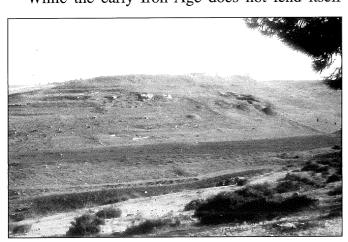
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Cultural Interaction through the Windows of the Four-Room House at Tall al-'Umayrī

This paper will examine in preliminary fashion evidences for regional cultural interaction by opening an investigation into everything associated with the early Iron Age "four-room" or "pillared" house at Tall al-'Umayrī (FIG. 1), part of the Mādabā Plains Project, and begin the process of exploring any connections beyond them. In doing so, we will explore intellectual constructs, as well as architectural and artifactual finds (and the expertise it required to produce and construct/transport them), related to three phases in the use of this house: 1) construction, 2) occupation and 3) destruction. Each phase has left us material clues from which we hope to determine provenance and means of procurement. These will provide information about cultural interaction not only within the area immediately around the tall, but in the Mādabā Plains region of Jordan in general and beyond. By using as our starting point a domestic dwelling, the best preserved "four-room" house anywhere in the Levant, we enjoy the benefit of analyzing one locus of cultural activity serving as the collection point for evidence of interaction with other locations and activities.

While the early Iron Age does not lend itself



1. Profile of Tall al-'Umayri, Jordan from the southwest.

especially well to the study of cross-cultural interaction, given the primarily subsistence economy dominating the region during this period, there are evidences of cultural interaction apparent in the material record of this house. Construction remains indicate the use of materials brought in, some from a distance. Occupation has left us approximately 170 artifacts used in everyday chores like food preparation, consumption, storage and disposal; textiles and other household activities; and cultic tasks. These come in the form of ceramic, stone, floral and faunal remains, which demonstrate some level of interaction far beyond the regional borders with which the inhabitants were familiar. Finally, the house's destruction occurred due to outside forces, leaving limited remains, which we wish could be more helpful in identifying from where the perpetrators came. Our investigation is preliminary and primarily descriptive, as opposed to synthetically analytical, and will only begin to open windows for further research. Much comparative analysis awaits our attention if we hope to complete this investigation in the future.

Dimensions of Four-Room Houses

This study of cultural influences visible through four-room houses must consider the wider dimensions of these structures, even if not all will receive equal treatment here. They are:

- Chronological Dimensions The entire Iron Age (ca. 1200-550BC), although our attention will be directed to the earliest part of Iron 1 (ca. 1200), even the latest years of the Late Bronze Age. This represents the temporal setting of the four-room house at Tall al-'Umayri.
- Environmental Dimensions The world of the Iron Age (especially the economic world) in which four-room houses were utilized, consisting

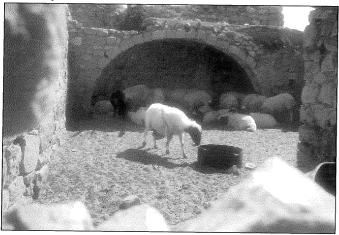
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primarily of subsistence strategies of survival in an agri-pastoral setting. Given the localized nature of this mixed survival strategy, we should not expect significant levels of interaction much beyond regional homelands utilized for agricultural purposes (FIG. 2) and normal patterns of travel to pasturage for sheep and goats (FIG. 3).

- Architectural Dimensions The construction of the house itself, including design and materials and their procurement.
- Basic Human Dimensions What it demanded of people to construct, occupy and destroy domestic houses.
- Social Dimensions The nature of life and existence in these houses, including roles for men, women and children.
- Ethnic Dimensions The capacity of remains to assist us in identifying the ethnic makeup of those who occupied four-room houses, wherever they are found.
- Ideological Dimensions Theories on the mental templates lying behind four-room house de-



2. Agricultural harvest taking place to the west of Tall al-'Umayrī.



3. Sheep being stabled in the traditional village of Danā in southern Jordan.

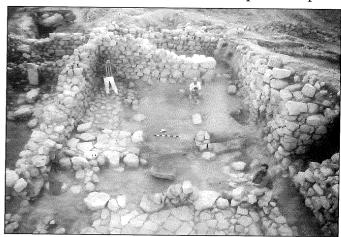
- sign, construction and use.
- Dimensions of Destruction What we can know about the demise of these houses and its causes as well as perpetrators.

It is in particular the environmental, architectural, basic human and destructive dimensions, which will play a role in this investigation, interwoven within the discussion, which follows.

