

'Irāq al-'Amīr and the Hellenistic Settlements in Central and Northern Jordan

The opinion has been widely held that Jordan reached one of its low points in settlement during the Hellenistic period (Arav 1989; Barghouti 1982; Berlin 1997; Smith 1990). However, what strikes us most in studying the settlement history in Jordan is the absence of comprehensive archaeological studies on the Hellenistic period. Indeed, to date, few studies have been published to address the Hellenistic period and its settlement history in Jordan using cumulative archaeological data. Recent archaeological findings in Jordan, however, have increased our knowledge of the Hellenistic period, and the time seems ripe for an integrative study.

In their studies, Berlin (1997) and Smith (1990) point out the lack of archaeological evidence for the early Hellenistic period and suggest that it stands in contrast to the abundance of evidence for the late Hellenistic period. According to Berlin (1997: 11), in Jordan the pattern of early Hellenistic settlement was similar to that of the central hill country of Palestine, "with a small, scattered, materially impoverished population, engaged wholly in subsistence agriculture." This view has led to the theory of "the early Hellenistic archaeological lacuna" which stands in sharp contrast with "the late Hellenistic expansion and prosperity" (Smith 1990: 124, 127). Thus, given the historical framework and archaeological data provided in the two studies, it appears that Jordan experienced a substantial decline during the early Hellenistic period, and increase in population came no earlier than the late Hellenistic period.

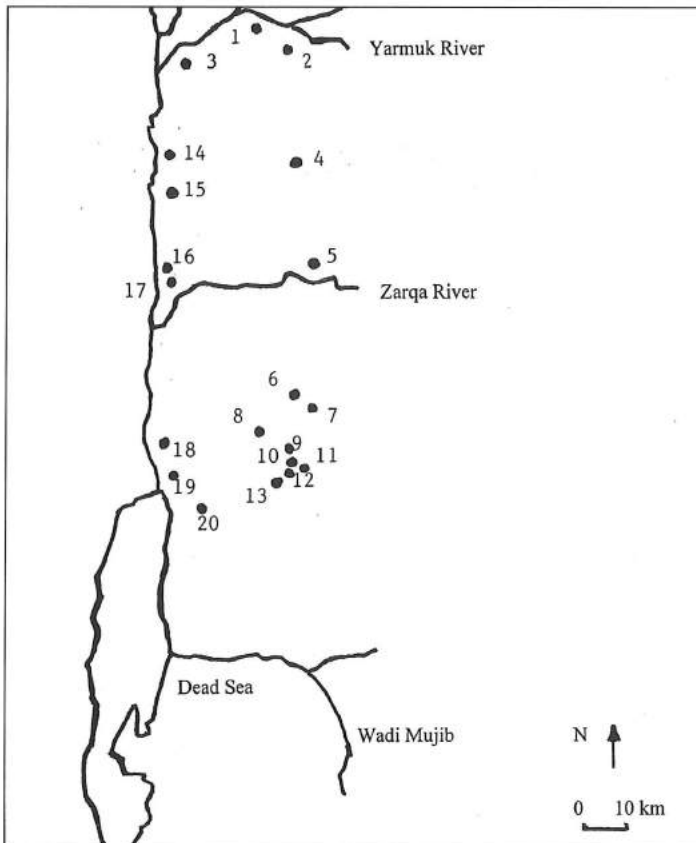
The preceding view, however, warrants further studies since it was derived mainly from a few selected sites such as Pella, the 'Ammān Citadel, and 'Irāq al-'Amīr. In fact, the discussion of recent findings in central and northern Jordan is absent in these studies. Furthermore, as Smith (1990: 123) himself points out, his view seems to be somewhat in conflict with the records of Polybius (Paton 1922), Zenon (Edgar 1925), and Strabo (Jones 1917)

which do not include any suggestion of depressed economic, social, or demographic conditions in the region during the early Hellenistic period. It also seems contradictory to Josephus who speaks frequently that the Tobiads constantly fought against and levied taxes upon the Arabs (cf. *Antiquities* 12.4). This record is of interest, since it may imply the presence of a settled population in Jordan during the early Hellenistic period. Besides, a careful review of literature presents another noteworthy finding (cf. Ahlström 1993; Avi-Yonah 1979; Bevan 1968; Cary 1932; Gera 1990; Mazar 1957; Tcherikover 1937; Whiston 1902). According to various sources, in the Persian and early Hellenistic periods, the Tobiads gained a special status under the Ptolemies and were treated differently from other peoples in Jordan. If the records in the Hebrew Bible and the Zenon papyri associated with the Tobiads are historically relevant to our study, then it follows that the 'Irāq al-'Amīr region and the southern Jordan Valley* should have witnessed a continuous flourishing population during the given periods. Yet, little has been done to address the potential differences of these regions from the remainder of Jordan, although much has been written on 'Irāq al-'Amīr (Lapp 1962a; 1962b; 1963; 1975; 1993; Larché *et al.* 1981; 1982; Will 1989).

