

Timothy P. Harrison  
University of Toronto  
Dept. of Near and Middle  
Eastern Civilizations  
4 Bancroft Avenue  
Toronto, ON, Canada M5S 1C1

**Timothy P. Harrison**

## **Urban or Rural? The Development of Regional Communities in the Highlands of Jordan during the Third Millennium**

### **Introduction**

The fundamentally urban character of the Early Bronze Age (EBA) southern Levant is a central tenet that runs consistently through the literature on the period (e.g. Kempinski 1978; Kenyon 1979: 84-86; Richard 1987; Mazar 1990: 110-11; Ben Tor 1992: 85-86), with most studies viewing it as structurally analogous to developments elsewhere in the ancient Near East. Urbanism as experienced in the EBA southern Levant was simply a secondary, derivative expression of the earlier and larger-scale manifestations that occurred in southern Mesopotamia and Egypt. In promoting this view, however, the conventional wisdom has failed to account for an important aspect of urbanism; namely that urban centers function not as isolated islands of settlement, but as part of an interdependent regional network of cities, towns and rural communities (Wheatley 1972). Conceived in this way, integration, not scale, becomes the key index for measuring the level of complexity and urbanization achieved in a region.

Attempts to explain the emergence of EBA society typically have invoked varying migration/invasion (Hennessy 1967; Lapp 1970; de Vaux 1971), diffusion (Kempinski 1978; 1989), or indigenous evolutionary (Schaub 1982; Miroschedji 1989; Joffe 1991) models. One study of EBA sociopolitical development has drawn on the concept of secondary state formation to address the role of external influence (Esse 1989). More recently, the core-periphery, or world systems model, has gained popularity in the ongoing effort to explain the move toward social and political complexity (Marfoe 1987; Steele 1990; Joffe 1993). Even the current emphasis on settlement pattern analysis (e.g. Esse 1991; Finkelstein and Gophna 1993; Gophna 1995; Joffe 1993), in spite of its success in documenting the process of settlement intensification and abatement on a regional level, however, has largely failed to examine the functional relationships that emerged between communities. While site-size hierarchies are relatively easy to document, their social, economic and political implica-

tions are not as readily evident.

Only recently has attention finally begun to shift to the issue of integration. In a series of studies utilizing site catchment analysis and models generated from rank-size distributions, settlement data from the principal geographical sub-regions of the southern Levant were found to have consistently low levels of integration, with the largest settlements superimposed on a broader, rural network of small towns and villages that followed their own courses of development (Falconer 1994a; 1994b; Falconer and Savage 1995). The advent of "urbanism" in the southern Levant, in other words, seems to have pursued a decidedly different trajectory from that traced elsewhere in the ancient Near East.

Survey and excavated data from the Highlands of central Jordan suggest a similar pattern of low-level integration and autonomous development. Nevertheless a complex social order did emerge, with expanding commercial opportunities serving as the catalyst that stimulated production, creating the incentive for communities to settle and invest in the land. By the EB III, a pattern of "rural complexity" (cf. Schwartz and Falconer 1994) had developed, resulting in a loosely integrated society heterarchically organized to exploit the environmental diversity and uncertainty that characterize the region. The regional communities that emerged were positioned to maximize their options, avoiding the less flexible and responsive tendencies that typify rigidly hierarchical, urban settlement networks.

