Ancient Settlement in the Zammar Region

Excavations by the British Archaeological Expedition to Iraq in the Saddam Dam Salvage Project, 1985-1986

Volume 1: Introduction and Overview
Excavations at Siyana Ulya, Khirbet Shireena, Khirbet Karhasan, Seh Qubba, Tell Gor Matbakh and Tell Shelgiyya, and other recorded sites

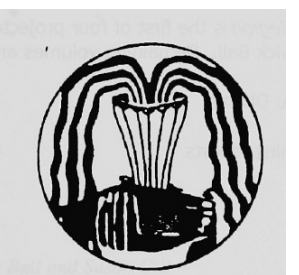
Edited by

Warwick Ball

with contributions by
Stuart Campbell, Susan Gill, Anthony Green, Marion Pagan, St John Simpson and David Tucker

Foreword by

Michael Roaf



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FOREWORD

by Michael Roaf

The excavations in the Zammar region by the British Archaeological Expedition to Iraq lasted from September 1985 to June 1986. In this period of rather less than ten months the expedition excavated on seven sites and surveyed a further 28 archaeological sites. The recording of the excavations and of the finds was done in the field and it is a tribute both to the organisational ability of the director, Warwick Ball, and to the enthusiasm and dedication of the members of the expedition that they were able to achieve so much in such a short time in very difficult conditions.

This volume is the first of the final reports on these excavations. It deals with excavations at six of the sites and with the survey work. A second volume will deal with the excavations at the large site of Tell Abu Dhahir. Further projected volumes will present the pottery and the specialist reports.

The British have been closely involved with the archaeology of Iraq from the time of Rich's researches at Babylon and Layard's discovery of the Assyrian palaces in the nineteenth century up to the present day. For the last sixty years much of this work has been conducted under the auspices of the British School of Archaeology in Iraq, and a very readable account of the main excavations undertaken by the School during the first years has been published (Curtis 1982). In 1978 a new phase started with the School's participation in rescue projects where sites were threatened by flooding through the construction of dams on the major rivers, first in the Hamrin Dam Salvage Project on the Diyala, then in the Qadissiyeh (or Haditha) Dam Salvage Project on the Euphrates, and then in the Saddam (or Eski Mosul) Dam Salvage Project on the Tigris (Postgate and Roaf 1981, Killick and Roaf 1983, Black and Killick 1985, Ball and Black 1987). In each of these projects Iraqi and foreign archaeologists cooperated in trying to recover as much information as possible before the sites were drowned.

The British effort in the Saddam Dam Salvage Project was initially concentrated in the region on the left bank immediately upstream from the dam itself, particularly the site of Tell Mohammed Arab which provided much information about the Later Uruk, Ninevite 5, Middle Assyrian and Hellenistic periods. Other nearby sites were also excavated, both by the British Archaeological Expedition to Iraq and by teams from the British Museum, Manchester University and Edinburgh University (Roaf 1983, 1984, Roaf and Killick 1987). In the course of three years (1982-1985) the archaeological picture of the region was filled in, though certain periods were not represented in the excavations. Remains of the Ubaid, Earlier Uruk, Akkadian, Khabur, Parthian, Sasanian and Islamic periods were only sparsely encountered. Furthermore, the area allocated to the British Archaeological Expedition to Iraq did not correspond to any natural geographical region and the hilly countryside not surprisingly lacked any major administrative or population centres.

On 20th March 1985 the dam was closed and over the next few days the waters rose inexorably, bringing to an end the work of the School in the region of Tell Mohammed Arab. Even before that some consideration had been given to what future work could usefully be carried out. After discussion with the Iraqi authorities it appeared that the most interesting region was on the right bank of the Tigris upstream from Zammar. The area around Tell Abu Dhahir still required investigation and was in imminent danger of being flooded. Here was an opportunity to choose a relatively prosperous area and to examine its settlement history from the early Neolithic to the present day. Warwick Ball, a very experienced archaeologist who had worked extensively throughout the Middle East, was invited to head the expedition and successfully completed work in the Zammar region before moving his field of operation to the site of Tell al-Hawa and its surrounding area.

Experience had already shown that even the most careful sherding of sites often failed to provide evidence of all the periods during which they were occupied. Furthermore, for those periods for which the ceramics are not well known, the excavation of even a small sample of well stratified pottery is essential in order to sort out the chronological indicators for the periods concerned. For these reasons it was decided to investigate and excavate as many sites as the limited resources would allow. The seven excavated sites have provided information about the history of settlement in the region from the Hassuna period to the present day. Even though little substantial architecture was found in the course of these excavations a clear picture of the development of the region has been revealed.

The complete destruction of the small site of Siyana Ulya after being flooded for a single summer demonstrates how much archaeological information has been lost through the flooding of these fertile regions. In forty years or so when the dams have silted up it may be possible to reexamine the area now under water by digging through the overburden of silt, but even if the position of the archaeological sites could be located many

of them will have been washed away by the waters of the dam. The record of the excavations made in the final months before the flooding is therefore of great importance.

The detailed record presented here is the first stage in making available the results of these investigations which will gain their full significance when the volumes dealing with the ceramics and other finds have been published.

ACKNOWLEDGEMENTS

The project was a joint one between the British Archaeological Expedition to Iraq (BAEI) and the Iraq State Organization for Antiquities and Heritage (SOAH). Under an agreement governing this and other salvage operations, the British provided the staff and all specialist equipment, and the Iraqis provided workmen, field housing and digging equipment. I would like to thank the Iraq State Organization for Antiquities and Heritage for inviting us to participate in the Saddam Dam Salvage Project under such generous terms, and in particular the Organization's President, Dr Mu'ayyad Sa'id Damerji, without whose support the Project would not have been possible. The British side was supported by generous grants from the British Academy and the British School of Archaeology in Iraq, and I would like to thank the respective Councils of both institutions for this support.

The success of the season was largely due to the hard work and goodwill of a number of people. Dr Behnam Abu al-Soof, then Director-General of the Northern Region for the SOAH, showed an active interest in and support for our work, both during his site visits and in Mosul and Baghdad. It was entirely due to his enthusiasm and encouragement that we were able to cover as much ground as we did. He and his deputy in Mosul, Mr Mohammed Sobhi Abdullah, gave all the material assistance that they and their staff had at their disposal. Our representative, Mr Moslem Mohammed, was particularly helpful in this respect, despite the many demands made on his time by his commitments at Tel'afar. Thanks are also due to Mr Salem Yunis, of the Mosul Office, for his help in many administrative and logistic matters, and to the many other members of staff of the SOAH, both in Mosul and Baghdad, who dealt with all the administrative problems of obtaining visas and permits for all the members of the expedition. The Mudir al-Nahiya in New Zammar kindly allowed us the use of government housing in Bardiya. Professor Fuji of the Japanese Archaeological Mission very kindly lent us a vehicle after the final collapse of one of our own. Mr George Johnson of John Laing International also provided considerable material help. Dr Jeremy Black and Dr Robert Killick provided the essential formal, logistical and moral back-up services of the Expedition house in Baghdad. In addition, the work in Mosul of Dr Anthony Green, who was completing the work of the British Museum Expedition at the Nineveh dig house, and Ms Jo Hall, of Macquarie University, Sydney, did much to improve relations with the SOAH and create a good atmosphere generally.

Personal circumstances necessitated my being absent from the excavations briefly from time to time, particularly for the last few weeks of the season when I had to return to Britain. I am therefore very grateful to Dr Anthony Green and Dr Trevor Watkins who, at different times, were able to take over as acting director of the excavations during these absences.

As always in fieldwork, however, by far the greatest support comes from the members of staff who, over the ten months in the field, made up the team. It goes without saying that without their skills, their hard work, and their good company, none of the results would have been possible. The team consisted of: Bronwen Campbell (surveyor), Stuart Campbell (site supervisor, Tell Gir Matbakh), Timothy Clayden (site assistant, Tell Abu Dhahir and Khirbet Shireena), Caroline Davies (lithics analyst, registrar and site supervisor, Tell Shelgiyya), Isabelle Doumet (conservator), Susan Gill (site supervisor, Siyana Ulya and Seh Qubba), Anthony Green (site supervisor, Khirbet Shireena), Wendy Matthews (ceramicist), Tessa Rickards (illustrator), St John Simpson (site supervisor, Tell Abu Dhahir) and David Tucker (site supervisor, Khirbet Karhasan). In addition, several more people were able to join the team for shorter periods, and I would also like to thank Heather Baker, Martin Clark, Paul Croft, Mark Dixon, Jo Hall, and Edward Luby for the extra work they put in. Two more people were attached to the team for short periods engaged on other research: Keith Dobney, working on the animal bones from Tell Mohammed Arab, was able to provide us with many valuable observations on our own faunal remains, and Esmee Webb was engaged in surveying for palaeolithic remains in the area and was able to offer many valuable observations on our own lithics.

The actual excavation of the material of course forms only a small part of any archaeological project; the subsequent processing and study of the material followed by the writing up takes as much work and far more time, and often involves as many people as the initial fieldwork. Much of this processing was carried out in the course of a study season held in the Citadel at Tel'afar from 8th October 1986 to 28th February 1987, and the remainder during moments fitted into the subsequent three seasons of the Tell al-Hawa Project over the following years. The study season team consisted of: Bronwen Campbell, Stuart Campbell, Imogen Grundon, Helen McDonald, Wendy Matthews, St John Simpson and David Tucker. The following people were able to carry out specialist studies of aspects of the excavations with the aid of grants and fellowships from the British School of Archaeology in Iraq: Bronwen Campbell (Roman pottery), Stuart Campbell (Tell Gir Matbakh; chalcolithic pottery), Anthony Green (Khirbet Shireena; Late Assyrian pottery), Leah MacKenzie (Hellenistic pottery), Wendy Matthews (Uruk pottery), Marian Pagan (Tell Shelgiyya; pottery type series), Alan Pipe (animal bone remains), Nigel Sadler (Ninevite 5 pottery), St John Simpson (Tell Abu Dhahir; Sasanian and Islamic pottery) and David Tucker (Khirbet Karhasan; the rosette hoard). In addition, Heather Baker carried out further studies of the Late

Assyrian pottery with the aid of a research grant from the G A Wainwright Near Eastern Archaeological Fund, Oxford, and Dianna Bolt carried out a study of the human bone remains whilst carrying out research for her University of California Ph.D thesis. Lucy Blue, Barry Flood, Isabelle Munsch, Louise Scott, Mark Shaw and Peter Sheehan drew the remainder of the pottery during the Tell al-Hawa seasons, and Susan Coliton photographed the pottery and additional small finds. Ruth Goldstraw, Virginia Neal and Jeanne Nijhowne conserved some of the objects (the former while a member of the British Museum team working at Khirbet Deir Situn).

In Britain Jane Gough typed up the manuscript of Tell Abu Dhahir, Graham Reed prepared most of the drawings for publication, and George Simpson and Ken Smith printed all the photographs. Youssef Al-Khatib translated the Summary into Arabic. Ellen McAdam and Anna Lethbridge carried out the laborious task of preparing the manuscript for typesetting, and Miranda Schofield and Amanda Patten did additional work on the drawings.

Much of the preparation and writing up of this volume was carried out in the early 1990s after my departure from Iraq with the aid of research grants from the British Academy, the British School of Archaeology in Iraq and the G A Wainwright Near Eastern Archaeological Fund, Oxford. The manuscript was finished in 1992.

Finally, I would like to take this opportunity to express a particular debt of gratitude to Professor Michael Roaf, my predecessor on the Saddam Dam and the former Director of the BAEI. He raised all of the funds for my own season and did all preliminary groundwork to ensure its success. In particular, the very cordial relations that we enjoyed with the authorities in the North were almost entirely due to the work Professor Roaf put in over the years in building up such good relations with the Iraqi authorities. On a more personal note, as a relative newcomer to Mesopotamian archaeology I was grateful to be able to benefit from his considerable experience and knowledge of both the country and the field, and his advice over the years on many matters, both administrative and archaeological, has been of immense assistance.

