# THE ISLAMIC QUṢŪR OF TALL ḤISBĀN: PRELIMINARY REPORT ON THE 1998 AND 2001 SEASONS

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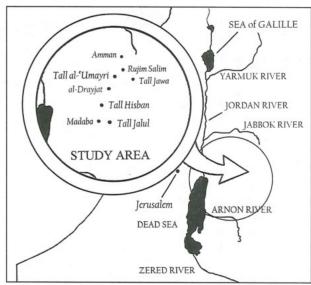
# Introduction<sup>1</sup>

Over the last fifteen years the Islamic periods have attracted the attention of archaeologists working in Jordan. Much of the recent fieldwork has focused on regional surveys and ceramic analysis, which have contributed in very important ways to our understanding of settlement patterns and material culture. What is needed now is a synthesis of environmental, archaeological, art historical, and textual data that would fill in chronological "gaps" in the archaeological record, as well as produce a nuanced model of core-periphery relations and occupational cycles.

It is to address some of these issues that the Mādabā Plains Project has resumed regular fieldwork at Tall Hisbān (تل حسيان) in central Jordan. A research design defined by food systems theory has provided a mechanism for documenting cycles of intensification and abatement in settlement and land use. This preliminary report will highlight the excavations of Umayyad, Mamluk, and Ottoman qusur in 1998 and 2001.

Located approximately 25 kilometers southwest of 'Ammān and overlooking the northeast edge of the Dead Sea, Tall Ḥisbān once occupied a strategic position along a caravan route of classical and medieval times and the Ayyubid-Mamluk pilgrimage route from Damascus to Mecca. Andrews University began fieldwork at the site in 1968 and con-

tinued excavations there, on and off, through 1978 (Boraas and Horn 1969; 1973; 1975; Geraty 1973; 1976; Boraas and Geraty 1976; 1978; Van Eldern 1975; 1976; 1978). In the late 1990's the same institution decided to resume regular excavations to answer questions raised during the publication of several volumes of the final reports and during efforts at restoration in 1997 (LaBianca and Ray

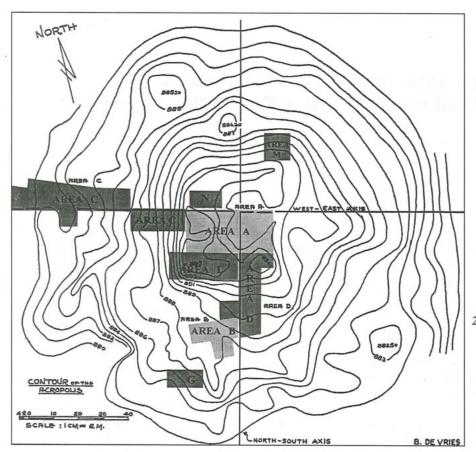


1. Mādabā Plains Project study area (Courtesy of Paul Ray, Jr., Horn Museum, Andrews University).

1. The authors of this article would like to thank Dr. Fawwaz al-Khraysheh, Director General of the Department of Antiquities, and Mr. Dhia' al-Din Tawalbeh and Mr. Adeb Abu Shmeis, the DoA representatives assigned to our project during the 1998 and 2001 seasons, for assisting and supporting our work on an official level. We are also grateful to the directorship and staff of ACOR, the Municipality of Ḥisbān, the 'Amman Training College in Muqabalayn, and the Crown Hotel in 'Amman for logistical assistance and lodging during the course of these two seasons. Thanks is also extended to Dr. Paul Ray, Jr, of Andrews University, who served as Chief Archaeologist during the 1998 season and Dr. Larry Herr of Canadian Union College for his assistance as Chief Archaeologist during the first half of the 2001 season. We also want to recognize Andrews University, National Geographic, and Robert M. Little for their generous financial support. We are, finally, indebted to the many stu-

dent volunteers from Andrews University, Oklahoma State University, Calvin College, SUNY-Bingamton, and the University of Jordan, without whose hard work and enthusiasim these two seasons would not have been possible.

The following is a report on the Islamic strata and architecture investigated during the project\_s excavations of June 24 – August 5, 1998 and May 21 – June 29, 2001. Specialists reports on the pre-Islamic strata will be published separately by Drs. Oystein LaBianca and Keith Mattingly of Andrews University; Dr. Theodore Burgh of the University of Notre Dame; Dr. Maria Elena Ronza, currently at the University of Jordan; and Mr. Adeb Abu Shmeis, Department of Antiquities of Jordan. For Phase I reports on the Islamic period, see Ibach 1987, Russell 1989, and de Vries 1986 and 1994.



2. Areas of excavations (Bert de Vries, Calvin College; Paul Ray, Jr., Andrews University; Ernest Cowles, Oklahoma State University; and Marvin Bowen, Andrews University). The 2001 season focused on the architectural remains of Areas L, N, and G, identified respectively as Mamluk, Umayyad, and Ottoman qusūr.

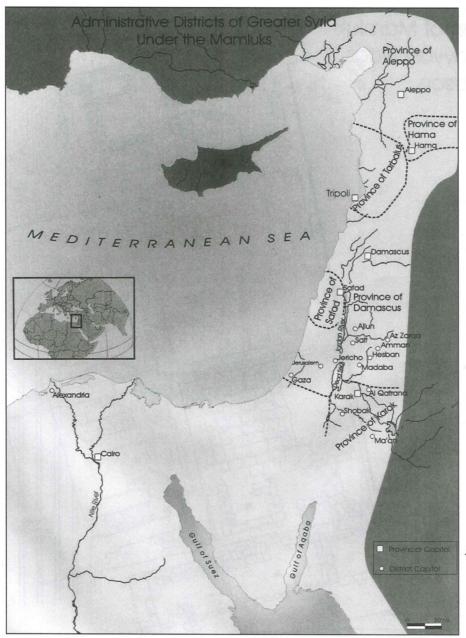
1998; 1999). Although the original excavations were focused primarily on the Biblical periods (the Bronze and Iron Ages), the new research agenda has turned to the site's Islamic history, from which most of the ruins on the summit of the *tall* date. Progress made in Islamic ceramic chronology as well as a growing awareness of the Islamic periods by archaeologists working in Jordan have made it possible, and indeed necessary, to return to the site to revisit issues of chronology, occupational "gaps", and the nature of settlement in the Umayyad (Early Islamic) through Ottoman (Late Islamic) periods (LaBianca *et al.* 1999).

Central to these new objectives is a reorientation in research theory that documents the ebbs and flows of a long history of occupation, which extends from the Palaeolithic through Late Ottoman periods (Fig. 1). The Mādabā Plains Project, of which the excavations at Tall Ḥisbān are a component, has adopted for this purpose the model of food systems theory (LaBianca 1990; 1991; 1994; 2000). Fieldwork in 1998 and 2001 was conducted to address many issues generated by Arabic texts of the period within the rubrics of the food systems model: to determine the function of the Mamluk-period (Middle Islamic) "bathhouse complex" in Area A/L, to examine more closely an apparent gap in occupation at the site in the Abbasid period, and to document more clearly the nature of Ottoman occupation and land use. The following is a preliminary report on the excavations of the Umayyad, Mamluk, and Ottoman quṣur (loosely defined as fortified residences) on the summit of the *tall* and in the village below, as well as several installations related to them identified throughout the site (**Fig. 2**).

## Land-Use History in the Mādabā Plains

Food Systems Theory

At 819.20 meters above sea level, Tall Hisbān commands a view not only of the Dead Sea, Jericho, and Jerusalem but also a large expanse of the Mādabā Plains. This highland plateau, roughly coterminous with the al-Balqā', was an important agricultural region in the Middle (Mamluk) and Late (Ottoman) Islamic periods, providing fruit, vegetables, and nuts to the central governments in Cairo and Istanbul and sugar and wheat for export markets as far afield as Europe. Its strategic location (along several communications corridors and at the center of a rich agricultural district), rainfall sufficient for dry farming at ca. 500mm annually, locally available perennial and semi-annual sources

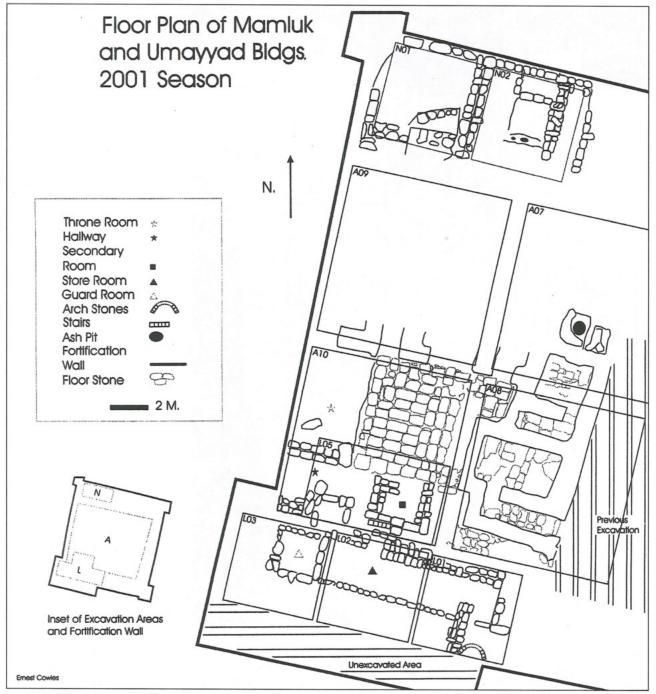


3. Administrative districts of Greater Syria under the Mamluks (map by Ernest Cowles, Oklahoma State University). The administrative capital of the Balqā' rotated among Hisbān, 'Ammān, and as-Salt in the 14th century AD.

of water (Wādī Majar and Wādī al-Marbat, several springs, and the nearby Jordan River), and its rich soil traditionally made Ḥisbān a regional center for market agriculture. Moreover, its location astride two major communications corridors positioned Ḥisbān as a distribution center of foodstuffs and other marketable goods. For these reasons, the site is an ideal candidate for a food systems research model.

