# PRELIMINARY REPORT OF THE SEASONS 2005-2008 OF EXCAVA-TIONS BY THE UNIVERSITY OF IOANNINA AT TALL AL-KAFRAYN IN THE JORDAN VALLEY

Thanasis J. Papadopoulos and Litsa Kontorli- Papadopoulos

#### Introduction

The Hellenic Archaeological Expedition of the University of Ioannina in Jordan continued its research activities in the Jordan Valley from 2005 to 2008 at the site of Tall al-Kafrayn (Phase II of the Project). Excavations were carried out with the permission of the Department of Antiquities of Jordan and were financed by the University of Ioannina, and the Greek Ministries of Culture and Foreign Affairs. The Project is jointly directed by the authors, assisted by a team of twenty to twenty five Greek archaeologists and students of the University of Ioannina and thirteen to sixteen local workers.

Tall al-Kafrayn, which has sometimes been identified as the biblical site of Gomora, is located approximately 5km south of the modern village of south ash-Shūna and 3km south southwest of the al-Kafrayn dam. A major highway connecting 'Ammān, south ash-Shūna, Jericho and Jerusalem runs close to the northern slope of the tall. In the area of the so-called "Jordan Disc", or "Middle Ghawr", where Tall al-Kafrayn belongs, there are more than ten different Levantine Bronze Age / Iron Age sites, including Tall Iktānū, Tall ar-Rāmā, Tall Nimrīn, Tall Barakāt and the most prominent being Tall al-Hammām, approximately 3km to the southeast. The site of Tall al-Kafrayn was identified in 2001. It is almost completely pristine and dominates the central Jordan Valley (Fig. 1). It was chosen as the key site for our research because of its strategic and prominent position overlooking the valley and because of the presence of visible ancient remains and parts of a fortification wall on the surface (Fig. 2). Excavations have been conducted at the site since 2002 and a preliminary synthesis of the results of the 2002 to 2004 seasons (Phase I) have been published (Papadopoulous 2007).

## **Recording System**

The polar-point grid and corresponding recording system employed at Tall al-Kafrayn are designed to facilitate computer-assisted analysis of data. Each 5m square (termed trench) is identified by the single point closest to the central reference point 1000/00, located on the summit. Because every point is unique within the system, computers can maintain three-dimensional provenance records of all loci and finds. Similarly, artefacts and stratigraphy can be correlated quickly.



1. Map of Tall al-Kafrayn.



2. General view of Tall al-Kafrayn

#### **Phase II of the Project**

The principal objective of Phase II of the Project was to explore earlier occupational levels on the tall in order to resolve issues of phasing and dating that had arisen at the end of Phase 1. A related objective was to continue work in the adjacent Early Bronze Age (EBA) cemetery. Initially, five new trenches, 5 x 5m square, were opened on the top of the tall and on the north, south and east slopes (N13, K18, L8, P14 and P15), while investigations were continued in deeper levels on the previously semi-explored trench J17.

Remains of stone walls visible on the northwest corner of the levelled top of the tall, led to the opening of trench N13. At least three thick, well-constructed stone walls, belonging to a significant building, have now been unearthed in this square. The first measured 4m in length, the second 2.50m in length and the third *ca*. 4.15m long x 0.90m wide x 0.15-0.25m high (**Fig. 3**). Associated artefacts included Iron Age (IA) I-II sherds and some basalt grinders and pounders. Excavations in this area have however, been suspended due to the discovery of three Islamic tombs.

Work resumed in Trench J17, opened in 2004. Further architectural remains were discovered in two successive layers 2.27m deep, consisting of well-built stone and mud brick walls, and floors made of beaten earth, ash and small flat stones (**Fig. 4**). The fill of this deposit



3. Trench N13



was a reddish brown colour with many lenses of ash and piles of stones in some locations. These deposits contained large quantities of IA I-II sherds and stone tools. Of special importance was the discovery of a thick carbonized wooden column, 0.12-0.14m in diameter standing erect and preserved to a height of 0.18m, with its stone base *in situ* (**Fig. 5**). Samples of it were sent to Demokritos laboratories in Athens for C-14 analysis and were dated by Dr Maniatis to 750-410BC. Another interesting discovery was a limestone slab bearing fossils of at least two whorl-shells on its surface (**Fig. 6**).

