

Jordan in the Iron I Period

Introduction

The Iron I period in Jordan is something of a dark age. Early surveys often assumed settlement patterns and ceramic development should be like those west of the Jordan River, leading them to misdate some types of pottery to Iron I in order to fill out the period. Unfortunately, this has happened in survey reports of some localities (especially the south) as late as the early 1990s. Thus, Iron I readings among the results of archaeological surveys, such as those of Glueck (1934, 1935, 1939, and 1951) should be treated with utmost care. There have also been very few excavations at sites that contain Iron I levels. Further, when sites have produced Iron I discoveries, they are often exposed in small areas for which coherent archaeological interpretations cannot be clearly supported, such as Nimrīn. Or, more problematic, the Iron I levels have been largely destroyed by later constructions, such as Ḥisbān. The third problem is that some excellent sites have not yet been published in a final form, such as Saḥāb.

We may divide the Iron I sites in Jordan into two principal groups: those in the Jordan Valley and those in the highlands. The sites in the Jordan Valley seem to reflect a more prosperous lifestyle. They also contain a material culture that displays a continuum with the Late Bronze and is oriented more toward the west than sites on the plateau. However, like the Valley sites, prominent LB sites on the plateau often continue to exist into the Iron I period. Also unlike highland sites west of the Jordan River, Iron I sites on the Jordanian plateau tend to be larger, some with fortifications. Among excavated sites there is virtually no evidence yet that the settlement pattern of the Transjordanian highlands included scores of very small village sites, like that of the highlands west of the Valley. We may still find some, especially in the north, but the highlands

of Jordan will most likely present a different settlement pattern for Iron I than that of the West Bank.

Recent research has tended to emphasize the “tribal” nature of settlement and sedentarization in the highlands while more established urban connections seem to have existed for the Jordan Valley sites (Herr 1998; Ji 2002; van der Steen 2004). Indeed, both Ji and van der Steen have used aspects of 19th century Bedouin tribal society to help explain Iron I settlement processes in the highlands. But see Routledge’s nuanced amplification (or re-direction: 2004: 92-93). At the risk of appearing simplistic, clustered settlement patterns may reflect tribal groups or confederacies as they began the settlement process at different paces in different areas, but these groups were never static and interacted with each other in fluid ways (LaBianca and Younker 1995).

Egyptian sources for the Late Bronze Age and early Iron Age mention a people group called Shasu, apparently nomads from a region, which included southern Jordan. The only other textual sources relevant to this period are later reports and/or remembrances of the biblical documents. These include stories of the origins of the Aramaeans, Ammonites, Moabites, Edomites, and ancient Israelites. Among them are the defeat of Sihon the King of Heshbon (Num 21), a series of wars between Israel and the Transjordanian people-groups about who was to control the territories east of the Jordan River (e.g. the Jephthah story in Judges 11), and even battles that occurred to the west (e.g. the stories of Ehud against the Moabites in Judges 4 and Gideon against the Midianites in Judges 6). All these sources certainly reflect interactions among the various people groups as they sorted out who they were and how they could best support their “related” clans.

The settlement process in the highlands was not constant. Regions with high agricultural potential were generally settled first. Thus, northern areas (north of the Wādī az-Zarqā') contain sites that continued from LB settlements; sites in the central areas (from the az-Zarqā' to the al-Mūjib) sometimes continued from LB settlements or founded new ones near the beginning of the period; the south-central area (between the Wādī al-Mūjib and Wādī al-Ḥasā) was first settled seriously during the 11th century; and the southern region (south of the Wādī al-Ḥasā) did not seem to have been settled clearly until the Iron II period.

Routledge has produced an important list of features describing the Iron I period as a contrast to the LB (2004: Chapter 5), which I summarize (in part) here:

1. The collapse of pan-Mediterranean trade systems.
2. Disappearance of palaces and temples with a more egalitarian demography.
3. Disappearance of Egyptian hegemony.
4. Collapse of the Hittite Empire.
5. The proliferation of pillared houses and the rise of the domestic nature of settlements.
6. Increase of sites in the highlands.
7. Episodic occupational patterns (short-term occupation with disruptions).

Much progress has occurred recently on the pottery of Jordan during the Iron I period, allowing us to re-date older excavated materials. For instance, simply to find a collared pithos is no longer enough to ascribe a settlement to the Iron I period in Jordan. Across Jordan for the most part, they continue into the Iron II period. Excavations are also providing us with a much better understanding of Iron I assemblages. Unfortunately, this better understanding of the pottery has resulted in a net loss of Iron I sites rather than gain, because early surveys and excavations tended to suggest pottery was Iron I when it really was Iron II (below).

No attempt has been made here to include survey sites, which have produced "Iron I" pottery. Older surveys did not illustrate the pottery consistently or clearly (Glueck 1934, 1935, 1939, 1951) or did not illustrate it at all (Mittmann 1970 and Ibach 1987). Indeed, when we peruse the plates of surveys that did illustrate the pottery, we must reduce significantly the number of Iron I sites they purported to identify (see below for details). Survey data (and JADIS entries based on them) are misleading at

best, forcing us to exclude them from this study.

I have tried to follow the new spelling conventions (but without diacriticals) from the Royal Geographic Society for site names, which have been adopted by the Department of Antiquities, but in cases where no example occurs, the old spelling is retained; I have also used popular classical site names, such as Pella. The following is an update and expansion of Herr and Najjar 2001.

The Late Bronze Age/Iron I Transition

This sub-period is necessary in any discussion of the Iron I period in Jordan, because many sites seem to contain a ceramic horizon which contains forms with strong LB tendencies, such as flaring, flanged cooking pot rims and slightly everted, triangular rimmed jars and jugs, but also forms that reflect the very beginning stages of the Iron I assemblage, such as cooking pots with long flanges and an upright stance and other upright forms. It also lacks certain typical LB forms, such as the low carinated bowls in the MB-LB tradition. This ceramic assemblage occurs together in buildings that reflect Routledge's Iron I characteristics (above). Unfortunately, not all the sites listed below have been extensively excavated or clearly published. Others contain only tombs. The list is presented to begin a process of discussion and decision about just what should belong to this sub-period or not. Sites with question marks indicate that not enough has been published to allow independent confirmation for the existence of the site in this period (usually entailing the lack of published pottery).

Excavated Sites with at Least Preliminary Reports: Jordan Valley

Dayr 'Allā?	House (Kafafi, lecture at SHAJ 10, Washington, DC, 2007).
Nimrīn	Pithos (Flanagan and McCreery 1994: 241, fig. 21:4).
Pella	Palatial town with destruction (end of LB) (McNicoll <i>et al.</i> 1982; Bourke 1997: 103-113).
Saḥam	Tombs (Fischer 1997)
As-Sa'idiyya	Tombs (Pritchard 1980); Strata XIV-XV — end of LB; wall and cobbled surface (Tubb <i>et al.</i> 1996).

Northern Plateau

Abila?	Walls (Mare 1992 and other references there).
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Al-Fukhār?	Reused palace?; house walls (Strange 1997).
Irbid Phase 2	City wall; tower; cultic building (Lenzen 1988); Tomb B (Dajani 1966b).
Jarash	Floor fragments; one published potsherd (Braemer 1987).
Zar‘ā	One potsherd (Vieweger and Häser 2005: 25, Abb. 8:19).