A food system is "a dynamic and complex unity consisting of all the purposive, patterned and interdependent symbolic and instrumental activities carried out by people in order to procure, process, distribute, store, prepare, consume, metabolize and dispose of food" (LaBianca 1990: 9). The food

systems model grew out of earlier cultural ecology and systems theories and is a most appropriate research model for the current fieldwork at Tall Hisbān because 1. It is multidisciplinary; 2. It is capable of explaining long-term cultural change; 3. It is suited to hinterland studies (by considering data culled from rural regions, which are at times far from centers of political power); 4. It examines institutions related to land use (such as those touching on access to land and water, transport, and organization of labor), and 5. It considers the multilayered interactions between the population and the environment (LaBianca 1990: 3-30; 1991; 2000). Food systems theory, therefore, shares many of the goals and methods of landscape archaeology and



 Floor plan of Mamluk and Umayyad buildings, 2001 season (map by Ernest Cowles, Oklahoma State University). The bathhouse is the three-room structure occupying A08.

can be used to document how rural landscapes have been transformed by imperial agrarian policies. In this sense, it opens a new window on the interactions between core and periphery and, in conjunction with other theoretical approaches, is a most useful tool for answering economic questions generated by written sources of the Middle and Late Islamic periods.

Archival Contributions to Food Systems Theory

In the fourteenth century, Ḥisbān served as a Mamluk administrative center (capital of the Balqa' from roughly 1310 to 1356AD) (Fig.3), military garrison (manned with a handful of soldiers under the command of an "amir of 40"), and sugar distribution point (Walker 2001a; 2003). While the summit was largely abandoned by the end of the century, the surrounding town (equipped with a mosque and *madrasa*, or law school) and its marketplace thrived until well into the fifteenth cen-

tury. One government employee in the fifteenth century describes Ḥisbān as a "city" (medina), the fortress of which was "ruined" but which dominated 300 villages in the region (al-Zahiri 1894: 46). For most of the Ottoman period the site was occupied only sporadically and perhaps at best on a seasonal basis by local, semi-nomadic tribes (Walker 2001b).

While all of this is known from published, contemporary written sources, what the Arabic texts leave out is an explanation for the intense investment by the Egyptian state in this politically peripheral region and its subsequent abandonment by the central state, any details on Hisbān the town (who lived there, what was sold in the marketplace, why and how it became an educational center), who was stationed at the garrison when Hisbān was at its height in the fourteenth century, and how the village responded to these cycles of imperial investment.

It is to address these issues, among others, that the Ḥisbān project has undertaken what is a bit of a novelty in Jordanian archaeology: long-term archival research. In an effort to flesh out the political economy and agricultural history of the region in the Mamluk and early Ottoman periods, we are analyzing hand-written, Arabic documents in archives in 'Amman and Cairo pertaining to endowments of agricultural land in Jordan (an institution known as waqf), price indices for export goods (such as processed cane sugar), and tax registers in order to better understand the role government played in the longer cycles of intensification and abatement in settlement and land use (Walker 2001a; 2003; 2005; and forthcoming Life on the Mamluk Frontier: Transjordan, 1250-1517AD). This study, in conjunction with the current excavations, surveys, numismatic studies, and floral/faunal analyses, aims to answer:

- What can we say about the specific structure of rural administration in southern Bilād ash-Shām during the Mamluk period?
- 2. What were the structure, composition, and location of local and regional markets in this period?
- 3. What role did the sugar industry (and other such agricultural monopolies) play in the development of both the economy of southern Syria and the public services of the larger Mamluk Empire?

- 4. What were the factors in decline of the region in the fifteenth century? (Walker 1999: 226).
- 5. In what ways did Mamluk economic policies in the Transjordan transform the landscape and impact local agriculture (Walker 2005 Forthcoming)?

This intersection of archaeological and archival research has necessitated a refining of the chronologies used previously by the Mādabā Plains Project. The current chronology is a compromise between a cultural periodization more illustrative of the archaeological record (Whitcomb 1992) and the more political (or dynastic) periodization used by historians. As such, it best reflects cycles of intensification and abatement as they relate to regional patterns of political and economic "connectivity" (Table 1).

Phase II Excavations at tall Ḥisbān, the 1998 and 2001 Seasons: The Islamic Periods (Strata I-VI)<sup>2</sup>

Field L (1998 and 2001–Dr. Bethany J. Walker, Oklahoma State University)

After a hiatus of twenty years, fieldwork resumed in Field L in the western half of the tall, in order to delineate the plan and determine the function of the architectural ruins partially excavated there in the 1970's.3 This complex of rooms, previously called the "bathhouse complex" (Fig. 4). was identified by the new team in 1998 as the residence of the Mamluk governor of the al-Balga'. It included a central courtyard, open to the air and paved with limestone flagstones, onto which open two identical square rooms to the north, a similar room (the "secondary room" of L.5) and hallway to the south, and a large *iwan* to the west (tentatively identified as the audience room, once used by Sultan al-Nasir Muhammad - see Walker 2001a). This last room was built on a platform some fifty centimeters above the level of the courtyard, its floor was plastered in plain white gypsum, and, like all rooms in the complex, was covered with a lowsprung barrel vault. To the east of the courtyard is a small bathhouse with changing room, steam room, and furnace. It was entered from an angled doorway on its south end; a plastered bench placed along the bath's western wall and faced the courtyard and iwan. Hidden behind the south wall of the

Oklahoma State University), and Dr. Keith Mattingly (Administrative Director, Andrews University). The following is based, in part, on the end-of-season Field Supervisors—and specialists—reports. The authors of these reports are listed with each section below.

<sup>2.</sup> Excavations at Tall Hisbān comprise one component of the larger Mādabā Plains Project, sponsored by a consortium of American and Canadian universities headed by Andrews University. Dr.Øystein LaBianca (Andrews University) is Senior Director of the Tall Hisbān project and is assisted by Dr. Bethany Walker (Co-Director and Chief Archaeologist,

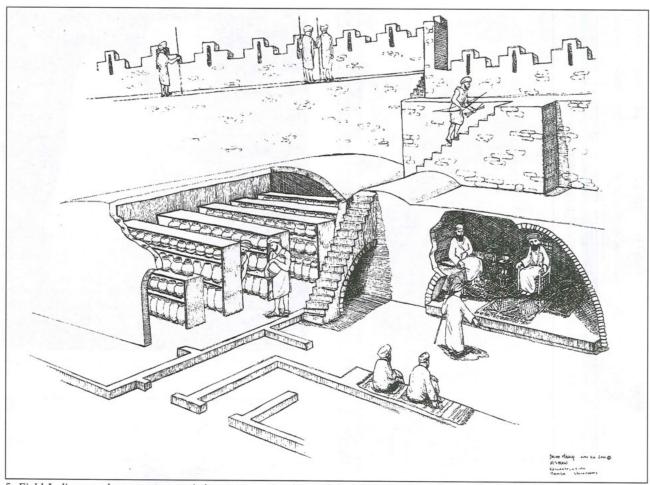
Table 1: Chronological Chart of Strata at Tall Ḥisbān

Stratum	Political periodization	Cultural period	Absolute dates
I	Late Ottoman-modern	Late Islamic IIb-modern; 1800 CE -today Pioneer, Mandate, and Hashemite	
II	Middle Ottoman	Late Islamic IIa; Pre-modern Tribal	1600-1800 CE
IIIb	Early Ottoman	Late Islamic Ib; Post-Mamluk – Early	1500-1600 CE Ottoman
IIIa	Late Mamluk (Burji)	Late Islamic Ia	1400-1500 CE
IVb	Early Mamluk II (Bahri)	Middle Islamic IIc	1300-1400 CE
IVa	Early Mamluk I (Bahri)	Middle Islamic IIb	1250-1300 CE
IVa	Ayyubid/Crusader	Middle Islamic IIa	1200-1250 CE
V	Fatimid	Middle Islamic I	1000-1200 CE
VIb	Abbasid	Early Islamic II	800-1000 CE
VIa	Umayyad	Early Islamic I	600-800 CE
VII	Byzantine	Byzantine	300-600 CE
VIII	Roman	Roman	60 B.C300 CE
IX	Hellenistic	Hellenistic	300 B.C60 B.C.
X	Persian	Persian	500 B.C300 B.C.
XIb	Iron II	Iron II	900 B.C500 B.C.
XIa	Iron I	Iron I	1200 B.C900 B.C.

<sup>&</sup>quot;secondary room" was a staircase (discovered in 2001 in square L.5), which gave access to a second floor and the upper levels of the citadel's southwest corner tower.

In plan the residence is an abbreviated qa'a, the most common form of Mamluk-period palaces: the

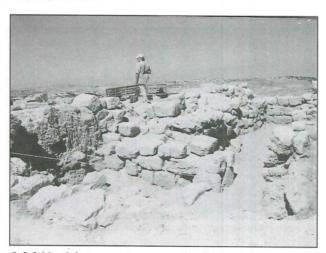
throne room, a raised *iwan*, opens onto a slightly sunken courtyard and faces the bathhouse, which is also raised on a platform (**Fig. 5**). In plan and construction the Ḥisbān residence is quite similar to al-Nasir Muhammad's palace inside al-Karak Castle, which was his primary residence during his second



5. Field L <u>diwan</u> and storeroom – artist's reconstruction (artwork by Brian Manley, Andrews University). The superstructure has been reconstructed on the basis of collapsed barrel vaults and in situ springer stones.

period of exile from the Egyptian throne (1308 to 1310 AD). Like the complex at Ḥisbān, al-Karak palace is placed within the span of the heavily reinforced South Tower (Brown 1989: 289, fig. 2 and 291, fig. 3). The Ḥisbān complex, however, is of much poorer construction. Most of the walls and vaults are built with medium-sized limestone blocks (most either roughly hewn or reused from the Roman and Byzantine ruins on the summit) and are largely laid without mortar. Because of its rapid and careless construction, the upper stories of the complex were unable to withstand a series of earthquakes that shook the region in the late fourteenth and early fifteenth centuries.

While the largest part of this residence was excavated in the 1970's, two interconnecting rooms behind (south of) the staircase and in what appears to have been the basement level were uncovered in 1998 and 2001 (Fig. 6). Square L.2 contained the remains of a low-vaulted storeroom, barely high enough for a man of average height to stand erect in it. The entrance to this storeroom was from the east and was closed by a door. When leaving the



6. L.2 Mamluk storeroom, excavated to floor.

storeroom, one made a 90° turn to the right and passed through another door (in square L.1) that gave access to another series of rooms to the south (as yet unexcavated) and just inside the citadel's southern fortification wall. These basement-level rooms were cross-vaulted, the storeroom's north-

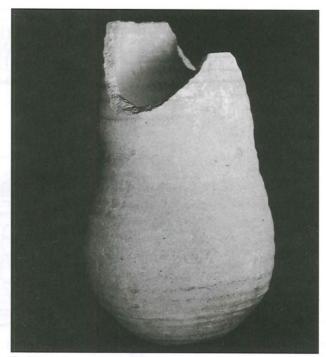


7. Storeroom complex of L.1-2 facing west. The bolt hole to the door into L.1.2 is visibile in the center of the photograph. A high, arched doorway into an unexcavated room to the south of L.1 can be seen on the lower, left hand side of the photo.