Archaeological Data (FIG. 1)

The "Madaba Plains Project" has provided important data on the Hellenistic settlements in central Jordan. For example, Rujm ad-Drayjāt is an early Hellenistic fort settlement in the Mādabā Plains, which continued through the late Hellenistic period (Younker *et al.* 1990: 11-14). Rujm Miriam is possibly another early Hellenistic site which includes a central rectilinear structure, terraces, cisterns and a cave complex (Herr *et al.* 1997: 159; LaBianca *et al.* 1997). The excavations at Rujm Salim revealed a large agricultural complex first built in late Iron II which was in continuous use on into the early Persian period (Geraty *et*

* Editor's note: the author restricts the term "Jordan Valley" to the area north of the Dead Sea.



1. Hellenistic settlements in central and northern Jordan: 1. al-Fukhār; 2. Abila; 3. Umm Qays; 4. al-Ḥuṣn; 5. Jarash; 6. Salāma; 7. 'Ammān; 8. 'Irāq al-'Amir; 9. Salīm; 10. al-'Umayrī; 11. Mīriam; 12. ad-Drayjāt; 13. Ḥisbān; 14. Pella; 15. as-Sa'idiyya; 16. al-Mazār; 17. Dayr 'Allā; 18. Nimrīn; 19. Iktanū; 20. Machaerus.

al. 1990: 70-72). The excavators suggested that an occupational hiatus lasted from the late Persian period until a new settlement was established in the late Hellenistic period. The Hellenistic pottery found at the site of Rujm Salīm, however, has not as yet been published, and thus we may still be far from knowing to which period we are to attribute the beginning of the Hellenistic settlement at this site. The excavation reports carry an important piece of information on this issue. In 1987, a bronze coin of Ptolemy II was found at Rujm Salīm in the occupational debris of the main structure (Geraty *et al.* 1988: 226; 1990: 71-72). This coin was minted between 251 and 249 BC and probably deposited at this site no later than the third quarter of the third century BC (Miller 1991: 382). Taking this coin into account, we may suggest that the Hellenistic settlement at Rujm Salīm commenced early in the Hellenistic period and continued into the late Hellenistic period.

At Tall Ḥisbān, Mitchel (1992; 1994) attributes Stratum 15 to the late Hellenistic period and dates it to 198-63 BC. Early Hellenistic stratum is known to be absent at Tall Ḥisbān, although a few examples of early Hellenistic sherds were produced in Area A (LaBianca 1998; Mitchel

1992; Sauer 1973; 1994). At Tall al-'Umayrī, a minor settlement took place in the Hellenistic period when a small farmstead was constructed on the southern edge of this site above substantial Iron II ruins (personal communication with L. G. Herr). Finally, it is well to remember that at Machaerus, a fortress was built by the Hasmoneans at the end of the Hellenistic period (Loffreda 1981; Piccirillo 1979).

At the 'Ammān Citadel there is clear evidence for several phases of massive late Hellenistic settlement (Bennett 1979: 166; Greene and 'Amr 1992: 126-127; Zayadine 1973: 25-28; 1990: 79-80; Zayadine *et al.* 1989: 362-63). At the Citadel most of the Hellenistic structures were erected directly over the Iron II walls, and thus Persian occupation seems to have been completely absent (Zayadine *et al.* 1989: 363). Remains of the early Hellenistic period are restricted to the Upper Terrace of the Citadel, which attests to the supposition that the early Hellenistic settlement was smaller than the late Hellenistic one (MacAdam 1992: 27-32; Najjar 1997: 7; Zayadine 1990; Zayadine *et al.* 1989: 359-63; cf. Zayadine *et al.* 1987: 309). Two coins of Ptolemy II along with early Hellenistic Rhodian jar handles came from the Great Temple area and the water system (Russell 1997; Russell *et al.* 1997). These materials show that the 'Ammān Citadel was probably refounded in the early third century BC. The Roman Forum at 'Ammān also seems to have been reoccupied at the beginning of the third century BC and was continuously in use through the late Hellenistic period (Hadidi 1973; 1974). The first settlement phase of Khirbat Salāma belonged to Iron II (Bikai 1993; 1994; Lenzen and McQuitty 1984; 1987). It was resettled in the early Hellenistic period after a potential hiatus during the Persian period (cf. Lenzen and McQuitty 1987: 203).

The excavations at Jarash show that an occupational sequence in the Macellum area began with the late Hellenistic period (Barghouti 1982: 224; Uscatescu 1995: 365). In addition, the French excavations at the ancient *tall* and the Zeus Temple uncovered large pits and building floors with late Hellenistic pottery dated to the late second and first centuries BC (Braemer 1987; 1989; Seigne 1989). Abila includes late Hellenistic pottery, wall remains, limestone pavements, domestic habitations, and aqueducts, yet lacks evidence for Persian occupation (Mare 1994; Mare *et al.* 1985; 1987). In 1989, Kerner and Hoffmann (1993: 363-369) uncovered evidence of a late Hellenistic settlement at Khālid al-Jindi southeast of Umm Qays. The earliest material at Umm Qays came from a test trench at Area XL, which is dated to the third century BC. Besides this, Weber (1991: 227) conducted a survey of the water-supply system at Umm Qays and suggested a Hellenistic date for the aqueduct system. Tall al-Ḥuṣn in northern Jordan also appears to have late Hellenistic evidence (Leonard 1987: 359). Tall al-Fukhār was re-

occupied in the early Hellenistic period after an occupational interruption through the Persian period following the Iron II settlements (Strange 1997).