Central Plateau

‘Ammān	Tomb (Dajani 1966a).
‘Arā‘ir V	Houses (Olavarri 1965: figure 1: 1-4).
Al-Baq‘ah Valley	Tombs (McGovern 1986).
Ad-Danānīr?	Unpublished pottery (McGovern 1986: 61).
Ḥisbān 21	Rock-cut trench; (Ray 2001: 75-120; Herr forthcoming).
Jalūl?	Pottery in secondary deposits (Yunker, personal communication).
Al-Lāhūn	Sherds under perimeter wall (Homès-Fredericq 1997: 58).
Mādabā	Tomb (Harding and Isserlin 1953)
Rujm al-Ḥinū?	Unpublished pottery (McGovern 1983: 126).
Şāfūt?	Unpublished pottery (Wimmer 1987: 281).
Şahāb	Tomb (Dajani 1970).
Al-‘Umayrī 12	Fortification system; city gate; houses (Clark 1997)

Southern Plateau

Ṭawilān?	One possible pottery sherd (Hart 1995: 60, figure 6.19: 11).
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In the discussion that follows, I have not repeated citations listed in the above list unless more details are given.

In the Jordan Valley, the most important site is Pella, although generally the Iron Age I is not very clear. The remains published as coming from the end of the Late Bronze Age are here considered to be Transitional, if the pottery published in 1982 also comes from that horizon (McNicoll *et al.* 1982: 121-127); it should, however, be noted that much of the pottery seems to be from later Iron I, as well. Researchers have recently discovered most of a house at Dayr ‘Allā which they date to this period. The large and rich cemetery at as-Sa‘īdiyya

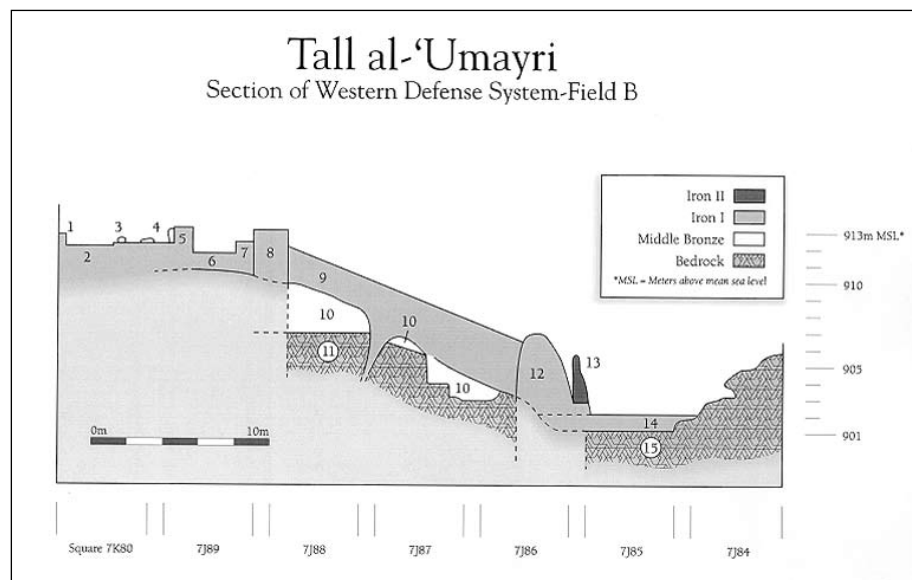
with LB IIB and Iron I pottery and other objects suggests a significant town or city there. Indeed, recent excavations have apparently uncovered tantalizing hints of its existence, but the exposure is small. One pithos sherd from Nimrin is identical to those from the Transitional period at al-‘Umayrī (Flanagan and McCreery 1994: 241, fig. 21:4). The Jordan Valley sites generally produced finds of a much more varied and luxurious repertoire than the plateau sites, often continuing the cultural pattern of the Late Bronze Age.

Several sites on the northern and central parts of the plateau seem to have continued from the Late Bronze Age (Abila?, ‘Ammān, the Baq‘ah Valley, Umm ad-Danānīr, al-Fukhār, Irbid, Jarash, Şāfūt?, Şahāb, and al-‘Umayrī). The early Iron I remains at Zar‘a seem to have reused LB walls. This suggests a peaceful continuity from the Late Bronze Age into the Iron Age, at least in the north and central plateau, where all of these sites occur.

Many of the finds on the northern and central plateau come not from excavation, but from tombs (‘Ammān, Şahāb, the Baq‘ah Valley, and Mādabā); fragmentary architectural remains are reported for Abila?, Ḥisbān (Sauer 1986; Ray 2001; Herr forthcoming), Irbid, and Jarash (the published collared pithos is similar to those from al-‘Umayrī [compare Braemer 1987: figure 2: 8 with Clark 1997: figures 4.14-20]); isolated and/or secondary pottery finds seem to come from ‘Arā‘ir, ad-Danānīr?, Rujm al-Ḥinū?, Şāfūt?, and Jalūl?. The finds at Ḥisbān include a long trench cut into bedrock, possibly a deep, narrow moat at the edge of the hilltop (Ray 2001). Preliminary reports from Irbid indicate a very thick destruction level (up to four meters thick), which covered the city wall, a tower, and a two-storied public building that contained cultic vessels.

The excavators of al-Lāhūn suggest the site was founded during the Transitional period, but no pottery has been published so far, except for three sherds found under the perimeter wall. Because the following period is much longer-lasting, I have placed the lion’s share of the site there for the time being.

The best preserved remains so far come from al-‘Umayrī (Herr 2002: 16-17). The defensive system (FIG. 1) included a dry moat cut out of the original ridge upon which the site was founded (FIG. 1:14); a retaining wall (FIG. 1:12) supporting a massive rampart which repaired a crack in bedrock



1. A sketch of the section through the Middle Bronze Age and Transitional LB/Iron I fortification system at Tall al-'Umayri.