8. Remains of partially collapsed barrel vault in L.2.

south vault meeting the east-west oriented vaults of unexcavated rooms to the south at right angles. The west end of the storeroom was built against a small room inside the west wall of the southwest corner tower, tentatively identified as a guard's room (excavated in 1998 in L.3). A narrow hallway (in L.5), although only partially excavated, seems to have connected the courtyard with the ground floor of



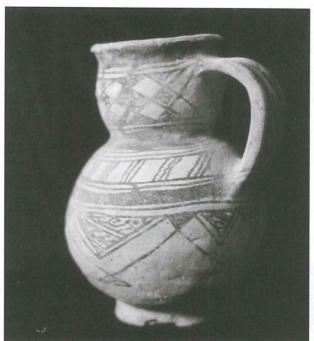
Sugar storage jar recovered from storeroom (40cm high). From L.2 storeroom, excavated in 1998, now with the DoA.



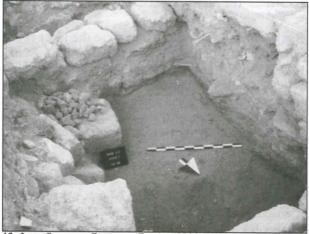
 Mamluk pinched lamp (5cm long). H01.AN.14, OSU Study Collection (Permanent Loan).

## the southwest tower.

The storeroom complex of L.1 and L.2 was built in three phases, all dated to the fourteenth century (and assigned to Stratum IVb) on the basis of associated pottery. Architectural Phases I and II correspond, respectively, to the original construction (the narrow storeroom in L.1 and the rooms east of it in L.2) and an extension of the L.1 storeroom to the east that followed a short time later (Fig. 7). Phase III, on the other hand, represents a relatively brief reoccupation of the rooms associated with the storeroom's doorway (square L.2). One poorly constructed curtain wall (L.1: 12) makes secondary use of masonry fragments from the Phase I construction, including door sockets and jambs. Moreover,



11. Hand-made Geometric Painted (HMGP) jug (22cm high). From L.2 storeroom, excavated in 1998, now with the DoA.



Late Ottoman Cemetery During 1998 Field Season. The cemetery occupied the upper 75cm of the L.2 storeroom.

a hearth (L.1: 10), located inside the architectural Phase I doorway (identified by threshold stone L.1: 13) that opened on to a series of unexcavated rooms south of the bathhouse, indicates that at least this passageway was reused for domestic purposes after an event that destroyed much of the larger governor's residence. The recovery of sherds of late fourteenth century blue-and-white bowls, regional products made to imitate Ming porcelains, from an abandonment locus of the storeroom (L.1: 3) further supports this hypothesis.

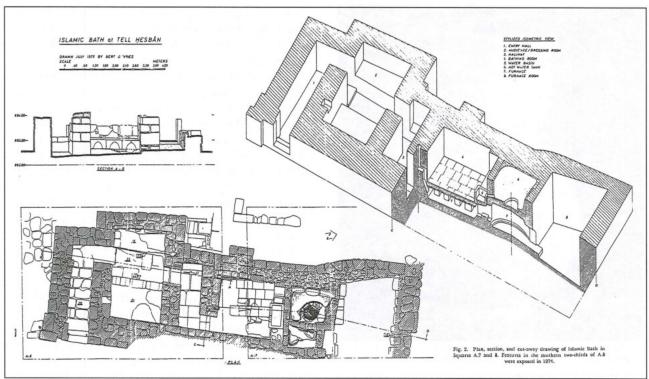
Earthquake damage was everywhere evident in the L.2 part of the storeroom, with walls knocked out of alignment; collapsed vaults (**Fig. 8**); and extensive ash cover, the result of a large conflagration

likely brought on by oil lamps that had fallen from the upper stories. Thousands of fragments of glazed pottery, crushed by the vault stones that fell on them; nearly complete sugar storage jars (Fig. 9); dozens of channel-nozzle and pinched lamps (Fig. 10), many interspersed among fallen vault stones; fragments of bronze weaponry; painted jars and jugs (Fig. 11); and occasional fragments of metal bowls were recovered from L.1: 17-L.2: 12, the beaten earth floor of the Mamluk-period (Stratum IVb) storeroom. There is evidence that the earth floor was originally plastered, as traces of white plaster were noticeable in the corners of the room. along the base of the walls at some places, and at the doorway. Earthquake and fire damage was so severe, however, that most of the plaster was destroyed. Several major earthquakes were recorded in the area in this period: in 1341, 1343, 1366, 1403-4, and 1458AD (Ghawanmeh 1992: 57-58).

A meter-thick fill of loess (L.1: 3, L.2: 7) covered the floor (L.1: 17, L.2: 12), bearing witness to centuries of abandonment after the partial collapse of the covering vaults. The uppermost levels of the storeroom (L.2: 3) above this fill were largely disturbed by a Stratum I, Ottoman-period cemetery (Fig. 12). What remained of the storeroom, its walls and part of its barrel vault, made a convenient space for occasional burial by local Bedouin in the nineteenth century. The cemetery contains about sixty individuals, tentatively identified as members of the 'Adwān tribe on the basis of the burial goods, oral history, and nineteenth-century travellers' accounts (Walker 2001b).

Several meters northeast of the storeroom complex are the remains of a small bathhouse, a bit of an anomaly for citadels of the Mamluk period (Walker 2001b). Uncovered during the Phase I excavation seasons of 1973 and 1974, it is an integral part of the governor's residence, occupying the place of a second *iwan* in the more traditional *qa'a* arrangement of the day (van Elderen 1975, 1976). This *ḥammām* is a small bath of three rooms, accommodating at most six bathers at one time, is barrel-vaulted, and is plastered (Figs. 13, 14) (de Vries 1986: 235). In form and size it most resembles the private baths of the so-called "Umayyad desert castles" (Dow 1996: 33-35).

The reason why a rural garrison such as this had a bathhouse provided for the exclusive use of its officers while larger centers did not, may be found in the Arabic sources, which regularly cite tribalism as a factor in local politics. There is, for example, no evidence for a <code>hammām</code> in the contemporary Karak Castle. Instead, the Mamluks serving there had the large <code>hammām</code> at the nearby village of Ader



13. Floor plan of Mamluk bathhouse (reprinted with permission from van Elderen 1976: fig. 2).



14. Cleaning and reconstruction efforts at bathhouse in 2001. Two to three courses of these walls have been removed and looted since the bathhouse was first uncovered in 1974.

at their disposal (al-Bakhit 1994: 186). Even in the imperial capital soldiers living in the barracks of the Cairo citadel went to the public baths of Baybars (west of the horse market) and of Baraka Khan (just off the *maydan* below the Citadel-Rabbat 1995: 105 and 135). Thus, the bathhouse at Ḥisbān may have played a role similar to that often attributed to the "desert castles": the governor would have entertained local tribal *shaykhs* in his residence in the garrison, consolidating relations between the Mamluk state and the tribal elite in the process (Walker 2001b). Of the many tribal groups in the region, the Bani Mahdi of al-Balqā' and the

Bani Sakhr of Nahiyat as-Salt were the most prominent (Hajja 1996; Tritton 1948). The Bani Mahdi hosted Sultān Barquq during his visit to Ḥisbān in 791 AH/1389AD (Ibn Qadi Shuhba I: 294). A preliminary archaeological interpretation of this event is that the tribal shaykh reoccupied the half-ruined citadel, repairing part of it in the process. This event may be illustrated architecturally by Stratum IIIa, which is one of reuse and apparently squatter, or seasonal, occupation (see above). By the end of the sixteenth century the Beni Mahdi were the only registered taxpayers at Hisban, making them likely candidates for this latter occupation (Bakhit and Hmoud 1989; 1991). Because of its historical and architectural importance, the *hammām* is currently undergoing restoration, a process that began during the 2001 season.

Part of the larger Stratum IV (Mamluk) "governor's" complex was built into the lower levels of a Stratum VII (Byzantine) structure, only wall stubs of which were uncovered during the 1998 season. While the nature of the Byzantine building cannot be determined at this point, evidence of significant Early Islamic (Stratum VI) reoccupation of the area was apparent, particularly in square L.1, where 1/5 of the pottery from loci 1 and 3 was Umayyad in date, in addition to smaller numbers of Abbasid and Fatimid-period sherds. There was, however, no architecture of these earlier Islamic periods found in association with these loci. The builders of the



 Area N building facing northeast. Remains of wall collapse are visible on the floor in the lower left-hand corner of photo.



16. Ceramic vessels crushed by fallen vault in Early Islamic room N.1.

bathhouse complex appear to have removed all earlier constructions down to foundation levels. What is left of the early Islamic occupation in L.1 is destruction debris – several layers of ash and charcoal. These layers extend north and across at least the western half of the summit; they are visible underneath the Stratum IV bathhouse in A.5 (in a cut made by the Department of Antiquities) as well as throughout Field N, an area of excavation at the north end of the summit opened in 2001. In all of these areas, the ash layers covered a

clay surface (L.1: 16, N.1: 18, N.2: 16), tentatively identified as a floor and dated by its pottery in Field N to the transitional late Byzantine/Umayyad period. These loci also extended across the eastern half of the summit in Field D, excavated in 1971. According to one section drawing published in the preliminary report of that season, a barrel-vaulted room in Stratum IV was built on top of two ash-covered surfaces: D.1: 29 and D.1: 36 (Geraty 1973: 90, fig. 4).

In neither Fields L nor N did the team reach bedrock. In order to avoid compromising the CRM goals of this project, we decided to leave the rest of the Field L complex in its fourteenth century form (to dig no deeper than L.1: 17-L.2: 12, the "Mamluk floor" of the storeroom, and L.1: 13, the Stratum IV threshold stone) for the time being, and to expand operations in Early Islamic Field N in future seasons. Restoration work in Field L began in 1998 with the rebuilding of the southwest corner tower and part of its connecting walls and continued in 2001 with the reinforcement of the bathhouse walls (in square A.8) and the laying aside and numbering of vaulting stones (largely removed in L.1 and L.2 for safety reasons) for future reconstruction of the storeroom's superstructure.

