KHIRBET SALAMEH 1992

by
Pierre M. Bikai

Location

Khirbet Salameh (JADIS Site No. 2315.125) is located in Amman opposite the University of Jordan and across the street from the American Center of Oriental Research (Palestine grid 232.2E and 157.49N). It is at the midpoint of a gentle slope overlooking a shallow crescent-shaped valley. A seasonal spring called 'Ain el-Beyḍa is ca. 250 m from the khirbeh. The area is rain-fed agriculture land, still used today for grains and the grazing of animals. The rainfall in the area averages ca. 400 mm a year. The elevation is 1020 m above sea level and the temperature averages 17 degrees.

The site is surrounded by hills and valleys that gave a name to the area: Tila' el-'Ali. The geological formation consists in general of Jurrasic calcareous (limestone) bedrock covered by *terra rossa* which varies in depth, depending on the location, from 2 m or more at the bottom of the valley, to 0.5 m on the gentler slopes; there is no coverage on the steep ridges. At the start of the excavation, one layer of irregular white stones was visible on the surface indicating the perimeter of a square building. Additionally, the eastern facade of the building was visible due to the slope. The facade consists of five layers of irregular stones of different sizes, with a 2 m wide opening at the center. While the coursing of the southern side of the wall is horizontal, the northern side shows a downward inclination to the north.

History of Excavation

The first survey of the site was conducted in 1976 by Mujahed Muheisin during his survey of Amman. In 1983 and 1984 the site was surveyed and partially excavated by C. J. Lenzen and A. M. McQuitty (Lenzen and McQuitty 1984; 1987). It is also included in the Archaeological Survey of Greater Amman (Abu Dayyah *et al.* 1991). The 1984 and 1987 excavations at Khirbet Salameh were a salvage/rescue project and the excavated area was only a small portion of the site (Lenzen and McQuitty 1987: 201).

The 1992 Excavation

After the site and the surrounding area were surveyed, the excavation area was divided into 5 m x 5 m squares with a 1 m balk. During this first season, 13 squares were excavated; bedrock was reached in five of the squares. The locus system was used and all stones were numbered and located on a plan for possible restoration purposes. Fill from some of the loci was sieved and seeds were collected. Samples of fill were also taken for pollen analysis. The pottery was collected and numbered by square, locus and basket.

There appear to be at least four phases of use of the area:

1) In a small area in square C-4, the walls of the large building are laid over an earlier structure which is oriented differently; the walls of this phase consist of small irregular stones with *terra rossa* mortar. The deposition associated with this is separated from upper layers by a wash of small gravel. As yet, no floor can be associated with these walls. The pottery analysis is not complete; however, preliminary readings from the ceramics indicate that they date to the Iron II. Part of this structure was incorporated into the later Roman/Byzantine square building.

2) The second phase may belong to the Hellenistic era, and may have been a structure built with well-cut ashlar blocks. In some parts of the later Roman/Byzantine

structure, these well-dressed ashlar blocks appear to be reused. Wall 1 and door 2 (plan, Fig. 1) may be a part of the Hellenistic building still *in situ*. There is a quantity of early Hellenistic material including ceramics and two Ptolemaic coins (Pl. II, 1; one from the survey, and the other from a bin). Four bins filled with debris were found associated with Hellenistic pottery; later walls were laid over three of the bins.

3) The third phase, to which most of the remains appear to belong, may be late Roman/Byzantine. In this phase, roughly cut stones are used but the construction appears to incorporate elements from the Hellenistic phase and may also incorporate elements of an Iron Age structure. The architecture uncovered so far confirms that the Roman/Byzantine building is square, 23.5 m on each side. The exterior as well as the inner walls are large, ca. 1.2 m in width. The interior of the structure contains a number of rectangular rooms around a courtyard. Four doors opening from those rooms into the courtyard were found, each with sills and parts of doorjambs. From the courtyard, one reaches the southeastern room by descending three steps which land on bedrock, while the northwestern room is reached by ascending a step. There were other bedrock floors at various elevations within the structure which indicates that the builder made use of the slope of the hill. Most of the walls uncovered are made of irregular, roughly-cut stones of various sizes; some are over 1 m in length while others are very small. The Roman/Byzantine building has also a second stage during which wall 4 was added to separate rooms 3 and 4. Wall 4 is different from the rest of the building; it consists of small stones embedded in dark earth.