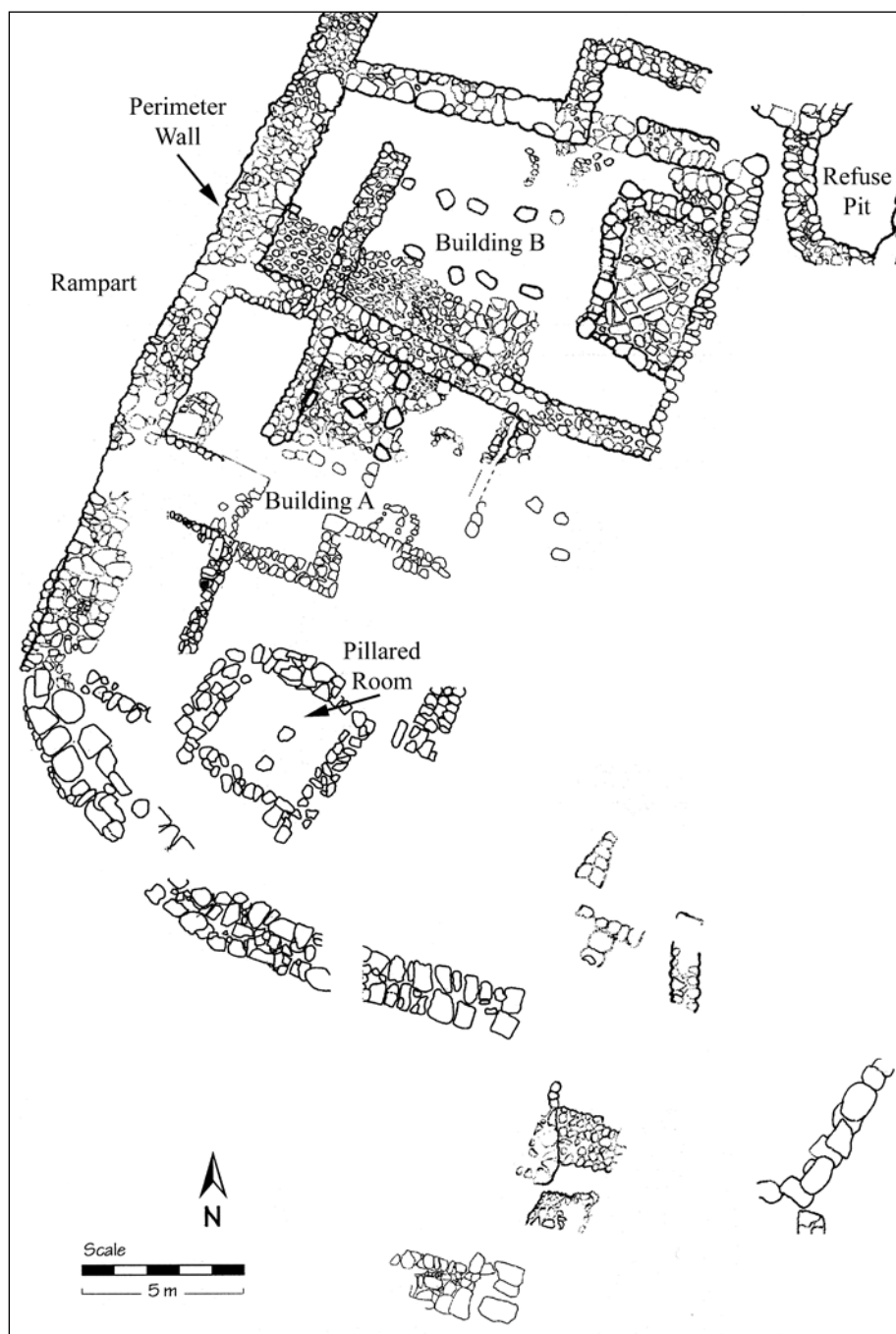
probably caused by an earthquake (FIG. 1:9); and a defensive perimeter wall surrounding the site at the top of the rampart (FIG. 1:8), which has been traced for approximately 70 meters. The perimeter wall curves into the city (FIG. 2) forming a gateway with a parallel wall partially excavated to the south in 2006 (FIG. 3). A new wall then continues the fortification system to the south (not illustrated).

Inside the perimeter wall were the remains of three houses (FIG. 2). Building B, the northernmost house, was preserved over two meters high in places by a massive brick destruction layer, which fell from the upper story of the building. It was a four-room house with post bases separating the long rooms (Room B2). The broad room (Room B3), which used the perimeter wall as its back wall, contained around 80 collared pithoi lining the walls of the room and fallen from the collapsed upper story (Clark 1997: figures 4.14-20 shows a few of them). Six bronze weapons in the destruction debris of the room suggest the site was destroyed by military attack, while the burned bones of at least four humans were scattered in the destruction debris, probably victims of the attack. Their remains were then dramatically spewed throughout the room by the subsequent collapse of the upper story. The house did not contain an eastern wall, but probably used blankets and carpets as curtains to protect the house from winds. They could then be opened to allow the early morning sunlight to enter the house, or they could be arranged in a variety of ways to create wind patterns that would disperse smoke from the hearth inside. In front of the house

was a small courtyard containing a paved annex to the east (Room B1), surrounded by a narrow wall interspersed with post bases. It may have been an animal pen.

Another building to the south (Building A) contained more collared pithoi in the broad room (Room A3). In the paved area of Room A2 was a standing stone with a votive altar or table in front, but in the nearby courtyard were domestic remains, suggesting a house with a small shrine. A small alcove contained eight standing stones lying down. The precise meaning of this arrangement is unclear. Another house is just beginning to appear to the south of Building A. Only the tops of some of the walls have been exposed so far. All three houses probably used a large open refuse pit, which contained about 25,000 bones (mostly from the meaty parts of animals) and hundreds of cooking pot sherds.

The best parallels to the objects from these structures are found mostly in the highland regions north of Jerusalem (and possibly in the Irbid region) and range from pottery to potters' marks to seals. Similarities are notably less extensive in the Jordan Valley. Al-'Umayri, however, was larger and somewhat more prosperous than the sites west of the Jordan Valley. The finds probably reflect socio-economic or lifestyle connections with the highlands of western Palestine. The limited assemblage of the finds suggests a simple economic system brought about by tribal groups beginning a lengthy sedentarization process in the highland areas of Jordan. Although the site was also occupied near the end of the Late Bronze Age, the ma-



2. Plan of the perimeter wall and adjacent houses from the Transitional LB/Iron I period at Tall al-'Umayri. The drawing reflects the remains up to the 2004 season and does not illustrate the gate area.

terial culture of this settlement is nothing like that of the previous, unambiguously LB level, which included a large public building, either a palace or a temple (Herr and Clark 2005: 250-253). A major catalyst of this initial settlement, and perhaps its destruction, may have been frictions arising from the north-south trade routes (Herr 1998).

At Ṭawilān in the southern region a probable cooking pot from this period and a Midianite potsherd were found in mixed contexts, but they hard-

ly indicate solid evidence for a settlement. It is very possible that they actually reflect different sorts of pots. In the total lack of anything else from this period at the site, we should discount them. Moreover, no other certain sherds from this period have been found south of the Wādī al-Mūjib in excavations or surveys. Early published reports may have attributed a few sites to the Transitional period, but almost all the sherds involved can be shown to derive from later periods, such as late Iron I or



3. The termination of the new southern gate wall of the Transitional LB/Iron I period at Tall al-‘Umayri found in 2006 (a fragment of which is just visible at the bottom of FIG. 2); note the very large stone. The walls to the left date to the late Iron II period and were built later in the gate entry passage; the wall to the right is the southern part of the perimeter wall (not shown in FIG. 2).

even Iron II. Personal observation of the pottery in two recent survey projects south of the Wādī al-Ḥasā conducted by Burton MacDonald (aṭ-Ṭafila-Buṣayra Archaeological Survey and the Ayl to Rās an-Naqab Survey) underlines the lack of pottery from this period in the entire region. For his other two surveys (the Wādī al-Ḥasā Archaeological Survey and the Southern Ghawr and Northeast Araba Archaeological Survey), I can confirm no pottery from this period in the plates. There may have been some human habitation in this region, but it was very slight indeed.