*Field N* (2001 – Dr. Bethany J. Walker, Oklahoma State University) (**Fig. 15**)

Excavation of the northwest corner of the summit began in 2001 with the opening of two new 5 x 5 meter squares (N.1 and N.2). This part of the site was selected because of its strategic location (in the northwest corner tower, along the original Hellenistic wall, and abutting the northern sally gate) and because it had not been previously investigated. Because the rolling surface of the topsoil in this area promised barrel vaults underneath, the team had originally hoped that this field would yield evidence of the medieval barracks. Instead, it produced an Umayyad-period building, the first early Islamic architecture discovered at Tall Hisbān in thirty years' of intermittent excavation.

Two roughly square rooms, each approximately 4 x 4 meters wide and built against the inner face of the Hellenistic wall, occupied most of N.1 and N.2. Masonry walls, four courses high, delineated the space. The original rooms were separated by what appears to have been an open air corridor; a door in the east wall of N.1 and one in the west wall of N.2 allowed passage between the two rooms. The floors of these rooms (N.1: 18, N.2: 16) were made of a hard packed, yellowish clay, which was badly broken and pocketed in many places by wall collapse. Upper courses of the walls of the rooms had fallen



17. Reused basin in N.2 related to pastoral reuse of tall.

onto the floor and crushed several large storage jars and basins and cookware (Fig. 16), dated in the field to the transitional Byzantine-Umayyad period. The only foundation trench identified (N.2: 25) yielded no pottery. The fill above these floors contained pottery that was late Umayyad and Abbasid in date. While it is not possible at this early stage of excavation to determine when this structure was first built, it was clearly occupied in the middle of the seventh century, suffered a catastrophic event, and was reoccupied (at some point) and used into the ninth century. Fallen architecture, crushed pottery, badly damaged floors that appeared to have "melted" around the fallen blocks, and wide and deep ash pits and lenses bare witness to a major conflagration. The most likely candidate for this is the recorded earthquake of 658/9, which was one of the most destructive in Jordan's history since the Roman period, rather than the Islamic conquests of the 630's (El-Isa 1985: 233).

Umayyad (red-on-white wares) and Abbasid (The so-called "splashed glaze" wares and red-onred painted bowls and jugs ) sherds were retrieved from a crumbly red earthen layer (N.1.12, N.2.15) above the architectural collapse. This turned out to be a key stratigraphical marker in this field, because it signaled the division between the early (Abbasid) and Middle (Mamluk) Islamic levels. Such evidence of Abbasid occupation of the building is significant, given recent discussions about a historically attested Umayyad family qaşr Hisbān (Grabar 1964 and Whitcomb 2000). According to the thirteenth-century historian Yaqut, who relies on an earlier source, one Sa'id bin Khalid al-Faddayni, an Umayyad descendant, made his last stand against Abbasid forces at Hisban in the early ninth century. Although Yaqut describes the site as a "strong fortress", it is more likely that Tall Hisbān was, as Building N indicates, a series of dwellings built within the remnants of the Hellenistic-Roman fortress. Hinterland surveys in the region have produced no evidence of agricultural installations of this period that would indicate the *tall* served an agricultural function comparable to that of many contemporary "desert castles" (see Ibach 1987: 189-191).

On the basis of ceramic evidence, it appears that the tall was largely abandoned sometime in the Abbasid period and was reoccupied hundreds of years later by the Mamluks, who added courses to the walls of the existing room and repaired the ceiling. The post-destruction layer described above (N.1: 12, N.2: 15) was reused as a living surface in Stratum IV, the occupants having covered part of this surface with a thin layer of terra rossa, likely carried from the wadi floor below. This layer is clearly visible between the second and third courses of all of the walls in both squares. In this way, it visually demarcates the original Umayyad construction from the later Mamluk additions. The orientation of the two rooms in N.1 and N.2 was altered by closing doorways in their eastern and western walls, creating doorways in their respective southern walls, and extending one wall in the south to join the two rooms. A large quantity of Mamluk-period sherds was recovered from the associated fill, including the glazed wares represented in the L.2 storeroom. The largest percentage of sherds, however, was from cooking and serving vessels. The presence of two small tabūns and the extensive remains of animal bones and charcoal inside and around them, suggest that these rooms constituted a kitchen in this period. As for any upper floors, little remains of the superstructure of the Stratum IV building, which collapsed and tumbled down the north slope of the tall long ago.

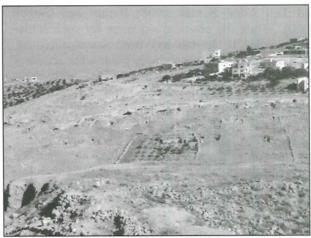
After a long period of abandonment (illustrated by the 50-75cm thick sub-topsoil), the room in N.2 was reoccupied in the Ottoman period. Installations related to agriculture and animal husbandry (two qiwaras constructed with field boulders and marble fragments and a reused limestone basin) were built on the "Abbasid" red layer (N.1: 12, N.2: 15) along the north and east walls of this room. The *qiwaras* (grain storage bins) are typical of agricultural sites in the region (Adeb Abu Shmeis, personal communication). One was made, in part, with fragments of a marble chancel screen taken from the ruins of the Byzantine basilica on the eastern end of the summit. The nearby basin was 63cm long, 40cm wide, with an interior depth of 23cm (Fig. 17). It had a drain hole drilled into one bottom corner. There were no oil stains, slicks, or discoloration in its interior to indicate it has been used for industrial purposes. It is identical in form, size, and construction with two other basins taken from the earlier Byzantine church and used for various purposes elsewhere in the site. This basin may have been a baptismal font, in its original form, and but was reused as a trough some 1300 years later by local farmers or herders.

It is impossible to date Ottoman strata with any certainty, given the state of knowledge of provincial Ottoman pottery and the largely a ceramic nature of this period in general. However, the configuration of these installations and their depth below topsoil (roughly 70 cm to one meter — the same as the Bedouin cemetery in L.2), suggest a nineteenth-century date for this Stratum I occupation of N.2.

Field G (1998-Terje Oestgaard, University of Bergen; 2001 - Lynda Carroll, SUNY-Binghamton; Dr. Oystein LaBianca, Andrews University)

One of the goals of the 2001 field season was to document changes in settlement and land use during the Late Islamic (Ottoman) period and to establish a framework for cumulative research on this neglected era of Hisban's history. Research followed four interrelated lines of inquiry: excavation of the tall's summit; architectural and archaeological surveys of buildings in Field G, located south of the tall and in the modern village (caves, residences, storage facilities, stables, and other buildings); interviews with local residents; and a review of textual sources and traveler's accounts from those centuries. To facilitate this research and to organize data, the Ottoman period (which spans five centuries) has been divided into six cultural periods: the Post-Mamluk (1500-1520), Early Ottoman (1520-1600), Pre-modern (1600-1850), Pioneer (1850-1920), Mandate (1920-1940), and Hashemite (1940-present). Such chronological subdivisions emphasize the dynamic and dialectic relationships between government and governed that define much of provincial Ottoman history (LaBianca 2000). It is by adopting the "frontier of settlement" model current among many historians of Ottoman Jordan, that the nuances of cultural change and settlement fluctuation produced by these relationships can be described, even in the absence of a readily recognizable material culture (Rogan and Tell 1994: xix, for the historical implications of this model).

The Post-Mamluk period is characterized by a political, military, and economic withdrawal from Transjordan by an Egyptian government burdened with problems at home (Walker 2003; 2005). Archaeological surveys throughout Jordan have documented a decline in the number of villages in this



18. Field G – View of modern village from summit of tall showing juxtaposition of built homes and caves. The caves were used sporadically from the Roman period as tombs, homes, and storage space. The modern residents of the village continue to pen livestock and store farming supplies here.

period and the apparent abandonment of some regions of the country (for particularly good discussions of the Kerak Plateau, see Miller 1991; Brown 1984; 1992). Following this pattern, Hisbān's tall was abandoned at this point; the village below may have been, as well (de Vries 1994: 165). When the Ottomans took Transjordan from the Mamluk state in 1516, their immediate concern was to reorganize strategic points and rebuild a taxcollecting apparatus. However, by the end of the sixteenth century Istanbul had tired of its defensive responsibilities in Transjordan and withdrew most of its forces and economic support, leaving administration (as it existed) in local hands. Some regions thrived under local adminstration, while others did not (Walker 2005). There is textual and archaeological evidence for the gradual decline of Hisbān from the mid-sixteenth century on. Defters of the period document the gradual decline in the tax status of Hisban from a tax-paying village to an abandoned one (Bakhit and Hmoud 1989: 100; 1991: 149-entry #139; Hütteroth and Abdulfattah 1977: 169-entry P138) (Fig. 18). The archaeological data is more ambiguous. While there is no evidence of reoccupation of the tall in the Pre-modern period, caves cut into the hillsides surrounding the village of Hisban were occupied on a seasonal basis (see below). Tall Hisban was, furthermore, used as a seasonal burial ground, presumably by a seminomadic tribe that camped nearby (also see below -Human Remains, Field L).

The assumption that these fluctuations in patterns of settlement were the direct result of nomadic incursions (to use the "desert vs. sown" argument), has been generally discredited by historians of Ottoman Syria and Jordan (Lewis 1987; Rogan

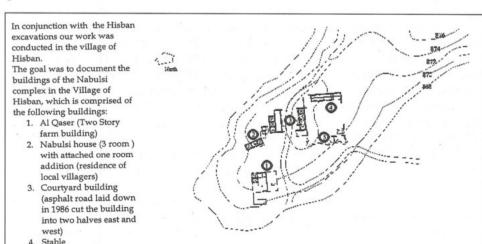
and Tell 1994: Schick 1998: Baram and Carroll 2000). While the physical evidence for such settlement cycles in Jordan has been documented archaeologically, it is not entirely clear what accounts for them. As Jeremy Johns has so eloquently demonstrated, the withdrawal of a centralizing, foreign government does not automatically translate into economic, demographic, and political collapse (Johns 1994). In fact, the return to regional and local autonomy, if the local authorities are qualified and committed, may mean economic revival; Johns argues that this is what happened in southern Jordan from the seventeenth through nineteenth centuries, under tribal leadership (Johns 1994: 25-28). Environment and geography play as great a role in economic revival or collapse as political factors, particularly for this period of Jordan's history (Johns 1994: 21; Walker 2005). For these reasons, archival and paleobotanical analyses have been adopted to facilitate the recognition and interpretation of agricultural and settlement fluctuations in the Hisban region during this cultural period (Walker 2005; also forthcoming paleobotanical and faunal reports by LaBianca).