Trench K18, opened between trenches L18 and J17, also produced significant architectural re-



5. Trench J17. Wooden column.

4. Trench J17.



6. Trench J17. Whorl – shell fossil.

mains. Successive habitation layers, similar to and contemporary with those recognized in trenches L18 and J17, have been identified; including a slab-stone base which probably supported a wooden column. Of the three unearthed stone walls, the most important and well-preserved was that running north-south, with a curving at its southern end. This wall was preserved to 4.15m in length x 0.45m in width x 0.25m in height (**Fig. 7**). It is possible that these walls formed part of a larger structure with the similar walls unearthed in the adjacent trenches K18 and J17 because of the similar construction



material and style. These walls can be dated on the basis of the pottery and other finds to the transitional Late Bronze Age (LBA) / Early IA (**Figs. 8a, b**).



8a. Trench K18. LBA/Iron Age pottery.

7. Trench K18.



Trench L8 was opened on the north slope of the tall. After removing the top soil a well-constructed stone wall was revealed, measuring as preserved, 4.10m in length x 0.60m in width x

0.35m in high, running east-west at the southern extent of the trench (**Figs. 9a, b**). It was associated with a thick mud floor, broken and scattered mud bricks and pottery of the IA. Work was interrupted because of the discovery of an Islamic tomb, but it likely that this part of the tall would have produced further important finds if work could have been continued.

Of exceptional interest and importance were trenches P14 and P15. These were situated on

the east side of the tall, near the summit (**Figs. 10a, b**). Foundations of stone walls mixed with broken mud bricks were found in Trench P14 and which probably belonged to a rectangular tower of a fortification wall encircling and protecting the settlement (Bunimovitz 1992: 221-33; Filkenstein 1992: 201ff; Kempinski 1992: 127-42). Additional and similar architectural remains were found in the adjacent trench P15 indicate a second tower there. LBA sherds were







9b. Trench L8.



10a. Trenches P14-P15.



10b. Trenches P14-P15.

scarce but considerable. IA pottery was recovered (**Fig. 10c**) in addition to basalt and stone grinders, flint tools, fragments of carbonized wooden posts and two fossil shells. The most important discoveries however, were two small  $t\bar{a}b\bar{u}n$ -like metallurgical smelting furnaces, containing a few bronze ores and slags (**Fig. 10d**). These may indicate that smelting activities were

undertaken in this area (Branigan 1974; Catling 1964; Tylecote 1970: 285).

Investigation of the EBA cemetery continued (**Fig. 11**). The rock-cut tomb B4 was totally cleared, revealing an intact burial of an adult in a slightly contracted position (**Figs. 12, 13**) and the disarticulated remains of a number of other individuals. Several joining sherds and



10c. Trenches P14-P15. LBA and Iron Age pottery.



10d. Trenches P14-P15. Bronze ores and slags.



11. EBA cemetery, from W.



12. Rock – cut tomb B4 and burial in situ.



13. Rock – cut tomb B4 and burial in situ.

other small finds (glass beads, flint blades, etc.) were collected from this tomb and the adjacent tomb B5 (**Figs. 14a, b**) both dated to EBA I-II period. A brief search for other intact tombs was unproductive as tombs A3 and B3 were found empty (**Figs. 15, 16**), but this does not rule out the future discovery of unlooted tombs in this



14a. Rock – cut tomb B5.



14b. Rock – cut tomb B5.





16. Rock – cut tomb A3,B3. EBA pots and small finds.

extensive cemetery (over 50 looted tombs were counted).

Work continued at Tall al-Kafrayn during

2006 with the opening of sixteen new trenches and the re-investigation of trenches P14, P15 on the east slope and N1 on the summit. Part of an

extensive complex of architectural remains has been revealed on the leveled top of the tall, possibly consisting of a central major building in N13 and some adjacent buildings to the north, south and east in trenches L13, M12-15, N14, O11-13, P11-13 (**Fig. 17**). The occurrence of Islamic tombs in most of these areas prevented further clearance during this season.

Noteworthy was the discovery, south of the central building, of a low-stepped, roughly rectangular structure, built of fine ashlar masonry (**Fig. 18**), which might provisionally be interpreted as the altar of a shrine (Wright 1985: figs. 138, 140, 154, 175) but which awaits verification by further work. On the northern side of the tall, just below the summit, in trench O11 (**Fig. 19**), stone and mud brick walls were revealed belonging to a room with a low platform and a small casing built of upright standing slabs. This room seems to have had a unique function not altogether understood at present. Part of a vertical wall positioned on a north-south axis was



18. Low – stepped rectangular structure (altar of a shrine?).

found in the adjacent trenches P11-12 and a circular well-built *silo* or *bothros* was unearthed in trench Q13 (*cf.* Dothan 1977: 865 for comparisons) (**Fig. 20**). Other finds from trenches O11 and P11-12 include pottery (the upper part of two flasks), stone tools and small objects (**Fig. 21**).



