.O. Thompson 1973;2000, 485).
A third tower, also excavated by H.O. Thompson, Rujm al-Mekheizin, north-east of Amman, also seems to have been built on the site of a former Early Iron Age site. A few Early Iron Age sherds were found on the site (H.O. Thompson 2000, 487).

Tell Jawa South
Tell Jawa was excavated, originally under direction of Daviau and Younker, and later under direction of Daviau (Daviau 1992). In the first season a probe was made in which Early Iron Age walls and destruction debris were found, on top of Middle Bronze Age layers. The following seasons concentrated on the later periods of occupation, in which a casemate wall was found, dating to Iron Age II. No pottery from the Early Iron Age layers has been published so far.

Jordan Valley

Pella
The site of Pella is situated in the foothills, close to two important trade routes: the north-south route through the Jordan Valley, and the west-east route from the coast through the Jezreel Valley. Pella consists of a complex of sites separated by valleys and wadis. Most significant are Tabaqat Fahl, the tell proper, and the natural hill of el-Husn. Excavations have been carried out in 1967 by Wooster College, directed by R.H. Smith (Smith 1973), and from 1979 on by Sydney University and Wooster College, directed by Hennessy, McNicoll and Smith, and later by Bourke (McNicoll et al. 1982; Bourke et al. 1994; Bourke 1997). On the south-east side of the tell of Tabaqat Fahl domestic architecture was discovered, in three occupation levels, which lasted throughout the Late Bronze Age. A multi-roomed structure was found with two phases, dated to the Middle Bronze-Late Bronze transition, and Late Bronze IB-IIA, respectively. The excavated part contained a number of plastered bins filled with pottery, and this has been interpreted by the excavator as a public temple/repository, where libation vessels were stored and purified (Bourke et al. 1998, 194). A second building was contemporary with the second phase of this temple/repository. This building, a multi-roomed courtyard building, had three building phases. The first consisted of neat mudbrick walls laid on stone foundations and plastered floors. In the second phase some new, poorly constructed walls were set inside the older structure, and a number of stone-lined pits constructed. The third phase (Late Bronze IIAB) shows evidence of semi-permanent structures within the courtyard areas. A street separated this building from a third building, labelled by the excavators a 'Governor's Residence' (following Oren 1985, 1992). The occupational history of this building matched that of its opposite neighbour. It went out of use at the end of the fourteenth century (Bourke 1997, 108). Although the architecture is indeed suggestive of an 'Egyptian residence', it is dated at least 200 years earlier than the other residence buildings described by Oren.

Elsewhere on the site recent excavations have uncovered a stone-built Migdol Temple, the largest that has been found so far in the Levant, with parallels at Megiddo, Shechem and Tell Hayyat (Bourke in Egan and Bikai 1999, 495). It was probably constructed around 1450, and went through a number of major rebuilding phases before it finally went out of use in the 9th century. West of the Migdol temple was a massive mudbrick building, with heavy walls. Its reconstruction was dated to 1300 BC, its destruction around 850 BC. The excavators suggest that this may be the “long sought after palace of the Iron Age rulers of Pella” (Bourke in Egan and Bikai 1999, 496).
The analysis of the zoological remains (Bourke et al. 1998, 203) shows an increase in sheep/goat bones in the second half of the Late Bronze Age, with a decrease of cattle and pig. A large number of Late Bronze Age tombs were found at Pella, many with rich funerary deposits. In 1964 a tomb was discovered with several anthropoid sarcophagi (Yassine 1975:60 n 11) in the ‘naturalistic’ (early) style. They have been dated to the Late Bronze IIA-B transition, but unfortunately they have disappeared without having been recorded (Bourke and Sparks 1995, 159). Pella “does not seem to have suffered any obvious economic or political eclipse” during most of the Late Bronze Age, but the end of the period sees a decline, and it ends with destruction and conflagration over the entire excavated area. Early Iron Age and Philistine material date this destruction to the beginning of the twelfth century. In the Early Iron Age some of the destroyed buildings were restored, but the quality was bad, showing the continuation of the decline. The excavated part was characterised by flimsy stone walls and refuse pits. Below the floor of one of the buildings were six lamp-and-bowl deposits (Bunimowitz and Zimhoni 1993), suggesting that the builders of this building had at least taken over cultural traits from their Egyptian former overlords. Analysis of the zoological material shows an increase in cattle again, and more cut marks on bones. The excavators interpret this as a difference in butcher’s practices, induced by the increased use of iron tools (Bourke et al. 1998, 203). This stratum was also destroyed by conflagration.

At Husn tombs were found with Early Iron Age material (the ‘eastern cemetery’: Smith 1973, 174 ff.).