NOTE

This manuscript was completed in 1992 and then remained 'in press' until moved to the present publisher in 2002. Over the interim ten years I am naturally aware of new material published that ought to appear in the bibliography and is relevant to this work. In addition, with ten years hindsight one might have made some changes to the text. However, none of the new work considerably alters any of the conclusions here, and rather than embark on any major re-writing - which would have meant even more delay - the present work remains substantially as it was in 1992.

I would like to add particular thanks to David Davison and Rajka Makjanic of Archaeopress for their courtesy and unfailing efficiency in seeing this through press.

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CHAPTER 1

GENERAL INTRODUCTION

Warwick Ball

BACKGROUND

The Saddam Dam (also known as the Eski Mosul Dam) Salvage Project, on the Tigris river north of Mosul, was a major rescue operation initiated by the then Iraq State Organisation for Antiquities and Heritage (SOAH; now the Department of Antiquities and Heritage) to salvage sites threatened by the flooding of the new dam. From November 1982 to May 1986 the British Archaeological Expedition to Iraq (henceforward BAEI) worked on the project in two areas. For most of this time, up to March 1985, the work of the BAEI was concentrated in the area around Tell Mohammed Arab, on the left bank of the Tigris near the head of the dam. This work took place under the direction of Dr Michael Roaf, then Director of the BAEI (Roaf 1983 and 1984). This area was flooded in the spring of 1985, so in September 1985 the work of the BAEI moved upstream to the area around Tell Abu Dhahir, on the right bank about two-thirds of the way up the area to be flooded by the dam. This took place under the direction of the present author, then Director of Excavations of the BAEI (Ball 1987a; Ball and Black 1987). In the spring of 1986 most of this area was also flooded (see below), marking an end to British participation in the Saddam Dam Salvage Project, although excavations by other teams of some of the sites on high ground continued until 1988. The work of the BAEI then moved on to the nearby North Jazira Project, which to some extent evolved from the Saddam Dam Project. The Zammar season was therefore partly a continuation of the British work in the Tell Mohammed Arab area, and partly a preparation for the North Jazira Project.

The field season lasted for over eight months, with a subsequent study season of some five months. Furthermore, seven excavations were carried out over the season, with all the bulk of material to be processed, studied and published that seven excavations entail. For example, some 154,000 sherds were processed, compressed statistically into descriptions of some 350 pottery types and graphically into over 5200 pottery drawings. Although this report covers only a single season, the results are thus more comparable to those of a larger-scale project over several years.

THE AREA

The area of the new British 'concession' lay on the right bank of the Tigris approximately 100 km northwest of Mosul, in the Zammar sub-governorate (*nahiya*) of Nineveh Province (Fig 1). It was limited to the south-east by the area where the Soviet Expedition was working at Tell Shaikh Humsi (although we were informed that there would have been no objection to working on the mound of Shaikh Humsi cemetery adjacent if we wished), and to the north-west only by the Syrian border. This makes a total distance of some 35 km as the crow flies, or about 70 km along the riverbank. In addition, we were encouraged to work across the river on the left bank in Dohuk Province if we wished to do so, depending on the availability of a boat. We were also allowed to survey, though not excavate, around sites immediately adjacent to but outside the flood area on the North Jazira Plain itself. The area in which we worked therefore comprised about half the entire length of the Tigris within the Saddam Dam area, or about a third of the entire flood area itself, not counting the survey area outside this. The area that was to be flooded was an extensive one which contained at least 20 known sites, including one of the largest and most prestigious on the Saddam Dam, Tell Abu Dhahir, as well as numerous other interesting sites with a range of material from Hassuna to Later Islamic.

The main area comprised the rich, flat floodplain immediately surrounding Tell Abu Dhahir (Fig 2). The river valley widened to about one kilometre from the right bank for a distance of some 15 kilometres, bounded to the west and south-west by an abrupt escarpment rising up to the Jazira Plain. The four dominant natural features that influenced settlement in the area are: a ford across the river just opposite Tell Abu Dhahir, a naturally commanding bluff overlooking the valley at Seh Qubba, the agriculturally fertile alluvium surrounding Tell Abu Dhahir, and the river

itself. The area therefore seemed very well defined, so that studying the sites within it made good sense from both the geographical and cultural point of view, as well as conforming to rescue and logistical requirements.

The floodplain, even before the present dam project, was subjected to periodic inundation, so if there had been small single-period settlements there in the distant past they would not have survived. The escarpment above the floodplain consists of rocky hills rising up to several hundred metres in places, interspersed with seasonal wadis, which quickly give way to more undulating grasslands and then to the flat plain of the Jazira. Around Tell Gir Matbakh, the riverbanks consist of conglomerate cliffs 4-5m high, so that the surrounding countryside is not the rich floodplain found around Tell Abu Dhahir but gently undulating ground more suited to grazing, with no modern settlements, giving way to the low rocky hills that border the valley to the west – a continuation of the escarpment that borders the Tell Abu Dhahir area.

The first river terrace of the floodplain, only several metres in height, leaves the banks of the Tigris at Seh Qubba, then swings round to eventually join the escarpment near Shaikh Humsi. Tell Abu Dhahir, Khirbet Karhasan and Siyana are situated on this terrace, as well as most of the modern villages. It is possible that this represents a pattern of settlement on this terrace out of reach of any flooding, but since any settlements at a lower level in the floodplain itself might have been entirely washed away, such a pattern may be more apparent than real.

AIMS AND STRATEGY

The overall aim was to establish a detailed pottery sequence as an index for the area as a whole. In view of the fact that the area was little known archaeologically, this was considered a high priority. To achieve this we proposed to examine the area as a whole, rather than concentrating on any specific site, by sounding as many sites as time, workmen and logistics permitted, focusing on the large multi-period site of Tell Abu Dhahir which was clearly the 'type site' for the area and one of the main sites within the Saddam Dam. Accordingly, a large quantity of nearly all pottery types present from securely stratified contexts was examined in detail, giving a virtually unbroken sequence from the Neolithic to the Islamic periods.

It was also intended that the excavations should

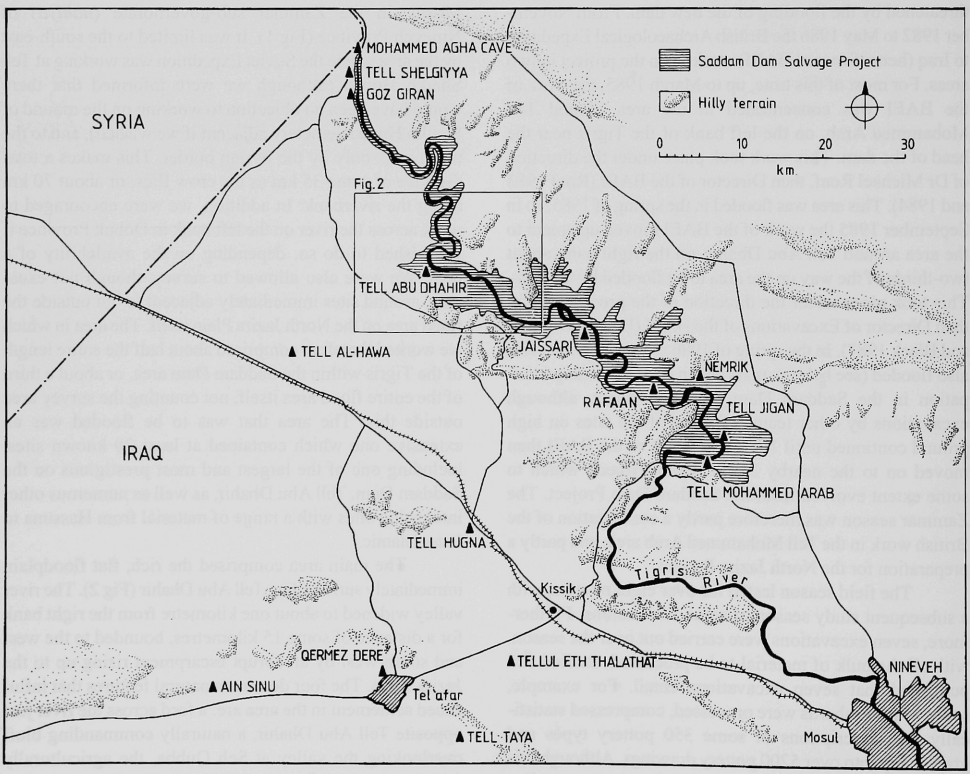


Fig 1. Map of northern Iraq, showing the project area and other sites mentioned in the text

provide a firm foundation of stratified material for the subsequent survey on the North Jazira Plain, which was then being planned as a separate project for the future.

TIMETABLE

The first reconnaissance by members of the BAEI was carried out by Charles Burney of the University of Manchester and Geoffrey Summers, then Fellow of the BAEI, accompanied by Mr Mohammed Zeki Abdul Kerim, at that time SOAH representative to the British teams working at Tell Mohammed Arab. A second visit was carried out by Michael Roaf in 1984, with a view to considering the area for British excavations after Tell Mohammed Arab finished. It was with this in mind that Michael Roaf and I subsequently visited and assessed Tell Abu Dhahir, Tell Seh Qubba and Siyana Ulya in April 1985.

At the beginning of the season the following autumn a first visit was made to the area on 26th September 1985 in the company of Mr Salem Yunus from the Mosul office of the SOAH, and the housing in Bardiya was arranged. The season started properly on 7th October 1985, when I returned to Bardiya with an initial team of four. Mr Moslem Mohammed, Inspector of Antiquities for Tel'afar and the Jazira, was appointed SOAH representative. The first week was spent in setting up the headquarters, recruiting workmen, sorting tools and equipment and examining some of the sites in the area; excavations then began at Tell Abu Dhahir on 16th October and at Siyana Ulya on 20th October. Excavations were carried out at seven sites in all up to the beginning of April 1986, with the months of April and May set aside for processing the material. The season finished at Bardiya on 1st June 1986, though some study of the material and further work in connection with the excavations continued in the Nineveh dig house in Mosul under Anthony Green.