17. Ceneral plan of the central building.



19. Trench O11.



20. Trench Q13: Circular well-built silo or bothros.



21. Trenches O11 and P11-12: Stone tools.

Further work on trenches P14-15, revealed additional architectural remains consisting of stone walls and fallen mud bricks (**Figs. 22**, **23**) mixed with LBA / IA I-II pottery, including an IA broken *pithos* jar (**Figs. 24, 25**). Further north, half of trench P13 consisted of a rock-cut floor with two narrow irregular channels running north-south of unknown use (natural cracking of the bedrock?) while the other half of the trench was much disturbed (**Fig. 26**). This context produced abundant IA pottery, including the upper half of a flask and two glass beads.

The two new trenches, K19 (Fig. 27) cut on the south slope of the tall, and K18 immediately below it, were both much disturbed but produced IA I-II pottery and remains of burned wooden beams similar to those found in the same area during the previous three seasons. One of these was over a meter long and most probably belonged to a collapsed ceiling and roof. Trench V8 (Fig. 28), opened on the north-east slope of the tall in an area destroyed by bulldozer activity, revealed two successive layers of habitation, dated on the basis of the pottery and other artifacts (stone grinders and whorl-fossils) to the IA I-II period (Fig. 29).

Investigation of the EBA cemetery was suspended as three trial trenches cut among the previously excavated tombs B4 and B5, were unproductive. We had, however, the chance to visit a private collection, ostensibly originating from the cemetery, in the village of Tall al-Kafrayn. With the kind permission of the owner, we were allowed to study the prehistoric objects, which included fifteen EBA vases, similar to those found in our excavations of the EBA cemetery (**Fig. 30**).



22. Trenches P14-15: Architectural remains.



23. Trenches P14-15: Architectural remains.



24. LBA/Iron Age I-II, big pithoid jar.



25. LBA/Iron Age I-II pottery.



26. Trench P13.



27. Trench K19.

-294-



28. Trench V8.



29. Trench V8: a whorl fossil from Iron Age I-II.



30. EBA vase from a local private collection.

During the 2007 season work was continued on the top of the tall and the south-east slope. On the summit was a complex of buildings that had been partially revealed during the 2005 and 2006 seasons. Further work on fourteen new and four old trenches brought to light new architectural remains and finds, which indicated the importance of this area.

Resumed excavations in trench N13, at the centre of the top of the tall, confirmed our 2006 view that a large three-roomed building existed there (Fig. 31). It was decided to clear this carefully, beginning with a rectangular room 3.50m x 3.10m. The foundations of the walls of this room consisted of large well-laid stones, preserved to a height of 0.75-0.80m. The floor was formed by partially cutting the bedrock and partially paving with clay or beaten soil. The discovery of scattered and collapsed mud bricks indicates that the stone walls had a mud brick superstructure. Noteworthy was a well-preserved entranceway, 1.2m x 0.9m comprising a flagstone threshold (Fig. 32) at its north-east corner, leading from the eastern open court to the interior of this room.

Immediately to the east of trench N13, in trench O14, the second larger room was constructed in a similar style to the first room and measured 5.60m x 3.50m. In the southern wall of this second room was another doorway, leading to the third room of the central building. It had well-constructed jambs and two large orthostats, approximately 0.80m high, standing vertically 0.60m apart (cf. Daviau 1992: 152, Pl. II:1). All three rectangular rooms communicated with each other via a smaller interior doorway at the northern corner of an adjoining wall. The discovery of a few MBA and LBA sherds and many IA sherds (Fig. 33) indicated that this building was used over an extended period. Other finds included two bronze pins and some stone implements. Of note was a rectangular gaming stone, bearing seven rows of seven shallow circular impressions on its upper surface, and a chessshaped design on its left side (Figs. 34a, b). A similar gaming stone was found at Tall al-Kafrayn in trench M16 during the 2004 season, and similar objects are also known from 'Arad and Umm Saysabān (Amiran and Ilan 1992: 76-77; Hübner 1992: 67-71; Lindner et al. 2001: 291, fig. 9; Papadopoulos 2007: 182, fig. 9).