### **The Highlands of Central Jordan**

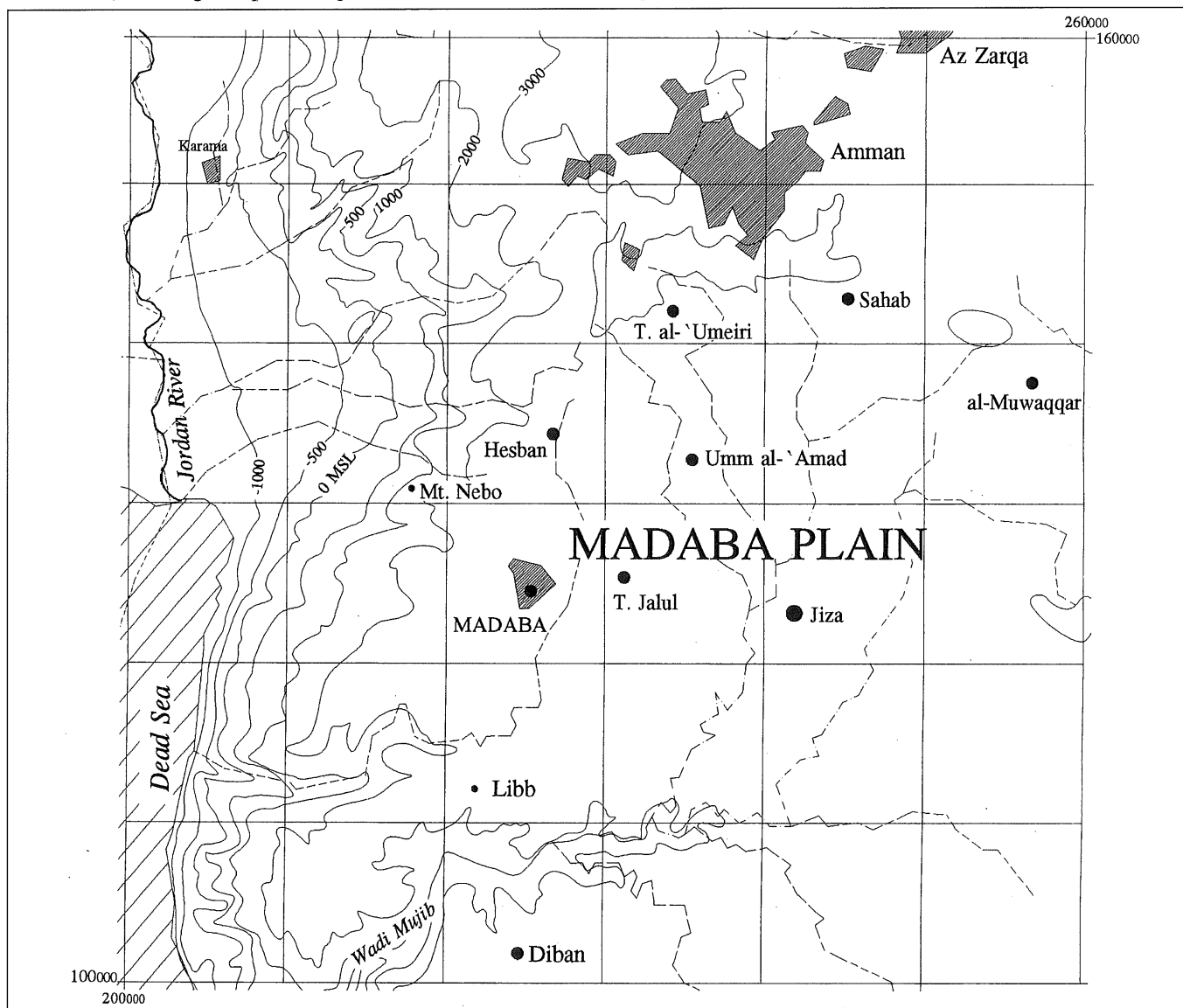
The semi-arid Highlands of central Jordan present a complex landscape of rolling hills and plateaus broken by deep cavernous *widyān* and rocky outcrops. Sandwiched between the dry eastern desert steppes and the more humid Levantine coast, the Highlands are characterized by their climatic variability and environmental uncertainty. Straddling this fragmented landscape, the *Mādabā* Plain, defined loosely here as the land mass between the Dead Sea

escarpment to the west, the foothills of 'Ammān to the north, the desert steppes to the east, and the northern branches of the Wādī al-Mūjib to the south, comprising an area of approximately 1600 sq km, forms a distinct geographic unit within this diverse setting (FIG. 1). As a microcosm of the complex environmental conditions that distinguish the region, the Mādabā Plain represents a coherent unit of analysis, and therefore constitutes the geographical focus of the present study.