Stone Houses in Iron Age Palestine and Transjordan

Although we do not have any direct textual descriptions or visual representations of the building activities or construction design of Levantine houses from the Iron 1 period, archaeological research has focused a good deal of attention on what have come to be called "four-room" or "pillared" houses and small agrarian villages from this period. Their connections with early tribal entities, which ultimately became ancient Ammon, Moab, Israel, etc., have occupied archaeologists and biblical scholars with intensity of late and will likely continue to do so for some time. A growing consensus today suggests that these tribal entities initially settled in small agricultural villages in the hill country of Palestine and Transjordan, often building fourroom houses and constructing terraces, cisterns and wine and olive presses.

The Iron 1 four-room houses discovered by archaeologists in this region typically measured 10-12m long and 8-10m wide (FIG. 4). The broad room, extending across the back end of the building, may have been 2m wide and opened into an area containing three long rooms, each separated from the others by a wall or a row of pillars or posts



 Al-'Umayri four-room house immediately following excavation picturing, clockwise from left top, Larry Geraty, Douglas Clark, Larry Herr, co-directors.

which also supported the ceiling or roof. The two side rooms normally housed animals, leaving the central long room for domestic activities surrounding food preparation and consumption.

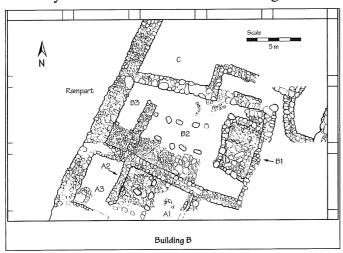
This pattern is clear in the best preserved and likely one of the earliest examples of this type of house, excavated in Field B at Tall al-'Umayrī, south of 'Ammān, Jordan. The Late Bronze/Iron 1 town was extremely well defended with a moat, rampart and perimeter wall construction. Interestingly, the builders utilized the broad rooms of the two adjacent buildings exposed to this point in excavation (Buildings A and B) as an integrated part of what appears to be double-wall defenses (FIG. 5). An external animal pen extended the length of House B.

Both early Iron 1 buildings have been completely excavated and suggest two stories over their full extent, thereby illustrating the size of these structures for domestic use as well as the height of the city wall into which they had been constructed.

Is there anything in the process of construction, which might illustrate cultural interaction beyond the immediate vicinity of the village or town?

Construction

Given the subsistence economy characterizing early Iron Age Palestine and Transjordan, we should not expect significant cultural interchange. However, questions arise surrounding issues of the four-room house design and the transport of building materials. Unfortunately, in the case of design, debate continues about whether the "four-room" house plan derived from earlier "three-room" models in Syria or those from Late Bronze Age Canaan

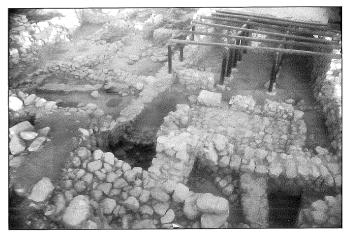


5. Top plan of al-'Umayrī four-room house on western edge of the tall.

at Tall Harasim and Tall Batash. The design lends itself extremely well to the mixed agricultural/pastoral survival strategies with its space for animals as well as agricultural produce and production, but provenance is to this point arguably unclear to us. The house at Tall al-'Umayrī, even if one of the earliest four-room houses in existence, nevertheless had precedents, which reflect cultural influence.

Building demands from the ground up (FIG. 6) included 1) beaten earth and flagstone flooring; 2) exterior stone walls on the ground level; 3) interior stone walls and wooden posts, beams and rafters; 4) first-story ceiling/second-story floor consisting of branches, mud, clay and plaster; and 5) the upper story with mudbrick walls, wooden posts, beams and rafters and another wood, mud and plaster ceiling/roof. Stone and mudbrick walls were also likely plastered over inside and out to prevent external erosion from the annual rainfall, which can be heavy and intense during the winter and early spring months and the internal invasion of insects and vermin. These required significant amounts of lime plaster and assumes all the labor involved in the manufacture of lime along with its application and maintenance.