In the Jordan Valley, the excavation of Tall ash-Shūna north yielded late Hellenistic graves set into the middle of the Early Bronze walls (Baird and Philip 1992). At Pella, Hellenistic settlement seems to have begun in the late third century BC (Smith 1982). Notable among the Hellenistic artifacts are a tetradrachm of Ptolemy II, imported glazed bowls, and stamped Rhodian jar handles, all dated to the third and second centuries BC (Smith 1980). The late Hellenistic city was destroyed, probably by the Hasmonean ruler Alexander Jannaeus; yet human settlement continued at Pella through the early Roman period (Smith 1981: 316-317). Excavations at Tall al-Ḥuṣn near Pella uncovered an extensive late Hellenistic occupation and a possible sanctuary (Hennessy *et al.* 1983: 348; Walmsley *et al.* 1993: 208). Another notable discovery is a large fortress which was built around the end of the third century BC. This fortress is located about 2km southeast of Pella (Smith 1982: 331-333). At Pella, Hellenistic evidence is found beneath the early Roman remains and above the Early Bronze or Iron II evidence, indicating an occupational gap before the Hellenistic settlement phase. In sum, Pella seems to have been refounded near the end of the third century BC and became a rapidly growing city under the Seleucid monarchy until it was destroyed by the Hasmoneans (Edwards *et al.* 1990: 73; Hennessy *et al.* 1981: 295-296; McNicoll *et al.* 1982; 1986: 175; Smith 1982).

There were occupations at Tall as-Sa'idiyya during the early Hellenistic period (Stratum II; Pritchard 1985; cf. Tubb 1985). A large public building was established partly over the Persian remains. In addition, despite the scarcity of datable artifacts, there is no doubt that Tall as-Sa'idiyya was in use during the Persian period. This suggestion is supported by the pottery assemblage found associated with Stratum III. For example, a close parallel of one jug from Stratum III is found at Qadūm in Palestine and dated to the end of the fifth and the fourth centuries BC (Pritchard 1985: fig. 18: 5; Stern and Magen 1984: fig. 7:8). The small bowl with incurved rim was the dominant type of the Hellenistic period, yet it came into use as early as the mid-fourth century BC (Pritchard 1985: fig. 18:1; Guz-Zilberstein 1995: 289). The decorated incense burner found in the same stratum also fits into the fifth century BC (Pritchard 1985: 66-68; Stern 1982: 192). Note, however, that there is no stratigraphical connection between Strata IV and III; the sequence from Stratum III to Stratum II is well established (Pritchard 1985: 60, 69). This fact indicates that the early Hellenistic settlement was the immediate successor to the Persian one. Accordingly, occupation appears to have been continuous from Iron II to the early Hellenistic period, although it is difficult to clarify stratigraphic relations between Iron II and

the Persian period. Tall as-Sa'idiyya was again used in the first century BC indicating a potential break in the sequence of occupation between the early Hellenistic and the first century settlements.

According to Yassine (1983: 498), in the late Persian period, Tall al-Mazār (Stratum I) served as a supply depot with a large number of silos and granaries. Below Stratum I are the remains of court buildings (Stratum II) which were violently destroyed. Yassine (1983) assigned Strata I and II to the fourth and fifth century BC respectively, and hence, Tall al-Mazār appears to have been occupied through the Persian period. According to this view, the abandonment of Tall al-Mazār took place at the time of Alexander the Great. In addressing the published corpus of Stratum I ceramic material at Tall al-Mazār, however, we suggest that certain forms are dated to the Hellenistic period rather than the Persian period. In detail, one of the five examples published in the preliminary report seems to be a well-known Hellenistic molded lamp roughly dated to the third and second centuries BC, and perhaps parallels a lamp found in Stratum II at Tall as-Sa'idiyya (Yassine 1983: pl. CX: 3; Pritchard 1985: fig. 19:22). It is evident that this particular example does not belong to the Persian closed lamp assemblage common in the fourth century BC (Stern 1982: 129). Another vessel found at Tall al-Mazār (Yassine 1983: pl. CX: 4) might be considered a globular cooking pot with typical squat, slightly ribbed body. This type of cooking pot appeared at the end of the fourth century BC and became the predominant form in the third century BC (Guz-Zilberstein 1995: 299; Stern 1995: 58). Among the other examples, one resembles a table jug which was commonly in use during the third and second century BC, while another one is reminiscent of a common Hellenistic jug with a flaring rim (Yassine 1983: pl. CX: 1 and 2; Guz-Zilberstein 1985: 309). The foregoing discussion may serve to place Stratum I within the fourth and third centuries BC, and thus possibly the abandonment of the Stratum I settlement occurred slightly later than the time of Alexander the Great (cf. Yassine 1983: 498).

At Dayr 'Allā the last building activities took place in the early Hellenistic period (Franken and Ibrahim 1977: 71-73; Ibrahim and van der Kooij 1979: 42-44; 1983). The flat bowl found at this site is a so-called fish plate of the Hellenistic period, appearing at the end of the fourth century BC and coming popular in the third century BC (Ibrahim and van der Kooij 1979: 43; Guz-Zilberstein 1995: 291; cf. Sauer 1994: 248). Below the early Hellenistic phase are the fifth and fourth century strata which contain building remains, pits, and floors. It thus appears that at Dayr 'Allā, occupation was continuous, without any major breaks, from late Iron II to the early Hellenistic period.