**Abu Kharaz**

Abu Kharaz is situated north of the Wadi Jabis, and about 4 km east of the Jordan. It has been excavated since 1989 by a Swedish expedition team headed by P. Fischer (Fischer 1991, 1993, 1994).

A Late Bronze Age temple has been found that was in use during the fourteenth century. It was small, but well constructed. Its end was dated to Late Bronze Age IIA on the basis of the presence of a Cypriot White Slip II milk bowl. According to the excavator the temple gave the impression of “being hastily abandoned” (Fischer 1991, 80) at the end of Late Bronze Age IIA. Furthermore a large wall was found which was interpreted as a possible town wall, dated to the Late Bronze I-II transition.
In the 1992 season Late Bronze and Early Iron Age remains were found on the top of the
tell. Three phases of occupation were discerned, originating in the Late Bronze Age, but
reused in Early Iron Age buildings. They consisted of stone-paved rooms and passages.
During the Early Iron Age there was probably a citadel with a defence system.
A four-room building was found, with a rich assembly of household goods. It is dated as
‘Iron Age’ by the excavator, but the finds are not published, so nothing can be said about
the date.

Deir 'Alla
During all of the Late Bronze Age there was a sanctuary on Deir 'Alla (Franken 1992). The
last phases (E and F) of this sanctuary have been excavated most extensively. In
these phases it was surrounded by 'treasuries' containing the pottery and other
items used in the sanctuary, and also service rooms, the kitchens and storage
rooms (Franken 1992, 163 ff). Objects included north Syrian cylinder seals and
other objects, some Mycenaean pottery and Egyptian objects (Homès-Frédericq
The first phase of the sanctuary was built on an artificial hill constructed over the
Middle Bronze Age occupation (Franken 1992, 11-12). An additional platform for
the cella was constructed on top of this hill. The sanctuary was destroyed several
times, by earthquake and conflagration. Phases A-D were dated by Franken in the
sixteenth-thirteenth centuries (1992, 1). Phase E followed Phase D immediately. Franken
explains the significant differences in pottery with the time that lies between the
destruction of D and that of E, in which the pottery may have changed gradually (but see
Chapter 10). There are no indications of newcomers on the tell in Phase E (contra Frendo
1986). This phase was destroyed by an earthquake with conflagration (Franken 1992,
176). An effort to rebuild the sanctuary (Phase F) was interrupted by a second
earthquake, after which no more efforts to rebuild the sanctuary were made.
Several undeciphered clay tablets have been found in one of the treasuries of the
sanctuary. The next building Phase, G, has a plan that differs completely from the
preceding ones. This phase, with walls, some of them consisting of two parallel rows of
bricks, floors and courtyards, has been found east and west of the cella. A building
constructed with double walls has been recovered west of the cella. This phase was
destroyed by conflagration. The last Late Bronze Age phase, H, consisted of a tower-like
building, set on Phase G remains west of the cella.
Resumed excavations on the south side of the tell have proved that the Late Bronze Age
occupation was not limited to the northern cella and its surroundings, as Franken
originally thought (see also Zwickel 1994, 98). At the southern foot of the tell Late
Bronze Age remains have been found, dated to the end of the Late Bronze Age. The
pottery found, as well as the remains of heavy conflagration, date these finds to Late
Bronze Phases E and F (Ibrahim and van der Kooij 1997). Some heavy walls were
found, but no structures or buildings could be reconstructed, partly because of the limited
area excavated. More clay tablets have been found of the same nature as those found by
Franken, and some collared rim jars. None of these finds have been published. A test
trench in one of the gullies on the south slope has revealed the presence, on the south
side of the tell, of earlier phases of the Late Bronze Age also (personal observation).
The earliest Iron Age occupation on Deir 'Alla followed the latest Late Bronze Age
phase almost immediately, according to the excavator. There are, however, no
indications that the newcomers had caused the end of the preceding occupation.
(Franken 1969, 20). The Early Iron Age occupation has been divided into two main
periods: Phases A-D and Phases E-L. The excavator characterises the first period
(Phases A-D) as follows:
- The tell may still have been used as a sanctuary, in line with older traditions (Coogan
1987). This has been suggested by the large numbers of incense burners that were found,
and the presence of two heavy walls in Square M (see Chapter 10), which might have
been part of a new sanctuary.
- The newcomers came from a semi-nomadic background: no houses have been found
on the tell, only a few postholes, which may have been the remains of tents (but see
Chapter 10).
- The walls found in this period belonged to furnaces or to courtyards. There were many
pits. The combination of furnaces, courtyards without houses, and pits suggests an
industrial function for the tell in this period. Franken related this to copper or bronze
industry. A succession of thin layers of burnt clay would point to a seasonal industrial
activity. Renewed excavations in the area of the Phase B furnaces have rendered the use
of these furnaces for metal working highly unlikely (personal observation). The actual
function of these furnaces has not been clarified so far.
- The site was occupied during winter, but deserted in summer. Agriculture was
practised on a small scale, as is shown by the large number of flint sickle blades, and the
presence of animal bones suggests pastoralism and hunting. A picture is painted of a
semi-nomadic population living on the tell in winter, practising some agriculture and
animal husbandry, and involved in some – so far unknown - industry, and moving back
to the hills in summer.
Phase E sees the coming of a new population, but again, there are no traces of violence.
Differences to be noted from the preceding population are:
- Heavy walls and town planning right from the beginning
- Pottery, although related to the pottery of the preceding period, was developed
independently of that used by the semi-nomads. This pottery is not typically Palestine in
nature, but suggests relations with the east.
- No wheel-burnished pottery is found.
This period is dated by Franken to the eleventh and tenth century.