The excavated sites were as follows (Figs 1-2):

1. Tell Abu Dhahir
2. Siyana Ulya
3. Khirbet Shireena
4. Seh Qubba
5. Khirbet Karhasan
6. Tell Gir Matbakh
7. Tell Shelgiyya (Fig 1)

Reports on sites 2-7 will be found in Chapters 3-8 below, and the report on Tell Abu Dhahir forms Volume 2 of this series. In addition, surface investigations were carried out

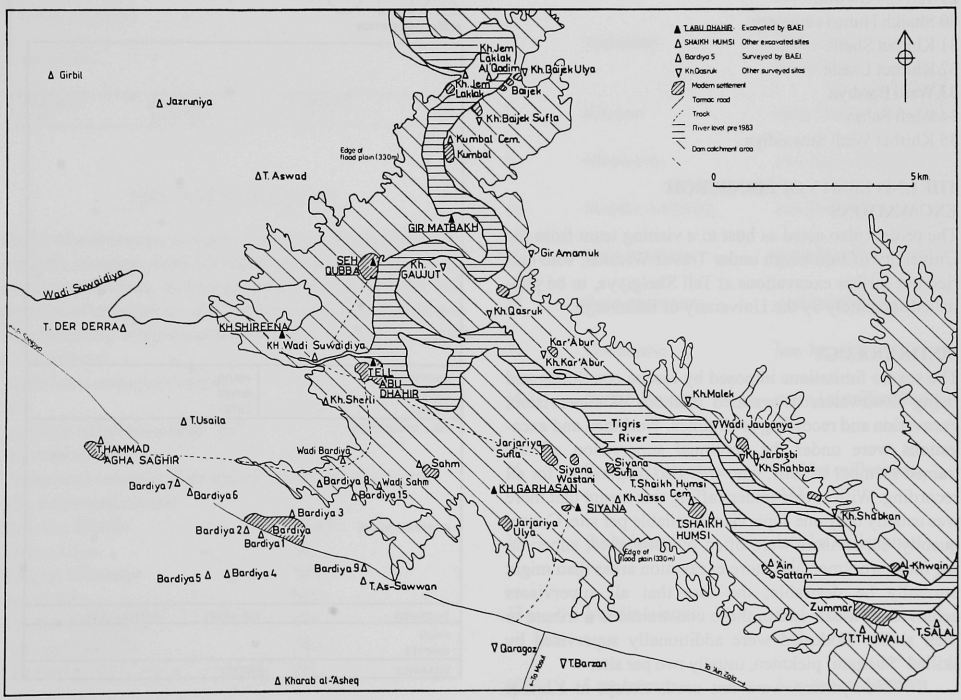


Fig 2. Map of the Tell Abu Dhahir area, showing the sites investigated

at the following sites in the region (Figs 1-2), reports on which will be found in Chapter 9 below:

8 Ain Sattam
9 Tell Amran (Bardiya 15)
10 Tell Aswad
11 Bardiya 3
12 Bardiya 4
13 Bardiya 5
14 Bardiya 6
15 Bardiya 7
16 Bardiya 8
17 Bardiya 9
18 Bardiya cemetery (Bardiya 1 and 2)
19 Gir Bil
20 Tell Göz Giran
21 Tell Hamad Agha as-Saghir
22 Khirbet Jassa
23 Jazruniya
24 Khirbet Jem Laklak
25 Khirbet Jem Laklak al-Qadim
26 Kharab al-Asheq
27 Mohammed Agha cave
28 Sahm
29 Tell es-Sawwan
30 Shaikh Humsi cemetery
31 Khirbet Sherli
32 Khirbet Usaila
33 Wadi Bardiya
34 Wadi Sahm
35 Khirbet Wadi Suwaidiya

THE UNIVERSITY OF EDINBURGH EXCAVATIONS

The project also acted as host to a visiting team from the University of Edinburgh under Trevor Watkins, who carried out further excavations at Tell Shelgiyya, to be published separately by the University of Edinburgh.

METHODOLOGY

The severe limitations imposed by rescue conditions and rising floodwaters determined methods of supervision, excavation and recording at all times. Workmen and excavations were under the continual supervision of one trained member of staff, who was also responsible for all recording. With severe understaffing this meant that there was usually only one supervisor available per site. Consequently, supervisors were often overstretched, supervising more workmen and more excavation areas than might normally be desirable; the fact that all supervisors achieved so much within these constraints is a tribute to their skills. Workmen were additionally supervised by skilled 'Sherqati' pickmen, usually two per site.

Grid systems were not used, except at Khirbet Shireena; nor were any systems of area excavation. Again the limitations of time and rescue conditions determined that the best results were obtained either by soundings or by strip trenches, with their orientations determined by site features (surface remains, mound contours, cuts, etc) rather than by arbitrary compass points. A small grid system was used at Khirbet Shireena partly because of its lack of surface features and partly because of its small size.

Excavation was by pick, shovel and trowel. Sieving was generally not feasible, and was only occasionally used for special features (eg contents of graves); wet sieving and flotation were not used. Recording was by a 'unit' system: all units requiring description, whether features or excavated contexts, were numbered according to a single consecutive numerical system within each trench or excavation area. Pottery, bone and lithics were recorded by unit rather than three-dimensionally, except in exceptional cases. Contexts were recorded on pre-printed unit sheets (Fig 3), supplemented by day-books, drawings and photographs. Small finds were recorded on separate printed catalogue sheets (Fig 4).

A special system of annotation was developed for the project (based on a system developed for use at the British excavations at Siraf, Iran, in the 1960s and 1970s) to label all units, finds and excavation records. This con-

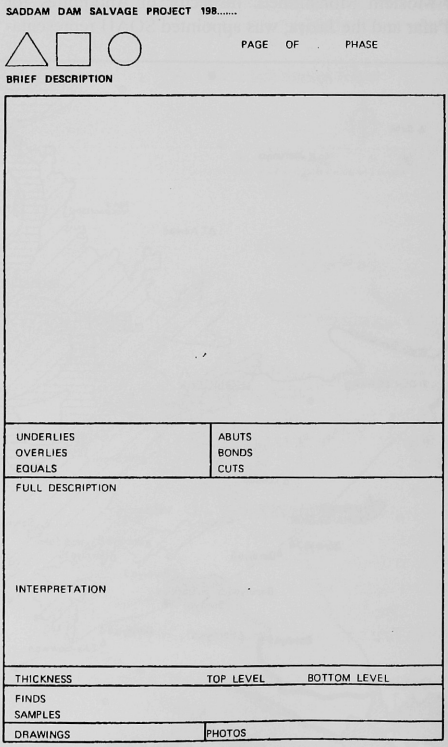


Fig 3. Excavation unit sheet

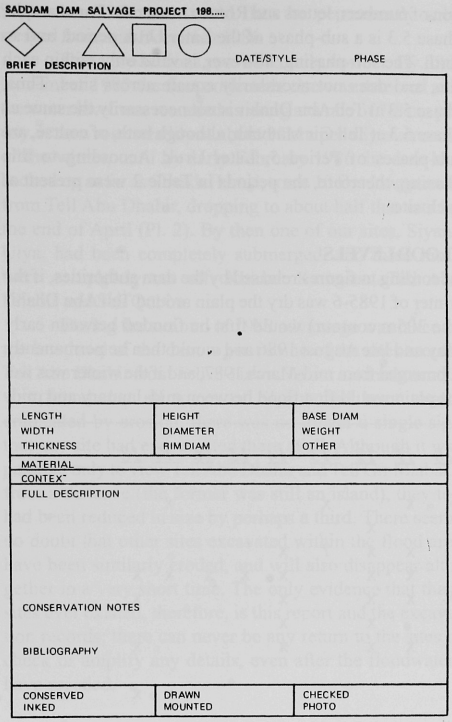


Fig 4. Small find registration

sisted of a diamond, triangle, square and circle (Figs 3-4: top left), denoting small find catalogue number, site, trench or excavation area, and excavation unit respectively. For the sake of consistency and brevity, this system is retained in publication, being translated into print as < >, /_\, [ ], and ( ) as follows:

small find catalogue number	< >
site	/_\
trench or excavation area	[ ]
excavation unit	( )

Underlined numbers were used to denote pottery types.

Site abbreviations are:

Tell Abu Dhahir	ADH
Siyana Ulya	SU
Khirbet Shireena	KHS
Seh Qubba	SQ
Khirbet Karhasan	KH
Tell Gir Matbakh	GM
Tell Shelgiyya	SH

Thus, an annotation reading '<371> /SQ\ [A2] (11)' would mean 'small finds catalogue number 371 from Seh Qubba, trench A2, unit 11'.

PHASING (Tables 1,2)

Rather than have a different system of phasing for each site, which would be confusing in the excavation reports and impossible in reporting on the pottery, an overall

Table 1. Tentative phasing for the Zammar region

Period	*Ceramic name*	*Approximate dates*
1	Hassuna	7th millennium
2	Halaf	6th millennium
3	Northern Ubaid	5th millennium
4	Earlier Uruk	1st half of 4th millennium
5	Later Uruk	2nd half of 4th millennium
6	Ninevite 5	1st half of 3rd millennium
7	Akkadian	2nd half of 3rd millennium
8	Khabur	early 2nd millennium
9	Mitannian	mid 2nd millennium
10	Middle Assyrian	late 2nd millennium
11	Late Assyrian	early 1st millennium
12	Post-Assyrian	mid 1st millennium
13	Hellenistic	late 1st millennium
14	Partho-Roman	early 1st millennium AD
15	Sasano/Byzantine	mid 1st millennium AD
16	Early Islamic	late 1st millennium AD
17	Middle Islamic	mid 2nd millennium AD
18	Late Islamic	late 2nd millennium AD
19	Recent	20th century AD

system for the Zammar region as a whole has been used, and the following scheme shown in Table 1 has been tentatively postulated. Several points, however, must be kept in mind. The first is that such a table is meant simply as a convenient framework to label the data and tie it all together; the individual headings used are nothing more than abbreviations that perhaps mean slightly more to the reader than a more cautious, purely alphanumeric system. They do not necessarily involve all the cultural ramifications that such names ideally imply, and are not meant as any statement on the cultural sequence for the north. Most importantly, it must be remembered that the terms are meant as ceramic rather than cultural names.

Hence, phasing follows a straightforward arabic numbering system, with sub-phases expressed as decimal points. This was felt to be less clumsy than any combination of numbers, letters and Roman numerals. For example, phase 5.3 is a sub-phase of the Later Uruk period, and so forth. The sub-phasing, however, is valid only within each site, and does not necessarily equate across sites. Thus, Phase 5.3 at Tell Abu Dhahir is not necessarily the same as Phase 5.3 at Tell Gir Matbakh, although both, of course, are sub-phases of Period 5, Later Uruk. According to this phasing, therefore, the periods in Table 2 were present at each site.

FLOOD LEVELS

According to figures released by the dam authorities, if the winter of 1985-6 was dry the plain around Tell Abu Dhahir (the 305m contour) would first be flooded between early May and late August 1986 and would then be permanently submerged from mid-March 1987, and if the winter was wet the plain would first flood between mid-January and mid-

Periods	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*
Abu Dhahir	x	x	?	x	x	x	x	x		x	x		x				x	
Siyana			?		x	x	x					x						
Shireena								x			x	x	?	x				
Seh Qubba								?			x	x		x	x	x	x	x
Karhasan								x	x	x	x	x		x				x
Gir Matbakh			x		x	x	x	x				x		x				
Shelgiya			x	x	x	x	x	x	x		x	x		x				x
Ain Sattam																		
Tell Aswad																	x	x
Bardiya 3		x	x															
Bardiya 4	x	x	x	x	x													
Bardiya 5		x					?	x				x		?				
Bardiya 6		?					x	x										
Bardiya 7	x	?			x	x	x	?										x
Bardiya 8			x		x			?			x			x			x	x
Bardiya 9	x	?	x		x			x										x
Bardiya Cem					x	?	x	x		?	x			?	?	x		
Gir Bil								x										x
Göz Giran															x			x
Mohammed Agha				x	x		?				x	x						
Jassa																		x
Jazruniya															x		x	x
Jem Laklak															x			x
Jem Laklak Qadim																		x
Kharab al-Asheq		x										x						x
Mohammed Agha																		
Sahm								?				?						x
Sawwan																		
Shaikh Humsi Cem				x	x		?				x	x						
Sherli																		x
Usaila								x							x			x
Wadi Bardiya																		
Wadi Sahm																		
Wadi Suwaidiya																		

Table 2. The periods present at each site according to the phasing in Table 1 (there is no attempt at quantification in this table)

September 1986 and would then be permanently submerged from mid-December 1986.

These predictions proved exactly correct. By 28th November 1985 the first noticeable rise was detected and the water level was recorded as rising at a rate of 7-8 cm per day. It then rose steadily at about 30 cm per day over most of the winter, until by early February 1986 the dam had backed up as far as Shaikh Humsi, some 10 km downstream from Tell Abu Dhahir, dropping to about half that rate by the end of April (Pl. 2). By then one of our sites, Siyana Ulya, had been completely submerged, and three more were completely cut off: Khirbet Karhasan, Tell Abu Dhahir and Seh Qubba.

During the autumn of 1988 advantage was taken of the low level of the dam to visit some of the sites around Tell Abu Dhahir from Tell al-Hawa. To our astonishment, it was found that all traces of Siyana had been totally eradicated by erosion; there was no longer a single sign that any site had ever existed there at all. Although it was possible only to view Tell Abu Dhahir and Tell Gir Matbakh from a distance (the former was still an island), they too had been reduced in size by perhaps a third. There seems no doubt that other sites excavated within the flood area have been similarly eroded, and will also disappear altogether in a very short time. The only evidence that these sites ever existed, therefore, is this report and the excavation records; there can never be any return to the sites to check or amplify any details, even after the floodwaters have receded.