Iron I (12th to 11th Centuries)

There are no clear settlements in Jordan that seem to go smoothly from the Transitional period to the main part of Iron I, the late 12th to 11th centuries. However, I must emphasize that the number of sites upon which that very tentative inference is made are few. Several sites saw new settlements: Abū al-Kharaz, Dayr ‘Allā, al-Mazār?, and Nimrīn in the Jordan Valley; and ‘Ammān, al-Bālū‘, Dhibān, Ḥajjār, ‘Irāq al-Amīr?, probably al-Lāhūn, Mudayna al-‘Ūlya, Mudayna Mu‘arrāja, Mu‘mmariyya, Rujm al-Malfūf south, Saḥāb, and al-‘Umayri on the plateau, and possibly an-Nuḥās in the Wādī ‘Arabāh. This suggests there was a disruption between the two periods with significant movement toward sedentarization after the disruption. We should not consider tombs to represent settlements if there is

no clear pottery from the excavations at the site itself. Some sites in both areas were settled only after a destruction level: Pella VII and al-‘Umayri 11 are the clearest examples. But most sites have not produced clear results or clearly published results for us to be sure if such a relationship extended to other sites. Indeed, many sites have produced only pottery in secondary deposits (and then often not very much): ‘Ammān, al-Bālū‘, Dhibān, probably ‘Irāq al-Amīr, Jarash, and Rujm al-Malfūf south; others have produced only fragmentary remains: Abila?, ‘Arā‘ir, Ḥajjār, Ḥisbān, al-Mazār?, Nimrīn, Pella VII, and Ṣāfūt?. Mādabā was limited to a burial and other sites were excavated when Iron I pottery in Jordan was not known very well and I question their attribution when the pottery is not published: ‘Arā‘ir, Rujm al-Malfūf south, and Ṣāfūt.

Excavated sites with at least preliminary reports on this period:

Jordan Valley

Abū al-Kharaz?	Citadel? (Fischer 1994: 130).
Dayr ‘Allā	Phases A to G or H; bronze smith workshop; pits (Franken and Kalsbeek 1969).
Al-Mazār	Courtyard building with cultic objects (Yassine 1988: 115-135).
Nimrīn	Wall fragments (Flanagan and McCreery 1994: 212-216).
Pella VII	Village wall fragments (Bourke 1997).
As-Sa‘idiyya XII	Parts of the cemetery (Pritchard 1980: e.g. figures 16: 2, 3; 30: 2; 31: 1, etc.--brown and black juglets); administrative complex; steps to water source (Tubb <i>et al.</i> 1996: 24-27).

Northern Plateau

Abila?	Walls (Mare 1992 and other references there).
Al-Fukhār	Reused palace?; house walls; Philistine potsherd (Strange 1997).
Irbid Phase 1?	City wall; houses; wine installation (Lenzen 1988).
Jarash	Pottery in secondary deposits (Braemer 1986: fig. 15: 9-10 [No. 8 is probably LB]).
Juḥfiyya	Pottery in secondary deposits (Lamprichs 2002).
Zar‘ā	Walls, ovens, pottery (Vieweger

2002: fig. 16; Vieweger and Häser 2005: 13, 25).

Central Plateau

- ‘Ammān Unpublished pottery (Zayadine *et al.* 1987: 308; Najjar 1997); pottery (Dornemann 1983: 97).
- ‘Arā‘ir? Houses? (Olavarri-Goicoechea 1993: 93).
- Dhibān Pottery in secondary deposits (Winnett and Reed 1964: Pl. 76: 11-13).
- Ḥisbān Copious pottery in rock-cut trench (Sauer 1994; Ray 2001; Herr Forthcoming).
- ‘Irāq al-Amīr V Fills and possible fortification wall (N. Lapp 1983: 10; 1989: figure 9b: 1-2, 20-23; the rest belong to Iron IIC and later — No. 8 is Roman)
- Al-Lāhūn Fortified village; casemate wall; 4 houses; perhaps multiple phases (Homès-Fredericq 1997b).
- Mādabā Tomb (Piccirillo 1975; Thompson 1986).
- Ṣāfūt? Mud brick installation; unpublished pottery (Wimmer 1989).
- Saḥāb Domestic house fragments; collared pithoi burials; burial cave (Ibrahim 1987: 77-78).
- Al-‘Umayri 11-10 Storerooms and destruction layer (Clark 1989: 249-250; [Field Phases 5 and 4; Phase 4 was misdated at the time to early Iron II]).
- Unnamed Site near Khirbat as-Sūq Few scattered domestic buildings and a tower with Iron I and Iron II pottery (personal observation).

Southern Plateau

- Al-Bālū‘ Pottery (Worschech 1994: 202)
- Mudayna al-‘Ūlya (also ‘Aliya) Houses, city walls and gate; 11th c. only (Routledge 2004: 100-108).
- Mudayna Mu‘arraja City walls, gate, towers, houses (Olavarri 1978; 1983).
- Mu‘mmariyya Citadel (Ninow 2004; 2006).

‘Arabah

- An-Nuḥās? Copper slag (Levy *et al.* 2005)
- This period, unfortunately, spans a relatively long period of time and includes several sub-phases of activity, which overlap. It is thus very difficult at

this time to propose realistic sub-divisions. Not all the sites listed above were contemporary and some sites probably had more than one phase of occupation, such as al-Lāhūn and al-‘Umayri. Nor can this “episodic” settlement pattern always be sorted clearly into a sequence of site occupation: which sites came first, etc. Moreover, the preliminary nature of the publications often do not allow us to project whether a site lasted a long time or not, or indeed, whether it contained more than one phase. It is possible, however, to propose sites that began toward the end of the period, such as those in the Karak region. I will point these out in the discussion.