It was determined that special attention would be given to the plan of this three-roomed building, in order to ascertain its function and association with other structures adjacent to it. However, this proved a difficult job, due to the





presence of recent Islamic tombs, which had destroyed much of the monument. Even so, its thick walls, large size (*ca.* 9.00m x 3.10-3.50m) and its location at the centre of the tall, suggests a different function from common domestic habitations and it might be hypothesized that this house was the residence of a person of high status, possibly a local leader or governor. Future excavation will help us to determine its use, especially since a great part of the tall is as yet unexcavated.

Trench P13, east of the central building, produced only a few pottery sherds and a rectangular cutting in the bedrock 2m x 1.13m x 0.50m (**Fig. 35**). This could be interpreted as a reservoir for collecting and storing water for everyday domestic activities.

Northwest of the three-roomed building, in trenches M12 and M13, there were parts of two separate, easily discernible foundation courses of defense walls, 13.50m in length (**Figs. 36a**, **b**). These suggest that the settlement was forti-



32. Three-roomed building with its doorway at its NE corner.



33. Trench O14: MBA, LBA and Iron Age pottery.



34a. Trench O14: Rectangular gaming – stone.

fied at least twice during its occupation, but only future excavation will verify the sequence.

Further work in trenches M14 and M15 revealed scanty architectural remains, as a result



34 b. Trench O14: Rectangular gaming – stone.



35. Trench P13.



36a. Trenches M12-13.

of the presence of at least six Islamic tombs. No definite interpretation of use of the rectangular structure was therefore possible, as pottery and other objects, which might help to establish the function of the structure as "cultic" were absent. Noteworthy however, was the finding in this



trench of a partly preserved  $tann\bar{u}r$  or  $t\bar{a}b\bar{u}n$ like bread oven (**Fig. 37**) similar to that found in trench J17, on the southern slope of the tall (Flanagan *et al.* 1996: 279, fig. 18; Steen 1991: 135-53; Politis 1995: 479, fig.4).

Work was continued in trench P15, on the east side of the tall, which had produced in previous seasons a possible metallurgical smelting  $t\bar{a}b\bar{u}n$  or fire pit. During this season, work on the deeper levels reached the bedrock, upon which was observed successive well-built walls of irregular small and large stones and mud bricks (**Fig. 38**). Seven stratigraphic layers have been distinguished, corresponding to at least three main building phases and other activities on this part of the tall. Finds include IA sherds, fragments of stone vases, basalt grinders, flint



37. Trench M14: Tannūr or tābūn type bread oven.

36b. Trenches M12-13.



38. Trench P15.

blades, shells and fossils (Fig. 39).

Finally, an effort to locate new EBA tombs at the eastern foot of the tall (trench 021) was unproductive, but revealed part of an east-west oriented wall, the preserved dimensions of which were 5.00m wide x 1.20m high x 1.10-1.60m long (**Fig. 40**) and which has been interpreted as a retaining wall. It is not surprising that as a consequence of the steepness of the tall slope, retaining walls had an important function at Tall al-Kafrayn.

During the 2008 season, work was continued on the top of the tall and on the east, south and north slopes. In the first instance, the area where a complex of buildings had been partially revealed during the last three seasons (2005, 2006 and 2007) was found to be badly disturbed by



39. Trench P15: Finds (fragment of stone vase, flint blade, shell).



40. Trench O21.

local looters, however, repairs were made to the damage areas and most of the walls were able to be restored. Further work brought to light new architectural remains and artifacts, strengthening the view that Tall al-Kafrayn was an important settlement of the LBA and IA.

Trench L14 was opened near the southwest edge of the summit, the purpose being to shed more light on the probable use of the area around the central tripartite building. The natural bedrock was exposed throughout the trench, producing among other finds a small iron spearhead, scraps of iron and two bronze hair-rings. In its northeast section, a layer of ash and burnt mud brick were uncovered but the most intriguing find was a big IA IIA-B amphora, almost totally embedded in the debris and lying upright *in situ* in a cutting close to the western edge of the trench (**Figs. 41a, b**). Its presence may be indication of a storeroom there. In the adjacent trench, L15 a plaster-lined water channel 2.15m long x 0.20-0.25m wide x 0.17-0.20m deep, partly covered with large flagstones, was discovered extending from the northwest section to the opposite end of the trench (**Fig. 42**) (*cf.* Flanagan *et al.* 1992: 102, figs. 16 and 17).