LOGISTICS

There is no denying that living and working in the field with a small group of people, with few creature comforts, under highly pressurised circumstances, over a very long period of time, in a very foreign country, in a war zone, enduring extremes of heat and cold, in all variations of flood, drought, dust, mud and snow, with transportation dramas, and shortages of almost everything except work, floods, understaffing and overworking, has its difficulties. Despite the often very trying conditions, however, morale remained high and most logistical problems were overcome, the former entirely as a result of the goodwill and spirits of the team, the latter due to the efforts of the SOAH.

The provincial government in Zammar allowed us the use of four adjoining new houses in the new village of Bardiya, 97 km north-west of Mosul and 5 km west of Tell Abu Dhahir (Pl. 1). Bardiya was a large new village built above the river valley on the escarpment to rehouse villagers from the flooded area. Although some distance from our area of operations, Bardiya had electricity, was on a main tarmac road, and was well outside the flood area, avoiding the need to move again.

Some of the sites we were excavating were up to 30 km from base, often over what were no more than muddy field tracks. In addition, the flood area had been largely evacuated, so most of the workmen had to be transported from Bardiya as well. Almost every day, therefore, posed a major transportation problem. Our own vehicles, blighted by lack of spare parts, the absence of good servicing, an excess of age and an over-abundance of use, were subject to continual breakdowns and consequent long periods off the road. One of them eventually reached an irreparable state and had to be written off.

For the first half of the season, workmen were unavailable locally, and many of our plans for excavation had to be curtailed. By January we were able to get 14 Sudanese workmen from the Tel'afar restoration project, and by February it was possible to hire more locally, bringing the total force up to a satisfactory 65.

The difficulties of excavating so many sites at once, with associated long periods in the field, harsh living conditions and inevitable logistical problems should not be minimised. Nevertheless, the archaeological results were well worth the efforts. We were able to recover a virtually complete and reliable chronological index for the archaeology of an area hitherto practically unknown, and a pattern of a very distinct culture for the area began to emerge which the subsequent Tell al-Hawa Project was able to amplify considerably.

Plate 1. The expedition headquarters and vehicles at Bardiya, winter 1985/86

CHAPTER 2

THE SETTLEMENT SEQUENCE OF THE ZAMMAR REGION: AN OVERVIEW

Warwick Ball

INTRODUCTION

Our investigations revealed an almost continuous sequence of occupation in the area from the Hassuna period down to Late Islamic times. In this respect the region follows a broad pattern that is repeated elsewhere in the area of the Saddam Dam and the north of Iraq generally, but with sufficient local variation to ensure that no particular area is typical. Those parts of the Zammar Region that we investigated were no exception.

Although the micro-region consisting of the floodplain immediately surrounding Tell Abu Dhahir was geographically self-contained, the area that we investigated, extending outside this micro-region (for example up the river to Tell Shelgiyya or onto the escarpment around Bardiya) did not make a self-contained area, and therefore does not lend itself well to specific regional statements. Furthermore, our coverage of this area was patchy, dictated by the circumstances imposed upon us by rescue conditions and acute understaffing, and it was not possible to apply the sort of systematic, consistent sampling methods that were subsequently carried out on the North Jazira Plain by Tony Wilkinson and others (Ball, Tucker and Wilkinson 1989; Wilkinson 1989). It is with these limitations in mind, therefore, that any regional observations are made.

Nevertheless, the combined results of the excavations and surveys represent a considerable body of important information, and although statements based on it may not necessarily be used as models or extended to cover any wider area, it can still be used to complement the evidence from other areas to make up a broader overall picture.

PRE-HASSUNA

No evidence was found for any Pre-pottery Neolithic or Palaeolithic presence in the area, apart from a possible flake-core found in Wadi Sahm (see Chapter 9). Although this is not the type of steppe terrain that seems to have attracted hunter-gatherers elsewhere, the area would none the less have been rich in the sort of game that abounds today in the river valley, such as wild boar and fish. Evidence for Palaeolithic man has been found only a short distance downstream in the area around Raffan (Mazurowski 1987), the important Early Neolithic settlement of Nemrik is only a short distance downstream on the opposite bank (Kozlowski & Szymczak 1987), and the slightly earlier site of Qermez Dere is not much further away on the Jazira at Tel'afar (Watkins 1990). Furthermore, the area is not far from the 'hilly flanks' sites of the Zagros (Braidwood and Howe 1960), the foothills of which approach the banks of the Tigris near here. It is therefore all the more surprising that a thorough search of our area for Palaeolithic sites by Esmee Webb produced no evidence of any pre-Hassuna material (Webb, pers comm), nor did sporadic searches by other members of the team (mainly on foot), despite the existence of some likely-looking rock-shelters in the escarpment bordering the river valley. One can only conclude that this lack is peculiar to the micro-region around Tell Abu Dhahir, and cannot be taken as typical of the area as a whole.

PERIOD 1: HASSUNA

There is clear evidence for a strong Later Neolithic presence, however, with the establishment of a substantial Hassuna settlement at Tell Abu Dhahir. Although Hassuna levels, consisting of just a few pits, were reached only in a small part of Trench M, Hassuna material was also found in the Mosul University trenches elsewhere on the mound (Adel 1981), and at the foot of an eroded cliff section at the north-western end, indicating some spread of occupation. Indeed, it probably covered most of the area of the present main mound, and was therefore a large settlement for this period. This material is characterised by very coarse, chaff-tempered vessels, including fragments of the ubiquitous 'husking-trays', and slightly finer red- and brown-burnished wares. There were none of the finer, highly decorated polychrome types that have been found on slightly later sites on the Jazira Plain (Ball, Tucker and Wilkinson 1989, Fig 14: 1-3; Wilkinson and Tucker 1995) or that characterise the later Samarran wares, so the Tell

Abu Dhahir settlement is probably earlier in the Hassuna period, perhaps contemporary with the hunting settlement of Umm Dabaghiyah (Kirkbride 1982).

The rich agricultural potential of the Tell Abu Dhahir area, the abundant game of the river and river valley, the existence of a permanent water supply in the river and a ford across that river, were all factors that combined to attract the first agriculturalists of the Hassuna period to Tell Abu Dhahir. This settlement established Tell Abu Dhahir as a centre for the area, a position it was to maintain – albeit with interruptions – for several millennia. Few other Hassuna sites were found in the area; only Bardiya 4 and 7 produced small amounts of Hassuna material. Presumably the population of the Hassuna period was fairly small, and a high proportion of that population was still nomadic. Indeed, the Bardiya settlements may not have been permanent. Furthermore, food production, still in its infancy, would not have supported larger communities. There may, of course, have been other settlements in the floodplain that have since been washed away, or Hassuna material may be hidden under later overburden at other sites, but one would not expect the denser pattern of centres, satellite settlements and outlying farms that emerged later. The picture of the region in this period is therefore probably a reasonably accurate one, and consistent with evidence from elsewhere.

PERIOD 2: HALAF

The settlement at Tell Abu Dhahir appears to have diminished during the succeeding Halaf period, although it must be noted that the lack of later Hassuna material pointed out above suggests a break rather than any gradual diminution into the Halaf. Very little Halaf material was found: one possible Halaf phase was found in Trench M, but the material from this may have been residual, as was the occasional Halaf sherd found elsewhere in the excavations. Otherwise, the only Halaf material was found on the surface or in slope wash, although a Halaf phase was reported from the Mosul University excavations.

Elsewhere in the river valley Halaf material was conspicuously absent: the Soviet excavations at Tell Shaikh Humsi (Bader 1989b) are the only recorded evidence for a Halaf presence on this stretch of the river, apart from Tell Abu Dhahir. In contrast, Halaf sites are relatively common above the escarpment on the eastern edges of the North Jazira Plain: no fewer than four definite Halaf sites were recorded in the area, with three more sites containing possible Halaf material, six of them clustered around Bardiya. This picture reflects that found further west on the plain in the North Jazira survey (Ball, Tucker and Wilkinson 1989; Wilkinson and Tucker 1995). Although just outside our rather arbitrarily defined area, one of the sites surveyed, Kharaba Asheq, a few kilometres west of Khirbet Karhasan, was particularly rich in Halaf material (this site bears no relation to the similarly rich Halaf site of Tell Asheq, which is further south near Kissik; see Reade 1968, 237). The picture in the river valley contrasts with the Mohammed Arab-Babira area of the dam, where Halaf sites were more common. This Halaf 'blank spot' between the North Jazira on one side and the southern Saddam Dam area on the other is therefore all the more curious.

PERIOD 3: UBAID

During the Ubaid period Tell Abu Dhahir is once again the key site of the region. The Ubaid deposits extended for some considerable depth, about 3.5m in Trench M, which makes it by far the main period present at Tell Abu Dhahir. This depth of deposit contained three main phases of major Ubaid activity and several sub-phases. From the large amounts of Ubaid material collected elsewhere on the main mound, particularly from eroded faces, it seems likely that the settlement covered the full area of the main mound. The Ubaid settlement therefore seems to have been both fairly large and to have existed for a long time. The most interesting structures excavated were two distinct phases of rather curious mudbrick cubicles. The earlier phase of cubicles was probably some sort of storage facility, but during the later phase the cubicles appeared to form a part of an 'industrial' area, with each cubicle being used as a flint-knapping area. There were several instances in which flakes and debitage fitted back onto their cores, and a particularly fine range of flint and obsidian lithics was recovered. The lowest of the Ubaid sub-phases consisted of a part of a cemetery, where eight burials were recorded. Some of these burials contained exceptionally fine painted complete pots as grave goods.

Some Ubaid material, not associated with any structures, was also excavated at Tell Shelgiyya. This, however, was at an outlying trench in a field (Trench PS) several hundred metres away from the main mound, where it lay directly underneath Earlier Uruk deposits. Not a single Ubaid sherd was found in the main mound at Tell Shelgiyya. At Tell Gir Matbakh a few Ubaid sherds were recognised during processing, but these were all residual; no Ubaid contexts were encountered during excavation. A few painted sherds from Siyana, again from later contexts, were tentatively identified as Ubaid, as they did not seem to fit easily into any painted Uruk or Ninevite 5 categories, but the sherds in question were too fragmentary for this identification to be certain. The one Ubaid sherd found during processing from Khirbet Shireena is almost certainly a prime example of 'sherd yard drift'.

On and above the escarpment, Ubaid material was found at four other sites around Bardiya. One of these sites, Bardiya 3, although extremely small, had a particularly fine range of ceramics and lithics (both obsidian and flint) on the surface. Since its location in the rocky hills of the escarpment would have made it unsuitable as an agricultural settlement, the lithics suggest that it too may have been involved in knapping, perhaps as some 'outer

station' of the main knapping centre at Tell Abu Dhahir.

The Ubaid period in the river valley therefore appears to have been one of re-establishment after a Halaf hiatus. Furthermore, it seems to have been a prosperous time for the Zammar region; a relatively large settlement area at Tell Abu Dhahir, together with storage facilities, sophisticated ceramics, specialised 'industrial' activity and an expansion of settlement into the valley and up onto the escarpment all suggest a high level of prosperity, presumably based upon agriculture. The change in settlement from the higher lands of the Jazira plain, which were more suited to grazing, to the more fertile floodplain of the river valley certainly suggests a greater degree of arable agriculture, probably coupled with more sophisticated agricultural techniques.