Building materials included mostly locally available types: limestone field stones for flooring and walls on the first floor as well as for lime used in plaster and mortar; wood from area forests for use as beams, rafters, ceiling/floor support; clay for the mudbricks of the second story and flooring/roofing material. The only building material brought in from a distance were the reeds for ceiling construction on both stories (FIG. 7); these came from the Jordan Valley or one of the wadis heading down into the valley. While this says little about cultural interaction between al-'Umayrī and other sites



6. Partially reconstructed al-'Umayrī house from the east.

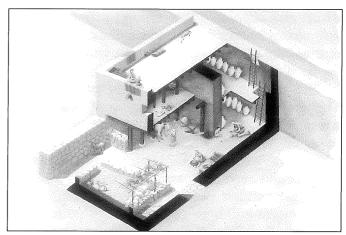


7. Reeds transported from the Jordan Valley being installed on the partially reconstructed al-'Umayrī house.

or tribal entities, it makes clear that at least some commercial transactions occurred. So too, likely, exchange of construction technologies and techniques, however challenging to trace.

Occupation

From the second phase in the life of four-room houses, and of the one at al-'Umayrī in particular, we examine artifacts associated with the house in order to explore possible cultural interaction with other peoples and places (FIG. 8). This could prove promising at al-'Umayrī due to the complete preservation of everything remaining in the house following a sudden military assault. The rapidity of the conquest, evidenced by large stores of grain, complete assemblages in food-preparation areas and remnants of articulated animal shank bones in the debris which fell from the second story, plus virtually complete preservation beneath 2 meters of mudbrick destruction debris from the second story



8. Artist's conception of al-'Umayrī four-room house as it may have appeared during the time of its use ca. 1200BC (Rhonda Root).

collapse, guarantee that we have virtually everything left behind by the house's Iron 1 occupants who apparently fled in a hurry. We thus find ourselves in an enviable position with regard to artifactual remains at least from this four-room house.

Two lists of all the approximately 170 artifacts from al-'Umayrī house follow, the first by material and type, the second by function:

Artifacts List by Material and Type

Stone

Hand Grinders – 8
Ballistica/Pounders – 4
Weights – 4
Whetstones – 3
Bowls – 2
Querns – 2 (one huge)
Sockets – 2
Alabaster Jar – 1
Cosmetic Palette – 1
Flint Blade – 1
Hematite Ball – 1
Loom Weight – 1
Pestle – 1
Roof Roller – 1
Spindle Whorl – 1

Ceramics

Pithoi – 60-70 Jugs – 18 Cooking Pots – 10 Stoppers – 10 Bowls – 7 Jar/Jug – 7

THE FOUR-ROOM HOUSE AT TALL AL-'UMAYRĪ

Kraters – 7 Jars – 6 Spindle Whorls – 4 Lamps – 2 Seal impression – 1 Flask – 1 Pyxis – 1

Metal

Bronze Weapon Points – 5 Bronze Figurine Legs and Feet – 1

Bone

Ca. 150 bone fragments, remains of at least four individuals (two adults, one likely male; one juvenile, ca. 15; and one child), the bones burned, disarticulated, scattered in the Broad Room. Astragalus

Unknown

Gaming Piece – 1 Large Spacer Bead – 1

Artifacts List by Function

Food Preparation

Ceramic Cooking Pots – 10

Stone Hand Grinders – 8

Stone Weights – 4

Stone Whetstones -3

Stone Querns -2 (one huge)

Stone Flint Blade – 1

Stone Pestles – 1

Food Consumption

Ceramic Jugs – 18

Ceramic Bowls – 7

Ceramic Kraters – 7

Ceramic Flask – 1

Ceramic Pyxis – 1

Stone Bowls -2

Stone Alabaster Jug – 1

Food Storage

Ceramic Pithoi – 60-70

Ceramic Stoppers – 10

Ceramic Jar/Jug – 7

Ceramic Jars – 6

Food Disposal

Massive Midden 60-70 Artifacts, 5,000-7,000 sherds, 25,000 bone fragments.

Textiles

Ceramic Spindle Whorls – 4

Stone Loom Weight – 1

Stone Spindle Whorl – 1

Household

Ceramic Lamps – 2

Ceramic Seal impression – 1

Stone Sockets -2

Stone Cosmetic Palette – 1

Stone Roof Roller – 1

Gaming Piece – 1

Large Spacer Bead – 1

Astragalus

Stone Hematite Ball – 1

Cultic

Bronze Figurine Legs and Feet – 1

Military

Stone Ballistica/Pounders – 4

Bronze Weapon Points – 5

Human Bones

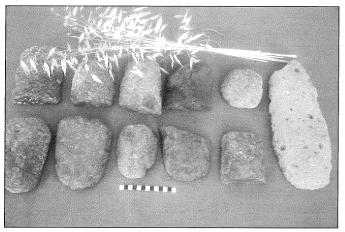
Ca. 150 human bone fragments, remains of at least four individuals (two adults, one likely male; one juvenile, ca. 15; and one child), the bones burned, disarticulated, scattered in the Broad Room.