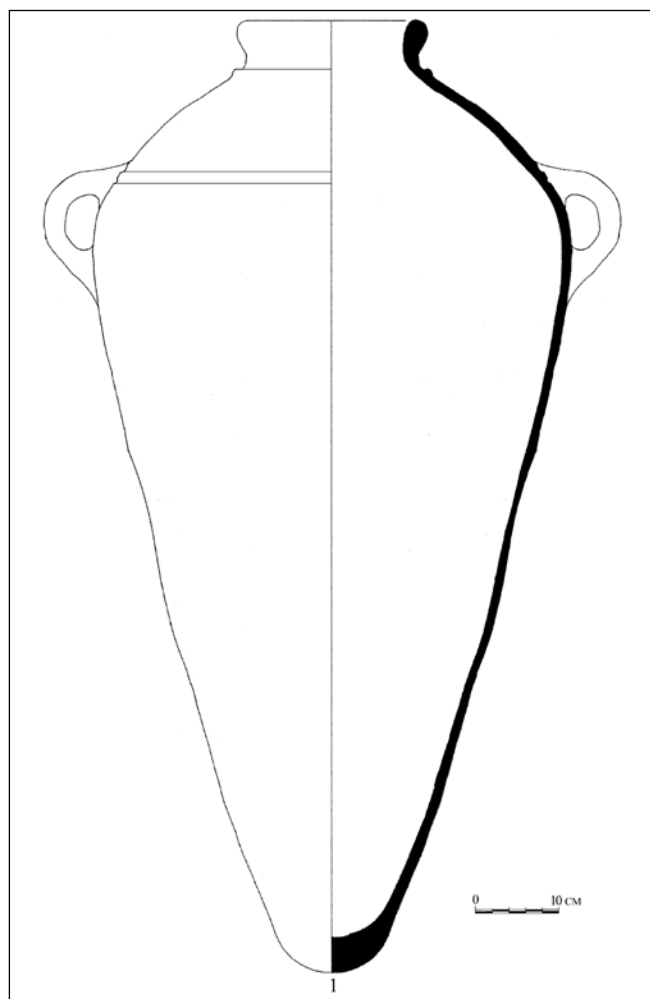
The Jordan Valley site of Pella continued from the earlier period, but the wall fragments are not as yet easily interpreted. Tubb *et al.* seem to suggest that stone terraces at as-Sa‘īdiyya may lead to entrances to the stepped structure, excavated by Pritchard, which descended to the water source at the foot of the site. The closest parallels to this latter feature are found in Mycenaean Greece (Mycenae and Tiryns). A large residency or administrative complex, possibly with Egyptian connections, was also found there. At Dayr ‘Allā Phases A to G or H all belong to the Iron I period. The first four phases (A-D) include a possibly-itinerate bronze-smith’s workshop on top of the LB sanctuary. Nearby deposits of clay were used for molds and the metal was fired in a large oven. Pear-shaped pits were also found around the smithy, as were small wall fragments. Some of the painted pottery has been connected with Philistine ware (Sauer 1986: 12 and figure 12). These first four phases probably date to the twelfth century. Their relationship to the house dated here to the Transitional period has not yet been established. The excavators suggest Phase C ended in an earthquake. Phases E-G/H were characterized by a much heavier settlement, but with walls often only one brick wide and founded on a layer of reeds. Phase H produced a major building of uncertain use.

Two major sites in the Jordan Valley began or were resettled at this time: Abū al-Kharaz, and al-Mazār. There may have been a citadel at Abū al-Kharaz, but the initial report has not been pursued in later publications. Toward the end of the period an open court sanctuary was constructed on the lower mound at al-Mazār with three rooms at the end of a large courtyard. The pottery, much of which was found together outside the door to one of the rooms,

dates to the end of Iron I and the beginning of Iron II (Yassine 1988: 122-124). A few wall fragments and pottery appeared at Nimrin. Thus in the Jordan Valley, the orientation of the material culture still seems to be more toward the west than the sites on the plateau. The East Jordan Valley Survey located 16 other sites, mostly dated to Iron IB, that have so far not been excavated (Yassine, Sauer and Ibrahim 1988: 174). If the dating was correct, it confirms the above picture that settlement grew in the Valley during the late 12th and 11th centuries.

On the northern plateau, al-Fukhār seems to continue, reusing the LB palace, while Abila may have extended into this time period, as well. The Philistine sherd found at al-Fukhār is still the only one so far discovered on the plateau. Most of the Iron I pottery published from Zar‘a (Areal I, Stratum 3 and the surface survey) is from the second half of the period. Phase 1 at Irbid, which lasted into Iron IIB, included a rebuilt city wall and domestic buildings, which were associated with an industrial installation that the excavators suggest was for wine. One wonders if there were not several sub-phases within Phase 1. However, the published evidence for all three sites in this region is sparse. The vast majority of the pottery published from Juhfiyya belongs to the Iron II settlement (probably the ninth and eighth centuries based on the cooking pot and collared pithoi—Lamprichs 1996; 2003; 2004). However, a few Iron I vessels occur in one publication (Lamprichs 2002): one certain Iron I collared pithos (Tf. 12:4), three probable jars (Tf. 15:4-6), two likely jugs (Tf. 19:4 and 6), several probable cooking pots (Tfs. 26:4-6 and 27:1-3), one probable krater (Tf. 29:4), and three probable carinated bowls (Tf. 35:2-4). The German survey of the northern plateau claims to have found small Iron I sites, such as the small villages on the West Bank. Mittmann (1970) lists 75 sites with Iron I pottery but only 51 with Iron II potsherds. Moreover, all but two of the “Iron I” sites contained multiple periods. Unfortunately, Mittmann did not publish any pottery whatsoever and his results cannot be confirmed. To find considerably more Iron I sites than Iron II sites makes one suspicious (because at that time collared pithoi were thought to be limited to the Iron I period, I wonder if the Iron II forms of collared pithoi (with inward stances), so frequent at Iron II sites all over Transjordan (see Juhfiyya, al-‘Umayri, and the Edomite sites), were mistakenly identified Iron I.

In central areas of the plateau Hisbān seems to have lasted throughout the Iron I period. The large amounts of pottery in the bedrock trench span the period from Transitional times down to Iron IIA (Herr Forthcoming). However, the pottery comes from a secondary fill in the trench and a true multi-phase stratigraphy for Iron I Hisbān does not exist. A massive destruction at al-‘Umayri separates the Transitional period from this one. Based on the significant change in ceramic assemblages between Strata 12 and 11, the site may have witnessed a hiatus during at least part of the 12th century. A storeroom was built on top of the bricky destruction of the earlier, Transitional settlement and the bases of at least 18 reconstructable collared pithoi were embedded in the fallen bricks (FIG. 4 shows an example of one of these vessels; they all have more upright rims, shorter necks, and higher collars than the pithoi of the Transitional period). South of the



4. One of the Iron I pithoi from a storeroom at Tall al-‘Umayri; it is typologically later than the pithoi from the Transitional LB/Iron I period.

gate area, an open-air sanctuary was constructed and paved with cobbles and plaster. It lasted until the late Iron II period. On one of the lowest floors was a model shrine (FIG. 5). In the southern areas of the site in at least three separate fields, several walls were constructed of very large stones (some are over two meters long). The lowest earth layers sealing against them date to this period, but the founding levels of only one wall have been discovered, built on top of the LB stratum. These megalithic walls may have been built during the Transitional period. Certainly, however, they were reused during this period (Strata 11-10).

The Iron I pottery from Saḥāb was virtually identical to that from al-‘Umayrī at this time (Ibrahim, personal communication; for one example among many, compare the collared pithos from al-‘Umayrī in FIG. 4 with the example from Saḥāb published by Ibrahim 1978: 116, 119). Of special interest are the seal impressions on the rims of many of the Saḥāb collared pithoi. This is a feature generally not apparent at other sites in Jordan. None of the house plans at Saḥāb were complete, but enough was uncovered to characterize the rooms as rectangular and mostly paved with flagstones (Ibrahim



5. The reconstructed model shrine found in an open sanctuary at Tall al-‘Umayrī.

1974: Pls. 15, 18 for the house plans). The Ḥisbān survey (Ibach 1987) located 30 sites for which Sauer read Iron I pottery. But unfortunately, none of the pottery was published. The surveys around Tall al-‘Umayrī and Tall Jalūl, for which I read the pottery, located very few Iron I sites, but the full publications have not yet appeared.