The Pioneer period was one of renewed settlement on a permanent basis and market-oriented agriculture. Many of these changes were a direct result of the 1858 Ottoman Land Law, which in part required the registration of land holdings. Although much land throughout Transjordan was at the time communally held tribal land, the Ottoman state offered land grants and encouraged migration throughout the region. Fear of expropriation of lands for new settlers drove tribesmen to register their lands, and agricultural rents provided an incentive for cultivators and Bedouin alike to compete for access to new property, leading to an expansion of the area under cultivation. Land

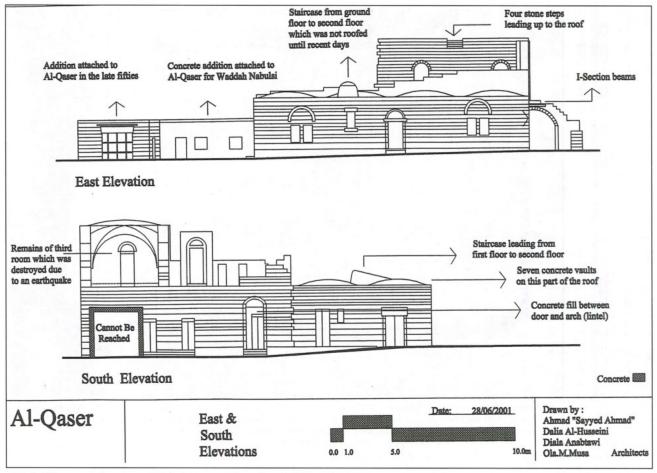
registration and the land grants, combined with the potential for substantial profits from agriculture, led to new settlements, and the growth of large-scale farmsteads. Farming, agriculture, and plantations, made by converting pastureland to rain-fed grain agriculture, proved to be very profitable for the Ottoman state, in the form of tax revenues, as well as for farmers (Rogan 1994: 89).

This relationship between the Ottoman state and renewed settlement at Ḥisbān is evidenced in the formation of a fortified farmhouse complex, located south of the *tall* in Field G. The Field G complex, consisting of a multi-domed "qaṣr", a series of single story residence structures, stables, towers, enclosure walls, miscellaneous out-buildings, and associated habitational caves have shed light on the development of this village for this transitional era. In addition, the occupational history of this farmhouse and the caves underneath it illustrates vividly the relationship between these two kinds of structures at the turn of the century.

During June 2001 four students from the College of Architecture at the University of Jordan, under the direction of Dr. Leen Fakhoury, conducted the first formal study of historical buildings in the village by tracing the architectural and occupational history of other buildings in this complex (Ahmed et al. 2001: 3). The students combined an architectural study of the original Nabulsi farmstead with research in university photo archives and interviews with family members. "Bayt Nabulsi" was built sometime at the turn of the twentieth century. It is not entirely clear who built the original farmstead. Two possible candidates, however, are the Nabulsi family and the members of the 'Adwan tribe, the same population that is buried on the summit of the tall (Ahmed et al. 2001: 8). Although there was no historical documentation about the history of the



19. Nabulsi farmstead and its constituent buildings (Ahmad et al 2001: 1).



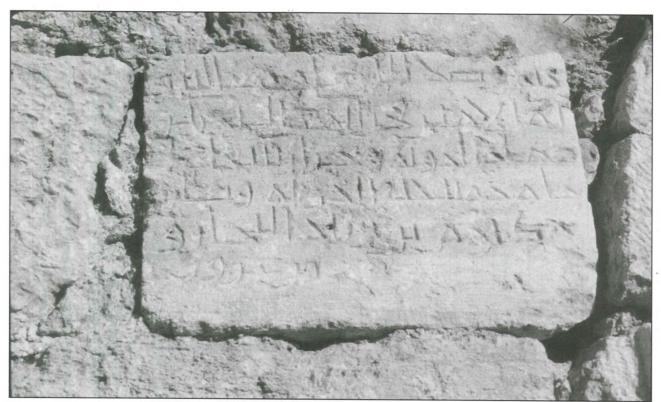
20. Architectural elevation of Nabulsi qaşr. (Ahmad et al 2001: 13). Kufic inscriptional plaque is above doorway in middle of eastern wall.

buildings before the Nabulsi family acquired them, their subsequent occupation, rebuilding, and partitioning by this family can be traced in some detail through architectural and archaeological survey. In addition, interviews provided information about the use of these buildings from the 1950s on.

The inclusion of much earlier architectural elements in several buildings, however, indicates an occupation of the area that predates the arrival of the Nabulsis (Fig. 19). Visual inspection of these buildings by both the University of Jordan and MPP teams in 2001 identified architectural remains of the Early Islamic period (Fig. 20). A series of arches partially reused in the building identified as the nineteenth and twentieth-century stable may be Umayyad or Roman in date. In addition, a fragment of a limestone plaque with a Kufic inscription was discovered above the doorway of a multiple-domed building known as the "Qaşr" (Fig. 21), reused as a lintel (Walker, n.d.). It has been tentatively dated to the Early Islamic period; but a possible Ottoman date cannot be rejected at this point. The nature of Umayyad and Abbasid occupation on the tall and in the modern village is only beginning to be understood and will be a focus of archaeological investigation in future seasons.

Based on archaeological and architectural survey results, the resettlement of Ḥisbān during the late 19th and 20th centuries was accomplished by using preexisting structures and building materials as the basis for a new farmstead. The intensification of agriculture brought with it the need for additional storage for produce and supplies, as well as additional space for accommodations for laborers and animals used in the production and distribution of produce. The architectural survey provides some clues to how this process transpired at Ḥisbān.

The 19th and 20th century residential complex is characterized by four major buildings southwest of Tall Ḥisbān. The most prominent standing building in the complex is a two-story qaṣr. This structure was originally used as a residence, with additional rooms intended for storage. The earliest standing portion of the building appears to be located in the northwest corner, where a corner stone stands at an odd angle in relation to the rest of the



21. Detail of Kufic inscription. This inscriptional block could have originally been part of a tombstone, milestone broundary marker, or architectural dedication from another, earlier building. It has been reused here as a decorative plaque on the façade of the Nabulsi qaşr. The block is broken on both ends. A preliminary reading of this partial inscription follows:

.... al-mujahid Fadl Allah .... .... li-amir Fakhr al-Maghali ....

.... li-amir Fakhr al-Maghali .... .... li-l-dawla wa hayyat al-malik ....

.... al-mujahid li-Allah ....

.... al-mujawir[un] ....

.... the Defender of the Faith, Fadl Allah ...
.... of the amir Fakhr al-Maghali ....

.... for the state and the life of the king ....

.... the warrior of God ....
[lands] surrounding ....

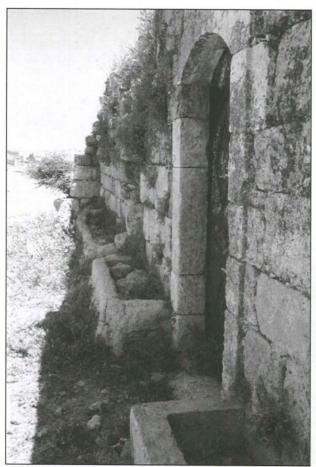
building. This cornerstone may be contemporaneous with an earlier structure. Another group of stone courses, located on the west side of the building, also appears to predate the majority of the 20th century structure. Several stones, with evidence of writing, (see above) and markings have been reused in the construction of the building.

The ground floor of the Qasr is comprised of several rooms with vaulted roofs, newly covered with plaster. The ground floor is currently divided and used exclusively for storage by several members of the Nabulsi family. Originally, the function of the ground floor may have differed significantly, and allowed for greater movement through the rooms. The presence of several windows, now filled with rubble for security purposes, would have allowed for more sunlight and a greater facility for living activities. It is unclear how many rooms the structure originally had, due to massive reconstruction and partitioning, as well as the survey teams' inability to gain access to some of the rooms. The building originally had at least three entrances.



22. View of qaşr, facing southwest (courtesy of Lynda Carroll) Note the construction of the second story and the presence of an external staircase.

The second story, although currently unused, functioned as domestic space. This floor was reached by an arched stairway on the northern side of the building (Fig. 22). Upon ascent, entrance would be made through a large door, capped by a curved lintel. The doorway opened into a small space, which led into other rooms. Movement through the second story could proceed immedi-



 Troughs inside courtyard of courtyard building, facing northeast (courtesy of Lynda Carroll). The original stone troughs have been reconstructed and covered with concrete.

ately to a western room with northern and western facing windows, or alternatively into one of several others rooms. In addition to this living space, the northern side of the building featured a small overhang balcony supported by I-beams.

The abandonment of the *Qaṣr* as a residential structure most probably occurred over a period of several years. The most obvious evidence comes from an earthquake in 1927. This event severely damaged the structural integrity of the *Qaṣr*, leaving several major cracks in its facade, and damaged several rooms, which had to be rebuilt before the building could be reused. In addition, a general pattern of urbanization during the mid-20th century made reuse of the *Qaṣr* undesirable.

Nevertheless, several modifications have been made to the *Qaṣr* building for contemporary use of the building. This includes a concrete addition attached to the south wall of the *Qaṣr* during the 1950s. This addition extends south from the *Qaṣr*, and joins a second addition made of cut stone. These two additions abut a wall of the elementary

school. Other modifications included filling doors and windows with concrete and rubble to secure the building's contents. Several doorways, in particular those on the south side of the building, were altered by adding fill and concrete to accommodate smaller, prefabricated doors.

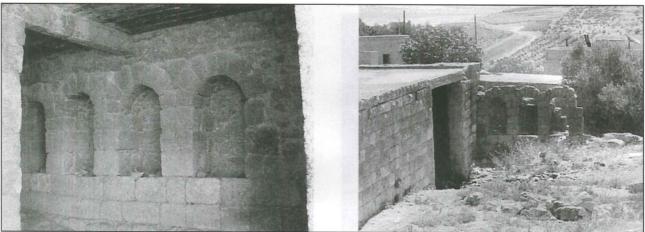
Although the *Qasr* is no longer used as domestic space, a second building in complex this currently serves as a residence. Comprised of two originally separate structures, this residence includes a long dome-vaulted building divided into three rooms, and a one-room stone building, conjoined by a goat pen and a contemporary concrete slab building. In addition, a series of abandoned rooms, not visible from the main entrance are located to the northwestern extreme of the complex.

Just to the east of the residence is the third building of the complex. This structure is most notable for the presence of a large central courtyard, surrounded by enclosure walls to the north and south, and rooms to the east and west. Although these walls are no longer standing, they are visible in old photographs of Ḥisbān (LaBianca 1990: 77, Pl 3.11). It is unclear however, whether that had a door or windows.