**Settlement Patterns**

On a regional level, the survey data available for the Mādabā Plain region indicate a period of intense settlement activity corresponding to the EB II-III period (Harrison 1997). During the preceding Late Chalcolithic and

EB I, settlement data reveal a consistent pattern of small (<2 ha) sites clustered along principal wadi systems, or adjacent to springs. With the EB II-III period, a dense pattern configured in a site-size hierarchy emerged in place of these isolated site clusters. The site of Mādabā, at 16 ha, was the largest settlement on the Plain, and therefore would seem to be the logical regional center during this period. Survey data for the area surrounding Tall al-'Umayrī indicate an intense effort to exploit local resources, so that the parent site, at 4.3 ha, emerges as a large agricultural village actively utilizing the resources of its hinterland. Visible features at a number of other sites suggest additional settlement types within this regional network, and it seems clear that a complex settlement configuration had emerged on the Mādabā Plain by the EB III



1. Topography of the Mādabā Plain region (created by Stephen H. Savage).

period.

Nevertheless, in the absence of excavated evidence of administrative activity, it is difficult to reconstruct the organizational structures that guided life on the Mādabā Plain during this period. The presence of two ceramic seal impressions at Tall al-‘Umayrī (Harrison 1995: 149, 156) and a third from Tall Mādabā (Harrison *et al.*, forthcoming) indicate that some kind of administrative apparatus did exist. Significantly, most of the seal impressions found at EB II-III sites in the southern Levant, including those from the Mādabā Plain region, have been on large storage jars, the end product of a specialized production process. These jars typically served as storage vessels, and probably also were involved in the export of agricultural products (Esse 1990: 32\*). Thus, it is fair to assume that the presence of a seal impression on such a jar not only helped established ownership, but fulfilled a record-keeping function as well.

In the absence of more direct evidence, the estimated agricultural sustaining capacity of the area provides a sense of the level of integration that might have existed within the regional community that resided on the Mādabā Plain. When calculated for the known EB II-III settlements on the Plain, very little overlap is evident (Harrison 1997: 21), suggesting that the settled population never reached a level of density that placed pressure on the region's resource base. At the same time, the environmental variability endemic to the Plain, which encourages sub-regional economic specialization (horticulture in the northwest, wheat and barley cultivation in the central and eastern steppes, and animal husbandry in the east), and a concomitant incentive toward intra-regional cooperation or interdependence, very likely prompted a significant degree of economic integration, although not necessarily in a hierarchical configuration. Rather than simple low-level integration, therefore, the evidence suggests a predominantly rural settlement landscape heterarchically organized to exploit the diverse resource base that characterizes the Mādabā Plain region. Rank-size analysis of the known EB II-III settlements produces a similar result (Harrison 1997: 21-23).

Thus the settlement data for highland central Jordan indicate that the emergence of social complexity during the EBA was not simply derivative of developments elsewhere in the ancient Near East. Instead, as Falconer and Savage have stated in their study of Bronze Age settlement patterns in Cisjordan, they describe "...an intriguing patchwork, in which the largest cities were superimposed on a much broader network of resilient towns and villages that followed their own courses of development" (1995: 55). Rather than rigidly hierarchical in structure, the EB

II-III settlement data for the southern Levant portray a dispersed, heterarchical settlement network in which individual communities and sub-regions maintained significant autonomy, and the ability to integrate in a variety of ways and at varying levels of intensity, in spite of the sedentarization process and increased settlement density evident during the period. While the site of Mādabā may have asserted some political influence over the other settlements on the Plain, it probably never achieved a level of integration that permitted close and sustained control of the social and economic life of these communities.