An effort was made to continue work begun the previous year in the partially explored trench O14, but the presence of some Islamic tombs prevented us clearing it out. Among the finds, the most important was a pottery sherd bearing an inscription (**Fig. 43**) not easily readable ("*m sh* k t and n ts b" or "*MfiKT* N, B"; Aramaic, Ammonite or Phoenician?) but showing similarities with some *ostraca* from Hisbān (Heshbon) or Assur dated to ca. 650/600BC<sup>1</sup>.

<sup>1.</sup> We warmly thank Dr Kay Prag for useful discussion and references and Professors A. Millard and P. Bordreuil for their help on the transliteration of the script and the dating of the ostracon. The well-written script seems to me to be Ammonite, perhaps from about 600BC, maybe slightly later. It shows similarities with some ostraca from Hisban. The letters of the two words preserved I read as m sh k t and n ts b; the letter at the right edge may be the end of a z, but I hesitate to read the marks at the left edge. What m sh k t and n ts b mean, I am unable to say m sh k t could possibly be "skins" or "cords"; the feminine plural ending — of being written without the

vowel letter w. *n ts b* may have to do with setting something up or be a noun meaning "stele" (A. Millard, *pers. comm.*). "Le caractère incomplete du texte n'en facilite pas la comprehension; au début de l'inscription, on un /B/. Aprés la fin du dernier mot, on voit des traces de deux ou trios letters que je ne parviens pas à identifier. L'incription elle-même se lit ainsi: ...x MfiKT N" "B" xxx... L'écriture pourrait être phénicienne, mais l'ostracon araméen d'Assour (# 650BC), présente les parallèles les plus pertinents pour chacune des letters. Les sens du premier mot (MfiKT) m'échappe encore, mais "N" "B"



41a. Trench L14 and Iron Age 11A-B amphora.



41b. Iron Age 11A-B amphora.

On the south slope of the tall a new trench, J16 was opened just above trench J17. Part of a wall 2m x 1.20m was found associated with many mud bricks, abundant IA I-II pottery and stone and flint tools. Of special importance was the discovery of a krater sherd with a frieze of a stamped cultic scene, showing a nude man raising his left hand and a ritual vessel placed on an incense altar (**Fig. 44**). This scene is identical to one known from a krater found at the nearby Tall Nimrin (Flanagan *et al.* 1992: 93, 106 PI I:2, II:1) published by Dornemann (1995:



42. Trench L15: Plaster – lined water channel.



43. Trench O14: Incribed pottery sherd.

621-28) and now housed in the archaeological museum of 'Ammān. It has been suggested by the excavators that the motifs are Egyptian and Mesopotamian and they have dated them to the



44. Trench J16: Krater sherd.

seventh century BC. An alternative identification of the motifs are proposed by Dr Kay Prag, who dates it to the very end of the IA or Persian period and argues against its uniqueness, citing several parallels from other sites in the region, including En Gedi, Ramat Rahel, Busayra in Edom and Tall Iktānū on the Wādī Hisbān (Bennett 1975: 15, figs 8: 9-10; Mazar 1993: 402; Mazar and Dunayevsky 1967: 137, Pl. 31: 5; Stern 1978: 11-21; Prag 1989: 40-44, fig. 8: 6). Prag suggests a local origin, perhaps influenced by Syrian/Assyrian, Phoenician, Phrygian or even Greek contemporary specimens "The current distribution of the style, on the western shore of the Dead Sea, in the south-east Jordan Valley, and the southern Transjordan plateau, is coherent and appears to testify not just to local ceramics, but to a very localized set of eclectic art forms which are likely to reflect the stories and cultural *milieau* of the contemporary population, where perhaps the influences are Syrian/ Assyrian as much as Phoenician...There seems no reason to look further a field for the origin of this style than in tracing the broader aspects of a very eclectic art history - whether Assyrian, Phoenician, Egyptian, Phrygian or Greek, and note the reinforcement of these cultural affiliations across the contemporary political boundaries" (2001: 228-32).

Turning to the north slope of the tall, work in trench Q17 brought to light part of a wall 10.45m long (**Fig. 45**), most probably a section of the main fortification wall, another part of which was found in 2007 on the northwest slope of the tall. Work was also continued in the adjacent trench P11, producing IA I-II pottery and several small objects (**Fig. 46**) and in trenches P14 and P15, on the east side of the tall, where a metallurgical furnace / oven was found in an earlier season. The 2008 season proved largely successful and we now understand the stratig-



45. Trench Q17.



46. Trench Q17: Iron Age I-II pottery.

raphy of this sector much better than before, i.e. digging on its deeper levels we reached the bedrock and revealed successive walls built of irregular small and large stones and mud bricks. The re-analysis of the stratigraphic sequence shows that six to eight layers can be distinguished (**Figs. 47, 48**) which correspond to at least four main phases of construction activity on this part of the tall. It has been suggested on the basis of the pottery (**Fig. 49**) that habitation



48. Trenches P14-15: Stratigraphic profiles.

on this part of the tall was continuous from the end of the LBA to the late IA.