PERIOD 4: EARLIER URUK

This period is characterised ceramically by the appearance of fairly coarse 'chaffy' wares and the highly distinctive but until now poorly documented 'sprig ware'. Among the more characteristic forms are hole-mouth jars, hollow-rimmed jars and high double-rimmed pots. Ceramically, therefore, the period has a very distinct identity, emphasised by the highly decorative sprig ware. The distinctive sprig motifs that define this ware have no known antecedents and few, if any, survivals into succeeding periods, an unusual circumstance given the popularity and long history that distinctive decorative motifs otherwise generally enjoy (eg hatched triangles, stripes, festoons, etc). Sprig ware and the culture, if any, which was associated with it must therefore be seen as an isolated phenomenon. This makes the Earlier Uruk period in the Zammar region difficult to understand.

Sprig ware was found in abundance at Tell Shelgiyya. Indeed, the corpus from here probably represents the greatest quantity of sprig ware yet found, so Tell Shelgiyya, for the moment at least, can be regarded as the type site for this ware. Unfortunately, most of it came from unstratified or residual contexts, with no associated architecture or occupation, so little more can be said from the stratigraphic point of view. The sheer quantity of sprig ware fragments, however, together with the large numbers of wasters and over-fired vessels, indicate that Tell Shelgiyya was a manufacturing and export centre for sprig ware, since far more was being produced than could possibly be consumed at an otherwise small- to medium-sized settlement such as Tell Shelgiyya.

Tell Shelgiyya, however, is somewhat outside the Tell Abu Dhahir area which is central to our present discussion. Here, Earlier Uruk pottery was almost entirely absent. A few possible Earlier Uruk forms and fabrics, together with one or two (doubtful) sprig-related decorative motifs, were found at Tell Abu Dhahir, but they were isolated occurrences in residual contexts, and not related to any occupation deposits. Inconclusive though this evidence may be, it does at least indicate some settlement of indeterminate nature at Tell Abu Dhahir for this period. The only other site in this region to produce definite Earlier Uruk material was Shaikh Humsi Cemetery, just downstream, where it was represented by a few sprig ware sherds picked up from the surface during a casual examination. A few more possible Earlier Uruk sherds were collected from Bardiya 4.

Otherwise, Earlier Uruk material was entirely absent, even on sites which had Later Uruk material (Tell Gir Matbakh, Bardiya 7, 8 and 9, Bardiya Cemetery, Tell Hamad Agha As-Saghir, Siyana Ulya). This absence is surprising, given the comparatively greater settlement density in the preceding Ubaid period and the massive increase in settlement not far away at Tell al-Hawa (Ball, Tucker and Wilkinson 1989; Ball 1991). Perhaps this urban expansion at Tell al-Hawa had a 'dragnet' effect that attracted population away from the area by the river, as has been suggested elsewhere.

The one or two fragments of sprig ware from Shaikh Humsi Cemetery and the larger quantities from Tell al-Hawa all appear identical (on close visual examination) in every respect to the Tell Shelgiyya sprig ware, lending support to the suggestion that this ware was manufactured and exported from Tell Shelgiyya. An analysis of trace elements from all three sites, together perhaps with samples from elsewhere (most notably Tepe Gawra), would test this suggestion and would be a particularly worthwhile exercise. If the suggestion were confirmed, the location of Tell Shelgiyya is well sited for such a role: the foothills of the Anatolian and Zagros mountains and routes entering them are just to the north-east, the Jazira plain is to the west and the river provides access to the Tell Abu Dhahir area and greater centres of population to the south-east. It thus lies in a centre for communications. It would also indicate a higher degree of regional specialisation for the Earlier Uruk period than has hitherto been evident.

Despite such tantalising questions, however, the Earlier Uruk period remains elusive. Its general absence from the Tell Abu Dhahir area suggests that the preceding increase in settlement and prosperity of the Ubaid period was, in fact, a 'false dawn'.

PERIOD 5: LATER URUK

This period saw a considerable increase in settlement in the area, a pattern that appears fairly common to sites in the Saddam Dam basin as a whole. Indeed, it appears to have established a cultural and settlement continuity in the region that lasted down to the end of the Assyrian period. The ceramics are very similar to those from Tell Mohammed Arab and other Later Uruk excavations further south in the Saddam Dam area: generally grey, sandy-tempered fine and medium bowls, nose-lugs, vertical ribbing, incised motifs (often in the form of triangles), various spouts and bevelled-rim bowls. This is in marked contrast to Tell al-Hawa, where apart from the presence of bevelled-rim bowls the Later Uruk assemblage was quite different (usually coarse, heavily chaff-tempered vessels,

of which the open 'hammer-headed' bowls are the most common form).

Tell Abu Dhahir was probably once again the central settlement in the area. The Later Uruk occupation consisted of some 1.3m of deposit in Trench M, making three main building phases. Outside Trench M, Later Uruk material was found in Trench K1 some 60m to the south-east of the main mound (though this may have been redeposited), and substantial quantities of material were picked up on the surface from most areas on the main mound. The Later Uruk occupation, therefore, was extensive and substantial. This picture was graphically filled out by the discovery of a part of a bevelled-rim bowl 'factory' in the earliest of the Later Uruk phases in Trench M: finds included many bevelled-rim bowls and several moulds used in their production, all associated with a kiln.

Although Tell Abu Dhahir was the larger settlement, Siyana was the 'type site' from the archaeological point of view, as it had a deeper stratified sequence and produced a finer corpus of Later Uruk pottery. The material was almost entirely Later Uruk through to Ninevite 5 (incised) for virtually the entire 1.6m depth of occupation. The stratigraphic evidence indicated a smooth transition from Later Uruk to Ninevite 5, implying an unbroken continuity of occupation, and it is impossible to draw a precise dividing line between the two. Two phases were differentiated in the Later Uruk. The first consisted of several layers of ash and occupation debris resting directly on virgin soil, associated with a mud brick 'granary rack'. The pottery was entirely Later Uruk. The second consisted of some thick layers of probably dumped ash and general debris up to 80 cm in depth with no associated structures; Ninevite 5 fine plain and incised wares were also beginning to appear, albeit in small quantities. The picture, therefore, is one of continuous occupation from the Later Uruk period at Siyana.

The settlement at Tell Gir Matbakh was probably founded in the Ubaid period, as we have seen above, but the earliest clear evidence of occupation at the site came from the Later Uruk period. This consisted in the main of an exterior surface and the corner of a building, found in Trench B. This trench also seemed to show a gradual transition to Ninevite 5 from the Later Uruk Period, but no architecture (and with it more securely stratified finds) was found associated with this transition. After the substantial Earlier Uruk presence at Tell Shelgiyya the Later Uruk settlement was relatively minor. Other settlements of this period were found on the escarpment overlooking the plain at Bardiya 4, 7, 8 and 9, Bardiya cemetery and Tell Hamad Agha as-Saghir.

There thus appears to have been an increase in settlement both on the floodplain and above the escarpment after an Earlier Uruk interregnum. Although very little architecture was excavated, two features provide important clues to the nature of the Later Uruk settlement in the area, the granary rack at Siyana and the bevelled-rim bowl 'factory' at Tell Abu Dhahir. The granary rack is reminiscent of similar occurrences at Tell Karrana 3 (Fales *et al* 1987), Tellul eth-Thalathat V (Fukai *et al* 1974) and Tell Atij. This feature, together with the location of the site overlooking a fertile floodplain and its small size, suggests an agricultural economy: Siyana was presumably an agricultural settlement or even a large farmhouse, perhaps one of a ring of similar agriculture-based settlements surrounding the larger market centre of Tell Abu Dhahir. The presence of a bevelled-rim bowl factory at Tell Abu Dhahir, however, suggests activities in addition to agriculture. Although it is not intended here to reopen the debate on these ubiquitous and much-discussed vessels, Tell Abu Dhahir none the less provides a major contribution, as it supplies important new evidence for their manufacture. Whatever the purpose of bevelled-rim bowls, their manufacture at Tell Abu Dhahir substantiates the statement that the Later Uruk settlement there probably enjoyed some status as a regional centre, or at least as a centre for specialisation.

PERIOD 6: NINEVITE 5

At Tell Abu Dhahir the only Ninevite 5 remains excavated consisted of a part of a pit in Trench M, dug into the Uruk deposits and in turn largely truncated by later building work. This pit contained plain and painted Ninevite 5 sherds and fragments of incised coarse-ware lids, but Ninevite 5 incised wares were entirely absent. However, some later redeposition from this pit, which was found at the foot of the Late Assyrian terracing, did include some fine incised sherds, as well as a Ninevite 5 cylinder seal and clay sealing. Ninevite 5 incised sherds were also picked up from the surface of the mound, albeit in small quantities, but enough at least to attest to its presence at the settlement. No Ninevite 5 deposits were excavated elsewhere, although Trench I1, where one might have expected it to be present, was not excavated below the Akkadian levels. Nevertheless, Ninevite 5 sherds were relatively rare on the surface, especially when compared to the quantities of Uruk and Akkadian sherds. It therefore seems fairly certain that the settlement of Tell Abu Dhahir had contracted in Ninevite 5 times to nothing more than a small village, probably no larger than other villages of the same period in this area such as Siyana or Tell Gir Matbakh (see below).

Indeed, Siyana appears to be the more important settlement, as most of the material excavated from there was Ninevite 5; Siyana was thus the main Ninevite 5 site to be excavated. The apparent continuity here from the Later Uruk has already been noted, and the problem of drawing an exact line of demarcation between the two remains. The period at the end of the sequence at Siyana, however (ie that with the least Later Uruk material), consisted of ashy occupation and general debris some 70 cm in depth, associated with some very rough stone and mud brick surfaces. The pottery was wholly Ninevite 5 plain and incised, much of it very fine in quality. Apart from a few poor fragments, Ninevite 5 painted sherds

were almost entirely absent. The almost complete absence of painted Ninevite 5 wares, representing an intermediate phase between the Later Uruk and Ninevite 5 incised, might seem an anomaly here, but a luxury painted ware of this quality would be out of place in such a small settlement as Siyana (although it was present at Tell Gir Matbakh, a similarly small settlement; see below). Occupation ceased at the end of the Ninevite 5 period, apart from a single intrusive Akkadian grave.

At Tell Gir Matbakh, four or five separate Ninevite 5 building phases were found in all trenches on the site. These consisted of the remains of several structures, with no discernible break in continuity, though it was not possible to excavate any complete building plans. Clearly, however, the Ninevite 5 occupation was fairly substantial. The pottery from Tell Gir Matbakh included a high proportion of painted types. These generally tended to come from the earlier Ninevite 5 phases, but the painted types occurred throughout the sequence, as did the fine plain and incised types. Among the incised types were many belonging to a very distinctive high-quality dark grey to black category with very fine incisions. These, together with the high proportion of painted sherds, made the Ninevite 5 pottery corpus from Tell Gir Matbakh surprisingly high in overall quality, surprisingly so in view of its relatively small size, especially when compared to the similarly sized Ninevite 5 settlement of Siyana, with its preponderance of coarse, plain and unpainted wares.

The overall picture of Tell Gir Matbakh in the Ninevite 5 period is therefore of a small settlement, like Siyana and Tell Abu Dhahir, that evolved in an unbroken transition from a similar Later Uruk settlement, again like Siyana. In contrast to Siyana, however, the high quality of ceramics at Tell Gir Matbakh seems to indicate a much higher level of prosperity, despite the much poorer quality of the agricultural land surrounding the site.

At Tell Shelgiyya the Ninevite 5 settlement again probably represents a continuous transition from the Later Uruk. No significant architecture was associated with the Ninevite 5 material. The Ninevite 5 settlement did not extend beyond the main mound, and must therefore have been considerably smaller than its Earlier Uruk forerunner, although probably the same size as the Later Uruk settlement.

