5. The Jordan Valley during the Early Bronze Age

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ABSTRACT

The Jordan Valley shows a long and unbroken occupational history since the earliest periods of human settled life. During the fifth and fourth millennium BC, a clear density of population can be observed in the Jordan Valley. This corresponds with the growth of agricultural and industrial production, which led to active trade. The new development introduced slowly to some kind of central organization during the Early Bronze Age (second half of the fourth and third millennium BC). The Early Bronze Age is best attested in the Jordan Valley, especially if we include the areas south of the Dead Sea and north of the Sea of Galilee. The beginning of EB represents a transition between village farming communities and urban life. Full urban sites can be observed at several excavations sites of the Jordan Valley during EB IB, EB II-III. Some fortified sites of these periods show administrative and religious buildings. During these periods more active trade took place with Egypt, North Syria and Anatolia. Many sites and burial fields have been identified during the EB IV period which witnessed an economic recession and major urban centers were abandoned or replaced by poor settlements or camp-like sites.

1. Introduction

The Jordan Valley between the Dead Sea and the Sea of Galilee is flanked by the mountains of Palestine (west) and Jordan (east). It is characterised as being the lowest spot on earth, with an absolute lowest point on the Dead Sea shore that lays c. 400 m below sea level. It becomes higher toward the Galilee and Hula seas in the north.

The Jordan Valley is a part of the Great Rift Valley and it consists of three geographical sub-units; the Ghor, the Katar hills and the Zor. The Ghor is the largest unit; it is flat and fertile and consists of terra rossa soil, which has mainly eroded from the mountains. Between the low and sterile Katar hills lies the Zor (the Jordan River bed), which is relatively narrow and is incised c. 5-25 m, depending on water fluctuations of the Jordan River (Douglas 1991, 4-5). For this reason there are hardly permanent archaeological sites identified in it.

Major landmarks in the Jordan Valley are the Dead Sea and the Sea of Galilee that are linked by the river Jordan. All these water resources are fed by streams and rain water coming from the mountain ranges. Side wadis, mainly oriented east-west, in the eastern hills are more numerous than in the western hills. The wadis are called (from north to south): Yarmouk, el-Arab, Ziqlab, el-Yabis, Kufranjeh, Rajib, ez-Zerqa, Shu‘eib, Kefrein, Hesban and Azeimeh. The Ghor is also much wider on the eastern side, which is the reason for the existence of a large number of modern settlements and archaeological sites.

At the time we conducted our archaeological survey in 1975-1976 there were 64,000 people living in the Jordan valley. Now there are c. 400,000 people living in the same area. The villages became larger and new settlements have been established, interconnected by new highways and crossroads. The entire valley is now covered with plastic greenhouses. New factories, schools, mosques, and other buildings have been constructed. Huge Muslim and Christian mausolias were built to replace the old small ones in Mu‘ad, Waqqas, Sharhabil, Abū ‘Ubiala and the Baptism site.

2. History of Early Bronze Age Research

Several archaeological surveys were carried out in the Jordan Valley, starting with a small survey by William Albright and followed by more extensive ones by Nelson Glueck (1939-1947) and by Henry de Contenson and James Mellart in 1953. The present author together with James Sauer and Khair Yassine conducted a large-scale survey in 1975-1976. Other surveys were conducted in connection with excavation projects in various parts of the valley. Major field projects took place at Shuneh North, Tell Sakhneh, Tabaqat Fahil (Pella), Tell al-Hayyat, Tell ’Abū al-Kharāz, Tell ’Abū al-Ni’aj, Tell ’Abū Hamid, Tell al-Sa‘idiyyeh, Tell al-Mazār, Tell Deir ‘Allā, Tell
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All these field projects have confirmed an unbroken history of occupation of the Jordan Valley from the Palaeolithic onwards. Major sites of the Early Bronze Age include Tell al-Shuneh North, Tell Sakhneh, Tell al-Arba’in, Tabaqat Fahil (Pella), Tell al-Hayyat, Tell 'Abū al-Ni‘aj, Tell 'Abū al-Kharāz, al-Dahab, Tell al-Handaqūq, Tell al-Sa‘idiyyeh, Tell al-Qōs, Tell 'Umm Hammād al-Sharqī, Tell al-Hammam and Tell Iktanu.