At Tall Nimrīn the Persian period is well represented

(Flanagan and McCreery 1990; Flanagan *et al.* 1994). The early occupational phase is dated to the sixth-fifth centuries BC; the late one to the fourth century BC. The late Persian settlement seems to have lasted through the early Hellenistic period, and the evidence of such settlement continuation is partially preserved at the summit of this site (Flanagan *et al.* 1992: 98). A large amount of Hellenistic pottery was found on the western slope, but no Hellenistic structures were uncovered. This architectural absence can be explained by years of modern bulldozing and development at this site that have destroyed the ancient remains. There is little stratified evidence for the late Hellenistic period, although some ceramic materials represent potential human activities during this period (Dornemann 1990: 155). At Tall Iktanū the upper levels of the south slope contain Persian and Hellenistic pottery including one imported sherd of the fifth-fourth century BC (Prag 1989: 42; 1990: 122). Prag associated these pottery remains with the use of this *tall* as a fortress in the Persian and Hellenistic periods. Hence, Tall Iktanū may include a sequence of occupation from Iron II to the early Hellenistic period.

The Tall Ḥisbān survey team recorded 148 sites in a 10km radius of Tall Ḥisbān (Ibach 1987). The Hellenistic period was represented at 21 sites while the Persian period was almost completely absent in the Ḥisbān region. The regional survey in the vicinity of Tall al-‘Umayrī recorded two Persian and seven Hellenistic sites (Boling 1989; Christopherson 1991; 1997; Cole 1989; Krug 1991; Younker 1989; 1991a; 1991b). In the Greater ‘Ammān region, a survey team found three Persian and 13 Hellenistic sites (Abu Dayyah *et al.* 1991). The ‘Ayn Ghazāl survey shows a total lack of Hellenistic remains north of the ‘Ammān area (Simmons and Kafafi 1988). A survey was conducted in the immediate vicinity of ar-Rummān and found Hellenistic sherds at six sites (Gordon and Knauf 1987). Persian pottery were also collected at six sites. According to the survey of Hanbury-Tenison (1987), Persian and Hellenistic sherds were entirely unrepresented in the Jarash region. Leonard (1987) carried out a survey along the highway between Jarash and Tall al-Ḥuṣn: two sites included late Hellenistic and early Roman pottery sherds. Persian and early Hellenistic evidence was totally absent at the surveyed sites. The survey in the area of Irbid and Bayt Rās included 27 sites (Lenzen and McQuitty 1988). No Hellenistic evidence was found in this region, although some sporadic late Hellenistic shreds were present at Bayt Rās. Yet, the excavation at Bayt Rās produced little evidence of the Hellenistic period (Lenzen *et al.* 1985; Shraidah and Lenzen 1985). The survey in the vicinity of Abila found no Hellenistic evidence, yet Hellenistic pottery was found on the surface of Zahr al-Midina (Kafafi and Knauf 1989; Mare *et al.* 1985: 230). According to Mittmann’s survey (1970), the Hellenistic period was represented

at 51 of the 346 surveyed sites in the region between the Yarmūk River and Wādī az-Zarqā’. No site yielded evidence of Persian occupations. Likewise, Persian and Hellenistic evidence is virtually absent in the southern Ḥawrān (Kennedy and Freeman 1992; King *et al.* 1983).

A salvage survey along the Yarmūk River collected Hellenistic sherds at one site (Kerestes *et al.* 1977). Persian pottery was absent in the region. The same team visited three sites in the Wādī al-‘Arab reservoir area: Persian and Hellenistic pottery were missing. In the Wādī al-Yābis region a survey team identified 12 sites with Persian and Hellenistic pottery sherds (Mabry and Palumbo 1988; cf. Palumbo 1992). On the other hand, the Wādī Ziqlāb survey recognized no Persian sites in the survey area, yet some late Hellenistic sites were found along the wadi (Banning and Fawcett 1983; Banning *et al.* 1989). A surface survey of Tall adh-Dhahab and the lower Wādī az-Zarqā’ covered 32 sites (Gordon and Villiers 1983). Both Tall adh-Dhahab east and west were very likely occupied in the Iron II, late Hellenistic, and early Roman periods. No early Hellenistic finds were linked to these sites. The regional survey dated one site to the Persian period and 14 sites to Hellenistic. The survey of King Talal Reservoir area identified one Persian and three Roman sites (Kerestes *et al.* 1977). In Wādī Shu‘ayb, Persian and Hellenistic occupation seems to have been sparse (Wright *et al.* 1989).

The survey in the northern Jordan Valley identified Persian sherds at five sites and Hellenistic ones at 14 sites (Ibrahim *et al.* 1976). Three sites included Persian and Hellenistic sherds together, and all the 14 Hellenistic sites contained early Roman sherds as well. In the southern half of the Jordan Valley, Persian sherds were found at seven sites, and Hellenistic ones came from 13 sites (Yassine *et al.* 1988). The Pella hinterland survey team recorded no small number of Hellenistic structures, and the pottery tends to assign them to late Hellenistic and early Roman (Watson 1996). The “Jisr Sheikh Hussein” Project surveyed a total of 15 sites, and no Persian and Hellenistic pottery was found in the survey area (Lenzen *et al.* 1987). The 1953 survey of the Jordan Valley recorded only one Hellenistic site of over 90 surveyed sites (de Contenson 1964; Leonard 1992; Mellaart 1962).