Mazar
Tell Mazar is situated 3 km northwest of Deir 'Alla, and 3 km east of the Jordan.
Excavations have been carried out here by Jordan University, directed by Yassine in
1977, 1979 and 1981. The Early Iron Age levels have not been published, with the
exception of a building 220 metres northwest of the main tell, on a low hill. According to
the excavator this was a temple (Yassine 1984). The building consists of three rooms
with a forecourt, surrounded by a wall. The outer walls are made of mudbrick and 1.20
m wide. There is only one building phase, with a number of occupation phases.
The finds from the earliest phase are contemporaneous with Deir 'Alla Iron Age Phase F.
In the central room one half of the floor was paved with stones and the other half with
mudbricks. The western room had low benches along two walls. A stone bowl was set in
the end of one of the benches. A large pear-shaped pit was dug in the floor. The eastern room contained much pottery: storage jars, two chalices, two kraters, two pilgrim’s flasks, an incense burner, all dated to the latest period of use of the building, in the tenth century. A shaft tomb was found in the forecourt, below the first level of occupation. It contained the remains of three men, all around 25 years of age, without burial gifts.

Five occupation phases have been established, each consisting of a layer of ash, with charcoal, sherds and animal bones. Dating is based on the Deir ’Alla pottery typology.

In the 'forecourt' bread ovens have been found belonging to several phases, and a stone 'table', 60 cm in height. Yassine interpreted this as an area in which ritual food preparation was carried out. He mentions parallels with Beth Shean Phase VI, and with Deir 'Alla Iron Age Phases A and B, the depression west of the Late Bronze Age sanctuary ruins. Yassine also names parallels for the storage of pottery within temple areas. There are, however, no parallels for the temple plan, and he does not substantiate his speculations about the specific function of the building. All in all it seems more likely that the building was a farmhouse, possibly with a house cult. As far as the pottery is concerned, only the incense burner is clearly cultic. The stone pavement in the middle room may have been related to some small-scale industry, or it may have been used as a stable in winter. By analogy with modern parallels, the eastern room may have been the women's quarters, with a household and storage function. In that case the western room would have been the men's quarters, where guests were received and the rituals of the house cult were performed. Bread ovens on courtyards are a normal feature in all periods. It is likely that most domestic activities were performed in the courtyards, at least in summer.

Tell es-Sa'idiyeh
Tell es-Sa'idiyeh is situated 12 km north of Deir 'Ala, 1.8 km east of the Jordan, on the south bank of the Wadi Kufrinjeh. It consists of an upper tell, 40 m high, and a lower tell west of it, 20 m high.

Between 1964 - 1967 excavations have been carried out by the University of Pennsylvania, directed by J.B. Pritchard. He excavated a succession of Iron Age II levels on top of the tell (Pritchard 1985). A staircase was found from the Early Iron Age, which led from the foot of the tell to the Iron Age city. It was built of stone, and had a mudbrick wall running along its centre which, according to the excavator, provided support for a roof of wooden beams. It was dated between 1200-900 BC. A cemetery was found on the lower tell, dated to the transitional Late Bronze - Early Iron Age period, and containing a number of rich burials. One grave contained a bronze wine-set, cosmetic boxes made of ivory, jewellery of gold and electrum, and much fine pottery.

Renewed excavations have been carried out since 1985 by the British Museum together with the Rijksmuseum van Oudheden in Leiden, directed by Tubb (Tubb 1988a, 1990; Tubb and Dorrell 1991, 1993).