Except for one locus (F1), there is surprisingly little stratigraphic layering. In the squares where bedrock was reached, three different depositions can be distinguished. From the bottom up: The first consists of a layer of gray-white earth mixed with stones of different sizes varying in thickness from 5 cm to 15 cm. The second deposition is much thicker, ca. 1.00 to 1.10 m and varies from one room to the other (Pl. I, 1; and see Pl. II, 2 and 3 for ceramics from the fill). It consists of large and small stones mixed with white-yellowish earth. The indications are that these deposits are simply the remains of the collapsed superstructure of the building. The third deposition consists of dark brown earth mixed with small tumbled stones varying in thickness from ca. 50 to 30 cm, indicating an accumulation after the destruction of the structure. The square building can be related to the Roman/Byzantine era, because in one of the rooms a number of storage jars were found *in situ* by the wall (Pl. I, 2). In association with these jars, utensils of the same period were found indicating the function of that room. The Iron Age and Hellenistic materials mixed with the fill in the Roman/Byzantine building can be related to a (vaulted?) superstructure in which earth mixed with earlier remains from the surrounding area was used.

It should be emphasized that (so far) no definite floors have been found in association with the walls of the structure. It is possible that the last inhabitant of the building before it collapsed cleared the interior to bedrock, perhaps for use as a shelter for animals.

4) In association with the upper deposition over the square structure there were remains of broken walls, built over the earlier walls. These walls were only 0.5 m thick. There is a possibility that the settlement survived up to the Umayyad period as a number of ceramic sherds belonging to that era were found. At the uppermost level, a number of Ayyubid sherds were found. Thus the possibility of a small Ayyubid settlement in the area cannot be ruled out.