Discussion

According to LaBianca (1990; Geraty *et al.* 1990: 60), in central Jordan, settlement intensification took place in the Iron II and continued up through the late Iron II and early Persian periods. The abatement process was initiated sometime in the Persian period and continued through the Hellenistic period. After this occupational gap, the process of a new intensification was slowly built up through the Roman era and reached its peak in the Byzantine pe-

riod. The findings of our summary support LaBianca's contention of the existence of a broad settlement pattern in the survey area. Yet, TABLE 1 shows that a slight modification of LaBianca's model would be in order. As LaBianca points out, a settlement intensification reached its peak during the period of late Iron II, and the Roman period seems to have witnessed a flourishing population as well. A close examination of our data, however, indicates that in general, the Persian period seems to have had a considerable decline in population, yet a resurgence of settled population began to occur some time in the Hellenistic period rather than in the Roman period. Most of the Hellenistic sites also contain Roman pottery, which indicates a continuation of settlement from the Hellenistic period to the Roman period. Hence, the Hellenistic period may have served as a transition from the nearly complete settlement gap of the Persian period to the settlement intensification of the Roman period (cf. Ibach 1987). The results of the surface surveys, however, do not shed much light on when in the Hellenistic period this resurgence of settled population began. In most of the survey studies, Hellenistic pottery was not further distinguished into early and late Hellenistic.

According to various excavations, the deposition at many sites in the Jordanian plateau and the northern Jordan Valley shows a new cycle of settlement in-

tensification took place in the Hellenistic period after an occupational gap in the Persian period (see TABLE 2). This intensification continued through the early Roman period with some decline. These Hellenistic sites fall into two main groups in terms of the beginning date of their settlements. First, in the plateau region, early Hellenistic evidence was uncovered at Rujm ad-Drayjāt, Rujm Salīm, the 'Ammān Citadel, the 'Ammān Roman Forum, Khirbat Salāma, Umm Qays, Tall al-Fukhār, and possibly Rujm Miriam. All these sites are attributed to the third century BC or slightly earlier than the third century BC, and geographically, scattered throughout the plateau region. In many cases, these early Hellenistic occupations continued through the late Hellenistic period. Second, Abila, Tall al-Ḥuṣn, and probably Jarash and Tall Ḥisbān were re-occupied in the very late third or the early second centuries BC. It is worthwhile noting that during this period, Pella and its vicinity were also added to the list of Hellenistic settlements. This fact is also reminiscent of late Hellenistic fortified sites in the lower Wādī az-Zarqā' and Wādī Rājib (Gordon 1987). An interesting point is that in the Pella region and the lower Wādī az-Zarqā', most of the fortresses were used for a relatively short period of

TABLE 1. Pottery sharding of main regional surveys in Jordan.

| Survey/Period | Persian | Hellenistic* | Roman** | Total |
|----------------------|-------------------|-------------------|------------------|-------|
| Irbid/Bayt Rās | 0 | 1 | 5 | 27 |
| Mittmann | 0 | 51 | 130 | 346 |
| Jarash-Ḥuṣn | 0 | 2+ | 6 | 30 |
| Jarash | 0 | 0 | 11 | 59 |
| ar-Rummān | 6 | 6 | 34 | 42 |
| al-Baq'ah Valley | 0 | 0 | 1 | 7 |
| 'Ayn Ghazāl | 0 | 0 | ? | 81 |
| Greater 'Ammān | 9 | 13 | 71 ⁺⁺ | 222 |
| al-'Umayrī | 2 | 7 | 22 ⁺⁺ | 133 |
| Ḥisbān | 1 | 21 | 57 ⁺⁺ | 155 |
| al-Maqārīn Reservior | 0 | 1 | 15 | 31 |
| Wādīal-'Arab | 0 | 0 | 3 | 3 |
| K.Talal Reservior | 1 | 0 | 3 | 14 |
| Tall adh-Dhahab | 1 | 14 | 18 | 32 |
| Wādī al-Yābis | 12 ^{***} | 12 ^{***} | 29 | 96 |
| Wādī Shu'ayb | 0 | 0 | 5 | 21 |
| Jordan Valley N. | 5 | 14 | 34 ⁺⁺ | 106 |
| Jordan Valley S. | 7 | 13 | 29 ⁺⁺ | 118 |

*not specified as early and late Hellenistic.
 **not specified as early and late Roman.
 ***includes both Persian and Hellenistic sites.
 +specified as late Hellenistic.
 ++specified as early Roman.

TABLE 2. Occupational history of Hellenistic settlements in Jordan.

| Site/Date (BC) | 5th | 4th* | 3rd | 2nd** | 1st*** |
|----------------------|-----|------|-----|-------|--------|
| al-Fukhār | | x? | x | x | |
| Abila | | | | x | x |
| Umm Qays | | | x | x | x |
| al-Ḥuṣn | | | | x | |
| Jarash | | | | x | x |
| 'Ammān Citadel | | | x | x | x |
| Roman Forum ('Ammān) | | | x | x | x |
| K. Salāma | | | x | | |
| Ḥisbān | | | | x | x |
| K. ad-Drayjāt | | x | x | x | x |
| Rujm Miriam | | x? | x | | |
| Rujm Salīm | | | x | x | x |
| al-'Umayrī | x | x? | x? | | |
| Machaerus | | | | | x |
| ash-Shūna North | | | | x | |
| Pella | | | x | x | x |
| al-Ḥuṣn (Pella) | | | x | x | x |
| as-Sa 'īdiyya | x | x | x | | x |
| al-Mazār | x | x | x | | |
| Dayr 'Allā | x | x | x? | | |
| Nimrīn | x | x | x | | x |
| Iktanū | x | x | x? | | |
| 'Irāq al-'Amīr | x | x? | x | x | x |