Excavators at al-Lāhūn have discovered an extensive town and have excavated a casemate wall and several houses, which are sometimes pillared. But possibly over 50 houses exist at the site. The excavators date the remains to the Transitional period, but seem to suggest a broader time range, as well. I have thus moved them to this period in their entirety. Not enough pottery has been published to make independent decisions (Homès-Fredericq 1997). Perhaps future publications will revise this decision. Whereas the remains are very shallow, several episodes of rebuilding in the houses suggest a long period of time for the settlement (Homès-Fredericq 1992: 190). Because there are virtually no other remains on top of the town, the site is the most extensively known site in Jordan dating to most of the Iron I period.

Other central plateau sites were probably new. That is, although they may have had an earlier tomb, the pottery published from the site lacks Transitional forms but matches the later assemblages: ‘Ammān (incoherent walls), Mādabā (Tim Harrison has told me of sherds from secondary deposits; note also the late Iron I tomb), and Ṣāfūṭ (also without published pottery). Possibly, a new site was constructed at ‘Irāq al-Amīr town (fills and a possible fortification wall; note that P. Lapp sometimes apparently identified Iron IIC pottery as Iron I; Ji, personal communication). A few potsherds from the period have been published from Dhibān. The unnamed site near Khirbat as-Sūq is atop the forested hills on the western fringes of the town almost immediately beneath high-tension wires. It is about 1-2km south of al-Yādūdāh and was discovered by the Mādabā Plains Project survey team (not yet published). It is the only unfortified, very small village site clearly identified so far on the central Jordan plateau, but it has not yet been excavated.

Toward the end of this period settlements were appearing in the Karak region at two very similar sites, Mudayna al-‘Ūlya and Mudayna Mu‘arraja. Because the ruins are prominently visible on the surface, it is easy to describe the house plans, city walls, towers, town gates, dry moats severing the

sites from neighboring hills, and the roadways approaching the sites. Four-room houses are visible and are sometimes preserved as high as the lintels spanning the doors (Routledge 2000). In some cases large slabs of stone are still visible spanning the rooms of the houses with a corbelling technique. Possibly as many as 35 houses existed at Mu'arraja, while the pottery from the excavations seems to date to the late eleventh century, perhaps going into the tenth century, as well. Similar pottery has been published from al-Bālū'. A nicely preserved citadel has recently been excavated at Mu'mmariyya, also, like the other sites in this paragraph, located on the edge of the al-Mūjib and containing pottery from the end of Iron I.

Miller's survey of the Karak plateau published only one genuine (to me) Iron I potsherd (Miller 1991: 274: Cooking pot No. 206) and a few other possibilities (Bowl No. 185 and Pithoi 218-219). Otherwise, everything else appears to be Iron II or even Hellenistic (Bowl No. 197 and Pithoi Nos. 205, 209-212, 220, and 221 [until very recently many archaeologists in Jordan have been calling these Hellenistic pithoi late Iron I or early Iron II]). The Iron I period was thus very sparsely settled in the Karak area until the end of the period. However, because the excavated sites tend to be limited to the edges overlooking the Wādī al-Mūjib, one should probably expect a few other sites to turn up in more central areas, probably well hidden beneath later remains.

No Iron I settlements have been excavated south of the Wādī al-Ḥasā. Various surveys have discovered pottery at several sites. Some of the published "Iron I" pottery assemblages from surveys prior to the 1990s, however, seem to be mostly Iron II forms. In the published plates for Iron I in the Wādī al-Ḥasā Archaeological Survey (MacDonald 1988: 312-316) only four most likely belong to Iron I (Pls. 6:10-11; 7:7, 24). Most of the others are Iron II and one (Pl. 6:5) is EB. One suggested Iron I site was actually excavated to test the survey results, but the team discovered only Iron II remains (Bienkowski 1997). In the Southern Ghawr and Northeast 'Arabah Archaeological Survey (MacDonald 1992: Pls. 18-19) I can find only 5 that are probably Iron I (Pls. 18:1, 11; 19:1, 3, 5, if they are cooking pots as they seem). More recent surveys by MacDonald have produced very few clear Iron I potsherds (I was the ceramic chronologist for his last two projects), leading me to suggest there may have been

an extremely sparse settled population, if any.

At the copper production site of Khirbat an-Nuḥās in the Wādī Fidān excavators claim to have found Iron I remains they date to the 12th to 11th centuries. But so far, publications have discussed a few architectural remains and 14C dates, primarily for the Iron Age II. Moreover, the dating for this phase of activity at the site is ambiguous (Levy *et al.* 2005: 149, Stratum S4). The finds from this pre-fortress phase seem to reflect temporary occupation, perhaps during seasonal mining and smelting operations. But without published pottery we cannot relate the 14C dates to the finds.

The End of Iron I

The transition to the Iron II period is very weakly attested on the plateau. Very little red-slipped, hand-burnished pottery has been found. I remember only about two sherds from eleven seasons of excavation at al-'Umayri. The pottery at Ḥisbān has considerable amounts that can be attributed to Iron IIA, but again it is all from secondary deposits. Most of the sites in the southern plateau in the Karak region were abandoned during this time. There needs to be much more work done on the early Iron II period in Jordan. It is still a dark age archaeologically.

Conclusions

We may tentatively suggest the following as hypotheses for future research: 1) The Transitional period seems to be well witnessed in the northern and central plateau. Based on the LB features in the ceramic assemblages, it would seem to date from the late 13th century to the early 12th century; 2) There are not a significant number of sites from the transitional period in the Jordan Valley where the orientation of the material culture is toward the valley culture of the west, not toward the eastern highlands, and carries on the architectural traditions of the Late Bronze Age; 3) There are no Transitional sites south of the al-Mūjib; 4) The major part of the Iron I period (from the mid 12th century to the end of the 11th century and maybe slightly into the 10th century) has no clear sub-divisions other than the rise of some sites toward the end of the period. Instead, settlements seem to have witnessed individual episodic occupation throughout the time period. Some sites show signs of durative settlement, while others were occupied for only short periods of time; 5) The Iron I sites in the central and southern highlands of Jordan do not reflect a

similar settlement pattern as the small unfortified villages of the western highlands of Cisjordan, but were often fortified and many were large enough to be called “towns.” A possible exception is the area north of the az-Zarqā’ River; 6) The Karak region began to be settled only toward the end of Iron I; 7) The Jordan Valley grew in number of sites during this period, but the orientation of the material culture still seems to be toward the valley culture of the west; 8) There was no major Iron I site south of the Wādī al-Ḥasā. A very few villages or camp sites may have existed, mainly in the northern areas.

Two things need to happen before our knowledge of the Iron I in Jordan can grow: 1) We need more excavations at sites with Iron I levels. One-period sites are fine, but multi-period ones will provide better insights into transitional periods. We especially need excavations at Iron I to early Iron II sites; 2) The Iron I sites that have been excavated need to be fully published.