### Ceramic Production and Distribution

Analysis of the EB III ceramic horizon for the Highlands of central Jordan must rely for the most part on an excavated sequence from the agricultural village site of Tall al-‘Umayrī, located on the northern edge of the Mādabā Plain (FIG. 1). The Tall al-‘Umayrī corpus consists predominantly of a domestic assemblage drawn from four stratigraphically superimposed architectural phases located in Field D, on the southern terrace of the site. The four-phase sequence exhibited a gradual, continuous development that culminated with the burning and destruction of the final phase.<sup>1</sup>

#### Production

The analysis completed thus far has resulted in the creation of a typological sequence (Harrison 1995; forthcoming), and a preliminary assessment of the manufacturing technology and organization of the pottery industry (London 1991; 1995). Several methods of analysis have been employed, including metric analysis of shape variation, analysis of manufacturing techniques, petrographic analysis of samples from both Tall al-‘Umayrī and hinterland sites, and an ethnoarchaeological survey of local contemporary potting traditions. Although this analysis is still in progress, preliminary observations suggest a dispersed, heterogeneous ceramic industry with production organized on at least three levels during the EB III period. Significantly, the ceramic traditions evident at Tall al-‘Umayrī appear to parallel those found at the contemporary site of Yarmouth in central Cisjordan to the west (London 1988).

The most basic production occurred at the household level, and involved the manufacture of common everyday domestic wares (London 1991: 394). Vessels such as cups, simple bowls and jars, all of which involved the use of pinch-pot or coiling techniques, are the clearest evidence of this productive activity.

The second level of production is evident in the larger necked jars, flared-rim jars and holemouth jars repre-

<sup>1</sup> A series of carbon samples have been collected from each of these four phases for radiocarbon dating. While ceramic parallels suggest a sequence that spans the EB IIIA and B, in the absence of in-

dependent dating evidence, it seems only prudent to avoid assigning the four phases to specific chronological sub-periods for the present.

sented in the assemblage. These vessel types required considerably greater skill to produce, and point toward more specialized production, possibly by itinerants, or potters attached to a local household or workshop industry (London 1991: 394). Although broadly uniform in appearance, metric analysis of individual vessel profiles (measurements have included rim diameter, neck height, and rim thickness) indicate significant variability within the relative morphology of each of these vessel types, implying dispersed rather than centralized mass production. In addition, the presence of a wide range of pre-fired potter's marks on many of the vessels infers the work of a diverse group of potters. Although it involved specialization, this second level of production therefore provides little or no indication of centralized control.

The third level of production preserved in the ceramic record at Tall al-'Umayri involved non-local wares such as Khirbat al-Karak Ware (KKW) and Combed Ware.<sup>2</sup> The presence of KKW, which probably had originated in northern Palestine, substantiates the existence of a long distance, inter-regional trade network, and links the local ceramic industry and economy of the Mādabā Plain region into the broader exchange network operative in the southern Levant during this period.

An ethnoarchaeological survey of contemporary local ceramic traditions has found parallels with the household and specialized levels of production evident in the EB III record at Tall al-'Umayri (London and Sinclair 1991), strengthening the case for a heterogeneous and dispersed ceramic industry during this period. Although petrographic analysis of the Tall al-'Umayri corpus is still in progress, the results of an initial pilot study seem to mirror the observations drawn from the technical and metric analysis, with the mineralogical composition of the samples falling into four distinct groups (London, Plint and Smith 1991: 434-36).

#### *Distribution*

In the absence of direct evidence of production,<sup>3</sup> the regional settlement picture provides some sense of the spatial distribution of the EB III ceramic industry, and the regional exchange network of which it was a part. That this network was the product of a complex web of social, economic, and political relationships that extended beyond the world of ceramic production must be emphasized, however, and must condition conclusions drawn about the organization of the ceramic industry itself.

The loosely integrated settlement patterns reflected in the survey data have significant implications for the organization of the ceramic industry. Without a well-

integrated and urbanized social order, it is unlikely that a highly specialized ceramic industry emerged to service the so-called "urban" communities of the EB III highland region. This does not mean that the ceramic industry was not well developed. In addition to the household production of common domestic wares, workshops, engaged for the most part in limited rather than large-scale industrial production, probably existed in the principal settlements, satisfying local demand for vessel forms that required specialized skill to produce. The presence of a two-chambered updraft kiln at Tall al-Far'ah (N) (de Vaux 1955: 558-63) provides perhaps the best example of such an operation. It is also possible that itinerant potters traveled from settlement to settlement, filling orders placed at each site, an arrangement well-documented ethnographically (London 1989; 1991: 394). Either way, we would expect such localized production, while retaining certain conservative elements (for example, stable clay-temper combinations, and gross vessel morphology), to result in a diverse and heterogeneous ceramic assemblage, as individual potters or workshops developed their own unique recipes from local raw materials.