*includes the sites dated late Persian/Hellenistic.
 **includes the sites dated to late Hellenistic.
 ***includes the sites dated to late Hellenistic/Roman.

time in the late Hellenistic period and were abandoned thereafter. Taken together, the comparison of the lower Wādī az-Zarqā' with the Pella region points out some basic similarities. That is, there is evidence of a settlement hiatus during the Persian period followed by increase in population in the late Hellenistic period; little evidence of early Hellenistic presence was found in these two regions.

On the other hand, archaeological data seem to indicate that the central and southern Jordan Valley formed a unique niche during the Persian and Hellenistic periods. We propose that, in the central and southern Jordan Valley: (1) a new settlement intensification began in the Iron II and reached its peak in the late Iron II and early Persian periods; (2) this settlement cycle continued through the Persian and early Hellenistic periods, although these periods saw reduced occupations; (3) destruction and abandonment came sometime in the early Hellenistic period; and (4) thereafter, settlement gap continued until the Roman period. This pattern contrasts sharply with the abatement in occupation in the plateau and the northern Jordan Valley during the late Persian period and the urban settlement boom during the late Hellenistic period.

Put in detail, we have seen from the foregoing review that at Tall as-Sa'idiyya, Tall al-Mazār, and Dayr 'Allā, the Persian period was one of proliferation of settlements, and they were continuously in use without any major breaks through the early Hellenistic period, although such evidence is more or less weak at Tall al-Mazār and Dayr 'Allā. Then, there was a long process of abandonment through the late Hellenistic period. A noteworthy point is that all these sites are long-inhabited urban centers in the Jordan Valley, located near Wādī az-Zarqā'. Note that they remained occupied in the Persian and the early Hellenistic periods when the lower Wādī az-Zarqā' was sparsely populated; they remained unoccupied in the late Hellenistic period when the lower Wādī az-Zarqā' region was densely populated. This fact offers support for Gordon's contention (1987: 67) that the settlement history of the lower Wādī az-Zarqā' was not linked to the settlements of the major cities in the Jordan Valley. As in the central Jordan Valley, the deterioration of settlement system in the southern Jordan Valley appears to have come in the late Hellenistic period. Tall Nimrīn and Tall Iktanū include potential evidence of early Hellenistic occupation beyond the military campaign of Alexander the Great. Hence, we posit that, in studying the Persian and Hellenistic periods, the central Jordan Valley may be treated as a single entity with the southern Jordan Valley, rather than with the lower Wādī az-Zarqā' and the northern Jordan Valley.

According to surface surveys, there are at least several additional sites which show the same pattern of occupational history to that of Tall Nimrīn and Tall Iktanū. For example, Tall Blaybil on Wādī Shu'ayb and Tall al-

Kufrayn on Wādī al-Kufrayn appear to have flourished during the Persian and Hellenistic periods (Prag 1989: 45). At Tall Blaybil, the Hellenistic period was not represented by pottery when the Wādī Shu'ayb survey team visited this site in 1988 (Wright *et al.* 1989: 347). In 1976, however, the eastern Jordan Valley survey team explored Tall Blaybil and Tall al-Kufrayn and collected Iron II, Persian and Hellenistic pottery on the surface (Yassine *et al.* 1988: 192, 199; cf. Ibach 1987: 22). No Roman pottery was found at either site. Judging from the results of the eastern Jordan Valley survey, we may suggest that in the future, Qaşr ad-Dāhūdī, an-Naşşariyāt, Mişlaḥa, and Dayr al-Baghil will prove to have been used in the early Hellenistic period as well. We should note that all these sites are located in the vicinity of Tall Nimrīn or Tall Iktanū. The Ḥisbān survey team also visited part of the southern Jordan Valley and found pottery of Iron II, Persian and Hellenistic periods at Tall ar-Rāma (Ibach 1987: 22). Turning back to the northern Jordan Valley survey, we note only two sites that contain evidence of continuous settlement from the Iron II to the Hellenistic period. They are Tall Abū al-Qaml and Tall al-Ma'ajaja which yielded Iron II, Persian, Hellenistic, and early Roman sherds (Ibrahim *et al.* 1976). They are situated on the floor of the valley near the confluence of Wādī al-'Arab and Wādī al-Yābis with the Jordan River. Khirbat al-Marqa'ah and Tall 'Ammātā are also known to have Iron II/early Persian and Hellenistic evidence, but late Persian and early Hellenistic evidence is likely absent at both sites. In sum, the surface sherding may indicate that in the northern half of the Jordan Valley, very few sites were continuously occupied from late Iron II to the early Hellenistic period (Yassine *et al.* 1988: 192).