The Late Bronze and Early Iron Age strata are dated as follows (Tubb and Dorrell 1991:69):
   XII: - destroyed c. 1150
   (XIB)
   XIA: 1040 - 970
A large building was found in Str. XII. This building had been destroyed by fire, after the doors had been blocked.
This is the building known as the 'Governor's Residence'. Along the western slope of the tell a 3.5 m wide casemate wall was found, set in foundation trenches into which pisé had been poured as a foundation matrix. The casemates were filled with rubble. Against the wall a large building was set, the 'palace', dating from the same period as the Governor's Residence. Both buildings show Egyptian architectural traits: deep mudbrick foundations without use of stone, a pisé matrix, and double walls with a narrow space between them. A possible 'bath' was found in the palace, consisting of two connected basins with a drainage system, and a channel leading from the top of the staircase to the basins. Another basin may have served as a cooling system for wine, according to the excavator. The staircase was re-examined, and proved to descend to a spring. It had been in use from Str. XII or possibly earlier. Str. XIB has been encountered in a few places only, consisting mainly of hearths and grinding stones. It was probably the remains of nomadic squatter occupation in the ruins of Str. XII. The pottery from this stratum is the same as that from Str. XII. Str. XI A starts with the levelling of the Str. XII remains. On top of this a house was built, consisting of two rooms, with a niche in the wall of the smallest room. In this niche a flat stone was set, and in front of that was a fireplace, with a channel leading to a pit at the other side of the room. In front of the fireplace stood an incense burner. This has been interpreted by the excavator as a kind of sanctuary. West of this building stood a stone tower. A street has been found dated to the Early Iron Age, separating the upper and lower tells.

Tell es-Sa'idiyeh: Burials on the lower tell
On the lower tell the American expedition found 45 burials (Pritchard 1980). The British expedition excavated almost 400 additional burials in six seasons of excavation. Most of the burials had been dug through the underlying Early Bronze Age levels. The largest group of burials consisted of rectangular or oval pits, sometimes lined with stones or bricks from the underlying Early Bronze Age layers. Another group consisted of rectangular pits lined and covered with new bricks. A group consisting of two parallel rows of burial pits may have been dug in advance, because some appeared not to have been used at all. There were many jar burials of children, and a number of double pithos burials. A striking observation was that only this type of burial had been robbed in antiquity. According to Tubb this suggests that these were burials of an allochthonous
group, possibly Sea Peoples, who were considered less inviolable by the local people. Some bodies had been covered with sherds and/or a pot had been put over the head. This, according to Tubb, would be a variant of the double pithos burial. Only one shaft tomb has been found, containing an adult and a child, and an imitation Mycenaean pyxis as a burial gift. There may have been more burials of this type, which were either not recognised, or have disappeared due to the intensive use that has been made of the cemetery. Most burials were single. Sometimes a child was buried together with an adult. There were some ‘secondary’ burials, possibly the result of the intensive use of the cemetery, when later burials cut the older ones, and the remains of the first burial were reburied in the new grave. The large number of bronze and iron burial gifts was striking. The pottery shows strong Egyptian influence. Some features suggest attempts at mummification: many bodies showed traces of textile, remains of Egyptian linen, in which the bodies, and sometimes also the burial gifts, had been wrapped; the position of the bones of one skeleton suggested that it must have been wrapped tightly; face and genitalia were sometimes covered with bronze or pottery bowls; traces of bitumen have been found on some of the bodies; and one skeleton had part of its rib cage removed, possibly an effort to remove internal organs.

The cemetery has been dated to the thirteenth-twelfth century, contemporaneous with Str. XII on the upper tell. Apparently Egypt created a fortified centre in Sa‘idiyeh in the final stage of the empire. Reasons for this centre, according to Tubb, were mainly economic (Tubb and Dorrell 1990, 109): Sa‘idiyeh is situated immediately east of a ford in the Jordan, and therefore in a strategic position on the east-west trade route. At the same time this part of the Valley was a kind of bottleneck in the north-south route, so its position on that route was strategic as well.

Tubb considers the results of the Sa‘idiyeh excavations, and the cemetery in particular, as an argument in favour of Pritchard’s hypothesis that a group of Sea Peoples, possibly Sherden, lived on the tell at the end of the Late Bronze Age. They would have come as mercenaries with the Egyptian army (Tubb 1988b), and remained after the Egyptians had left. They would have been responsible for the development of bronze industry in the region. According to him the burials in Sa‘idiyeh produced more imitation Mycenaean than Canaanite pottery, which would argue in favour of the presence of Mycenaean potters, making their own style pottery with local materials. He considers the double pithos burials, a number of which were found at Sa‘idiyeh, to be related to the anthropoid coffin burials, which he associates with the Sea Peoples. Tubb also argues for an increased use and production of bronze in the thirteenth - eleventh century in the Jordan Valley (Tubb 1988b, 255), as is shown by the finds in Late Bronze Deir ’Alla, Mazar and Sa‘idiyeh (cemetery), and in Beth Shean (cemetery). Tubb suggests that every site from this period on which bronze working was practised, was dominated by either Egyptians or Philistines, the coastal ones first by Egyptians, later by Philistines. He considers Sea Peoples (not the Philistines in this case, but another group, possibly Sherden) as the practitioners of a metal industry, originally under Egyptian supervision, but later independently.