Thus we have a structure on the fringes of ancient Amman which appears to have

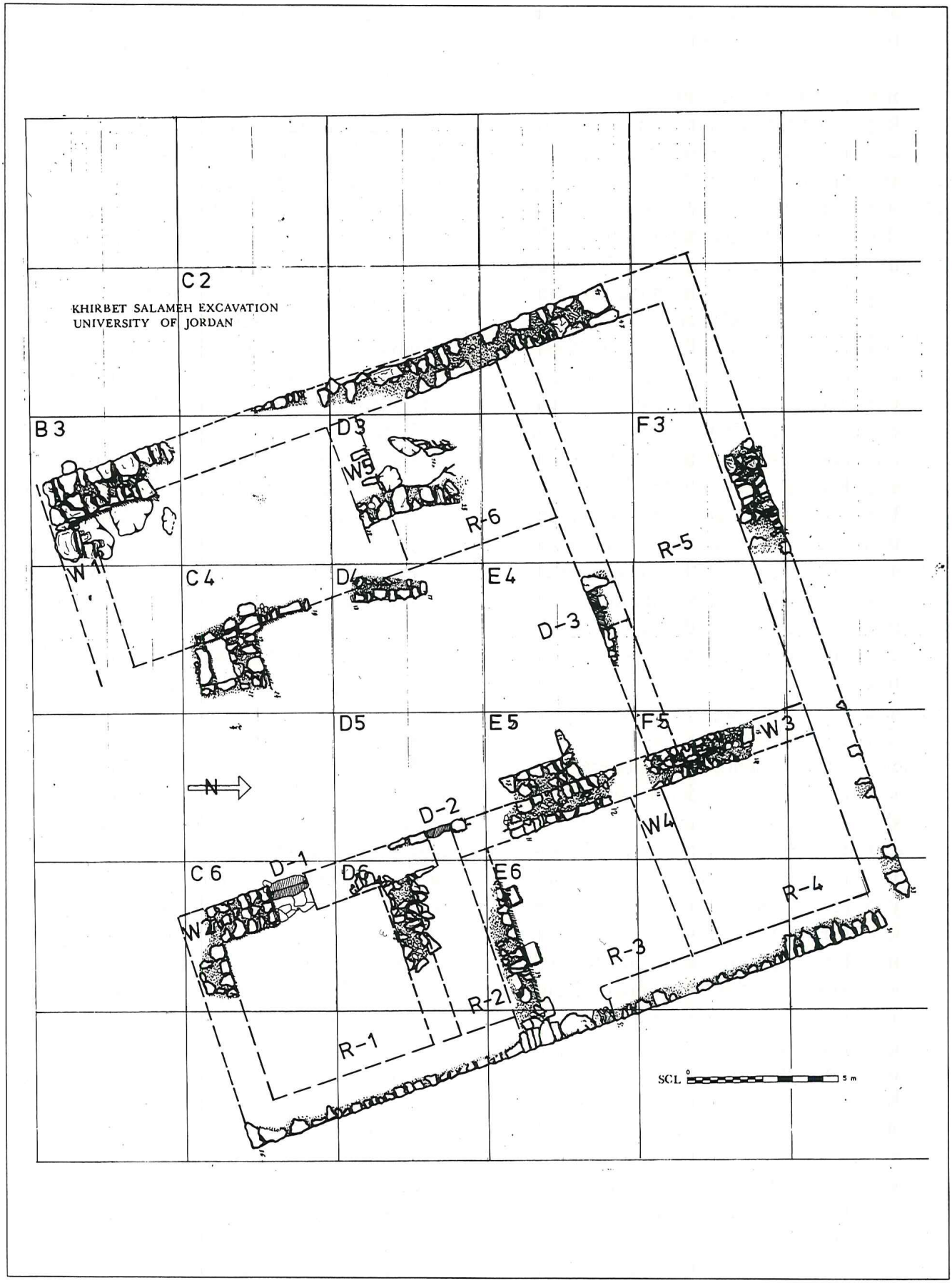


Fig. 1. Plan of the excavation.

been built, abandoned and then rebuilt over a period of at least a millennium.

Preliminary Interpretation

A large number of 'rujm' and 'khirbeh' structures are reported from surveys and excavations in the Amman area. Indeed, 50 such sites are already known (Abu Dayyah *et al.* 1991), and approximately another 29 around 'Umeiri, east of Amman (Younker 1989: 196). Studies on the structures include Najjar 1992; Kletter 1991; Boraas 1971 and Landes 1961. The word 'rujm' means a pile of stones while 'khirbeh' means the ruins; there is no real difference between the terms. Thus Rujm el-Malfuf means the pile of stones that are round (and not, *pace* Kletter 1991: 33 'cabbage tower'). The word rujm has been associated with tower, hence watch tower, a defensive system for war. This was the interpretation of the early and some later explorers. Due to their biblical background, they interpreted the rujum as defensive installations, sometimes rather creatively. For example, regarding Khirbet el-Ḥajjar, Thompson stated (1973c: 38):

> There is no evidence of a general destruction. While the evidence could have washed away ... one would expect to find some traces of a general conflagration ... the lack of destruction evidence may point to abandonment rather than conquest. Historically, we know that the Ammonite kingdom came to an end about 580 B.C. as the Babylonian (Chaldeans) swept down from the north ... (II Kings 25:22-6; Jeremiah 40f). Could it be that the men guarding their little fort at Khirbet al-Hajjar saw the smoke of Rabbath Ammon 10 km. to the east when it fell to the Babylonians? Perhaps they gathered up their belongings, leaving behind only a few broken bowls ... and fled to the south or the Jordan valley. When the capital fell, their task of guarding the capital was over, so better to flee and live to fight another day than to defend their little hill against overwhelming odds. Who knows?

The same author (1973a: 48), reporting on Rujm el-Malfuf South, states: "Present interpretation for locus 4 is that it represents 6-7th century occupation, perhaps by a family of a soldier or by off-duty troops."

This line of inquiry was continued by Gese who saw a line of "border 'forts' along the border between Ammon and the Israelite tribes" (see Kletter 1991: 34). Younker (1989: 195), however, reporting the results of the 1984 Tell el-'Umeiri survey, says of the structures in that area:

> Initially it was thought that these structures might be more examples of the so-called "defensive towers" that have been described elsewhere in the Amman region ... surface sherds ... indicated that the 'Umeiri "towers" were occupied during the same periods as the Amman structures.

Defense, however, was later ruled out as the primary function of 'Umeiri's "towers".. they were not strategically placed for either defense or communication.