Major sites can be found in the foothills (Tell Sakhneh, Tell Mustah, Tell al-Hammam, Tell Iktanu, Tabqaṭ Fahl (Pella) and Tell 'Abū al-Kharāz). These sites have strategic locations, overlooking the floor of the valley. Most of them show defensive architecture and public buildings.

The end of the Early Bronze Age (end of the third millennium BC) is called Early Bronze IV, or Early Bronze-Middle Bronze (EB-MB) and by some American scholars MB I. The majority of the Early Bronze Age sites were not occupied during this transitional period between Early Bronze and Middle Bronze Ages. The few existing sites were situated near small wadis, oriented east-west across the floor of the valley.

3. THE TIME BEFORE THE EARLY BRONZE AGE

The period preceding the Early Bronze Age in the Jordan Valley is well represented by a large number of village farming communities dating to the fifth and fourth millennium BC. Many of these sites are located immediately near side wadis on the floor of the valley, while one major site of this period (Tell 'Abū Hamid in the central valley) was founded on the Katar hills overlooking the Zor and the Jordan River. Most of the sites had expanded along wadis with water and therefore more fertile soil. A large number of Neolithic and Chalcolithic sites represent one period of occupation. Among these sites are Tell 'Abū Hamid, Tell 'Abū Habil, Dhra’ al-Hseini along Wadi Zerqa, Tell Ghannam, Tell Affash and Ghruba on both sides of Wadi Shueib (Nimrin) and Tulailat Ghassul. There were usually large quantities of surface finds, including pottery sherds, flint tools and other
stone implements. Some of the sites showed remains of buildings close to the surface.

The number and large size of the village farming communities shows clearly growth of the population during the fifth and fourth millennia BC. Excavations at sites like Tulailat Ghassul and Tell 'Abū Hamid have shown extensive agricultural practices, which include growth of wheat, barley, olives and others. Large jars and other storage facilities suggest that such things were necessary to store the surplus of production for trade and future use.

It was apparently necessary to coordinate efforts in terms of administration and religious beliefs. Some major buildings at Tell 'Abū Hamid and Tulailat Ghassul could be interpreted as temples and/or administrative buildings. The large number and size of settlements may suggest a new kind of administration (for small regions). This type of administration may have been limited to small regional communities represented by major sites surrounded by smaller ones. It seems that the cumulative production of these sites may have been gathered in the central settlements for storage and marketing or distribution, as is supported by the presence of huge storage pits and large vessels at the major sites. A similar situation can also be observed at Chalcolithic sites in the mountains.

Corresponding sites south of the Dead Sea were, on the other hand, industrial centres, which produced copper and launched flourishing trade with Egypt and other regions of Bilad al-Sham.

4. Early Bronze Age I

Towards the end of the fourth millennium BC, we are faced with a transition which can be observed in the entire Near East. This transition has been designated as Late Chalcolithic (de Vaux), Proto-Urban (Kenyon) and EB I (Albright and others). It shows a much lower number of settlements and a drop in the production of agricultural and copper production. The best evidence for this period comes from shaft tombs, which can be found in large numbers. These tombs were used for collective burials within central graveyards. Bab edh-Dhra’ and Tell es-Sultan within the Jordan Rift Valley are good examples.

Fig. 2. Map showing the Early Bronze Age sites in the Jordan Valley
Major Chalcolithic sites including Tell ʿAbū Hamid, Tell ʿAbū Habil, Tell Qaʿdan, Affash and Ghannam along Wadi Nimrin and Tuleilat Ghassul were abandoned during and after the Early Bronze Age. Other sites like Tell al-Shuneh North, Tell al-Arbaʿin, Tell al-Nkheil North and Katāret al-Samrāʿ continued to exist in the Early Bronze Age.