On the western side of the central courtyard a staircase leads to the second story, although there is no current evidence of activity areas on the roof. However, the roof has been replastered since its original use. The roof may have simply provided views of the area and additional living space within the complex. The courtyard itself served as one of several places where livestock or animals were kept. Encircling the courtyard was a series of troughs (Fig. 23). Concrete caps to the original troughs were also added at some point, although it is difficult to determine the exact date of this addition. These predated the 1986 destruction. There is also a concrete water tank, which has been added at later times.

The courtyard building is largely unused, but serves as storage facility and garage space for farm equipment. Several modifications have been made to this building. Other modifications include the construction of a concrete slab garage on the southern edge of the eastern half of the building. This garage was built against the courtyard to make use of existing walls, but extends further south than the original building. The western wall was also converted into an additional garage.

The eastern wall of the courtyard building is part of a larger, and significantly older, structure. The characteristics of this building include a northern building, which has undergone major transformation in the late 20th century, and a set of three



24. Ancient arches in courtyard building, facing east (Ahmad et al 2001: 7, figs. 7 and 8). Ancient arches reused in Nabulsi courtyard building may provide evidence for Umayyad period in the village.



 Southern façade of east octagonal tower (courtesy of Lynda Carroll). Entrances are quickly being buried by modern refuse disposal.

towers to the south. Although this structure is currently a reinforced concrete garage, the eastern wall of this building includes a series of arches beginning inside the building, and extending to the south. These arches appear to date to the Roman or Umayyad period (Fig. 24). The arches inside the garage have been filled in rubble when the building was converted.

The greatest part of this large structure has been destroyed or remains buried beneath ground level. In the southern part of the building, the remains of three towers are still visible. The western tower is almost completely buried, and the eastern tower is in the process of being submerged by modern refuse (Fig. 25). During the 2001 season, only one room of the southern half of the building could be accessed.

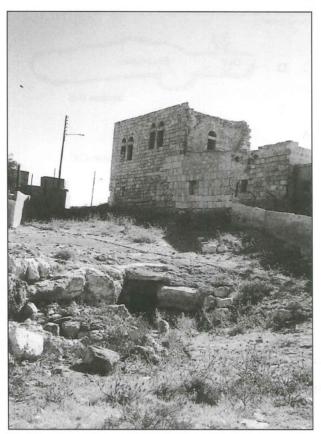
The original function of the room is unclear, but during the 20th century, the room was used for domestic activities. The room is characterized by a dome vaulted ceiling and windows opening either to an adjacent room or a courtyard. These windows have been sealed. The room was later converted



 Oven and grinding stones in octagonal tower/stable building, facing north (courtesy of Lynda Carroll).

into a stable, and includes two troughs on the north and south walls. The presence of fodder *in situ* on the ground surface suggests that this room was used as a stable through the 20th century. In addition, an oven and grinding stone are located near the entrance (**Fig. 26**).

The four major buildings of the gasr complex



27. View of small cave entrance (left) and large cave entrance (right), facing north (courtesy of Lynda Carroll). The qaşr is visible in the background.

provide evidence for some of the activities that occurred in this part of Ḥisbān during the late 19th and 20th century. During this period of renewed settlement at Ḥisbān, encouraged through settlement initiatives of the state, settlers utilized pre-existing structures to construct a residential compound for sheltering humans, their animals, and supplies. These permanent buildings, however, were not the only forms of evidence available to understand 19th and 20th century life ways in the village.

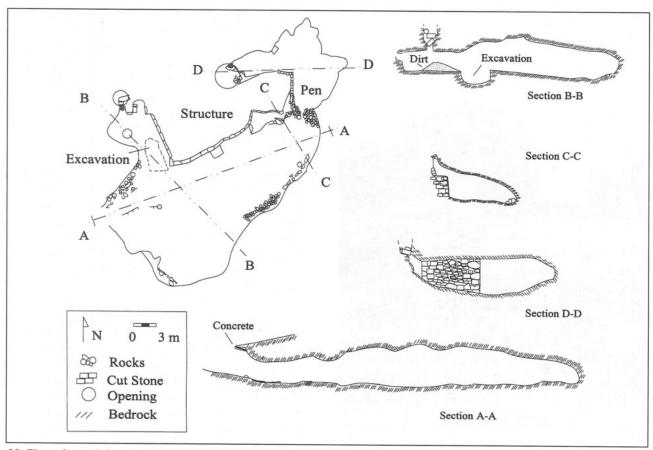
During the 2001 season, MPP archaeologists surveyed two caves beneath and extending directly to the south of this two-story building. Archaeological survey of the cave in 2001 began to trace its cycles of settlement, possibly in relation with the *q̃aṣr*, and to obtain rough plans of the space (**Fig. 27**). The survey documented one large cave, with a large built structure, an animal pen, overhead entrances, and several small interconnecting tunnels, bringing the size of the complex to approximately 40 meters. Although the survey of these caves is at a preliminary stage, they appear to have been associated with the occupation of the farmhouse above them (**Figs. 28, 29**).

Much of the evidence for the use of the cave dates to the 20th century, although the presence of a few Mamluk sherds inside the cave, as well as the presence of a Roman wall directly south of the entrance, suggests that it has been used throughout many periods. Its continued use during the 20th century, however, indicates that it was used contemporaneously with the *qaşr*.

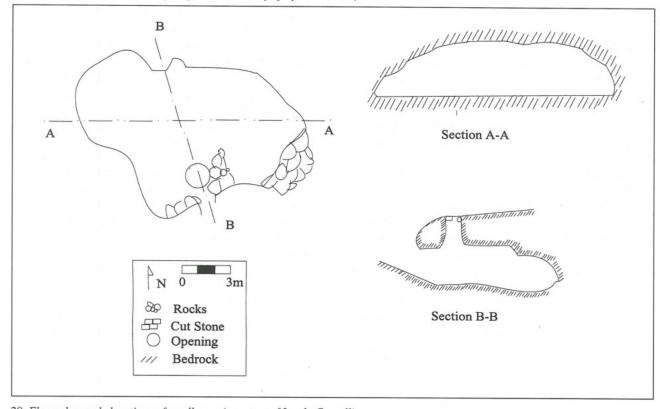
The animal pen was constructed near the back of a large cave out of rubble and branches. Plastic sheeting was scattered throughout the cave (Fig. 30). In addition, a series of nails were fastened to the walls; associated string and soot indicate these 20th century nails were used for hanging lanterns, lamps, or torches. Initial construction of the pen is unknown; however, its presence in the back of the cave provided a confined and constricted place to keep animals.

The function of the large cut stone structure inside the cave, however, is unclear (Fig. 31). There were no entrances into the structure, indicating that access could only be made from above. One of the storage rooms of the qaṣr, however, included a small shaft that extended to a subterranean passage. This shaft appears to links the building complex to the cave. Local informants explained this as an escape from Ottoman officials and tax collectors, although it may also have been used as a way to deposit, store, or even conceal goods. Further investigation on the nature of this structure, as well as its initial date of construction, are necessary.

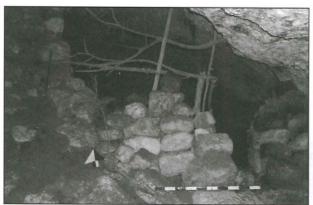
A previously identified subterranean system of caves and cisterns closer to the tall in the same field (G) was chosen for excavation in 1998 in order to begin to trace its cycles of settlement and use; to obtain a rough plans of its ground and upper floors; and to clean, secure, and rebuild parts of the system to make them available for public visitation. The survey documented six new cisterns, several small rooms and interconnecting tunnels, and one tomb, bringing the size of the complex to approximately one hundred meters. Small excavation units were selected inside the ground floor of the two-story entrance to the cave (G.26), a monumental cistern with pillar supports several meters inside and to the south of the entrance (G.29), and two of the smaller rooms to the east of the entrance (G.30 and 31). On the basis of lithics, architectural features, and pottery, several phases of use of this subterranean system were documented: flint knapping in the Paleolithic and Neolithic, tombs of the Bronze Age, isolated sherds of the Iron II, major construction (the pillars in the cistern, the carved doorway and lintel of the cave entrance and arched doorways of adjoining rooms) in either the Hel-



28. Floor plan and elevations of large cave (courtesy of Lynda Carroll).



29. Floor plan and elevations of small cave (courtesy of Lynda Carroll).



30. Animal pen in back of large cave, facing north (courtesy of Lynda Carroll). The low cave ceiling provides a natural enclosure for keeping animals in the pen.



 Structure inside large cave, facing southwest (courtesy of Lynda Carroll). An earlier excavation hole is visible, far right.

lenistic or Roman periods, and the building of walls by the cave entrance in the Byzantine period.

By the Umayyad period the cistern had partially collapsed, and it subsequently went out of use for water storage. At this time it was reused for domestic purposes and small tunnels were made to connect the various individual caves with one another, creating a subterranean village. By the Mamluk period, much of this space was used for the deposition of refuse; the cistern, specifically, produced some of the most complete and best preserved Middle Islamic glazed wares of the entire site. The upper room above the cave entrance, however, apparently continued to be occupied during this time and into the Ottoman period. In modern times, locals have regularly used the complex as a dump, producing the two-meter high mound of garbage in the cistern partially cleaned in 1998.

Field A (2001-Dr. Maria Elena Ronza, now at the University of Jordan, and Terry Jones, Oklahoma State University) (Fig. 32)<sup>3</sup>

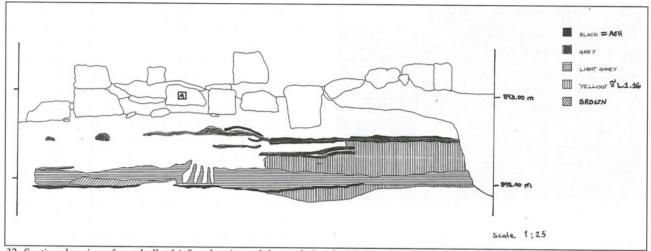
As part of a cleaning operation in 1997, the DAJ made a cut along the entire eastern flank of the Field L bathhouse, exposing its structural support. We used the opportunity to explore the stratigraphic relationship of this bath with the visible remains of Byzantine and Roman structures below by exanding operations in an irregular excavation unit numbered "A5", first opened in 1974 (van Elderen 1976). The hammam was built on top of a meterhigh rubble platform, which overlay the mosaic pavement of the basilica's narthex. This, in turn, was built on top of the lowest courses of an Early Roman structure, tentatively identified as a nymphaeum by our architectural historian, Dr. Elena Ronza. The Roman walls, furthermore, covered a drainage system (also Roman in date) that seems to be a functional part of the bathhouse. In other words, the bathhouse reused the earlier Roman water system.