Bibliography

- Bienkowski, P. (ed.) 1992. *Early Edom and Moab: The Beginning of the Iron Age in Southern Jordan*. Sheffield (National Museums and Galleries on Merseyside).
- Bienkowski, P., et al. 1997. Soundings at Ash-Shorabat and Khirbat Dubab in the Wadi Hasa, Jordan: The Stratigraphy. *Levant* 29: 41-70.
- Bourke, S.J. 1997. Pre-Classical Pella in Jordan: A Prospectus of Ten Years’ Work. *Palestine Exploration Quarterly* 129: 94-115.
- Braemer, F. 1986. Etudes complementaires. Pp. 61-66 in F. Zayadine (ed.) *Jerash Archaeological Project 1981-1983*. Amman (Department of Antiquities).
- 1987. Two Campaigns of Excavations on the Ancient Tell of Jarash. *ADAJ* 31: 525-529.
- Clark, D.R. 1989. Field B: The Western Defense System. Pp. 244-257 in L.T. Geraty, et al. (eds.), *Madaba Plains Project 1: The 1984 Season at Tell el-Umeiri and Vicinity and Subsequent Studies*. Berrien Springs, MI (Andrews University/Institute of Archaeology).
- 1997. Field B: The Western Defensive System. Pp. 53-98 in L.G. Herr et al. (eds), *Madaba Plains Project 3: The 1989 Season at Tell el-Umeiri and Vicinity and Subsequent Studies*. Berrien Springs, MI (Andrews University/Institute of Archaeology).
- Dajani, R.W. 1966a. Jabal Nuzha Tomb at Amman. *ADAJ* 11: 48-51.
- 1966b. Four Iron Age Tombs from Irbid. *ADAJ* 11: 88-101.
- 1970. A Late Bronze-Iron Age Tomb Excavated at Sahab, 1968. *ADAJ* 15: 29-34.
- Dornemann, R.H. 1983. *The Archaeology of the Transjordan in the Bronze and Iron Ages*. Milwaukee (Milwaukee Public Museum).
- Fischer, P.M. 1994. Tell Abi al-Kharaz: The Swedish Jordan Expedition 1992: Third Season Preliminary Excavation Report. *ADAJ* 38: 127-145.
- 1997. *A Late Bronze to Early Iron Age Tomb at Sahem, Jordan*. Wiesbaden (Harrassowitz).
- Flanagan, J.W. and McCreery, D. (1994). Tell Nimrin Preliminary Report on the 1993 Season. *ADAJ* 38: 205-244.
- Franken, H.J. and Kalsbeek, J. 1969. *Excavations at Tell Deir ‘Alla I*. Leiden (Brill).
- Glueck, N. (1934, 1935, 1939, 1951). *Explorations in Eastern Palestine, I, II, III, IV*. Annual of the American Schools of Oriental Research 14, 15, 18-19, 25-28. New Haven, CT (American Schools of Oriental Research).
- Harding, G. L. and Isserlin, B. S. J. 1953. An Early Iron Age Tomb at Madaba. *Palestine Exploration Fund Annual* 4: 27-33.
- Hart, S. 1995. The Pottery. Pp. 53-66 in C.-M. Bennett and P. Bienkowski (eds.), *Excavations at Tawilan in Southern Jordan*. Oxford (Oxford University).
- Herr, L. G. 1998. Tell el-‘Umayri and the Madaba Plains Region during the Late Bronze-Iron Age I Transition. Pp. 251-264 in S. Gitin, A. Mazar, and E. Stern (eds), *Mediterranean Peoples in Transition*. Jerusalem (Israel Exploration Society).
- 2002. Excavation and Cumulative Results. Pp. 8-22 in L. G. Herr, D. R. Clark, L. T. Geraty, R. W. Younker, and Ø. S. LaBianca (eds.), *Madaba Plains Project 5: The 1994 Season at Tall al-‘Umayri and Subsequent Studies*. Berrien Springs, MI (Andrews University/Institute of Archaeology).
- Forthcoming. The Iron Age Pottery, in J. A. Sauer and L. G. Herr (eds.), *Hesban II: The Pottery*. Berrien Springs, MI (Andrews University/Institute of Archaeology).
- Herr, L. G. and Clark, D. R. 2005. Madaba Plains Project: Excavations at Tall al-‘Umayri, 2004. *ADAJ* 49: 245-260.
- Herr, L. G. and Najjar, M. 2001. The Iron Age. Pp. 323-345 in B. MacDonald, R. Adams, and P. Bienkowski (eds.), *The Archaeology of Jordan*. Sheffield (Sheffield Academic).
- Homès-Fredericq, D. 1992. Late Bronze and Iron Age Evidence from Lehun in Moab. Pp. 187-202 in P.

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- Bienkowski (ed.), *Early Edom and Moab*. Sheffield Archaeological Monographs 7. Sheffield (J. R. Collis).
- 1997a. Lehun. Pp. 340-341 in E. M. Meyers (ed.), *The Oxford Encyclopedia of Archaeology in the Near East*, Vol. 3 New York (Oxford University).
- 1997b. *Lehun et la voie royale*. Brussels (Comité Belge de Fouilles en Jordanie).
- Homès-Fredericq, D. and Hennessy, J. B. (eds.). 1989. *Archaeology of Jordan*. Leuven (Peeters).
- Ibach, R. D. 1987. *Hesban 5: Archaeological Survey of the Hesban Region*. Berrien Springs, MI. (Andrews University/Institute of Archaeology).
- Ibrahim, M. M. 1974. Second Season of Excavation at Sahab, 1973. *ADAJ* 19: 55-61.
- 1978. The Collared-Rim Jar of the Early Iron Age Pp. 117-126 in P. R. S. Moorey and P. Parr (eds.), *Archaeology in the Levant*. Warminster (Aris and Phillips).
- 1987. Sahab and Its Foreign Relations. *SHAJ* 3: 73-81. Amman.
- Ji, C.-H. 2002. Tribes and Sedentarization in the Madaba Plains and Central Jordan during the Iron I and Ottoman Periods. Pp. 348-357 in L. G. Herr, D. R. Clark, L. T. Geraty, R. W. Younker, and Ø. S. LaBianca (eds.), *Madaba Plains Project 5: The 1994 Season at Tall al-'Umayri and Subsequent Studies*. Berrien Springs, MI (Andrews University/Institute of Archaeology).
- LaBianca, Ø. S. and Younker, R. W. 1995. The Kingdoms of Ammon, Moab and Edom: The Archaeology of Society in Late Bronze/Iron Age Transjordan Pp. 399-415 in T. E. Levy (ed.), *The Archaeology of Society in the Holy Land*. London (Leicester University).
- Lamprichs, R. 1996. Some Notes on Tell Johfiyeh and Iron Age Site in Northern Jordan. *Ugarit Forschung* 28: 325-342.
- 2002. Tell Johfiyeh: Ein eisenzeitlicher Fundplatz in Nordjordanien und seine Umgebung. *Ugarit Forschung* 34: 363-452.
- 2003. Tall Juhfiyya, An Archaeological Site in Northern Jordan: A Preliminary Report on the 2002 Field Season. *ADAJ* 47: 101-116.
- 2004. Tall Juhfiyya: An Iron Age Site and Its Surroundings in North Jordan, Preliminary Report on the 2002 and 2003 Seasons. *ADAJ* 48: 171-180.
- Lapp, N. L. 1983. Introduction. Pp. 1-11 in N. L. Lapp (ed.), *The Excavations at Araq el-Emir*. Annual of the American Schools of Oriental Research 47. Winona Lake, IN (American Schools of Oriental Research/Eisenbrauns).
- 1989. 'Iraq el Amir Pp. 280-297 in D. Homès-Fredericq and J. B. Hennessy (eds.), *Archaeology of Jordan*. Akkadica Supplementum VII. Leuven (Peeters).
- Lenzen, C. J. 1988. Tell Irbid and Its Context: A Problem in Archaeological Interpretation. *Biblische Notizen* 42: 27-35.
- Levy, T. E. et al. 2005. Lowland Edom and the High and Low Chronologies Pp. 129-163 in T. E. Levy and T. Higham (eds.), *The Bible and Radiocarbon Dating*. London (Equinox).
- MacDonald, B. 1988. *The Wadi el Hasa Archaeological Survey 1979-1983, West Central Jordan*. Waterloo, ON (Wilfrid Laurier University).
- 1992. *The Southern Ghors and Northeast 'Arabah Archaeological Survey*. Sheffield Archaeological Monographs 5. Sheffield (J. R. Collis).
- 2004. *The Tafila-Busayra Archaeological Survey*. Boston (American Schools of Oriental Research).
- Mare, W. H. 1992. The Abila Excavation: The Seventh Campaign at Abila of the Decapolis. *Near East Archaeological Society Bulletin* 37: 10-18.
- McGovern, P. E. 1983. Test Soundings of Archaeological and Resistivity Survey Results at Rujm al-Henu. *ADAJ* 27: 105-141.
- 1986. *The Late Bronze and Early Iron Ages of Central Transjordan: The Baq'ah Valley Project, 1977-1981*. Philadelphia (The University Museum).
- McNicoll, A. W. et al. 1982. *Pella in Jordan I*. Canberra (Australian National Gallery).
- Miller, J. M., ed. 1991. *Archaeological Survey of the Kerak Plateau*. Boston (American Schools of Oriental Research).
- Mittman, S. 1970. *Beiträge zur Siedlungs und Territorialgeschichte des nördliche Ostjordanlandes*. Wiesbaden (Harrassowitz).
- Najjar, M. 1997. The 1990-1992 Excavations, pp. 1-22 in A. Koutsoukou, et al. (eds.), *The Great Temple of Amman: The Excavations*. Amman (American Center of Oriental Research).
- Ninow, F. 2004. First Soundings at Khirbat al-Mu'mmariyya in the Greater Wādī al-Mūjib Area. *ADAJ* 48: 257-266.
- 2006. The 2005 Soundings at Khirbat al-Mu'mmariyya in the Greater Wādī al-Mujib Area, *ADAJ* 50: 147-155.
- Olavarri, E. 1965. Sondages a 'Aro'er sur l'Arnon. *Revue Biblique* 72: 77-94.
- 1978. Sondeo Arquelogico en Khirbet Medeineh junto a Smakieh (Jordania). *ADAJ* 22: 136-149.