The overall picture that emerges is one of a decentralized ceramic industry driven by local demand, rather than one controlled through a centralized redistributive network. Perhaps more importantly, the evidence suggests an economic system guided more by supply and demand than by the dictates of a central ruling elite in control of production. Accordingly, we would expect the distribution of economic goods to occur by means of an intricate regional exchange network, in which small agricultural villages participated actively along with the larger central settlements, both as producing and consuming partners. A similar organization has been documented for the EB IV and MB II in the Jordan Valley (Falconer 1987; 1994b: 133-39).

Overlaying this regional network was a more extensive, inter-regional one, evidenced by the presence of KKW and, perhaps more importantly, the lime-coated Combed Ware with its predominantly southern distribution. The presence of these wares not only indicate consumer demand for non-local products (note the domestic context of this material), they also link the local economy into the broader economic system operative in the southern Levant during this period. More specifically, the parallels apparent in the ceramic assemblages and industries of highland central Jordan and central and southern Cisjordan (for example, Ai, Yarmouth, and Lachish) suggest that there were close economic ties between these two regions. They also infer the existence of an east-west

<sup>2</sup> Frequently coated with a white chalky substance, this ware group has a predominantly southern distribution, and should be distinguished from the more northern Metallic Ware tradition (see now Greenberg and Porat 1996).

<sup>3</sup> Direct evidence of on-site production at Tall al-'Umayri has now materialized with the recent discovery of the top half of a basalt turntable found in association with the EB III pottery from Field D.

corridor that very likely extended all the way to the Mediterranean, funneling goods to coastal markets at sites such as Ashkelon (Stager, forthcoming) for transshipment to regions beyond.

### Regionalism and EBA Sociopolitical Complexity

The survey data for the Mādabā Plain, as we have seen, suggest that EBA communities were only loosely integrated, even when the region reached peak settlement density during the EB II-III period. The ceramic evidence similarly depicts a dispersed, heterogeneous industry characterized by varying levels of production and interaction. Both lines of evidence nevertheless also attest to the emergence of complex, regionally defined communities in the Central Highlands during this period.

Cluster analysis of survey data for the rest of the southern Levant further substantiate this view, revealing distinctly regionalized settlement patterns, with specific regions exhibiting significantly varying levels of integration. Coastal areas, for example, seem to have experienced more integrated, "urban" configurations, fluctuating in response to developments elsewhere in the Near East, while communities in the highlands and inland valley systems appear more stable and insulated from external influence (Savage and Falconer 1995; see also Finkelstein 1995: 55-64, for an alternative attempt at a peer polity model using Thiessen polygons). The restricted northern distribution of Metallic Ware at the onset of the EB III, and corresponding introduction of KKW around the Sea of Galilee and in the North Jordan Valley, moreover, delineate the possible rise of competing centers of production (Greenberg and Porat 1996: 20). The dendritic trade networks forged between hinterland communities and coastal ports (cf. Stager, forthcoming) meanwhile, highlight the economic forces that helped give shape to this regionalized landscape.

In spite of this economic pressure, however, EBA hinterland communities continued to favor adaptive strategies that preserved flexibility and autonomy over those that emphasized maximum productivity. They never fully relinquished the flexibility needed to adapt to economic downturns and periods of political instability, resisting full integration by maintaining a diverse subsistence base and a high degree of autonomy. Even at the height of development, the basic organizational and productive unit remained the household (Harrison 1995: 227-29). Communities remained self-sustaining and sociopolitically autonomous, while engaging in varying levels of specialized economic production. The result was a loosely integrated society comprised of regional communities heterarchically organized to exploit the environmental diversity and uncertainty that characterize the southern Levant. The outcome was a remarkably resilient and enduring culture that thrived for more than fifteen hundred years.

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