The artifactual data contain several items that demonstrate cultural interaction. Most of these derive from secure stratigraphic levels of the house and, where noted, additional finds were produced by a massive midden to the east of the house which contained fragments of 60-70 objects, 5,000-6,000 ceramic sherds and some 25,000 bones. While we will not utilize these finds extensively in this paper, there are several items of significance to our goals here, as we shall see below.

First we turn to stone objects. Most if not all of the limestone artifacts were likely local in origin and utilitarian in function. Nothing here points to foreign provenance, although further study might change this assessment. This was not so with the sandstone and basalt implements (FIG. 9). Sandstone is not local; the three whetstones, while simplistic and utilitarian, derive from elsewhere, perhaps the Jordan Valley. Basalt was available only at some distance, from the deserts to the north and east or south toward Karak or the southwest near Mukāwir.

According to Cynthia Temoin in her Thesis at the University of Lethbridge, a study of grindstones at

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9. Assemblage of typical basalt grinding stones from al-'Umayrī.

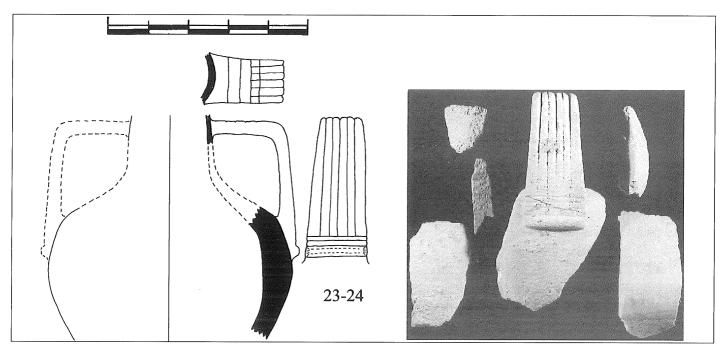
Tall al-'Umayrī, there are three patterns of design distinguishable among basalt ground stone tools:

- 1. Strategically designed those which are typically large, well crafted, intended for single use, non-local, made by specialists. These are normally manufactured near the source of the stone since the weight of unfinished stone would make transport extremely difficult.
- 2. Sequentially designed those which are typically small, conical and cylindrical in shape, intended for multiple uses, locally (re) made by non-specialists.
- 3. Expediently designed those which are typically small, ovoid in shape, intended for multiple uses, (re) made locally by non-specialists.

At al-'Umayrī, the Iron 1 basalt grinding stones fall into two of the three categories. Forty percent are strategically designed, and thus reflect artisanship from nearer the sources of stone. The rest (60 percent) were designed expediently by locals whose utilitarian needs and limited economic capacity necessitated the reuse of imported basalt implements. Thus, nearly half of the basalt grinding stones at Iron 1 al-'Umayrī were acquired directly from elsewhere, demonstrating commercial exchange of some kind.

More easily traceable evidence of foreign interchange among the stone finds in al-'Umayrī house were fragments, some large, of an alabaster jug (FIG. 10). As the form was typical of Egyptian types from the Late Bronze Age (Platt and Herr 2002: 157, 159), there is no doubt of its place of origin, design and manufacture. Despite the fact that al-'Umayrī four-room house contained only limited evidence of exchange and economic standards above the level of subsistence, this find appears to be an exception. The same may also be the case with other stone artifacts, for example, the hematite ball and cosmetic palette, but solving that question will take further research.

Of the ceramic objects discovered in al-'Umayrī house, most are clearly utilitarian forms with similarities to those from local sites in the area. The largest representation is found in collared pithoi, which make up 60-70 separate vessels (FIG. 11).



10. Fragments of an elegant alabaster jug.

which time its small chapel was paved with a mosaic floor. In the eighth century, a tomb was inserted inder the floor at the western end of the nave. This ask necessitated the repaving of this area and the addition of a new dedicatory inscription that provides a date of 762AD (Piccirillo 1995). This inscription demonstrates not only that Christian comnunities were continuing to thrive, but that a local nonastic presence was also sustained well into the eighth century.