The rubble fill below the bath was crossed in several places by thick lines of ash. Whether these were related to the late Byzantine – early Umayyad earthquake noted in Field N or to some industrial activity, such as burning fuel for heating a bathhouse, cannot be determined at this point. Nonethless, sherd samples taken in 2001 from the DAJ cut were Umayyad in date. The stratigraphic relationship with the Roman water system and these ceramic readings require a reconsideration of the Mamluk date originally posited for the construction of this bathhouse.

The bathhouse, excavated during the 1973 and 1974 seasons (van Elderen 1975: 119-122; 1976: 17-20), was assigned to Stratum IV on the basis of pottery: nearly all of the earth loci inside the rooms contained Mamluk sherds and were further dated by two coins, one of Sultan al-Nasir Muhammad (ruled on and off from 1293 to 1341) and another of his son al-Nasir Hasan (ruled 1347-1361-van Elderen 1976: 22). Foundation trenches. however, were never explored: because of the special importance of this building (only one of two standing Mamluk citadels in Jordan) and what was then its excellent preservation, the DAJ decided to keep it in place and put an end to futher excavation in that area (van Elderen 1978: 19). Therefore it was clearly used during the fourteenth century, but there has been no evidence so far to prove that this is when the complex was built. Another factor to consider is its floor plan. While the bath is spatially an integral component of the courtyard house, it does not directly communicate with the courtyard

and 1978). Field L excavated in 1998 (squares L.1, L.2, L.3, and L.4) and 2001 (L.1, L.2, and L.5) was located immediately south of A.10.

<sup>3.</sup> The bathhouse, courtyard, and rooms immediately adjacent to the courtyard were fully excavated in 1973, 1974, and 1976 as "Field A", squares 8-10, (van Eldern 1975, 1976,



32. Section drawing of east balk of A.8 – showing ash layers below bathhouse (Maria Elena Ronza, University of Rome). This section was exposed during DoA clearance operations of 1997.

or adjoining rooms; the bath was originally entered from the east side and may have been part of some other complex of rooms on that side of the summit (van Elderen 1976: 19, 1978: 22-23). Moreover, in plan it does not resemble the more common central layout of most Mamluk hammāmāt ( see entries for 14-16 century palatial residences in Garcin 1982; Dow 1996).

It is possible that the hammam was originally an Umayyad (Stratum VIa) construction, which was later reused or partially rebuilt in the fourteenth century, perhaps for the social and political purposes cited above (see also Sauer 1994: 262). In plan and scale, it resembles hammam as-Sara and the bathhouse of the "desert castle" at Quşayr 'Amra: a more or less linear arrangement of three small rooms, at least one of which was barrel vaulted (Creswell 1989: 165-167, 105-117). Structurally and functionally it belongs to the same tradition, by using hypocausts, instead of the flue channels more common to Mamluk-period baths (de Vries 1986: 234). Moreover, Umayyad tabūns, wall fragments, and living surfaces surrounded the bath and were stratigraphically related to loci connected to the drainage system under the bath. These include a wall, floor, two small tabuns (A.7: 73 and A.9: 81), and one rather large one (A.7: 73-at two meters' diameter it may have been a kiln rather than a åbøn) (van Elderen 1975: 123; 1976: 21-23; 1978:

Excavation of this field will resume in 2004 to address these issues.

Preliminary Report on the Islamic Pottery (1998 and 2001-Bethany J. Walker; see also Sauer 1973, 1982, 1986, and 1994 and Walker 2004b)
Pottery of the Byzantine, Early Islamic (Umayy-

ad), and Middle Islamic (Mamluk) periods is best represented on the *tall*. While no examples of early Umayyad, white-painted pottery were recovered in 1998 and 2001, transitional Late Byzantine-early Umayyad white wares and the red-painted, light fabric bowls and jars associated with the late Umayyad period were quite numerous throughout the site. The Abbasid period (red-on-red painted and the so-called "Samarra splashed glaze" wares) is clearly attested on the summit of the *tall*. Sherds of Fatimid *kerbschnitt* ware were relatively rare.

By far the most impressive ceramic finds came from the Stratum IVb, L.2 storeroom, where a room full of Middle Islamic glazed vessels (some intact and many more restorable) was discovered (Fig. 33). Largely dated to the first three quarters of the fourteenth century, this is one of the largest and best-preserved assemblages of Mamluk pottery in Jordan. This assemblage consists of a wide range of regionally available glazed wares, including pseudo-celadons (an Egyptian specialty), monochrome and bi-chrome glazed pedestal-footed bowls, under-glaze painted wares (Egyptian and Syrian products), sgraffitos, and glazed relief wares. The monumental-sized, inscribed, glazed relief wares are most remarkable, in this sense; they were probably manufactured in Jerusalem (Mason and Milwright 1998). At only two other sites in southern Syria (Jerusalem and Kerak Castle, which were also administrative capitals) have as many large and inscribed glazed bowls been recovered (Fig. 34). In addition to these, many vessels were likely the products of local kilns: sugar jars, glazed cook pots, burnished "elephant-eared" cook pots, and the handmade painted jars and bowls with geometric designs (HMGP Ware). There is, however, no evidence for ceramic production at Tall Hisban, or in

33. Profile drawings of most representative Mamluk wares from 2001 season (Courtney Self, Kristen Bayans, and B. J. Walker, Okla-

homa State University).

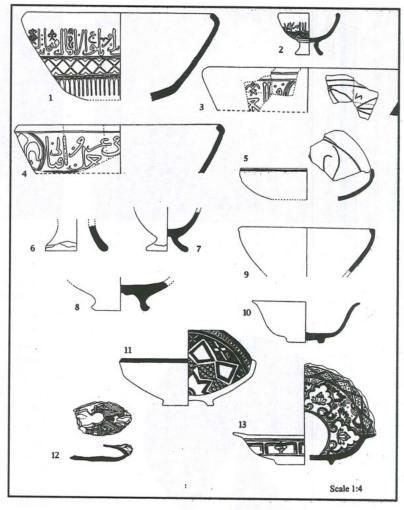
1. H01.L2.87.3a, H01.L1.55.2a, H01.Li.53.2a -Rim of large carinated bowl; interior and exterior slipped and glazed (interior bright green, exterior yellow 2.5Y 8/8), exterior covered in relief design with Arabic inscription; fabric pink (5YR 7/4), hard with few medium sized quartz inclusions and small mineral voids; wheel and mold made; Glazed Relief Ware; 14thcentury. Arabic inscription reads "Glory, good fortune," achievement, and happiness, to the amir....'

2. H01.L1.53.1a,b - Small bowl on pedestal foot; interior and exterior slipped and glazed (yellowish brown 10YR 5/8), exterior covered in relief design with Arabic inscription; fabric pink (7.5YR 7/4), hard with few medium sized quartz inclusions and small mineral voids; wheel and mold made; Glazed Relief Ware; Mamluk (Wightman 1998: 258. Pl 64.9). Arabic inscription reads "Made [on

the order of] the amir ....

3. H01.N1.11.1d, H01.15.10 - Rim fragment of large bowl (possibly carinated); interior and exterior slipped and glazed (interior olive yellow 2.5Y 6/8, exterior bright green), exterior covered in relief design with Arabic inscription, interior covered in sgraffito design; fabric pink (5YR 7/4), hard with few medium sized quartz inclusions and small mineral voids; wheel and mold made; Glazed Relief Ware with sgraffito; 14th century (Mason and Milwright 1998: 178, fig. 3, 13.A.4127; Milwright 1998: 184, fig. 34.2).

4. H01.L1 (no inventory number) - Rim fragment of large bowl (possibly carinated): interior and exterior slipped and glazed (interior brownish yellow 10YR 6/8, exterior bright green), exterior covered in relief de-



sign with Arabic inscription and blazon (fleur de lys); fabric pink (7.5YR 8/4), hard with medium sized quartz inclusions and small mineral voids; wheel and mold made; Glazed Relief Ware; 14thcentury (Milwright 1998: 187, 35.2). Arabic inscription reads "...glory and achievement...."

5. H01.M5.18.1 - Bowl with upturned and thickened rim; interior covered in white slip and pale yellow glaze (10YR 6/8) and decorated with abstract marine design in sgraffito within broad circle, exterior smoothed and unglazed; fabric red (2.5YR 5/6), well levigated with very small quartz inclusions; wheel made; Sgraffito Ware; mid-12th-14cs., "Coarse Graffita" (Pringle, 1985: 184, fig.6.37); Ayyubid (Tushingham 1985: 390, fig. 38.2).
6. H98.L2.7 (no inventory number, pail 33) – Pedestal bowl base; exterior covered in white slip and mint green glaze; fabric pink

(7.5YR 8/4) with small calcite inclusions; wheel made; Middle/Late Islamic.

7. H98.L2. 7 (no inventory number, pail 33) – Bowl with trumpet pedestal base; white slip and yellow glaze with tripod scars; fabric beige buff with small chalky inclusions and some pebbles; wheel made; Middle/Late Islamic.

8. H98.L2.7 (no inventory number, pail 33) – Bowl with upturned ring foot; interior slipped and covered in a mottled yellow glaze (2.5Y 7/6, splotched with iron deposits), faint sgraffito spiral on interior; exterior partially covered in same glaze; fabric reddish brown (5YR 5/4), soft and poorly levigated clay with medium sized quartz and mica inclusions; wheel made; Cypriot Sgraffito Ware; second half 13th century (Pringle, 1985: 192, fig. 12.61). 9. D.6.74B-71950 - Bowl with thickened, inturned rim; interior covered in white slip and bright green glaze, decorated with a radial

sgraffito design; fabric pink (5 YR 8/3), hard with small mineral inclusions; wheel made, Sgraffito Ware; Middle Islamic.

10. H01.12.55.1 - Deep bowl on narrow low ring foot with outturned rim; interior and exterior covered in celadon glaze (pale green GLEY1 7/5G); fabric reddish yellow (5YR 6/8), hard and well levigated with small quartz inclusions; wheel made; Pseudoceladon; Syrian or Egyptian; 14th century (Tushingham 1985: 393, fig. 41.18).

11. H98.G25 (cistern cleaning) – Carinated bowl on low ring foot; painted black interior with radial checkerboard, spiral, and star

patterns; rim exterior painted black, rest of exterior plain; fabric pink (5YR 7/4), poorly levigated with quartz and chaf voids and

medium sized quartz and mica inclusions; hand made; HMGP Ware; Middle Islamic.