Concerning the conditions of the early Hellenistic period, as stated above, a current consensus seems to be that Jordan was unutilized, and the region experienced a substantial decline in settled population. Given the preceding analysis of archaeological data, however, such a point of view seems to be no longer plausible. Excavations have yielded early Hellenistic evidence at no small number of sites evenly scattered over the Jordanian plateau and the Jordan Valley. Therefore, the question may no longer be whether settlement increase came in the early Hellenistic period, but to what degree and in what ways. Once we accept this position, we can turn our attention to an important historical and archaeological consideration: the nature and pattern of early Hellenistic settlements in Jordan.

In the central Jordan Valley, a striking feature of the early Hellenistic sites is the presence of a public building and a large number of storage pits, showing that they were used as either tax gathering sites or supply depots. At Tall al-Mazār, Stratum I contains dozens of circular pits and silos apparently used for massive grain storage (Yassine 1983). The early Hellenistic phase at Dayr 'Allā includes

a large building surrounded by storage pits (Ibrahim and van der Kooij 1979: 42). Stratum II at Tall as-Sa'idiyya also consists of a rectangular structure which served some public function (Pritchard 1985: 73). In the Mādabā Plains, as in the central Jordan Valley, the most significant point that can be made about the early Hellenistic sites is that they consist of an isolated central building associated with agricultural features. Excavations of Rujm Miriam yielded a rectangular building, terraces, four cisterns, and a cave complex (Herr *et al.* 1997). Ceramic evidence joins with this building to indicate that Rujm Miriam served as an agricultural collection depot. Rujm Salīm is another site with a large central building and several agricultural features in the vicinity (Geraty *et al.* 1988: 226). Rujm ad-Drayjāt seems to be a fortress or villa which consists of a large rectangular building with a nearby cave and cisterns (Younker *et al.* 1990: 12-14). Khirbat Salāma and Tall al-Fukhār also fit the type of agricultural complex with a strongly-built large building like those in the Mādabā Plains and the central Jordan Valley (Bikai 1993; 1994; Lenzen and McQuitty 1984; 1987; Strange 1997). At the 'Ammān Citadel, late construction seems to have obliterated early Hellenistic architectural remains. Nevertheless, the ceramic and numismatic evidence from the early Hellenistic period seems quite solid (Najjar 1997; Russell 1997; Russell *et al.* 1997). In light of textual evidence, it may be conjectured that the Ptolemies built a fortress rather than a city at 'Ammān (Tcherikover 1959: 101).

Given the combination of the foregoing evidence, the early Hellenistic settlements in Jordan may share one fundamental characteristic: they were all small-sized settlements associated with possible public buildings and various agricultural trappings. In many cases, these buildings consist of a courtyard surrounded by or adjacent to multiple rooms, although so far the evidence does not indicate one particular building plan ubiquitous enough to justify a standard plan for the early Hellenistic public buildings. In conjunction with these facts, it must be recognized that throughout the excavation reports of these sites, one theme surfaces repeatedly: they served as a tax-gathering site, an agricultural depot, or a garrison. It is also obvious that for the major long-inhabited sites in the plateau and the northern Jordan Valley, early Hellenistic evidence is notably weak. Possible exceptions to this generalization are the 'Ammān Citadel and Tall al-'Umayrī which contain early Hellenistic pottery and materials.

Another finding that deserves particular mention is coins of Ptolemy II found at Rujm Salīm, 'Irāq al-'Amir, Pella, and the 'Ammān Citadel (Geraty *et al.* 1988; 1990; Lapp 1983: 13-20; Russell *et al.* 1997: 23; Smith 1982; Zayadine 1990; Zayadine *et al.* 1989). The coin from Rujm Salīm was minted in Alexandria between 251 and 249 BC; one from the 'Ammān Citadel was minted at

Tyre or Gaza (Russell *et al.* 1997: 25; Miller 1991: 382). Tall al-Fukhār, Tall Ḥisbān and Khirbat Salāma contain coins dated to the period of Ptolemy III (Bikai 1994: 397; Hendrix 1994: 181; Strange 1997: 405; Terian 1976: 136). The discovery of Ptolemy II and III coins in Jordan is not surprising given that a great deal has already been written about a regular caravan traffic and trade between Transjordan and Egypt (Tcherikover 1937). Notwithstanding, these Ptolemy coins are of great value for two reasons: (1) they may represent the geographical range of Egyptian commercial activity in Transjordan during the early Hellenistic period; (2) they may give us hints as to how commercial trade between Transjordan and Egypt was organized. First, the Ptolemy II coins minted at Alexandria and Gaza apparently indicate that in the mid third century BC, the 'Ammān region and the Mādabā Plains were connected in commercial activity with Egypt and the coastal region, and the circulation of money increased in these regions with the growth of commerce between Egypt and the central Jordanian plateau (cf. Cary 1932: 299). Second, according to Tcherikover's study of Zenon papyri (1937: 21-22), the grain and oil trade between the two regions was ultimately in the hands of the government in Alexandria. Yet, private agents played a great role, collecting grain and oil for export to Egypt from the state lands or the landed property. They played the role of middle-men and were paid money through the agency of a bank. Native leaseholders cultivated the lands under the supervision of royal officials, although local leaders were occasionally allowed to own the lands. In connection with this textual evidence, it is tempting to assume that many of early Hellenistic sites in Jordan were associated with this trade activity, and the public buildings at these sites served as administrative centers of royal officials in conjunction with commerce. However, we have as yet very little direct evidence for this hypothesis.