47. Trenches P14-15.



49. Trenches P14-15, Pottery sherds.

At the northeast corner of trench O15 a number of clay weaving and loom-weights were found (*cf.* Daviau 1994: 185, 1996: 86, 91) placed in a small rectangular cist made of mud bricks (**Figs. 50a, b**). These suggest the existence of a domestic quarter of the settlement where textiles were produced.

An exploratory trial trench  $11m \ge 2m \ge 4m$ was opened on the north slope of the tall running from the summit to its base (**Fig. 51**). The purpose of this trench was to examine the long stratigraphic sequence in this area. During this season six successive layers were distinguished and of special interest was the finding of a substantial retaining (?) wall 1.90m high  $\ge 2.20m$ 



50 b. Trench O15: loom weights.

in length (**Fig. 52**). On the basis of the ceramics and other finds (**Figs. 53, 54, 55**) collected from the base of the wall its construction can be dated to the IA I, but as yet there is no stratigraphic relationship between the retaining wall and other walls situated on the slopes of the tall. Nevertheless, it is reasonable to postulate that continued investigation of the north slope of Tall al-Kafrayn will certainly produce more stratified evidence as the uppermost layers of the squares excavated on the slopes showed much less modern disturbance than other areas.

In summary, the overall picture on the top of the tall, as it has been revealed by the work Phase II, 2005- 2008, is more or less clear: an important, monumental three- roomed building existed there with open courts to its northern and southern sides and well-constructed doorways leading to its interior. A substantial double de-



50 a. Trench 015: Clay weaving and loom weights in the NE corner.



51. Exploratory trench, strong retaining wall.



52. Exploratory trench, strong retaining wall.

fensive fortification wall, reinforced at intervals with watch towers enclosed the upper perimeter of the tall, providing efficient protection for the settlement complex (**Fig. 56**). Pottery and other finds (**Figs. 57, 58, 59, 60, 61**), suggest that tall Kafrayn was occupied from the EBA through to the Late IA.

The disturbance caused by the construction of Islamic tombs on the top of the tall prevented us reaching a definitive explanation for the probable use and chronology of the threeroomed building. The hypothesis that this was a local sanctuary or administrative centre for the management of agricultural activities and the control of trading routes is by no means certain. Only further work will give an answer to this problem.

Finally, running concurrently with the fieldwork was the study and preparation for publication of the artifacts, carried out by members of the expedition (**Figs. 62, 63**). Care was taken ensuring the protection and preservation of the excavated architectural remains by a team of specialists working with the project. In addition, a staircase was built on the northeast slope of the tall (**Fig. 64**) in order to make easier the access to excavation areas on the summit and the Department of Antiquities of Jordan built a fence to protect the tall from illicit intruders.

## The Animal and Human Skeletal Remains

The faunal and human skeletal remains re-



T.J. Papadopoulos and L. Kontorli- Papadopoulos: Tall al-Kafrayn Excavations 2005-2008

56. Tall al-Kafrayn: Plan of the architectural remains on its top.

covered during excavations were separately collected. The majority of the examined faunal remains represented sheep/goat (140 bones and 46 teeth). Twenty-six bones represented cattle. One tooth and four bones came from rodents. In addition, the semi-articulated fairly complete skel-



57. Selection of pottery profiles and various finds.



58. Selection of pottery profiles and various finds.



59. Selection of pottery profiles and various finds.



60. Selection of pottery profiles and various finds.



61. Selection of pottery profiles and various finds.

eton of a sub-adult sheep/goat was excavated in trench P14, locus 1b.

Nine human bone specimens were collected from trenches N15-O15, representing at least one adult and one juvenile, probably aged not less than  $4\pm$  years. The incomplete post-cranial skeleton (less than 15%) of a juvenile, probably 3 to 4 years old was recovered from trenches L14-M14. Moreover, in two cases the author undertook herself recovery of skeletal material located by members of the excavation team. In trenches P-Q 14-15, locus 11, she recovered one complete occipital bone (posterior cranium). Thorough cleaning of the area revealed no further human bone. Based on the morphology of the superior nuchal line and external occipital protuberance on the ectocranial surface, this was identified as a male individual. As the lambdoid suture is mainly unfused, it may be tentatively suggested that he died at a rather young age. The size and morphology of this bone, however, is indicative of an adult individual (Dr Argyro Nafplioti, pers. Comm.) (Fig. 65).