Following further work in 1978 (Younker 1991a), many of the structures were found to be lime kilns, field shelters, small agricultural complexes (farmsteads) and large agricultural complexes (estates). Younker (1991a: 341) interprets only one of the structures, ed-Dreijat as a military installation: "Based on the data ... it would seem that this building was originally intended to serve a military purpose and, therefore, should be classified as a genuine 'Ammonite tower' (although I would prefer the term 'fort')." The data presented, however consists of ed-Dreijat's 'strategic' location on a high ridge and that "other features generally associated with the farmhouses appeared to be missing," (341), which is negative evidence. This is not enough to qualify ed-Dreijat as a genuine 'fort,' and even Younker (341) acknowl-

edges that none of these structures had any real defensive capability: "Any large army would simply overwhelm or bypass these small forts and towers (as the Assyrians, etc., indeed did)." To cite a modern example, the Bisharat house (Umm el-Kundum), an Ottoman manor house near 'Umeiri, was built 130 years ago on much older remains. It is a large building at the top of a hill, a very strategic location, but it is not a fort.

Recent excavations at Khilda indicate that the settlement functioned as an agricultural site (Najjar 1992). The excavation at Rujm el-Malfuf did not provide any evidence of defensive installations (Boraas 1971), nor did the excavation of Rujm el-Malfuf South (Thompson 1973). Lenzen and McQuitty (1987: 204) also concluded that Khirbet Salameh was a 'farmstead.' Zayadine (1986: 149-156) argues that all such sites were agricultural settlements.

Kletter's (1991) analysis of Rujm el-Malfuf South in relation to similar structures finds that even though similar buildings may exist in western Palestine, Gilead and Edom, structures typified by Rujm el-Malfuf are unique to Ammon. He concludes (44) that:

> They reflect the settlement process of the "sons of Ammon" during the "Pax Assyriaca." The process was a local Ammonite phenomenon, not due to any particular Assyrian involvement. The distribution of the buildings follows natural limits, which more-or-less indicate the borders of Ammon. ... definition of the borders of Ammon would be useful for a new discussion of the biblical evidence.

Thus, he limits interpretation to the Iron II period and looks for mechanisms of interpretation which are limited to that period. In any case, the interpretation 'tower = defensive installation' has lost ground and Kletter makes an interesting case for the distribution of such sites in the Iron II, but that is not the only era in which these sites were used, as demonstrated by Khirbet Salameh and by the Madaba Plains structures.

Younker (1989: 196) says that of the 29 "tower sites" located, 3 were used in the Late Bronze, 7 in Iron I, 24 in Iron II, 9 in the Roman period, 19 in the Byzantine, and 9 in the Umayyad. Younker (1991: 335) adds: "further sherding and excavation indicate that more sites were occupied in the Persian and Hellenistic periods than had been thought."

Further work is needed to ascertain to which periods these buildings belong. Indeed, the results from surveys and excavations of these sites indicate that they may belong to different periods, either single or multiple. For example, Boraas' excavation at Rujm el-Malfuf North indicated a Roman/Byzantine occupation with no other datable materials. However, Yassine (1988: 17) states from unpublished excavation materials that "Langer de Polacky, excavating the same structure as Boraas ... , has suggested a 6th-5th century B.C. date for the ceramics from the lower levels of the tower." Most of the sites are partially excavated, if at all, or, if excavated, have not provided secure evidence as to date. On the current evidence there do appear to be breaks in occupation at many of them.

The question is: what is the cause behind a growth in population and prosperity which precipitates expansion out into such areas and then abandonment of the sites? If one examines the regional history of the area, it may be possible to relate historical events to this phenomenon. Kletter (1991: 36-37) does this to a limited extent: "It seems, therefore, that Rujm el-Malfuf buildings ... date from the Assyrian period (i.e., from ca. 730 B.C. to 630/620 B.C., when the Assyrian power in the west declined)."

Based on Younker's data (*supra*), the Iron II and Roman/Byzantine eras appear to show a major increase in such construction. The hypothesis here is that this may be related to interruptions of the primary trade

route from the Persian Gulf to the Mediterranean. That primary route was by means of the Tigris and Euphrates Rivers. One route left the Euphrates to cross to Aleppo while the Tigris route went from Nineveh through Carcamesh or to Anatolia. The Mediterranean ports could be reached by either route.

Control over those routes was the pride of every major Mesopotamian ruler, e.g., the Sumerian who : "will cross the 'river of Erech,' subdue all the lands 'above and below, from the sea to the cedar mountain'" (Kramer 1959: 205). The wealth thus generated is illustrated by another Sumerian text which refers to Agade, Sargon the Great's domain, which was in the area of Baghdad:

> In those days the dwellings of Agade were filled with gold, ... silver ... copper, tin, slabs of lapis lazuli ... its quay where the boats docked were all abustle ... (Knapp 1988: 87).