No further Ninevite 5 sites were found in the floodplain, apart from a possible general third millennium presence at Khirbet Jem Laklak (although as already pointed out the floodplain is subject to periodic inundation, so that if there had been single period settlements there in the distant past they would not have survived). Two or three sites with Ninevite 5 material were found on the escarpment above the floodplain: Bardiya 7, Tell Hamad Agha as-Saghir and possibly Bardiya cemetery. Tell Hamad Agha as-Saghir has been subsequently excavated by Peter Spanos of the University of Munich, who also excavated another Ninevite 5 site in the Wadi Suwaidiya, Tell Der Darra (Spanos 1988, 1990). All were probably small settlements, producing only small quantities of Ninevite 5 material. Only fine plain and incised types were found, though the absence of painted types may be attributable only to their poor survival in surface conditions.

There was generally not the great variety of painted pottery types in the region (even at Tell Gir Matbakh, which produced the largest quantity of painted pottery) that was found at Tell Mohammed Arab. This lack of variety has already been noted for this side of the river (al-Soof 1968, 76). For the incised types, however, most decorative types were represented, including a highly distinctive dark grey to black fabric, generally with much finer and more complex incised designs than is usual.

The larger number of settlements in the countryside suggests that there were fewer external threats and a greater measure of rural prosperity and stability in the Ninevite 5 period. Agriculture was probably the basis of this prosperity, as the large numbers of small sites seem to indicate predominantly rural communities, but the surprising wealth of ceramics in an agriculturally comparatively poor area like Tell Gir Matbakh suggests that agriculture was by no means the main factor in the Ninevite 5 economy.

In the general picture of growth and continuity from the Later Uruk period, the situation at the Later Uruk regional centre of Tell Abu Dhahir stands out as an anomaly, since here the Ninevite 5 settlement contracted considerably in size from the Later Uruk. Perhaps the regional centre moved away (for example to Tell Sellal (see Fig 2), a large site with Ninevite 5 material some 16 km downstream excavated by Mosul University and the Department of Antiquities (Black and Killick 1985, 238)), or perhaps the development of a major Ninevite 5 central town at Tell al-Hawa over to the west diminished the need for provincial centres such as Tell Abu Dhahir.

PERIOD 7: AKKADIAN

The term 'Akkadian' here is defined by the ceramics, rather than conquest of the region by Sargon or Naram-Sin or consequent cultural affinities with Sumer and Akkad. The ceramics are different from the Akkadian pottery of the south, and consist of large, greenish coarseware vessels, usually with incised decoration, and smaller, extremely fine and hard 'metallic' vessels in a range of colours such as grey, light green, orange and black. The greenish coarse-wares were often 'bucket-shaped' in form; the finer wares were usually flat-based, with the flat-based, square-sided beaker being the most distinctive form. The black 'metallic wares' distinctive of this period further west were not found. The finer vessels appear to derive from the fine Ninevite 5 grey wares, and are obviously related to Taya ware, first excavated at Tell Taya (Reade 1982). This first led us, perhaps mistakenly, to adopt the name 'Taya' for the whole period, but since this term applies only to a very specific pottery ware the

term was dropped, under pressure from our peers, in favour of the more generally accepted 'Akkadian'. Perhaps, however, the former term is more accurate than the culturally misleading 'Akkadian'.

The Akkadian period once more sees a dramatic reversal of Tell Abu Dhahir's character, growing from a much diminished Ninevite 5 village to regain the size it enjoyed in Later Uruk and Ubaid times. Akkadian material was found in virtually all trenches, and substantial deposits were excavated in Trench M. These seemed to belong to major new building activity associated with substantial terracing which probably cut away and levelled much of the preceding Later Uruk and Ninevite 5. Here, as on other sites where Akkadian architecture was excavated, building techniques are marked by extensive use of large stone footings. Very large quantities of Akkadian sherds were also found over most of the surface area. Tell Abu Dhahir therefore appears to have expanded once more into a small provincial centre, probably covering an area of at least 7 hectares.

Akkadian material was also present at Tell Gir Matbakh, but its relationship to the Ninevite 5 was difficult to establish, as it mainly occurred on the unexcavated areas of the site. There certainly did not seem to be the same continuity between Ninevite 5 and Akkadian which marked the transition from Later Uruk to Ninevite 5. Akkadian material was also present at Tell Shelgiyya, but it is not possible at this stage to say whether it came after a smooth transition from the Ninevite 5 or represents a break. At Siyana the only evidence for an Akkadian presence was a burial, associated with a handful of sherds. It appears, however, to be no more than an isolated incident with no relation to the settlement; in a very thorough surface collection, not a single Akkadian sherd was collected. Some possible Akkadian material was found at Shaikh Humsi cemetery, and the possible general third millennium presence at Khirbet Jem Laklak has already been noted above. Above the escarpment we see Akkadian settlements being established at Bardiya 4, 6 and 7, Bardiya cemetery, Tell Hamad Agha as-Saghir and possibly Bardiya 5, or in other words an increase in the number of settlements over the Ninevite 5 period.

This appears to be in marked contrast to the situation around Tell al-Hawa to the west, where there was a dramatic decrease in the rural population tied to an apparent increase in the central settlement of Tell al-Hawa itself (Ball, Tucker and Wilkinson 1989). Along the river the parallel growth of Tell Abu Dhahir did not appear to depopulate the smaller settlements in the same way. The reasons for this are difficult to explain. The river, close to the hilly region of Kurdistan, might represent a frontier, the larger number of settlements being necessary for defensive purposes. The period as a whole does not appear to be an unstable one, however, and large urban areas such as Tell al-Hawa or Tell Taya were not defended by city ramparts (Ball 1990, Reade 1982; note, however, the presence of city walls at Tell Leilan in this period in Weiss 1983), unless the urban nucleation around the obviously well defended position of the Tell al-Hawa Acropolis is evidence for the need for greater security in the Akkadian period. None of the settlements along the river occupied defensive positions, and there were probably no more external threats than in the preceding Ninevite 5 period. Perhaps the very different terrain alongside the river in the rockier, more undulating escarpment area, where the grazing of livestock would have been a more important part of the economy and travel would have been much slower, would have required more closely spaced settlements than the immense flat plains surrounding Tell al-Hawa, where a different type of agriculture may have been practised and communications may have been easier. Alternatively, the present tendency to see and impose patterns on ancient settlement systems may be more the result of perceptions of our own highly structured and sophisticated human geography than a reflection of the realities of antiquity, when even the concept of settlement was still in its infancy.

PERIOD 8: KHABUR

Strictly speaking, it is a mistake to refer to a 'Khabur' period. Like the term 'Taya' before it, it refers to a distinctive ceramic type rather than an era, and specifically to the stripe-painted pottery that is so familiar in so many sites in the region. To give the period the more historical term of 'Old Assyrian', however, is to enter dangerous waters, and assumes a weight of historical evidence that simply does not exist, at least for the Zammar region. The distribution of Khabur pottery covers both a fairly distinct time span in the earlier second millennium as well as a reasonably well defined geographical unit with the Upper Khabur river as its nucleus (Hamlin 1974), however, and reference to a Khabur period therefore seems to be spatially and chronologically justified, although not necessarily ruling out Old Assyrian domination.

In many ways, the relationship of the Khabur period to the Akkadian period is much the same as that of the Ninevite 5 to the Later Uruk: it appears very much as a continuation, and one cannot talk about the Khabur without continual reference to the Akkadian. Indeed, so close is the association of the two periods that in excavating some of the Khabur levels at Tell Abu Dhahir we initially believed that many diagnostic Khabur ceramics were found together with Akkadian material. A closer examination revealed that they were in fact two separate contexts, with the Khabur material belonging to a destruction level that had collapsed onto the Akkadian, thus forming an apparent juxtaposition, but the close associations were real none the less. Nowhere was there any evidence of long abandonment separating the two phases, the Khabur fine wares appearing to be a logical development from the Akkadian fine wares, and nowhere were any radical new departures apparent in the Khabur period.

Rather it was a time of steady evolution and consolidation on the Akkadian period remains.

Culturally, apart from the distinctive ceramics with their possible relationships to the north and west (Hamlin 1974), the period seems marked by a dramatic increase in the appearance of animal figurines. As often as not these endlessly varied headless and legless objects were unidentifiable, but when they were reasonably intact they were usually recognisable as horses. Whether this signifies the possible arrival of horse-riding invaders (such as the Hurrians?) is impossible to say on the evidence of the Zammar region alone. The Khabur period elsewhere in the north is also generally marked by the arrival of literacy, although no texts were found in the present excavations.

Alhough by no means the largest site for the Khabur period, Khirbet Karhasan produced easily the largest and richest corpus of ceramics, and thus forms the Khabur 'type site'. All varieties of Khabur ware were found here, including a particularly rich range of fine wares, and the site also produced the largest number of horse figurines. Most of these were found in a flat part of the site with Khabur remains immediately on the surface, but unfortunately this area was bulldozed as part of construction operations for the dam before significant building plans could be obtained. Enough was recorded, however, to confirm the widespread use of stone in construction for this period: walls generally had large stone footings (as in the preceding Akkadian period) and surfaces were often paved with stone. The practice is consistent with Khabur building techniques found elsewhere in the region.

In virtually all cases, sites that were occupied in the Akkadian period continued into the Khabur, with the exception of Siyana, which as we have seen can in any case be discounted. Thus, Tell Abu Dhahir, Tell Gir Matbakh and Tell Shelgiyya of the excavated sites, and Bardiya 4, 5, 6 and 7, Bardiya Cemetery and Tell Hamad Agha as-Saghir of the surveyed sites, all had considerable quantities of Khabur material overlying the Akkadian. Furthermore, there were many new foundations: Khirbet Shireena, Khirbet Karhasan, Bardiya 9, Usaila, Girbil and possibly Bardiya 8 all represent entirely new settlements. A few rather ill-defined sherds that can only be dated broadly to the second millennium were also found in residual contexts at Seh Qubba, so it is possible that this settlement too may have been founded in the Khabur period. The pattern is therefore of a significant increase in rural settlement, a pattern entirely consistent with that found in the Tell al-Hawa area further west (Ball, Tucker and Wilkinson 1989).

Tell Abu Dhahir once again appears to be the largest site in the region, with no apparent decrease in its size from the Akkadian period. It thus presumably continued in the role as regional centre, a role now reinforced by the foundation of smaller surrounding settlements, such as Khirbet Shireena, Khirbet Karhasan, the Bardiya sites and possibly Seh Qubba, which were presumably dependent upon it, as well as the continued use of older settlements such as Tell Gir Matbakh and Tell Hamad Agha as-Saghir (though the latter may have formed its own regional centre, drawing upon settlements on the plain as well as perhaps the Bardiya sites as its subsidiaries). This pattern suggests a rural economy; nothing was found in any of the excavations that would suggest any additional activities.

PERIOD 9: MITANNIAN

This is perhaps the most intriguing, albeit the most elusive, of all periods in the north. The period is characterised ceramically by the highly distinctive 'Nuzi' fine ware, and ought to be easily recognisable. However, only two fragments of this ware were found at Tell Abu Dhahir and a few more at Tell Shelgiyya, in both cases from surface or residual contexts. This is hardly enough to suggest a settlement of any substance, even at Tell Abu Dhahir, the traditional centre for the region. This apparently almost complete absence of sites of the Mitannian period seems very curious, especially in view of the large number of sites of the preceding Khabur period and, at a later date, in the Late Assyrian period. The apparent lack at first led us to believe that we were simply not recognising the full range of ceramics for the Mitannian period, and that more sites would 'appear' after a more thorough examination of the pottery: perhaps it would be possible, on re-examination, to reattribute some of the pottery belonging to periods immediately before or after the Mitannian. Our questions were partly answered by the excavations at Khirbet Karhasan.

Khirbet Karhasan was the only site in the Zammar region which had any quantity of Mitannian material, and even so it produced very little. The only remains found associated with this material were part of a building in the deep sounding (Trench A1) consisting of a substantial mud brick wall and a succession of room fills totalling some 75 cm of deposit. The pottery was distinctly Mitannian, with no comparative material from any of the other sites apart from the isolated examples already mentioned. Although only a relatively small sample, this deposit was well sealed and was both stratigraphically and ceramically distinct from the Khabur and Middle Assyrian periods before and after. It thus represented the only stratified Mitannian remains found during our excavations in the region.