## **Concluding Remarks**

Although many questions remain regard-



62. The dig house and preparatory works for publication of the finds.



63. The dig house and preparatory works for publication of the finds.

ing the precise function and dates of the various strata and architectural features discovered during Phase II of the Project, some general and



64. Staircase built on the NE slope of Tall al-Kafrayn.



65. Dr. A. Nafplioti working on the animal and human skeletal remains.

tentative conclusions can be drawn.

Excavations to date have confirmed the great scientific importance and potential of the site, identifying it as a multi-period settlement. Further excavation will certainly provide precious archaeological data and information about the character of the site, its construction phases and the ways of life of the people who lived there, including their burial practices.

On the basis of the evidence available from the tall and the adjacent EBA cemetery, one might provisionally suggest that the site of Tall al-Kafrayn was inhabited from Early Bronze Age times with the floruit during the Iron Age. There is some evidence from pottery of a limited Late Bronze Age occupation, but no architectural remains fill the gap observed also at other sites of this area, such as Tall al-Hammām, Tall Iktānū and Tall Nimrīn (Dornemann 1990: 153-81; Flanagan et al. 1990: 131-52, 1992: 89-111, 1994: 295-344, 1996: 271-92; Prag 1974: 69-116; Prag 1991: 55-66). It seems, however, that life on the site in the different periods was dominated by strategic, as well as economic and political factors. Of great interest is the discovery on the top of the tall of a monumental complex of buildings, possibly including an altar(?). In addition, a metallurgical smelting *tābūn*-type oven, carbonized wooden beams and cereal seeds, clay weaving and loom-weights, indicate small-scale local industry, handy crafts and domestic and possibly ritual activities all took place at the site.

Equally important is the occurrence of some possibly imported objects, for example, an alabaster cosmetic palette, the gaming stone with rows of circular impressions, an Attic red-figured vase fragment and the krater-fragment with stamped cultic scene. All these objects suggest links with Egypt, Syria/Assyria, Palestine, Phoenicia, Phrygia, Cyprus and Classical Greece.

Tall al-Kafrayn, like the adjacent and much larger Tall al-Hammām, may indeed hold key pieces of the archaeological puzzle from which a greater comprehension and appreciation of the regional history can emerge, a reasonable expectation based on the important finds and its strategically dominant location in the Jordan Valley. We strongly recommend the continuation of our excavation project.

#### Acknowledgements

The authors of this report are especially indebted to Dr Fawwaz al-Khreysheh, Director General of the Department of Antiquities.We thank our Jordanian colleagues, Profs. L. Khalil, M. Ibrahim, Z. Kafafi and O. Ghul, as well as Dr K. Prag (University of Manchester, U.K) for visiting and discussing with us some special topics. We would also like to thank, Saad al Hadidi (2005, 2008), Ahmad Juma al-Shami (2006) and Jehad Haroon (2007) representatives of the Department of Antiquities. Khalil Hamdan, Husam Hjazeen and Aktham Oweidi, archaeologists of the Department of Antiquities, as well as and especially Hussien al-Jarah of the Dayr 'Alla office, for their help and good cooperation. We are deeply grateful to the authorities of the University of Ioannina and the Greek Ministries of Culture and Foreign Affairs for their generous financial support, as well as to the Hellenic Embassy in Amman, especially the H.E. ambassadors J. Kambolis and T. Paraskevopoulos for their constant support and help. Special thanks are also due to the Greek Orthodox Patriarchate of Jerusalem and its representative in Mādabā, archimandrite Innocentius for offering hospitality to the members of the expedition at the "Pilgrim's House" of the Saint George Monastery in Mādabā and to the Director of City Planning and Irrigation in the area of south ash-Shūna for offering the basement of his office for study and temporary storage of the excavation tools and the finds from Tall al-Kafrayn.