Many sites in the Jordan Valley were founded in the Early Bronze Age, indicating a clear growth of population and expansion of active farming communities. Some of the EB sites are located on or just below the foothills, dominating the floor of the valley and forming a defensive line. These sites include Tell al-Shuneh North, Tell Sakhneh, Tell al-Qōs, Tell ʿAbū al-Kharāz, Tell al-Handaquq, Tell ʿAbū al-Zīghān, Tell al-Mustah, Azeimeh North and Azeimeh South, Tell al-Hammam. Other sites are to be found on the flat floor of the valley. As shown in the East Jordan Survey publication (Ibrahim et al. 1976; 1988), there are many more EB sites in the southern half of the valley then to the north of Wadi Kufranjeh. More than 30 EB sites were listed during the second season of the survey extending from Wadi Kufranjeh until Sweimeh (Ibrahim et al. 1988, 195). Almost half of these were found around the fertile plain of Deir ʿAllā. It should also be taken into consideration that the area between the Zerqa River and Wadi Nimrin did not show traces of Early Bronze Age occupation. Other periods were also much less represented here than in other areas of the Jordan Valley.
More extensive surveys were undertaken in connection with several excavation projects at EB sites in the Jordan Valley. These included Tell al-Shuneh North, Tabaqat Fahil (Pella), Tell al-Hayyat, Tell ’Abū al-Ni’aj, Dhahrat Umm al-Manār, Tell ’Abū el-Kharāz, Tell al-Sa’idiyyeh, Tell Deir ‘Allā, Tell ’Umm Hammād al-Sharqī, Tell al-Hammam and Tell Iktanu. This is in addition to small-scale excavations at Tell Sakhneh, Tell al-Handaquq North, Tell al-Handaquq South and Tell Nimrin. These investigations have thrown more light on the history and archaeology of the Jordan Valley in the Early Bronze Age. Final publications appeared on Tell ’Abū al-Kharāz, Tell al-Sa’diyyeh, and Tell ’Umm Hammād al-Sharqī, while preliminary reports appeared on other EB sites. Several reports affirmed that the beginning of the Early Bronze Age (during the second half of the fourth millennium BC) is considered a transitional period between village farming communities of the fifth and fourth millennium BC and urban life of the “proper” Early Bronze Age of the third millennium BC (Tubb 1998, 38-48).

Tell ’Abū al-Kharāz presents a good sequence of Early Bronze (EB IB and EB II) occupation, consisting of three main architectural phases and three sub-phases (phase IA, phase II A-B, phase III A-B). Based on radiocarbon samples it was dated to c. 3150-2900 BC. The site was abandoned during the remaining part of the Early Bronze Age until the later part of the Middle Bronze Age. According to the excavator, some earthquakes were responsible for the destruction of the EB II settlement (Fischer 2008, 31-34). The EB II settlement was surrounded by a massive stonewall (4-5 m wide and up to 6-8 m high), which rests on mud-brick remains of an earlier city wall of phase IB (Fischer 2008, 383).

The fortification system of Tell ’Abū al-Kharāz goes beyond the site itself and might have served to protect other EB settlements and agricultural fields, which might have belonged to the residents of ’Abū al-Kharāz in the valley.

Plant remains from EB contexts show that residents of Tell ’Abū al-Kharāz grew wheat, barley, grapes, broad beans, lentils, figs, olives, and other species. Quantities of faunal remains were also attested at Tell ’Abū al-Kharāz. Most of the samples consist of food animals including caprines, cattle, pig, fallow deer and gazelle (Fischer and Holden 2008, 308-22). These flora and fauna samples seem to be representative for the early part of the Early Bronze Age in the Jordan Valley. Agriculture with products like cereal grains, olive oil, figs and grapes was intensified during the EB II-III period as excavations at Tell al-Sa’diyyeh have shown (Tubb 1998, 45-48).

The production of most of these plants, with the exception of barley, decreased to a large extent during
EB IV, as indicated by the evidence from sites like Tell al-Hayyat, Tell 'Abū al-Ni'aj and Dhahrat 'Umm al-Marār (Falconer et al. 2007, 266-67).

We find major phases (EB IA, EB IB, EB II, EB III) represented at some Jordan Valley sites like Tell al-Shuneh North, Tabaqat Fahil (Pella), Tell 'Umm Hammād al-Sharqī, Bab al-Dhra’ and to a large extent, Tell al-Sa’idīyyeh al-Tahta.