While there were other routes through the desert, the primary traffic relied on water transport, thus the area of Jordan was bypassed. Those routes were sometimes disrupted by political events, however, and what is suggested here is that when there were disruptions, the trade route shifted and Aqaba became the gateway to the Mediterranean and Syria. It is possible that the periods of expansion toward the suburban areas can be related to such a shift which would effect not just the Amman area, but also all the sites on the route from Aqaba. It is also possible that both the actual closure of the Persian Gulf route and the reasons behind such a closure could have led to population shifts toward the area of Jordan.

There were such disruptions in the Iron Age I that may have blockaded the trade routes in Mesopotamia; such disruption could have been caused by the expansion of the Assyrians toward Babylon. They crossed the Euphrates for the first time under Tiglath-Pileser (1115-1077 B.C.), and in the time of Nebuchadrezzer I (1124-1103 B.C.) there was war against Babylon and against the Elamites. Further, the Aramaeans were establishing their power and started crossing the Euphrates.

In the second half of the seventh century B.C., the Assyrian empire began to fall. While we have no records after 640 B.C., Assyria was clearly on the defensive, and by 612 B.C., Nineveh was destroyed by a coalition of Scythians, Babylonians and Medes. It is possible that this disruption shifted the trade route to the Gulf of Aqaba. The Babylonian/Persian period also sees disruptions. Cyrus of Persia spread his power from the Aegean to Afghanistan, and started a campaign against Babylon. The period of the Neo-Babylonian Nabonidus (556-529 B.C.) illustrates such a shift. Nabonidus moved to Teima in western Arabia after he defeated the Adumu in el-Jauf, near Aqaba. Two of the major reasons for that move may have been: 1) because the Persian Gulf was filled with silt and navigation through the Shaṭ el-'Arab became impossible; and 2) the trade routes to the north were blocked by the Medes. Thus, while the move may have been because of his devotion to the god Sin whose cult center was at Teima or because he wanted to create a coalition with the Arabs to defeat the Persians, it is more likely that the move was for commercial reasons. The fact that the Persians under Cyrus the Great were able to reopen the routes quite quickly, may make tracing of the impact of the move of Nabonidus in the archaeological record difficult. These events happen quite quickly as was amply demonstrated by Jordan's rapid absorption of the Gulf returnees. Another brief disruption occurred after the death of Alexander the Great in 323 B.C.

> ... Babylon changed hands several times. At first the seat of a military junta presided over by the regent Perdiccas ... In 316 B.C. Antigonus, the ambitious satrap of Phrygia, dislodged Seleucus from Babylon, forcing him to take refuge with Ptolemy in Egypt. But Seleucus came

> back in 312 B.C. ... and Seleucus added to Babylonia the satrapy of Syria ... (Roux 1964: 382).

In 126 B.C. the Parthians conquered Babylon. Their arrival may have disturbed the trade route again, to be replaced by Aqaba. "For many years to come, the world's political, cultural and economic center had shifted from the banks of the Euphrates to the shores of the Mediterranean" (Roux 1964: 383).

The Late Roman/Byzantine era is characterized by total control of the Sassanians over Mesopotamia except for short stretches of time during the Roman/Sassanian wars, but the Sassanians had complete control over Mesopotamia from A.D. 224 to A.D. 651. During the Roman period, the Limes Arabicus defensive installations at the edge of the desert were built to protect the trade route through Aqaba. This line of defense against the Sassanians played a major role in the prosperity and intensification of use in and around the sites that linked Aqaba to northern Syria.