The Church of the Virgin Mary, located along he cardo northeast of Mādabā's acropolis, contains a lengthy inscription in front of the apse that documents the dedication of the building in 767AD. The remains of the border of an earlier pavement andicate that this must have constituted a rededication in conjunction with the installation of a new geometric mosaic floor (Di Segni 1992; Piccirillo 1982).

This inscriptional evidence demonstrates that thurches in the Mādabā region were being repaved and renovated well into the mid-eighth century. It ulso provides the names of three bishops from the Early Islamic period: Sergius (718AD), Job (756-¹62AD), and Theophane (767AD). Thus, not only vas there enough wealth in the area to permit the e-founding and renovation of several churches, but the diocese of Mādabā was still fully functionıl, complete with a bishop. Although these ecclesiistical remains are important when discussing the mpact of the transition to Islamic rule on the life of the Christian community in the region they must be contextualized by examining the broader social ind cultural developments that also occurred durng this period. In keeping with this objective, the esults of the recent excavations of the Tall Mādabā Archaeological Project help illustrate these develpments within a secular context, and constitute an mportant addition to the growing corpus of mateial from the Mādabā region.

Mādabā's West Acropolis Mansion

The remains of a large complex have been uncovered on the western slope of Mādabā's acropolis Foran *et al.* 2004; Harrison *et al.* 2003). The building was constructed against the western face of the tity's pre-classical fortification wall, and extends cross a series of bedrock ledges that descend to he west. There are several features of this structure hat indicate it underwent two distinct construction phases, followed by a lengthy period of abandon-

ment. The initial construction phase dates to the Late Byzantine period (sixth century AD), while the subsequent renovations and abandonment date to the Early Islamic period (mid-seventh to mideighth centuries AD).

The building consists of a series of rooms arranged around a large flagstone-paved courtyard (FIG. 1). Most rooms were paved with mosaics, some of which portray elaborate geometric and Figural designs executed in a variety of colours. The complex exhibits a number of different construction techniques. The exposed bedrock on the site was effectively employed as the foundation for several walls. These walls were constructed of large and small stones supplemented with mud mortar, and were then faced with numerous layers of plaster. The arches supporting the second storey of this building were constructed of dry-laid ashlar boulders. An elaborate water collection system composed of pipes, basins, and channels, link the different areas of the complex.

Room 1, the southern-most room of the building, was paved with a mosaic depicting a field of rosebuds, with a geometric panel framed by a meander border to the west. The southern wall of this room was equipped with a window. Room 2, immediately to the north, was connected to Room 1 via a doorway.

Room 2 could also be entered through a doorway in its western wall fitted with a stone threshold. The floor of this room was unfinished, consisting of a simple beaten earth surface. The area in front of Room 2 was paved with a plain white mosaic floor, its perimeter delineated by carved bedrock complemented by stone and mortar construction. The bench located against the north and west walls acted as a step in front of the western doorway to the room. An entrance in the northern wall linked this area with a third room to the north (Room 3).

Room 3 had four east-west arches that spanned the width of the room, supporting a second storey. These arches were anchored to an east wall built directly against the exterior of the fortification wall. The floor of the room was paved with a plain white mosaic. A basin carved from the bedrock was located in the southeast corner of the room. The second storey mosaic was preserved in a small strip along the top of the east wall of Room 3, and a small portion of its polychrome decoration was preserved. A second stone basin was located in the northeast corner.

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A Large Urban Residence from Late Byzantine and Early Islamic Mādabā

Introduction

By the mid-seventh century AD the character of the Near East had changed forever. The Byzantine Empire, the dominant force in the region for the previous three centuries, had been defeated by the Muslim armies invading from the east, and the flourishing Christian communities of central Transjordan came under the control of the Umayyad caliphs based in Damascus. Their fate had once been thought to be quite dismal, until interest in the transition from Byzantine to Islamic rule gained increasing scholarly attention (Bisheh 2001; Shboul and Walmsley 1998; Shahid 1995, 2001). Previously this period had been characterized as a time of decline accompanied by an abatement in settlement, a degeneration of public institutions, and a reduction in population. However, the evidence produced by numerous archaeological projects, working in the region over the past 20 years, dispels this idea, presenting instead a period of continued prosperity.