At Tell 'Umm Hammād al-Sharqī, some 16 building phases (1-16) were recognised to cover a long occupational period of the Early Bronze Age. This site extends about 16 hectares along the Zerqa River during its early stages but no fortifications were uncovered (Betts 1992, 33-35).

A representative number of EB I sites were identified in the Jordan Valley but the architectural remains do not indicate long-term or permanent settlements. The evidence from Tell 'Umm Hammād al-Sharqī and Tell al-Shuneh North supports a long duration of EB I in the valley. In general, houses are rectangular and built of mud-brick, occasionally with limestone and basalt. Open areas included storage pits and other facilities for the production of tools and pottery (Baird and Philip 1994, 130-31). Based on $^{14}$C radiocarbon dates, the EB IA started around 3600 and lasted until 3200 BC, which is much earlier than previous archaeologists dated their material.

A variety of finds indicates that agriculture was practised on a large scale. The lithic assemblages include retouched blades, sickles, end scrapers and chipped stones. The blades found at Tell 'Umm Hammād al-Sharqī are described by A. Betts as follows: “The blades used at the site are regular, parallel sided, trapezoidal in cross-section and struck from single platform cores. Only a few have a triangular cross-section. Where preserved, most have facetedted platforms.” (Betts 1992, 123). There seemed to be an active trade of sickle blades and other flint tools between the Jordan Valley and other parts of the Near East, especially North Syria and Mesopotamia, but this assumption requires more discussion. Other stone tools from EB I context include stone and basalt bowls, grinding stones, mace heads, shells and perforated beads.

EB I pottery types include hole-mouth jars, which seem to be dominant at all sites of this period in the Jordan Valley as well as at sites in the highlands. Other well-represented vessels are straight-necked jars and others with folded-over rims, which are often decorated with thumb indentations. Some of these jars bear thumb-indented or incised tong-shaped ledge-handles. Grey burnished or Esdraelon Wares are also common at EB I sites of the northern Jordan Valley.

Fig. 7a+b. EB I-II chipped stones from Tell 'Umm Hammad al-Sharqī (after Betts 1992)
Most common are carinated bowls with wide open mouths and near-hemispherical bowls, some with knob-like projections. Other examples include black polished and red slipped vessels. These types were discussed by Catriona Gibson and Dianne Rowan (Baird and Philip 1994, 121-29; 1992, 79-82), Gustavson-Gaube (1985, 49-52) and Svend Helms (1992, 39-118).

Early Bronze IB is well attested at Tell ‘Abū al-Kharāz and discussed in detail by the excavator Peter Fischer (Fischer 2008), at Bab al-Dhra’ by Walter Rast and R. Thomas Schaub (Rast and Schaub 2003), at Numayra (Schaub and Chesson 2007, 245-52; Rast and Schaub 2000) and at Tell ‘Umm Hammād al-Sharqī by Svend Helms (Betts 1992, 92-121). EB IB sites in the Jordan Valley are more common and on average larger in size than sites in later periods of the Early Bronze Age. Some of the major sites seem to be surrounded by smaller agricultural villages, which supported their subsistence requirements. The Jordan Valley sites had better means of production than most hill sites, as a result of water and fertile soil availability.

Fig. 8. Illustrated holemouth jar from Tell ‘Umm Hammad al-Sharqī (after Betts 1992)

Fig. 9. An illustration of Tell ‘Abū al-Kharāz EB IB spouted basins with ledge-handle (after Fischer 2008)

Fig. 10. Red-skipped ware incised decoration from Tell al-Shuneh North (after Gaube 1987)

Fig. 11. Local early painted pottery from Tell al-Shuneh North (after Gaube 1987)
5. Early Bronze Age II

Urban architecture cannot be assessed at all major Early Bronze Age sites in the Jordan Valley. This applies to Tell 'Umm Hammād al-Sharqī, Tell al-Saʿidiyyeh, Tell al-Handaquq North and Tell al-Shuneh North. This is due to limited horizontal excavations and to the complexity of the stratigraphy. Architectural remains of EB II-III at Tell 'Umm Hammād al-Sharqī are fragmentary but they can be seen within an urban plan. A series of rectangular houses were assigned by the excavators to EB IA, EB IB, and EB II and compared with other houses in the Southern Levant (Betts 1992, Figs 38-41).