After the collapse of the Byzantine Empire, and under Umayyad rule from Damascus, both routes, the Red Sea and the Persian Gulf benefitted, because of the geographical setting of the capital Damascus. However, when the capital moved to Baghdad by the Abassid Caliph el-Manṣur, Aqaba lost its importance for ca. 500 years. The Mongols destroyed Baghdad in 1258, and the Mamluk era began in Egypt, founded by Ṣalaḥ el-Din who defeated the Mongols at 'Ayn-Jalut in 1260 and put an end to the Crusaders at the battle of 'Akka in 1291. Aqaba again became a major gate for trade because of its geographical relationship to the Mamluk capital, Cairo, while the land between the two rivers was still suffering from the Mongols, the Suljuks and, later, the Ottoman Turks. The end of the Mamluk era came as the result of a devastating plague that took many lives, and also as a result of the rise of Ottoman power. Constantinople was taken by the Ottomans in A.D. 1453, and the whole of the Near East after that. Communications were open in all directions towards the capital, Istanbul. When Vasco da Gama discovered the new route around Africa to Europe in 1497-99, that route took most of the traffic away from the Mediterranean and thus away from both Aqaba and the Persian Gulf. In past years, Aqaba again became important and there has been an impact on the economy of Jordan.

The suggestion here is that in looking for the causes of both use and abandonment of such sites as Khirbet Salameh, one needs to look to the larger economy of the area rather than to particular military events (as *per* Thompson) or to a "settlement process of the 'sons of Ammon' during the 'Pax Assyriaca'" as *per* Kletter.

Conclusion

The importance of Khirbet Salameh is that the incorporation of different stages in the construction may shed light on the history of and the reasons for expansion in particular periods, and abandonment in other periods. Khirbet Salameh seems to be similar in its historical process to the hundreds of sites scattered outside the large fortified settlements such as Amman. Interpretations of these sites differ, but the majority now agree that in general these sites were agricultural settlements. The hypothesis presented here as to the larger economic mechanism involved is one to be tested in future work.

Acknowledgements

Excavation at Khirbet Salameh is a summer class in field archaeology for University of Jordan students and is a joint project of the university and ACOR. The team in 1992 consisted of 25 undergraduate students and 5 graduate students who acted as square supervisors. Photographer Sarkis Labejian, foreman Ayesh Abou Hilal, archi-

tect Maysoun Nahar, and a driver were supplied by the university as well as the necessary equipment; 12 laborers were supplied by the Department of Antiquities and the assistance of the Director General of Antiquities, Dr. Safwan Tell, is much appreciated, as is the assistance of Dr. Nabil Khairy of the university for organizing this project and assisting with the ceramics reading.

P. M. Bikai
ACOR
Amman

Bibliography

Abu Dayyah, A. S., Greene, J. A., Haj Hassan, I. and Suleiman, E.
1991 Archaeological Survey of Greater Amman, Phase 1: Final Report. *ADAJ* 35: 361-395.

Boraas, R. S.
1971 A Preliminary Sounding at Rujm El-Malfuf, 1969. *ADAJ* 16: 31-45.

Gese, H.
1958 Ammonitische Grenzfestungen swischen Wadi es-Sir und Na'ur. *ZDPV* 74: 55-64.

Kletter, R.
1991 The Rujm El-Malfuf Buildings and the Assyrian Vassal State of Ammon. *BASOR* 284: 33-50.

Knapp, A. B.
1988 The *History and Culture of Ancient Western Asia and Egypt*. Chicago.

Kramer, S. N.
1959 *History Begins at Sumer*. Garden City, New York.

Landes, G. M.
1961 The Material Civilization of the Ammonites. *BA* 24: 66-86.

Lenzen, C. J. and McQuitty, A.
1984 Khirbet Salameh. *ADAJ* 28: 295.
1987 The Site of Khirbet Salameh. *ADAJ* 31: 201-204.

Najjar, M.
1992 Rescue Excavations at Khilda/Amman. *ADAJ* 36: 409-420 (Arabic).

Roux, G.
1980 *Ancient Iraq*. 2nd edition. London.

Thompson, H. O.
1973a Rujm Al-Malfuf South. *ADAJ* 18: 47-50.
1973b The Excavation of Tell Siran (1972). *ADAJ* 18: 5-14.
1973c The Biblical Ammonites. *The Australian Journal of Biblical Archaeology* 1.6 (=2.2): 31-38.

Yassine, K.
1988 Ammonite Fortresses, Date and Function. Pp. 11-31 in K. Yassine (ed), *Archaeology of Jordan: Essays and Reports*. Amman.

Younker, R. W.

1989 "Towers" in the Region Surrounding Tell el-'Umeiri. Pp. 195-98 in L. G. Herr *et al.* (eds), *Madaba Plains Project 1: The 1984 Season at Tell el-'Umeiri and Vicinity and Subsequent Studies*. Berrien Springs, Michigan.