The initial impression of a lack of Mitannian remains was therefore correct, and this has been further confirmed both by extremely detailed studies of all pottery from the other sites and by the subsequent excavation of a large corpus of Mitannian material at Tell al-Hawa (Ball 1990). In other words, if there had been any more Mitannian material in the Zammar region, it would certainly have been noticed.

At most, therefore, there were only three very small Mitannian period settlements in the region, a dramatic reversal after the large number that existed in the

Khabur period. Before speculating on the reasons for this apparent devastation, however, it is necessary to summarise the evidence for the Middle Assyrian period immediately after the Mitannian.

PERIOD 10: MIDDLE ASSYRIAN

The Middle Assyrian period in the Zammar Region suffers from much the same problem as the Mitannian before it: it hardly exists. Once again, we found virtually no traces of Middle Assyrian material on any of the sites. Unlike the Mitannian material, however, we could not initially explain this away by the unfamiliarity of the material, since it was well known from the excavations at Tell Mohammed Arab. The explanation of this apparent lack was then thought to be that the Middle Assyrian Empire had perhaps not penetrated to the Zammar Region; the material remains of any settlement for this period would then be represented either by earlier ceramic types surviving longer or by later ceramic types beginning earlier than in other regions. The former possibility, however, was clearly out of the question, as the paucity of Mitannian ceramic types has already been remarked upon. In other words, it was initially thought that Middle Assyrian material would simply not be found in the region and that any settlement contemporary with the Middle Assyrian period elsewhere would be represented by Late Assyrian pottery beginning earlier than would otherwise have been thought possible.

Once again, it was the excavations at Khirbet Karhasan that put us on the right track, since very important Middle Assyrian material remains were found here, albeit in relatively small quantities. This consisted of some well stratified ceramics, stratigraphically quite distinct from Mitannian and Late Assyrian deposits before and after, belonging to types that were well known from the excavations at Mohammed Arab: generally coarse, vegetable-tempered plain wares, of which the large jars and the shallow carinated bowls were the most identifiable forms. More important was a hoard of extremely fine faience jewellery, consisting of a vast array of rosettes, cylinders, pendants, glass beads and small shells, probably part of a set of very elaborate horse trappings (Tucker 1992).

Otherwise, the only site that produced Middle Assyrian pottery was Bardiya cemetery, although the pottery we tentatively identified as Middle Assyrian from Bardiya cemetery bore more similarities to Kassite pottery from the south than the usual Middle Assyrian types of the north (I am indebted to Timothy Clayden for this information). Not a single recognisable sherd was picked up from very thorough sherding of all the other excavated sites (the surfaces of all these sites were in all cases completely stripped, as were most of the Bardiya sites). Furthermore, the subsequent excavations at Tell al-Hawa once again clarified the position of Middle Assyrian settlement within the wider region: substantial monumental Middle Assyrian remains and a large corpus of associated material were excavated over all three seasons (Ball 1990). The almost total lack of settlement in the Zammar region in the Middle Assyrian period, as in the Mitannian period before it, was therefore real, despite our initial scepticism.

It is significant that this apparently long period of depopulation in the middle and later second millennium coincides with the period of rivalry and conflict between the Mitannian and Middle Assyrian states. The Zammar region must have been a buffer zone on the fringes between the two empires for much of this time, as the rival interests expanded and contracted. The result for a region caught up between the two must have been considerable instability, even devastation at times. Hence the archaeological evidence for depopulation certainly fits in with the historical picture. Furthermore, the location of the Zammar region would have laid it open to depredations from both the nomads of the Jazira steppe to the west and the hill people from the mountains to the east during times of instability and loss of strong central control. Both areas are traditional sources of raiding in Mesopotamian history.

Against this background, the presence of the hoard of horse trapping jewellery at Khirbet Karhasan, which must surely represent considerable wealth, is all the more curious. Such a hoard would hardly belong to the sort of modest rural settlement which was the norm along this part of the river, nor could it belong to a country residence or 'fishing lodge' of a Middle Assyrian nobleman; the depopulation and evident instability discussed above argue against such an explanation. The horse trappings might have been associated with an isolated military outpost guarding the river at this point, perhaps dependent upon the main Middle Assyrian stronghold for the region of Tell al-Hawa. Against this must be pointed out that no evidence for fortifications was found at Khirbet Karhasan, and the site itself was not a naturally defensible one, especially compared to the more obvious military position of Seh Qubba nearby (though it must be noted here that Seh Qubba may have had some as yet ill-defined second-millennium occupation). Alternatively, the hoard may have been booty, deposited there after a raid on a much wealthier settlement. As in the case of so many archaeological anomalies, the hoard's real nature for the moment remains an enigma.

PERIOD 11: LATE ASSYRIAN

The Late Assyrian period sees a re-establishment of settlement in the Zammar region. Khirbet Karhasan continued to be occupied, and Tell Abu Dhahir, Seh Qubba, Khirbet Shireena, Tell Shelgiyya, Bardiya 8, Bardiya cemetery and Shaikh Humsi Cemetery were all re-established as settlements, making a total of eight in all. It is interesting that, with the possible exception of Seh Qubba, no entirely new settlements were founded; all were on existing mounds.

No one settlement appears to have been dominant,

not even Tell Abu Dhahir, the traditional centre for the region. At Tell Shelgiyya the Late Assyrian settlement was the first to approach its Earlier Uruk size, but even this did not extend much beyond the main mound, and was hardly large enough to merit description even as a small town. All appear to have been comparatively small rural settlements, probably farmhouses or villages, with any market centre (if any existed) lying outside the area. None (apart from Khirbet Shireena; see below) produced remains of any significance: at most, the excavated remains consisted of fragments of buildings and associated occupation deposits, although Tell Shelgiyya had the remains of a kiln and possible associated (but indeterminate) complex.

Both the re-establishment of settled communities after such a long period of instability and depopulation and the possible reference to external forces suggest a strong, centralised government exerting control over the area from outside. Moreover, the establishment of a settlement (albeit a very small one, judging from the very small number of sherds recovered) at the strongly defended site of Seh Qubba implies some measure of control over the countryside. Such a pattern, therefore, appears entirely consistent with the re-emergence of the Assyrians in the Neo-Assyrian Empire.

Although no settlement appears to have been dominant, Khirbet Shireena was the 'type site' for the Late Assyrian period, even though its size suggests it was probably little more than large farmstead or hamlet. It produced the best corpus of pottery for the period, however, well stratified by a succession of surfaces. A series of burials sealed beneath one of the surfaces provided our first information on population for the period, the 'grain silo' was additional evidence for agricultural practice in the region, and the existence of an extensive field system surrounding the site provided the first intact landscape in the region (although this may not have been contemporary with the Late Assyrian settlement; see below). Khirbet Shireena therefore provides the most comprehensive evidence of any period in the Zammar region.

The excavated architecture consisted of a succession of earth, pebble and flagstone surfaces, associated with substantial mudbrick walls. It is likely that they represent only a single building complex, probably a large farmstead: with a maximum area of 75 x 150m, there would have been little room for additional structures. Some 'palace ware' associated with this building would be more consistent with a large farmstead or 'manor house' than a modest hamlet.

The field system consisted of a number of very low (maximum 10 cm high) rubble boundary walls dividing the fields for several hundred metres around the site into narrow strips. They are clearly associated with Khirbet Shireena, though it is not so clear which period they belong to. All one can say is that they cut across present field alignments and are clearly not modern, so they presumably belong to one of the ancient periods of occupation at Khirbet Shireena; Khabur, Late Assyrian or perhaps Hellenistic, although the last appears unlikely, given the extremely limited nature of the Hellenistic presence at Khirbet Shireena. Furthermore, the divisions into individual strips suggest a period of organised countryside administration. This is consistent with the little we know of the Late Assyrian agricultural practice (eg Saggs 1984, 162-65), but by itself does not imply a firm date for the field system.

PERIOD 12: POST-ASSYRIAN

The labelling of so many periods in the north with reference to the Assyrians (the Khabur period is commonly labelled 'Old Assyrian') even after they had been overthrown, reminds one of the Japanese scholar who referred to the archaeology of Afghanistan in terms of three periods, 'pre-Buddhist, Buddhist, and post-Buddhist'. As with so many archaeological terms, however, it is the term which is least unsatisfactory that ends up being the most satisfactory: 'Medeo-Babylonian' and 'Achaemenid' carry obvious difficulties, and 'pre-Hellenistic' dissatisfies all but the classicists. Although perhaps not ideal, the term 'post-Assyrian' does at least acknowledge the dominant force that Assyrian civilisation exerted over the north, and continued to exert after its political collapse.

At the time of writing, it is difficult to identify material remains that correspond to the confused sequence of events following the collapse of the Assyrian Empire and the control by Babylonians, Medes and Achaemenids of the area of northern Iraq. It may be, therefore, that material belonging to this 'post-Assyrian' period is at present being lumped either with the Late Assyrian or Hellenistic. Until it is possible to identify a distinct post-Assyrian corpus with certainty, however, the apparent lack of sites in the region from this period reflects the present state of knowledge of the material rather than any real lack of settlement. For the moment, therefore, this period must be passed over.

PERIOD 13: HELLENISTIC

The Hellenistic occupation of the region appears to differ little from the Assyrian before it, consisting of a number of small, presumably rural, communities with no apparent centre. There certainly does not appear to have been the sort of rural collapse and depopulation which one might expect after such a dramatic event as the overthrow of the Assyrians, and which happened at the end of the Khabur period in the region. On the contrary, the number of settlements on the plain around Tell al-Hawa, for example, reached its greatest number in the Hellenistic period (Ball, Tucker and Wilkinson 1989), and by the river and up on the escarpment some seven or eight settlements were recorded, a number exceeded only during the Khabur and Late Islamic periods. No obviously

fortified positions (such as Seh Qubba) were occupied. Clearly, therefore, it was a period of considerable rural prosperity and stability (Ball 1996).

Hellenistic material was excavated at Tell Abu Dhahir, Tell Gir Matbakh, Tell Shelgiyya and possibly Siyana and Khirbet Shireena (which had doubtful Hellenistic pottery). In addition, Hellenistic pottery was collected from the surfaces of Bardiya 5, Tell Hamad Agha as-Saghir, Kharaba Asheq and Shaikh Humsi Cemetery. At all the excavated sites apart from Tell Abu Dhahir, however, the material came from either surface collections or from disturbed contexts very near the surface, with no associated architecture or occupation deposits. Even at Tell Abu Dhahir the remains consisted of no more than a number of lined storage pits in Trench M. These appear to be a feature of Hellenistic sites in the Saddam Dam area (eg Tell Jessari, Grai Darki; see Fuji 1987, Curtis 1987; 206), and are often interpreted as grain silos.

The explanation for the rather unsatisfactory state of all Hellenistic remains lies in the nature of the sites rather than the settlements: occurring on or near the surface, they are more subject to disturbance and erosion than those of earlier periods. On the basis of mere presence/absence, therefore, the distribution of Hellenistic sites in the region provides some picture of the period, but more detail can be provided only by excavations at single-period sites with better preservation than we have here.

PERIOD 14: PARTHO-ROMAN

As in the Mitannian-Middle Assyrian period, the region once more became a frontier buffer zone between two powerful conflicting empires. In the confusing sequence of historical events and constant shifting of frontiers it is not always possible to ascribe the material remains to one 'bloc' or the other, hence the hybrid term 'Partho-Roman'.