Our warm thanks go to our colleagues Profs. A. Mantas (University of Ioannina), K. Palyvou (Polytechnical School of Thessaloniki) and X. Moussas (University of Athens) for their scientific assistance. Trench supervisors and close collaborators in our excavations in Jordan and Greece, include archaeologists .V. Chrysikopoulos, M. Sofikitou, D. Meggidis, M. Nikolakaki, N. Mavroudi and post-graduate students in Archaeology of the Ioannina University: E. Papadopoulou, K.T Heodoridis, K. Paschalidis, D. Basakos, S. Thermos, A. Tsonos, S. Oikonomidis, G. Panousopoulos, I. Angelletopoulos, I. Giannakakis and K. Lambri. We sincerely thank also the following specialists who participated on the project: S and E. Tzimas, A. Toya, A. Lagopoulos (architects), Suleiman Al-Jamal (surveyor), Dr A. Nafplioti (archaeologist-osteoanthropologist), Dr I. Maniatis (Demokritos Laboratory, C14 dating), K. Zervaki (M.A. conservator) and D. Chatzhliou (photographer).

Thanasis J.Papadopoulos Papadop7@gmail.com

Litsa Kontorli-Papadopoulou Kontorli.litsa @gmail.com Department of History and Archaeology University of Ioannina-Greece

#### References

- Amiran, R. and Ilan, O.
  - 1992 Arad, eine 5000 Jahre alte Stadt in der Wüste Negev, Israel. Veroffentlichungen de Hamburger Museums fur Archäologie N.64. Hamburg.
- Aslihan Yener, K.

2000 The Domestication of Metals. The Rise of Complex Metal Industries in Anatolia. Leiden: Brill.Bennett, C.M.

- 1975 Excavations at Buseirah, Southern Jordan, 1973: Third Preliminary Report. *Levant* VII: 1-19.
- Branigan, K.
  - 1974 Aegean Metalwork of the Early and Middle Bronze Age.
- Bunimovitz, S.
  - 1992 The Middle Bronze Age Fortifications in Palestine. *Tel Aviv* 19: 221-33.
- Catling, H.W.
- 1964 Cypriot Bronzework in the Mycenaean World.
- Daviau, P.M.M.
  - 1992 Preliminary Report of the Excavations at Tell Jawa in the Madaba Plains (1991). *ADAJ* 36: 145-62.
- Dornemann, R.H.
  - 1990 Preliminary Comments on the Pottery Traditions at Tell Nimrin, Illustrated from the 1989 Season of Excavations. ADAJ 34: 153-81.
  - 1995 Preliminay Thoughts on the Tell Nimrin Krater. *SHAJ* V: 621-28.
- Filkenstein, I.
  - 1992 Middle Bronze Age Fortifications. A Reflection of Social Organization and Political Formation. *Tel Aviv* 19: 201ff.

Flanagan, J.W. and McCreery, D.W.

- 1990 First Preliminary Report of the 1989 Tell Nimrin Project. ADAJ 34: 131-52.
- Flanagan, J.W., McCreery, D.W. and Yasine, K.N.
  - 1992 Preliminary Report of the 1990 Excavation at Tell Nimrin. *ADAJ* 36: 89-111.
  - 1994 Tell Nimrin: Preliminary Report on the 1993 Season. *ADAJ* 38: 205-44.
  - 1996 Tell Nimrin: Preliminary Report on the 1995

Excavation and Geological Survey. *ADAJ* 40: 271-92.

Hübner, U.

1992 Spiel und Spielzeug in antiken Palästina. Göttingen.

Kempinski, A.

1992 Middle and Late Bronze Age Fortifications. Pp 127-42 in A. Kempinski, R. Reich (eds.), *The Architecture of Ancient Israel from the Prehistoric to the Persian Periods.* Jerusalem.

#### Mazar, B.

1993 En-gedi. NEAEHL II: 399-405.

Mazar, B. and Dunayevsky,

1967 En-gedi: The Fourth and Fifth Seasons of Excavations. Preliminary Report. Israel Exploration Journal 17/3: 133-43. Papadopoulos, T.

2007 The Hellenic Archaeological Project of the University of Ioannina in Jordan: A Preliminary Synthesis of the Excavation Results at Ghawr as-Safi and Tall al-Kafrayn (2000-2004). *SHAJ* IX: 175-91.

Prag, K.

2001 Figurines, Figures and Contexts in Jerusalem and Regions to the East in the Seventh and Sixth Centuries BCE.

Tylecote, R.F.

1970 Metals and Materials 4/7: 285.

Van der Steen, E.J.

1991 The Iron Age Bread Ovens from Tell Deir Alla. ADAJ 35: 135-53.

Wright, C.R.

1985 Ancient Building in South Syria and Palestine.