Negbi (1991, 1998) attacks Tubb’s hypothesis, and argues convincingly that the Sa‘idiyeh material culture points towards a strong Egyptian influence rather than one from the Sea Peoples. She suggests that the site was inhabited by Canaanites who tried to imitate their Egyptian overlords in their burial practices (single sarcophagus burials, attempts at mummification). This hypothesis is not very convincing. The material culture at Sa‘idiyeh seems to point to an Egyptian outpost, probably military, where the Egyptian inhabitants tried to hold on to their own burial practices. Mummification was a
specialist's job in Egypt as well, so it is doubtful whether an Egyptian soldier would know how to perform it. The clumsy attempts at mummification may well have been performed by Egyptians who had some vague notion of what should be done, and did just that. Burial practices are related to conceptions of the supernatural. There are as yet no indications that the local inhabitants of the Jordan Valley adopted Egyptian religious concepts; moreover, Egypt never promoted that (Redford 1992, 198, but see Gonen 1992, 30). Canaanites traditionally buried their dead in multiple burial chambers. Single burials (sometimes with two individuals, but rarely with more) are encountered on the coast in the Late Bronze Age and penetrated inland only at the end of the period. (Gonen 1992, 35 ff). The use of mudbrick instead of stone for lining and covering the burials is typically Egyptian (Negbi 1991, 210). The artefact repertoire in the burials as well as on the tell, points to a strong Egyptian presence. The conclusion is obvious that the tell was inhabited at least partly by Egyptians, who tried to perform their burial rituals as well as they could in a foreign country. The double pithos burials, seen by Tubb as a conceptual parallel to anthropoid sarcophagi from Beth Shean (especially the grotesque ones), have far more convincing parallels in thirteenth century Anatolia, as has been shown repeatedly (Negbi 1991 n 6 lists the literature). It seems more logical to see these as burials belonging to people with a Hittite background than to one of the Sea Peoples. Noort (1994, 128 ff) has demonstrated on the basis of both the historical and archaeological sources that the impact of the Sea Peoples, certainly outside the coastal areas, was much less than is often assumed.

West of the Jordan

Shiloh

West of the Jordan, Shiloh (Khirbet Seilun) has been excavated in 1922-32 and in 1963 by Danish teams, and in 1981 by Bar Ilan University, directed by Finkelstein (1993). Shiloh is situated in the western Highlands, some 16 km north of Ramallah. It sits on the confluence of two wadis, and is surrounded by fertile land. The area was, and still is, particularly well suited for the cultivation of olives (Zwingenberger 2001, 183). On the top of the tell all earlier remains had been removed by Roman to Medieval builders. Nevertheless Finkelstein concluded that there must have been a Middle Bronze Age sanctuary, probably on the top. Middle Bronze Age IIC Shiloh had a glacis and a town wall. It was destroyed at the end of the period. Much pottery and other objects from the Late Bronze Age were found, but no architecture. Finkelstein concludes that the site must have been a nomadic sanctuary in this period. It was deserted before the end of the Late Bronze Age.

At the beginning of the Early Iron Age the site was reoccupied. Well-constructed buildings are found partly built into the glacis of the Middle Bronze Age defence wall, their construction techniques largely determined by the fact that they were built on a slope (see Zwingenberger 2001, 231-238 for a detailed analysis). Many silos, some still containing the charred remains of wheat, were found, as well as the seeds of grapes, olives, lentils and the like. Animal remains consisted largely of sheep/goat, while the cattle bones showed traces of having been used as plough animals (Zwingenberger 2001, 313). The Early Iron Age settlement revealed a higher percentage of cattle and a lower percentage of sheep/goat than the Late Bronze Age. The pottery repertoire is domestic, consisting of collared rim jars, cooking pots, deep bowls and kraters, and jars; it is dated to the second half of the twelfth and the beginning of the eleventh century. There is punctured and incised decoration on a number of handles, comparable to that of Sahab on the Amman Plain. A few Manasseh bowls (see Ch. 7) were found. The rim of a
A collared rim jar with rosette-shaped seal impressions has been compared with collared rim jars from Sahab. In the archaeological repertoire, there are no indications, either architecturally or in the smaller finds, for a sanctuary in the Early Iron Age. Still, Finkelstein assumes that Early Iron Age Shiloh was a sanctuary, partly because of the Biblical tradition, partly because of his own interpretation of Shiloh as a sanctuary in the preceding periods. The buildings at the edge of the tell would have had a service function for the complex on the top. This hypothesis is not unequivocally accepted (Zwingenberger 2001, 451). Shiloh may just as well have been an unfortified, basically agricultural village.