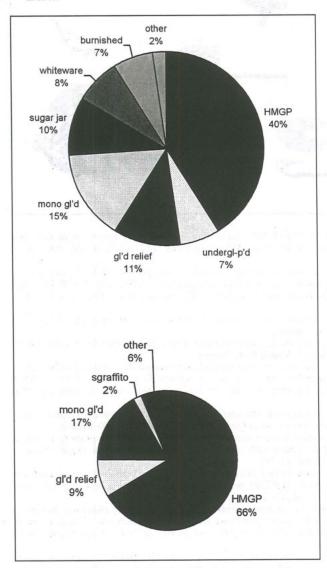
12. H01.L1 (no inventory number) – Channel and nozzle slipper lamp; top of lamp carries impressed design of chevrons, bottom of lamp roughly smoothed by hand; fabric very pale brown (10YR 8/3), poorly fired and well levigated with few inclusions; mold made; 13th C.? (Pringle 1984: 100, fig. 5.9); 13/14th C. (Hadad 1999: 216, fig. 9.34); last quarter of 14th century (Tushingham 1985: 397, fig. 45.3).

13. H01.L1.54.1 - Shallow bowl with scalloped rim; dark blue floral painted design covered by thickly applied transparent glaze; fabric white (GLEY1 8/8), high quartz frit ware; wheel made; Underglaze-painted Ware; late 14th/early 15th century; (Atil

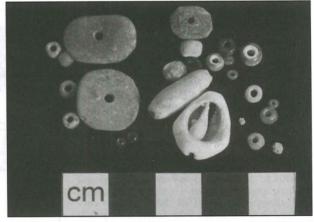
1981:166, fig. 76; Milwright 1989: 245, fig. 58.4).



34. Monumental Glazed Relief Ware bowl recovered from L.2 storeroom (H01.L2.87.3a, H01.L1.55.2a, H01.L1.53.2a – on temporary loan from DoA). Arabic inscription reads "Glory, good fortune, achievement, and happiness to the amir..."



35. Relative percentages of wares from Mamluk assemblages by excavation square, Fields L (top) and N (bottom).



36. Seed beads from necklace worn by a woman buried in L.2 cemetery. The raw materials for most of the burial goods were available regionally.

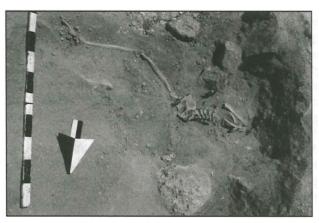
its immediate vicinity, in the form of kilns, wasters, or furniture (see Gloria London's forthcoming poterographic report in Sauer and Herr 2004).

As the accompanying charts indicate, the percentage of wares per Mamluk assemblage by field is roughly the same across the site. The only noticeable differences are the predominance of imported and "special-occasion" vessels (such as the inscribed glazed relief wares, some made on commission for officers) in the storeroom and the slightly larger numbers of cooking wares from N.1, where two tabuns were found (Fig. 35). Sugar jars fragments were found in all fields but were dominant in Field L, suggesting that the room in L.2 was a storage facility. Distinct groupings of pottery by function is recognizable in the spatial relationship of wares in the storeroom: lamps, sugar jars, and Glazed Relief bowls, for example, seem to have been stored in different parts of the room or on their own shelves. Some "whiteware" lamps and blue-and-white bowls recovered from L.1 can be dated to a slightly later phase of the Bahri Mamluk period: the last quarter of the fourteenth century to the early fifteenth. As there is no evidence of these later wares from L.2 or any other field excavated these seasons, it would appear that only parts of the summit were reoccupied in this later phase (Strata IVa-IIIa).

## **Human Remains**

(Dr. Joan Chase, Metropolitan State College of Denver; Lynda Carroll, SUNY-Binghamton; and Sarah Murtha, Oklahoma State University)

In 1998 an unmarked, Ottoman-period cemetery was discovered at 75 centimeters below the surface in the Stratum IVb storeroom of L.2 (Walker 2001b). Approximately seventy individuals were



37. Semi-articulated burial in L.2 storeroom, nineteenth century AD. This was likely the last interment in the cemetery and stands out from the others for its absence of burial goods.

buried together in a common grave defined by the walls of the storeroom and its barrel vault. All of the burials uncovered in 1998 contained grave goods, primarily jewelry (female and male), black gauze veils with large Ottoman coins sewn to them (**Fig. 36**), the remnants of white linen shrouds, and miscellaneous personal effects (eyeglasses, kohl applicator, etc.). Nearly 50% of the burials were of infants. Several of the newborns were buried in the arms of their mothers, indicating that both mother and child died in childbirth. Of the burials excavated in 1998, 16 were adult (aged 18-50 years), two were juveniles (12-17 years), five were children (5-8 years), and at least 22 were infants (newborn to 18 months – Walker 2001b: 48).

There is no evidence in the skeletons of physical trauma or of any consistent pathology. According to Chase, recurrent genetic anomalies (such as metopic sutures, wormian bones, and early obliterating sutures) suggest that the deceased belonged to the same family or clan (Chase, n.d.). Preliminary analysis also revealed that most individuals suffered from congenital arthritis but were otherwise healthy, with good teeth and bones. All of the skeletons were semi-articulated, with the exception of one individual excavated in 2001: a male adult in his early 30's, laid on his side facing south, with his head facing west and up against the west wall of the storeroom, his legs bent, and his arms drawn to his chest (Fig. 37). It appears that the cemetery was used on a seasonal basis over many years, with earlier burials having been brushed to the side each year to make room for new ones. This was clearly the case with the male adult described above, who was probably the last burial in this cemetery. The cemetery has been dated to the nineteenth century on the basis of local oral history, a stylistic analysis of the grave goods, isolated sherds of late Ottoman handmade ware (crudely constructed and perhaps of Bedouin manufacture) and a single legible Ottoman coin (a large copper *fils* of 1293 AH), found near the entrance to the storeroom. 1876AD, then, provides a *terminus post quem* for what must have been the latest phase of the cemetery's use. The population in the cemetery has been tentatively identified as the 'Adwān, one of three tribes that frequented the region in the nineteenth century (Walker 2001b).

#### Conclusions

The 1998 and 2001 field seasons have produced the most comprehensive picture of the Islamic periods at Tall Hisban. to date. Many previously held notions about the nature of Islamic-period occupation need to be reconsidered as a result of these Phase II excavations. With the discovery of an Early Islamic structure in Field N that spans the Late Byzantine through early Abbasid period, it is becoming clear that rather than being a period of decline leading to abandonment of the site, the Early Islamic period at Hisban was one of continued occupation and social vibrancy. For the Middle Islamic period, there is enough archaeological and historical evidence that the standing ruins of Fields A and L constituted a Mamluk governor's residence and administrative complex, rather than a caravanserai. In a similar vein, multidisciplinary research aimed at fleshing out the occupational history of the Late Islamic and Modern periods has begun to revise the common image of economic and cultural decline usually associated with the Ottoman's abandonment of the region from the late sixteenth century.

Architecturally, the renewed excavations at Hisban have verified the continued economic vitality of the tall and village during times of political transition. According the criteria adopted in Lawrence Conrad's oft-cited study, the three major complexes examined during the 1998 and 2001 seasons could be considered qusur, a term that is socially and chronologically specific (Conrad 1981). Adopting the Abbasid geographers' understanding of the term, we can say that the two-room building in Field N, along with the walled summit of the tall, the tabuns of Field A, and perhaps the Field A/ L hammām, together constituted an Early Islamic gasr, or fortified, residential complex comprised of multiple structures and belonging to an extended family or clan and their allies (Grabar 1964 - citing Ya'qut; Conrad 1981: 15-22). In construction, layout, installations (cisterns, bathhouse, fortification wall with square towers) and physical location within the local landscape, it can be compared to

the Early Islamic "desert castles" (qusur) of Jordan, many of which are in al-Balqa'. These are generally believed to have served as fortified, princely residences, meeting houses, and agricultural centers (Bisheh 1985; King 1992). On the other hand, the Field L "governor's palace" would have been described by contemporaries as a qaşr, or a multi-storied unit, generally understood to be a well-built, private residence in a civilian district of a large settlement (Amin and Ibrahim 1990: 90, citing Mamluk chronicles and wagfiyyāt) or in a citadel, qal'a (such as Sultan al-Nasir Muhammad's residence, the gasr Ablaq, in Cairo Citadel-Rabbat 1995). As such, it is as symbol of officialdom and the power of the state. Today much later Nabulsi complex in Field G is called by villagers a gasr, which in popular parlance implies a farmhouse or a storage building, comparable in form and function to the Abu Jaber complex now known as Kān Zamān (see also Conrad 1981: 13-15). In all three cases, there is clearly a concern for security and control over adjacent farmland and agricultural resources. Moreover, as the term qasr generally suggests some level of prosperity or economic independence, these periods represented anything but decline at Hisban.

The Phase II excavations, however, raise more questions than they answer. The abandonment of the Mamluk gasr on the tall in the middle of the fourteenth century resurrects the debate on the origins of Mamluk decline that has regularly appeared in Mamlukist scholarship in recent years (Dols 1977; Ghawanmeh 1985, 1992; Levanoni 1995; Walker 2004a). While the factors traditionally cited (such as the Black Death of the 1340s, environmental disasters, and the Timurid invasion of Damascus) certainly impacted central Transjordan to some degree, the sudden abandonment of important administrative sites, such as Ḥisbān, and the shuffling of these centers in the region suggest that more political factors, perhaps those internal to the workings of the Mamluk machinery in the capital, were at play. What constitutes economic, political, and social "decline" in the Mādabā Plains must be defined on its own terms. This is the challenge of research in "the provinces", and one that requires asking more nuanced questions of the material record than has been previously attempted.

Research questions, such as those embraced by this project and described earlier in this article, take a step in this direction. The project's food systems approach is the backbone of the larger multidisciplinary strategy. Not only has this approach been adopted by the Mādabā Plains Project as a whole, but it is also part of a current initiative to understand the ecological history of the Jordan River Basin (Nashef and LaBianca 1999). Such anthropologically based theory, combined with the commitment to traditionally historical archival work, offers the kind of methodological depth needed for provincial studies of the Islamic periods. The next full excavation season, tentatively scheduled for May-June, 2004, will continue to explore the lower levels of Field N, as well as begin a systematic exploration of the Middle Islamic village occupying the slopes of the *tall*.

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