The large amount of excavated material from the Mādabā region provides compelling evidence for this new view (e.g. Bisheh 1994, 2000; Piccirillo 1985, 1986a, 1989, 1993, 1997, 2001, 2002; Piccirillo and Alliata 1994, 1998; Saller 1941; Saller and Bagatti 1949). The Byzantine period was one of extensive prosperity in the area, during which the town of Mādabā reached its greatest extent. The city was the see of a bishop, who controlled a diocese that extended to the northwest as far as Mount Nebo, to the southwest to include the sites of Mā'īn, 'Ayn al-Qaṭṭār, and Mukāwir, and to the southeast to incorporate the settlements of Nitl, Dhibān, and Umm al-Raṣāṣ.

The Byzantine – Islamic Transition and the Churches of the Mādabā Region

The mosaic pavements that adorn the churches

of the Mādabā region provide an invaluable resource for dating the building activity of the sixth through the eighth centuries AD. Many of these floors contain inscriptions that give a precise date for the foundation of the building and for any renovations that were carried out subsequently. It is from these sources that we learn of the continued prosperity of the Christian communities of Mādabā. The inscriptions of the eighth century depict a period of sustained building activity where older buildings were renovated and new mosaic floors were installed, complete with updated dedicatory inscriptions.

The Church of St. Stephen at Umm al-Raṣāṣ presents one such example. The building was most likely constructed in the late sixth century, but an inscription in the nave confirms that it was rededicated in 718AD. A second inscription, located in the apse, provides a date of 756AD for the repaving of this area. Architectural and ceramic evidence indicate that the courtyard west of St. Stephen's was transformed into a church, known as the Church of the Courtyard, in the early eighth century, probably in conjunction with the rededication of the basilica. A chapel was also constructed to the south of this church in the mid-eighth century (Piccirillo 1991; Piccirillo and Alliata 1994).

The Acropolis Church at the site of Mā'īn contains an inscription with a date of 719/720AD. It is unclear whether this refers to the dedication of a new pavement, or a rededication associated with alterations executed in order to conform to iconoclastic law (de Vaux 1938; Piccirilo 1985; Schick 1995: 398-399). In any case, it testifies to some form of ecclesiastical building activity at Mā'īn in the eighth century.

The Monastery of the Theotokos at 'Ayn al-Kanīsa was constructed in the mid-sixth century, at

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and the bones themselves do not yield much meat, making it unusual that they were transported only for food. Thus, we have support for trade in the region with Egypt.

Destruction

Unfortunately, artifactual remains from the destruction of al-'Umayrī house are extremely limited and tell us very little about who mounted the assault on the site. The five bronze points deserve further study, but at this point can tell us nothing definitive about those who used them, whether local or foreign. This task is especially difficult as we continue our efforts to understand who occupied al-'Umayrī, let alone who attacked the place.

It may be that further analysis of the human remains discovered in the house could prove helpful. However, it appears that the four individuals — two adults, one likely male, a juvenile and a child — may well have been unlucky inhabitants of the house who were killed before the building was torched and collapsed. Future DNA research will at least be able to determine relationships among them.

Conclusion

Thus, there are preliminary indications that, by viewing cultural interaction through the windows of the four-room house at Tall al-'Umayrī, we can see limited evidence of exchange. The subsistence economy of the Late Bronze Age / Early Iron Age transition placed severe restrictions on the possibility or practicality of significant trade with tribal or state entities at any distance away from the site.

However, signs of interaction do exist. We can argue for regional sources for the fabric and patterns on some of the collared pithoi, particularly the Hisban area. From further away we can posit exchange of ground stone tools, perhaps the Karak, Mukāwir or northeastern desert regions. The Jordan River was probably the source for construction reeds and maybe even one of the types of fish whose bones were uncovered in the large midden. Syria or Canaan might provide the origin of the house design itself. Finally, Egypt appears to have provided not only the other fish bones, but also the alabaster jug as well as the stamped jar-handle impression and possibly the bronze statue fragment, although Canaanite parallels might explain the statue. Further research will contribute more to our understanding of cultural exchange and how we

should interpret its significance for economic and political realities.

Acknowledgments

The author acknowledges the support of many people and organizations for the work leading to this article, but especially wants to single out: The Walla Walla College Faculty Research Grants Program for nearly two decades of financial assistance with the Mādabā Plains Project excavations at Tall al-'Umayrī; the Council of American Overseas Research Centers for a senior fellowship (2002) to study early Iron 1 architecture in Jordan; my fellow directors of MPP-al-'Umayrī; and Pierre and Patricia Bikai and the staff of the American Center of Oriental Research in Amman.

[Except where indicated otherwise, all figures are used courtesy of Douglas R. Clark or the Mādabā Plains Project-al-'Umayrī].

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