Shechem
Shechem (Tell Balatah) sits on the lower slope of mount Ebal, at the eastern end of the Shechem pass. The site has been excavated by Sellin in 1913-14, in 1926-27 and in 1934. Unfortunately, all field reports and final report manuscripts were destroyed during WW II through Allied bombing. Some preliminary reports were published however (see Wright 1965, 23-34, with literature). Between 1956-68 a joint expedition was organised by Drew University and McCormick Theological Seminar, directed by G.E. Wright and Anderson. In 1972-73 Dever conducted a rescue excavation on the Middle Bronze Age layers (Dever 1974). According to the excavators, the Late Bronze Age settlement at Tell Balatah was not occupied before Late Bronze IB (around 1450; Toombs 1972, 105), when a new fortification system was built on the ruins of the Middle Bronze Age fortifications. The Middle Bronze Age temple was rebuilt as a broad room temple, with a massabah on either side of the entrance and a large altar in the court. A bronze figurine of the god Baal was found here (but see Zwickel 1994, 83-85). The houses in this stratum have been laid according to a coherent plan, giving the impression of a developed centre. No traces of destruction are found at the end of the Late Bronze Age (Wright 1965:67). Str. XI, the first Iron Age stratum is dated to the early twelfth century. It is basically a continuation of the preceding stratum, but it is simpler and suggests diminishing prosperity. The massabah temple was rebuilt, but altar and massaboth were buried under a layer of plaster. Another room, found in 1964, was also interpreted as a sanctuary by the excavators (Bull et al. 1965, 11). Zwickel however (1994, 76) argues against such an interpretation. Artefacts from the destruction layer date the end of
Stratum XI around 1125 (Seger in Meyers 1997 vol. 5, 22). Little pottery has been published. The site was not reoccupied until the tenth century.

**Mount Ebal site**
The Mount Ebal site (Zertal 1987;1998; Zertal in Meyers 1997 vol. 2, 179-180) came to light during a survey of the region. The site, named el-Burnat, lies on the north-eastern slope of mount Ebal. It is very inaccessible. It has been excavated between 1982-1989 by Zertal, who identified it as an open cult place. The site is surrounded by an elongated stone rampart, with an extra partition inside, 75 m in length.

Two strata have been discerned, both of which were assumed to have a sacred function. The main structure in Stratum II, dated between 1240-1200 on the basis of the finds, was a building that was interpreted as a four-room structure by the excavator. The plan of the building does not entirely justify this interpretation however. The entrance is on the wrong side, and the architecture is very irregular. A silo stood in the entrance, and a collared rim jar was found in a hollow in the floor. South of this building a group of eight collared rim jars was found, arranged in pairs. A second group of structures or installations ascribed to Stratum II consisted of an enclosure divided into compartments. Inside was a stone-lined round storage bin with much ash and burned bones. A pit contained hammer stones and a decorated stone chalice.

Stratum I is subdivided into IA and IB. In Stratum IB a structure was found that has been described by Zertal as an altar for burnt offerings. It consisted of a rectangular structure, filled to a height of almost two metres with a fill of earth and stones, ash, burnt bone and pottery sherds, all arranged in neat layers, suggestive of a ritual cleaning and re-sanctifying of the old sacred area. Connected to it were two courtyards, each with a pavement of stones, on which installations were found containing ash, animal bones and
TRIBES AND TERRITORIES IN TRANSITION

pottery. They were separated by a double wall, ascending to the main structure. A broad ‘staircase’ was also considered part of the complex. Surrounding it, inside the enclosure, was an area with hearths, ashes, sherds and bones, apparently used for ceremonies or feasts. Further away were about a hundred circular, rectangular or irregular stone installations, 30 - 70 cm in width, containing much pottery, which seem to belong to both phases. These have been interpreted as places where people left their offerings. Zertal interprets the site as an open cultic place, comparable to the Bull site.

The bone material suggests a pastoral economy, based on sheep, goats and some cattle. Fallow deer must have been hunted (Horwitz 1987). At the same time olives and almonds may have been grown (Lipschitz 1987). In Stratum IA the structure was 'buried' under a layer of stones, possibly to prevent desecration. Zertal admits that there are no parallels for this type of altar in either Canaanite or Israelite culture (Zertal 1987:161), but according to him it is a forerunner of the altar in Jerusalem, and he suggests conceptual parallels with Mesopotamian altars (Zertal 1985, 35-37). Zertal's interpretation is not generally accepted: Coogan, following his own criteria for cultic sites, sees it as a sanctuary, but disagrees with Zertal's reconstruction of the altar (Coogan 1987). Finkelstein (1988, 85) and Mazar (1990, 350) also agree with the interpretation as a cultic site, but not with the reconstruction of the altar. Kempinsky (1986) does not believe in a cultic function for the site either; according to him it was a fortress. Zwickel (1994, 204-207) agrees with Kempinsky. Fritz (1996, 88, 154) sees it as an agricultural site, that used terracing on the mountain slopes (although why farmers should settle on the top of a mountain, and resort to a complicated and labour intensive technique like terracing, in an area where good agricultural land was available in abundance, remains unexplained). Altogether, the explanation of an open cult site of some sort seems the most viable, both on the basis of architectural and other remains as well as that of the location of the site.