- Olavarri, E. 1983. La campagne de fouilles 1982 a Khirbet Medeinet al-Mu'arradjeh pres de Smakieh (Kerak). *ADAJ* 27: 165-178.
- Olavarri-Goicoechea, E. 1993. Aroer (in Moab). Pp. 92-93 in E. Stern (ed.), *The New Encyclopedia of Archaeological Excavations in the Holy Land*. Jerusalem (Israel Exploration Society).
- Piccirillo, M. 1975. Una tomba del ferro I a Madaba. *Liber Annuus* 25: 199-224.
- Pritchard, J. B. 1980. *The Cemetery at Tell es-Sa'idiyeh, Jordan*. Philadelphia (The University Museum).
- Ray, P. J. 2001. *Hesban 6: Tell Hesban and Vicinity in the Iron Age*. Berrien Springs, MI (Andrews University/Institute of Archaeology).
- Routledge, B. 2000. Seeing through Walls: Interpreting Iron I Architecture at Khirbat al-Mudayna al-'Aliya, Jordan. *BASOR* 319: 37-70.
- 2004. *Moab in the Iron Age: Hegemony, Polity, Archaeology*. Philadelphia (University of Pennsylvania).
- Sauer, J. A. 1986. Transjordan in the Bronze and Iron Ages: A Critique of Glueck's Synthesis. *BASOR* 263: 1-26.
- Sauer, J. A. 1994. The Pottery at Hesban and Its Relationships to the History of Jordan: An Interim Hesban Pottery Report, 1993. Pp. 225-282 in D. Merling and L. T. Geraty (eds.), *Hesban after 25 Years*. Berrien Springs, MI (Andrews University/Institute of Archaeology).
- Strange, J. 1997. Tall al-Fukhar 1990-91: A Preliminary Report. *SHAJ* 6: 399-406. Amman.
- Thompson, H. O. 1986. An Iron Age Tomb at Madaba. Pp. 331-363 in L. T. Geraty and L. G. Herr (eds.), *The Archaeology of Jordan and Other Studies: Presented to Siegfried H. Horn*. Berrien Springs, MI (Andrews University/Institute of Archaeology).
- Tubb, J. N. *et al.* 1996. Interim Report on the Eighth (1995) Season of Excavations at Tell es-Sa'idiyeh. *PEQ* 128: 16-40.
- Van der Steen, E. J. 2004. From Burckhardt to Bell: What Does the 19th Century AD Tell Us about the Iron Age? *SHAJ* 8: 449-457. Amman.
- Vieweger, D. 2002. Tall Zar'a in Wadi al-'Arab: The "Gadara Region Project." *ADAJ* 46: 157-177.
- Vieweger, D. and Häser, J. 2005. Der *Tell Zera'a* im *Wadi el-'Arab*: Das 'Gadara Region Project' in den Jahren 2001 bis 2004, *ZDPV* 121: 1-30.
- Wimmer, D. H. 1987. The Excavations at Tell Safut. *SHAJ* 3: 279-282. Amman.
- 1989. Safut (Tell). Pp. 512-515 in D. Homès-Fredericq and J. B. Hennessy (eds.), *Archaeology of Jordan*. Akkadica Supplementum VII. Leuven (Peeters).
- Winnett, F. V. and Reed, W. L. 1964. *The Excavations at Dibon (Dhiban) in Moab*. Annual of the American Schools of Oriental Research 36-37. New Haven (American Schools of Oriental Research).
- Worschech, U. 1994. Preliminary Report on the Third Campaign at the Ancient Site of el-Bālū' in 1991. *ADAJ* 38: 195-203.
- Yassine, K. 1988. *Archaeology of Jordan: Essays and Reports*. Amman (University of Jordan/Department of Archaeology).
- Yassine, K., Sauer, J., and Ibrahim, M. 1988. The East Jordan Valley Survey, 1975. Pp. 159-207 in K. Yassine (ed.), *Archaeology of Jordan: Essays and Reports*. Amman (University of Jordan).
- Yunker, R. W. 1999. The Emergence of the Ammonites. Pp. 189-218 in B. MacDonald and R. W. Yunker (eds.), *Ancient Ammon*. Leiden (Brill).
- Zayadine, F. *et al.* 1987. Recent Excavations on the Citadel of Amman (Lower Terrace) A Preliminary Report. *ADAJ* 31: 299-311.

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