Put together, there is no doubt that in the early Hellenistic period, Jordan was thinly populated in comparison to the Iron II. Yet, there is difficulty in arguing for an occupational hiatus in the early Hellenistic period, since there was an increase in population during this period. One may be prone to emphasize the early Hellenistic period as a transition to the much higher population level of the late Hellenistic period. This view, however, is also one to be tested in future work, since we lack solid evidence showing that the late Hellenistic period witnessed substantial settlement increase in comparison to the early period. In any event, according to the data on hand, Jordan seems to have been more densely populated than scholars have thought. In addition, the difference between the early Hellenistic period and the late one seems qualitative rather than quantitative. The Jordanian plateau and the Jordan Valley saw a rapid urbanization during the late Hellenistic period (Barghouti 1982); during the early Hellenistic pe-

riod, as a whole, evidence accounts for the rural and agricultural characteristics of the region. The view that Jordan was devoid of population in the early Hellenistic period thus seems to be somewhat exaggerated; it was rather a prosperous rural society tied with Egypt through trade and taxation.

A remaining question is why the central and southern Jordan Valley has a potentially unique Persian-Hellenistic settlement history. A suggestion is that the answer may lie in their geographical proximity to the region of 'Irāq al-'Amīr. In the previous accounts of the region of 'Irāq al-'Amīr and Wādī al-Kufrayn, Iron II and Hellenistic settlement patterns were presented in detail, and will not be repeated here (Ji 1997; 1998). A summary of the main points will suffice for the purpose of this paper: at 'Irāq al-'Amīr and in the region of Wādī as-Sīr, the evidence in general is strong enough to suggest a settlement continuity from late Iron II to the early Hellenistic period, and there were potential road systems connecting the southern Jordan Valley with 'Irāq al-'Amīr along Wādī al-Kufrayn and Wādī Jariya.

Our suggestion is that the proposed road systems along Wādī as-Sīr, Wādī al-Kufrayn, and Wādī Jariya were related with the Persian and Hellenistic settlements at the mouth of Wādī Shu'ayb, Wādī al-Kufrayn and Wādī Ḥisbān. This being the case, it is very likely that the Persian and Hellenistic settlement pattern in the southern Jordan Valley was associated with that of 'Irāq al-'Amīr and Wādī as-Sīr. On the basis of this notion, we may conclude that the southern Jordan Valley needs to be treated as a continuation of the settlements in the 'Irāq al-'Amīr region. It also seems reasonable to assume that the Persian and Hellenistic dwellers of the 'Irāq al-'Amīr region, most likely the Tobiads, were involved in building settlements for strategic and commercial purposes in the southern Jordan Valley and along Wādī al-Kufrayn and Wādī Jariya. A question is the relation of the central Jordan Valley to the region of 'Irāq al-'Amīr. We are still far from solving this puzzle because of the paucity of archaeological and textual data concerning whether or not Tobiah's territory included the central Jordan Valley. This question seems to require further studies.

Conclusion

For the present synthesis, we often had to rely on quite fragmentary information on the Hellenistic period disseminated in an array of reports in the form of a supplement to the study of the Iron Age and the classical periods. Hence, it can be easily predicted that some of the suggestions professed in this study will be revised as archaeological work continues and further analyses of findings come out in the future. Bearing this limitation in mind, we may reduce the present study to the following conclusions.

First, in light of recent excavations and surveys, there is no doubt that central and northern Jordan was thinly populated in the Hellenistic period in comparison to the Iron II and Roman-Byzantine periods. Yet, a popular view of a break in sedentary life during this period may negate archaeological evidence. We rather characterize the Hellenistic period as the beginning of a return of intensification in settlement. This is particularly true for the early Hellenistic period. Addressing this period, scholars have overlooked the relative importance of small farmstead and garrison sites scattered across the Jordanian plateau and the Jordan Valley. Profound changes first occurred in rural areas in which new villages, villas, farmsteads and garrisons were built during the early Hellenistic period, which was followed by changes in urban centers in the late Hellenistic period. At present, however, in terms of settlement density, we should probably not speak about the early Hellenistic period as a mere transition to the heavy occupation in the late Hellenistic period. The published statistical evidence is as yet too limited for this contention. Second, the Hellenistic settlement patterns were perhaps more complex than those discerned by previous studies. The central and southern Jordan Valley represents a different type of settlement history from that of the Jordanian plateau and the northern Jordan Valley. The heaviest concentration of Persian-early Hellenistic sites occurs in the central and southern Jordan Valley, particularly along Wādī Shu'ayb, Wādī al-Kufrayn and Wādī Ḥisbān, whereas in the Jordanian plateau and the northern Jordan Valley, a settlement intensification began early in the Hellenistic period and continued to the late Hellenistic period. There was a break in sedentary life in the central and southern Jordan Valley in the late Hellenistic period, whereas in the plateau and the northern Jordan Valley, such a break took place during the Persian period. Finally, the presence of the Tobiads in the region of 'Irāq al-'Amīr appears to be the best answer for this possibly unique settlement pattern in the southern Jordan Valley. A striking fact is the similarity of settlement history of the two regions from late Iron II to the Hellenistic period. The vicissitude of the Tobiads in the region of 'Irāq al-'Amīr may well have influenced intensification and abatement of the settlements in the southern Jordan Valley.

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