Tell Far'ah North
Tell Far'ah North has been excavated between 1946-1960 by the Ecole Biblique in Jerusalem, directed by R. de Vaux. A part of his excavations was published by Chambon (1984; see also Joffe in Meyers 1997 vol. 2, 303-304). The Late Bronze Age settlement is poorly preserved. A sanctuary was constructed above an earlier gate shrine, but this has later been reassigned to the Early Iron Age. Burials had Late Bronze Age material, containing Mycenaeaean and Cypriote pottery. In some of the houses jar burials of children were found. The date and circumstances of the abandonment of the site are unclear. In the first Early Iron Age stratum, in the twelfth century and directly on top of the Late Bronze Age ruins, a badly built residential building with two rows of pillars and an elevated rear room was found. Chambon (1984) interprets it as a domestic building, perhaps with a house cult (also Zwickel 1994, 208). Two buildings with a four-room-building plan have been found. The next Iron Age stratum is dated to the tenth century.

Bull site
The Bull site in North Samaria was discovered after the accidental find of a bronze bull, and excavated between 1978-1981 by A. Mazar (Mazar 1982). It consisted of a circular stone wall on top of a hill. There were no other traces of occupation, perhaps due to erosion. A large stone lying on edge has been interpreted as a massabah or altar. In front of it were found sherds, a scrap of bronze, animal bones and the corner of a rectangular pottery object, on a stone pavement. The pottery dates the site in the Early Iron Age (but see Finkelstein 1998; Mazar 1999c). Mazar sees it as an open cultic site, a bamah.
I-3 MATERIAL REMAINS: EXCAVATIONS

Fig. 3-16. Plan of the Bull site

regional survey (Mazar 1982:37, 39) has shown the existence of five Early Iron Age agricultural hamlets, forming a cluster with the Bull site. They remained occupied during the Early Iron Age. Open bowls found here have a thickened inverted rim, comparable to Zertal's Manasseh bowl. The bronze bull is unique in style, but its presence conforms to Canaanite traditions in for example Ugarit, Hazor and Ashkelon, and has also parallels in Cyprus, Hatti, Mari and Ebla (Mazar 1982:28). Mazar concludes that Israelites, probably from the tribe of Manasseh, were the builders of the Bull site, which therefore was an early Israeliite cultic place. Wenning and Zenger (1986) think that it was a Ba'al sanctuary, and Ahlström (1990) suggests that the builders of the Bull site were Hittites, who had migrated from the north. Ornan (2002) has summarised the evidence of bull worshipping in the Levant, showing the complicated and varied religious concepts that were involved. Connecting the Bull site with any specific ethnic or religious group on the basis of the presence of the bull statue alone seems, therefore, impossible.

Dothan

Dothan is situated about 22 km north of Shechem, and has been excavated between 1953-1964 by J.P. Free, who published yearly preliminary reports (Free 1953;1954;1955;1956;1958;1959;1960). Between 1960-1960 three tombs from the Western Cemetery were excavated by R. Cooley (Cooley and Pratico 1994). Very little has been published of the excavations so far (Ussishkin in Stern 1993 vol. 1, 372-373 and Cooley and Pratico in Meyers 1997 vol. 2, 171 are still the main sources of information).

The site was occupied in the Late Bronze and Early Iron Ages, as can be seen from finds on the top of the tell. Among other objects, a small vessel was found containing pieces of metal, mostly silver, that might have been used as currency.

A shaft tomb was found in the Western Cemetery, with 300-500 individuals and some 3400 objects, some of which have been published (Cooley and Pratico 1994). In this tomb, tomb I, a unique figurine lamp was found (Cooley and Pratico 1994, 163-165).