Architectural remains found at Tell al-Saʿidiyyeh al-Tahta were dated to EB II and described as a ‘palace’ and ‘non-domestic in nature’. This architectural complex was connected with large-scale oil and/or wine production for domestic and export use. This conclusion was supported by a major oil press and with specialised pottery jars associated with it (Tubb 1998, 41-48, Figs 12-18). The possible identification of at least part of this complex at es-Saʿidiyyeh as a temple or space used for religious purposes should not be excluded. The architectural complex in the upper town of Khirbet al-Zeiraqun of EB II-III in the eastern hills included temples and an administrative building-palace, attached to which were a series of shops and/or workshops (Ibrahim and Mittmann 1989; 1994). The temple during this period could have played a major role in the economic life of the society, which justified what might be described as a ‘temple economy’.

14C dates from Tell 'Abū al-Kharāz (phase IB) support dates for EB IB and EB II (phases IIA and B) extending from 3200 to 2900 BC. The site was destroyed at the beginning of the third millennium BC as a result of an earthquake after which it was deserted until the beginning of the second millennium BC (Fischer 2000, 222-24). The affect of this earthquake on other sites in the region should be investigated. The sudden destruction of the EB II settlement at Tell 'Abū al-Kharāz and the abandonment of the site for more than a 1000 years resulted in the protection of the evidence related to the floors and household objects as well as the roof construction. The earliest evidence at Tell 'Abū al-Kharāz EB IB corresponds with Naqada IIIB of Pre-Dynastic Egypt and the EB II repertoire with Dynasty 1-2 (Naqada III C1-D). These dates and comparisons with Egypt were concluded as a result of 14C dates and pottery parallels (Fischer 2000, 225-29). During this period Tell
'Abū al-Kharāz was a fortified settlement (surrounded by a massive city wall), which supported itself by means of trade, agriculture and large-scale weaving industry. The latter is well documented through hundreds of loom weights, spindle-whorls, bone tools and textiles remains (see also Fischer this volume). Pottery from the phase II context includes various storage jars, carinated bowls, juglets and jugs (Fischer 2008, 56-69). Vessels described by other scholars as “Abydos jars” are designated “metallic ware” by Peter Fischer as they were locally made and found in Egypt as imported goods (Fischer 2008, figs 129-132, 144, 284-289). Copper objects were also found in an EB context at Tell 'Abū al-Kharāz (Fischer 2008, figs 293 and 311). There were also four sickles with curved frames discovered to which lithic sickle blades were attached (Fischer 2008, 250, figs 312-313) as well as small cylinder seals/ beads made of bone and hippo ivory with geometric and grain designs (Fischer 2008, 356, fig. 320).

Similar to Tell 'Abū al-Kharāz, Pella’s Early Bronze Age occupation can be dated to the EB IB and EB II. Two distinct phases of the EB wall and associated towers consist of mud-brick on stone foundations, as do the remains of other structures. The site was reoccupied during the Middle Bronze Age. The material culture of EB IB/II is similar to neighbouring Tell 'Abū al-Kharāz and other EB IB/II sites in the Jordan Valley.
EB III was attested at several sites in the Jordan Valley. This period witnessed flourishing urban centres on both sides of the Jordan River. A major walled EB III settlement was excavated by Meredith Chesson at Tell al-Handaquq South, located in the southern foothills of the Wadi Zerqa. The size of this walled settlement reaches c. 15 ha forming one of the major urban sites in the Southern Levant. The excavators distinguished four main architectural phases, all dated to EB III (Chesson 2000, 365-78; 1998, 20-34). The pottery assemblage at Tell al-Handaquq South represents a Jordan Valley style, which had to do with daily life in the region (Chesson 2000, 367). Main types included hole-mouth jars, pithoi, bowls, basins, jugs and juglets (Chesson 2000, figs 20.3
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Chesson classified the pottery according to its use in terms of serving, storage, food preparation and special use which "illustrates the self-sufficient nature of the residential compound as an economic unit in EB III towns" (Chesson 2000, 376).