1991a The Judgment Survey. Pp. 269-334 in L. G. Herr *et al.* (eds), *Madaba Plains Project 2: The 1987 Season at Tell el-'Umeiri and Vicinity and Subsequent Studies*. Berrien Springs, Michigan.

1991b Architectural Remains From the Hinterland Survey. Pp. 335-342. in L. G. Herr *et al.* (eds), *Madaba Plains Project 2: The 1987 Season at Tell el-'Umeiri and Vicinity and Subsequent Studies*. Berrien Springs, Michigan.

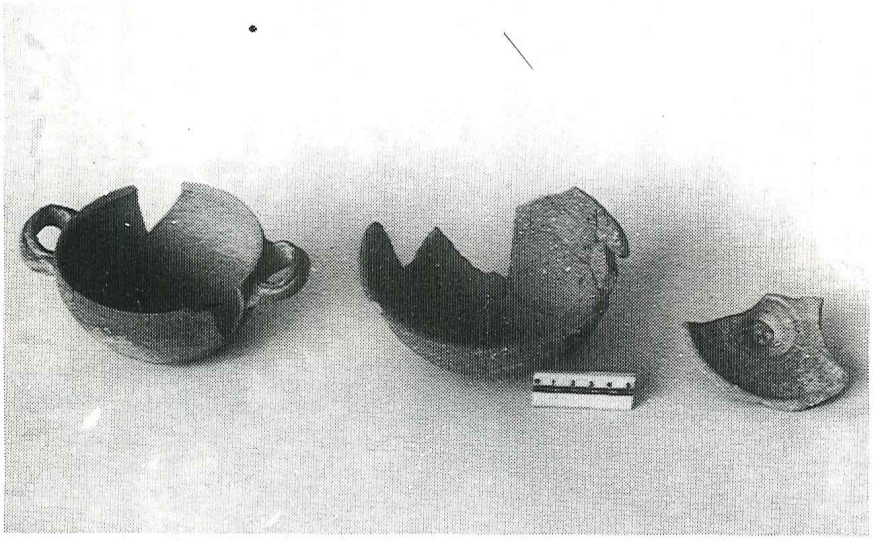
Zayadine, F.

1986 Les fortifications pré-helléniques et hellénistiques en Transjordanie et en Palestine. Pp. 149-56 in *La fortification dans l'histoire du monde Grec*. CNRS Colloque International 614. Paris.

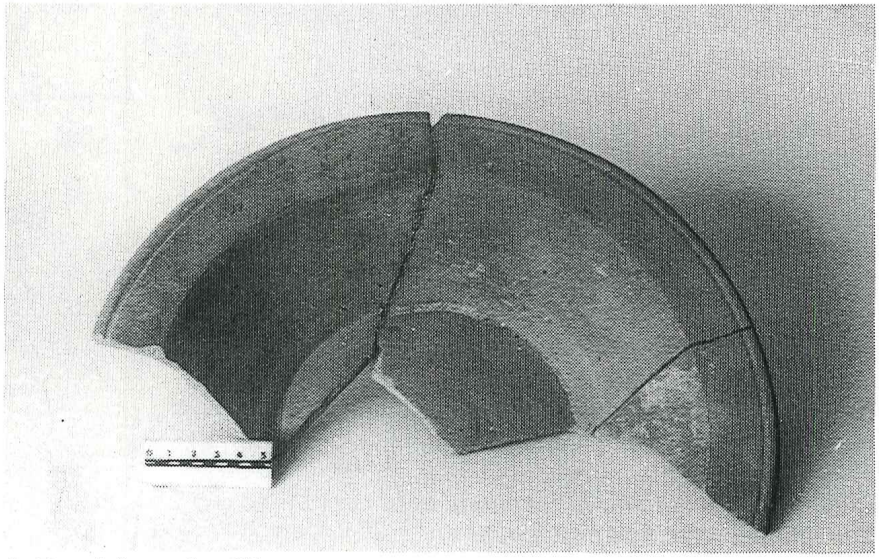
1. View of the excavation at the end of the season.

2. View of Room 4 with storage jars *in situ*.

1. Hellenistic coin (Ptolemy II?, possibly from Tyre) found in the survey.



2. Ceramics from the fill.



3. Bowl from the fill.