Fig. 3-17. Plan of the shaft tomb at Dothan
Beth Shean
Excavations in Beth Shean have been conducted by the University of Pennsylvania Museum, directed by Fisher, Rowe and Fitzgerald, between 1921 and 1933 (Rowe 1930; 1940). The Iron Age levels and the burials have been published (James 1966; Oren 1973). Renewed excavations in 1983, directed by Y. Yadin and S. Geva, concentrated on the Iron Age levels (Yadin and Geva 1986; see also McGovern et al. 1993; James and McGovern 1993). Most recently, in 1990-1996 excavations were carried out on the top of the tell by A. Mazar. During the Late Bronze Age the top of the tell was occupied by a temple, in which five building phases have been discerned, and several other monumental buildings. The dating of these phases remains problematic (McGovern 1985, 13; see also Zwickel 1994, 173-4). The first phase (R3), dated to Late Bronze Age IA, was a modest mudbrick structure, that was abandoned after a short period. In the next phase the ruins of this temple were levelled and served as a courtyard for the new sanctuary, in which numerous Egyptian objects were found, and which is dated to the time following the campaign of Thutmose III. In the time of Seti I the area surrounding the temple developed into a residential area. The next stratum, VII, is dated to the thirteenth century. Southwest of the temple, which may have been dedicated to Anat (Zwickel 1994, 185, who concludes that apparently the Egyptian inhabitants of Beth Shean worshipped local gods) was an administrative building, and a large circular silo. The two Seti I stelae and the Ramses II stele are thought to date from this period.

During the most recent excavations remains of a thirteenth century public building were found, with a granary, millstones and part of a collared rim jar, one of the earliest in the region. Opposite this building, on the other side of the street, a row of rooms with bread ovens was found. The first Early Iron Age stratum, lower Stratum VI, is a rebuilding of Stratum VII, without major changes. It is dated to the twentieth dynasty, the last stage of Egyptian supremacy on Beth Shean. The temple was rebuilt with minor changes, although it may have served a different – Egyptian – deity (Zwickel 1994, 190). Building 1500, the ‘Governor’s Residence’, was built on top of an Egyptian-style building, that bore a strong resemblance to the Egyptian citadel in Deir el-Balah (Mazar 1997, 72) in dimensions, building techniques and architecture. Both this building and the Governor’s Residence were built during the twentieth dynasty. The excavators found a rich
assemblage of luxury goods, containing many Egyptian or Egyptianised features. Most of the Egyptian pottery proved to have been locally produced (Mazar 1997, 71-72). McGovern et al. (1993) state that during the Egyptian supremacy in Beth Shean the majority of the population consisted of Canaanites in Egyptian service. Lower Stratum VI was destroyed by conflagration. Upper Stratum VI, dated to the late twelfth or early eleventh century, is often seen as the first non-Egyptian stratum. Flimsy walls and rebuilt walls, many pits and functional pottery characterise this stratum. In the recent excavations many storage compartments filled with grain were found, as well as a group of bronze arrowheads. Building 1700, found during the excavations of Pennsylvania University, was redated by Mazar to the first post-Egyptian stratum: upper Stratum VI (Mazar 1997, 72). In the former temple area two buildings were found, also interpreted as temples, partly because of their location, and partly because of the many cultic stands found there (Coogan 1987). They have been dated to the second half of the eleventh and the tenth century. Garfinkel (1987) has suggested that the oldest Early Iron Age strata should be taken together and seen as one semi-nomadic occupation stratum, with re-use of older structures (sometimes with small additions), and many pits. The pottery of Stratum VI is a continuation of the Late Bronze Age repertoire. Small open bowls have straight or everted rims. In the northern cemetery more than 50 fragments of anthropoid coffins have been found, five of which are of the 'grotesque' type (Dothan 1982; Oren 1973, 138). The dating of this type of sarcophagus is a matter of debate. Pritchard (1968, 108-109) dates them in the thirteenth century, on the basis of analogies in the burial gifts with the cemetery of Sa'idiyeh. Dothan (1982, 268-275) dates them in the second half of the eleventh century. Oren (1973, 148) considers them to be burials of mercenaries in the Egyptian army, and dates them to the 19th or XXth dynasty. The repertoire of burial gifts strongly resembled that of Deir el-Balah: including much pottery, Mycenaean bronze vessels, ushabti, jewellery, ivory and weapons.

Rehov
While Beth Shean was an Egyptian administrative and military centre in the Late Bronze Age, Rehov was the main Canaanite town in the region (Mazar 1999a, 2). Rehov is one of the largest mounds in Israel. It is situated 5 km south of Beth Shean. Excavations started here in 1997, directed by A. Mazar (Mazar 1999a). Several Late Bronze Age levels were exposed, but on a small scale. They consisted of a number of superimposed large buildings. In the third of these phases, dated to the twentieth dynasty (early twelfth century), two lamp-and-bowl deposits were found (see Bunimowitz and Zimhoni 1993). The pottery from this phase was similar to that of Beth Shean in the same period, but Egyptian forms were rare. According to the excavator the next phase was “an extremely disturbed area”, consisting of a rapid accumulation of flimsy walls and surfaces with thin layers of dirt and dust. Bread ovens and other installations were found there. The pottery was similar to that of the previous phase. No fortification remains were found in the Early Iron Age layers (Mazar 1999b). The pottery from the Late Bronze and Early Iron Age layers has not yet been published.