EB III major sites in the central and southern Jordan Valley, including Tell Bab al-Dhra’, Tell al-Handaquq South, Tell ’Umm Hammād al-Sharqī, Tell al-Sa’idiyyeh, Tell al-Handaquq North (Mabry 1989) and others did not produce Khirbet Kerak Ware, which was considered by archaeologists as typical for this phase of the Early Bronze Age. A large amount of hand-made Khirbet Kerak Ware was found at Tell al-Shuneh North (Rowan 1994, 128-29), Tell Beth Shean (Mazar et al. 2000, 260-65, figs 14.3, 14.4 and 14.10), Tell al-Qidah-Hazor and Tell al-Qadi-Dan (Greenberg 2000, 189-190, figs 11.4 and 11.8), all of which are located not too far south of the site of Khirbet Kerak (Beit Yerah) where this ware was first identified. Several authors discussed Khirbet Kerak Ware as having originated in Trans-Caucasia and Anatolia. Its presence may indicate an immigrating group of potters to the Syrian coast and North Palestine. Khirbet Kerak vessels are recognised by their bichrome decoration (mainly red and black). They are usually of well-made coarse ware and are over-fired.

EB III urban sites in the Jordan Valley produced a large variety of other common wares including metallic ware, dribble painted ware, hole-mouth jars, and many other types.

7. Early Bronze Age IV

The end of the Early Bronze Age is named either EB IV, EB-MB, or MB I, due to a lengthy discussion that takes place concerning the designation of the material culture. During this period, the entire region witnessed an economic recession and major urban centres were abandoned or replaced by poor rural settlements or camp-like sites. There has been a long discussion about the abandonment of EB III settlements either as a result of destruction by human attack or by natural causes (Kenyon 1966). EB IV sites in the Jordan Valley are numerous.
but most of them seem to be small or seasonal. Many archaeologists consider EB IV as a transitional period between highly developed urban cultures of EB II-EB III of the third millennium BC and the MB of the second millennium BC.


Later, extensive fieldwork and research was conducted by S. Falconer and B. Magness-Gardiner at the EB IV-MB I sites of Tell al-Hayyat, Tell 'Abū al-Ni’aj and Dhamret 'Umm al-Marār (Falconer and Magness-Gardiner 1989; Falconer et al. 2007, 261-68; Falconer and Fall 2006). Kay Prag’s work at Tell Iktanu contributed to the understanding of this period (Prag 1989, 33-45; 1990, 119-28; 1991, 55-66). The work of Paul Lapp and later Thomas Schaub and Walter Rast at Bab al-Dhra’ sheds light on all periods of the Early Bronze Age and corresponding tomb types (Schaub and Rast 1989; 2000; Schaub 1981a; 1981b; 1982; Schaub and Chesson 2007).

More extensive evidence of the EB IV comes from tombs, which show a clear change in the burial practices from those of the earlier phases of the Early Bronze Age. Most of these later ones were shaft tombs, which were made for individual persons. The funerary objects were homogeneous and included pottery, beads, and metal objects (Schaub and Rast 1989; Tubb 1990; Palumbo 2001).

**8. Dolmens**

There are large fields of dolmens in the lower foothills of the East Jordan Valley, especially in the areas of Dāmiyah and Wadi Hesban. These megalithic structures were visited and explored by many scholars over the last two centuries. The most comprehensive study was undertaken by Gajus Scheltema (2008). Varied dates were proposed for these dolmens based on typology and parallels. The dates range from Natufian to the Bronze Age. More reliable dating of the Dāmiyah dolmens on the foothills of the central Jordan Valley are based on the excavation of one of the dolmens by Khair Yassine. The excavator found human skeletal remains and a collection of pottery vessels in the dolmen, including grey-burnished bowls dating to the EB I (Yassine 1988).

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Fig. 17. Porthole-type dolmen at Dāmiyah
BIBLIOGRAPHY