Accordingly, we see a similar situation in the countryside to that observed in the Mitannian and Middle Assyrian periods, with a dramatic depopulation reducing the number of settlements from the eight or nine that existed in the Hellenistic period to just four or five: Tell Abu Dhahir, Seh Qubba, Tell Gir Matbakh, Tell Shelgiyya and possibly Bardiya 8. With the very important exception of Seh Qubba, it is impossible to tell anything about the nature of the settlements in this period for much the same reasons as in the Hellenistic period: the material was from disturbed surface contexts and no architecture or occupation deposits survived. Judging from the very small quantities of this material, however, these settlements were very small ones.

At Seh Qubba, however, we have the first settlement in the region that was extensively fortified, not only by virtue of its natural position on a high bluff commanding the river and surrounding countryside, but by artificial earthen ramparts as well. The need for such defensive measures adds weight to the impression of instability in the countryside. The position of the site might suggest that it is guarding a frontier marked by the river, with the additional implication that the opposite, eastern, bank is the hostile one, or in other words that it is Roman rather than Parthian. This and other evidence (mainly historical) has led us to identify Seh Qubba with the Roman frontier post of Castra Maurorum (Ball 1989).

We have, moreover, a considerable corpus of stratified material from this period associated with architectural remains and occupation deposits in a deep sounding on the highest part of the bluff. The pottery consists of the very distinctive 'brittle ware', usually associated with Parthian and Roman remains in this area (Campbell 1989). There were two distinct building levels in the deep sounding associated with brittle ware, the later one including a line of terracotta pipes and a very fragmentary mosaic floor. The nature of these remains, together with their position on the highest part of the site, suggests that they represent the remains of the Roman commandant's house at Castra Maurorum.

The region presumably did not remain Roman throughout the entire period, but would have fallen into Parthian hands several times. It is tempting to see the two brittle ware architectural phases in the sounding at Seh Qubba as representing two phases of Roman occupation. With the frontier set at the river, it is not surprising that there is so little settlement in the river valley, since it must have been subject to frequent incursions from across the river. These few settlements were presumably local rather than 'Roman' in the true sense of the term, with Roman cultural influence probably extending no further than the garrison in Seh Qubba itself.

It is worth noting, however, the find of a piece of mosaic in a wash context at Tell Abu Dhahir, which suggests that some level of Hellenisation or Romanisation extended to the village. With the garrison so close by at Seh Qubba, it is of course possible that some sort of modest 'villa' existed at Tell Abu Dhahir during a brief interval of stability.

PERIOD 15: SASANO-BYZANTINE

The two rival imperial powers of Rome and Parthia were replaced by Byzantium and Sasanian Iran, and once more the Zammar region probably fell within the border zone. The increased number of settlements, however, might indicate a greater degree of control by one or the other power over the area. Seh Qubba remained in occupation and new settlements were founded (or refounded) at Usaila, Khirbet Jem Laklak, Jazruniya, Göz Giran, Shaikh Humsi Cemetery, Khirbet Karhasan and possibly Bardiya Cemetery. They were, however, small in number, so we must conclude that the area had still not regained the prosperity it had enjoyed in former times (Ball 1996).

Brittle ware continues to be the main diagnostic pottery for this period, though it is generally coarser and grittier than the Partho-Roman types. Some of the coarser varieties have a very distinctive surface treatment, known

as 'smeared ware' and 'honeycomb ware'. All material comes from surface contexts, again with the exception of Seh Qubba, which continued to be the main settlement for the area. Before moving on to discuss Seh Qubba, however, it is worth drawing attention to the one entirely new site founded in this period, Göz Giran. It is situated on the river a short distance downstream from Tell Shelgiyya, and presumably replaced the Partho-Roman settlement at the latter site. The mounded area at Göz Giran is relatively extensive, although the surface sherding was not detailed enough to determine whether all of this belonged to the Sasano-Byzantine period.

Seh Qubba continued as a main centre for the region, with Sasano-Byzantine pottery being distributed evenly throughout all the area enclosed by the ramparts. Architectural remains were found in the deep sounding, but the area exposed was too small to allow their exact nature to be determined. The ramparts presumably continued in use, so Seh Qubba probably continued as the administrative centre for the region. Historical documentation is scarcer than in the preceding period, and it is not possible to attach a name to Sasano-Byzantine Seh Qubba or recover any clue to the empire to which it belonged. The presence of two Byzantine coins on the surface suggests that it may have been Byzantine rather than Sasanian, but such evidence is by no means conclusive.

PERIOD 16: EARLY ISLAMIC

Only three sites had Early Islamic (pre-Mongol) pottery, collected from the surface in all cases: Bardiya Cemetery, Seh Qubba and Khirbet Karhasan. Such depopulation may indicate another period of instability and the breakdown of central government, but this seems unlikely given what we know of the strong rule of the Abbasid government in Iraq with its regional centres at Mosul and Nusaybin. Perhaps it signifies no more than a shift in demographic emphasis away from the river over to the Abbasid road further west on the Jazira Plain (Fiey 1964), and the consequent establishment of market gardens elsewhere to supply Mosul. Certainly none of the sources for the period pay much attention to the river area (Le Strange 1905, 93-94).

Occupation apparently continued at Khirbet Karhasan and Seh Qubba, but the very small number of sherds found at the latter site suggests that it was much diminished in status from its former role of regional centre. The total reorganisation of provincial administration after the Omayyads and, more particularly, the Abbasids took control presumably removed the need for any administrative centre here. In other words, the region became a backwater.

PERIOD 17: MIDDLE ISLAMIC

The only sites identified for this period were Jazruniya and Seh Qubba, identified by the presence of Atabeg coins from the 13th century. The remains at Jazruniya are of a small town, with the outlines of buildings and a well laid-out street plan still visible. One of the buildings is fairly large and situated on a high mound, and presumably performed some administrative function. At Seh Qubba the ramparts had fallen into disuse and many wall lines were visible on the surface, some of them running over the mounds of the ramparts. On the highest part the remains of a large courtyard building were excavated, probably a khan or an administrative building that would have functioned as the district headquarters.

The area was ruled during this period by the Atabegs from Mosul. It was undoubtedly a prosperous time for the region, which would initially have risen to prominence after the disuse of the Abbasid road further to the west, when the route northwestwards out of Mosul shifted further east towards the river (Fiey 1964). This may have been due to the instability caused by nomad raids, which drastically depopulated the Jazira plain and caused a shift towards the river valley. Jazruniya was probably a major way station on this route, perhaps the site mentioned in the sources as Bashazza, which took over as a minor regional centre from Barqa'id (Fiey 1964, 115-16). The route, as well as the rich market gardening potential of the river valley for the Mosul markets, undoubtedly added to the region's prosperity.

PERIOD 18: LATE ISLAMIC

There appears to be a sudden and very dramatic increase in the settlement for the Zammar region in the Late Islamic period, with occupation at sixteen or seventeen sites. This, however, may be a sign of the higher degree of preservation of remains from this latest period. In addition, many of the sites may have been occupied for only a single generation, so not all of them may be contemporary. The real number of settlements at any given time is therefore probably lower.

Late Islamic remains were excavated only at Tell Abu Dhahir, Seh Qubba and Khirbet Karhasan. Surface remains, however, were recorded at Bardiya 7, 8 and 9, Tell Amran, Tell Hamad Agha as-Saghir, Usaila, Khirbet Jem Laklak, Tell Aswad, Jazruniya, Gir Bil, Kharaba Asheq, Göz Giran, Khirbet Jassa, Khirbet Wadi Suwaidiya and Khirbet Sherli. Some of these were very minor and hardly count as settlements; for example, Khirbet Wadi Suwaidiya was a mill and Khirbet Sherli a tomb.

Construction was usually of stone rubble set in gypsum mortar, a technique that until the advent of concrete blocks was still prevalent in most of northern Iraq. The most diagnostic pottery type was a distinctive, hard, fine sandy-tempered ware with rouletted decoration. This pottery first came to our attention in large quantities at the site which appears on the official Saddam Dam archaeological map as 'Khirbet Jem Laklak the Second'. Following the custom of naming a distinctive pottery type after the site where it first comes to notice, we were tempted to name it 'Khirbet Jem Laklak the Second

ware', but in the end opted for the briefer, if less grandiose, term 'rouletted ware' for this type.

Both Seh Qubba and Jazruniya continued in unbroken occupation, both possibly even expanding in the Late Islamic period. Seh Qubba can be tentatively identified as Old Zammar, the Late Islamic headquarters of the sub-governorate, before it moved downstream to modern Zammar and subsequently, after its flooding by the dam in 1986, to New Zammar up on the plain towards Tell Huqna.

CONCLUSION

The excavations revealed an almost continuous sequence of occupation in the area from Late Neolithic times onwards. There is clear evidence for a strong Later Neolithic presence, with the establishment of a substantial Hassuna settlement at Tell Abu Dhahir. A picture therefore emerges of a prosperous area, rich in agricultural potential, attracting the first agriculturalists of the Hassuna period to Tell Abu Dhahir. This settlement established Tell Abu Dhahir as an agricultural centre for the area, with smaller, presumably satellite, settlements growing up around it on the floodplain over the succeeding periods. Tell Abu Dhahir maintained this position until for reasons not yet certain (but possibly associated with greater defensive measures becoming necessary during a period of instability) the centre for the area passed to Seh Qubba at some time in the late first millennium AD. It remained there until the Later Islamic period, when the centre passed to Zammar, until that in turn was inundated in 1986 and the centre passed to New Zammar. To this day, the Tell Abu Dhahir area has remained a rich agricultural area, contributing considerably to the produce of the area as a whole.

It is this aspect, the agricultural, that stands out above all in the evidence we now have from the Zammar region. Rarely has such a full picture been found of the life of the ancient countryside and its agricultural practices (albeit not all in the same period). The sites excavated represent a hierarchy of agricultural settlements ranging from a market centre at Tell Abu Dhahir through subsidiary villages such as Siyana to possible farmsteads such as Khirbet Shireena. Arable agriculture economies such as Siyana and Tell Abu Dhahir contrast with probable pastoral economies such as Tell Gir Matbakh. There are specialised service 'industries' such as flint knapping at Tell Abu Dhahir in the Ubaid period, 'sprig ware' manufacturing at Shelgiyya in the Earlier Uruk and possible bevelled-rim bowl manufacturing at Tell Abu Dhahir in the Later Uruk to complement these economies. The organisation of the land itself is illustrated by the field systems surrounding Khirbet Shireena, and the storage of the produce of such fields is represented by several different storage systems, such as the granary at Siyana or the 'silos' at Khirbet Shireena and Tell Abu Dhahir. Finally, the technology used to process this produce is amply illustrated by a wide range of lithic tools and an unusually wide corpus of ground stone implements, particularly from Khirbet Shireena. With much of Near Eastern archaeology concerned (perhaps overmuch) with questions such as the origins of settlement, urbanism, the growth of cities, technologies and trade, the very full picture we now have of the ancient countryside in the Zammar region forms a significant contribution towards a broader understanding of the ancient Near East.

CHAPTER 3

SIYANA ULYA

Warwick Ball and Susan Gill

INTRODUCTION

Siyana Ulya is a small, low mound on the edge of the first river terrace bordering the floodplain, about 7 km south-west of Tell Abu Dhahir (Fig 2). One side of it is cut by a wadi, providing a natural section through the edge of the mound (Pl. 3). The excavations consisted of cutting this section back about 5m for a length of 20m, down to virgin soil at a depth of 3.2m (Fig 5). The material was almost all Later Uruk and incised Ninevite 5 for virtually the entire 3.2m depth of the section, mainly Ninevite 5. Siyana was the main Ninevite 5 site we excavated in the Zammar region.

Siyana is not listed on the official archaeological map of the Saddam Dam. The site was first visited by Michael Roaf and Geoffrey Summers in October 1984 during their preliminary reconnaissance of the area, when some fine Ninevite 5 incised sherds were collected. Following an examination of these sherds, Warwick Ball visited the site in March 1985 and decided to excavate it. Excavations began on 20th October 1985 and lasted until 2nd December of the same year, a period of some six weeks, under the supervision of Susan Gill, after which operations were moved to Seh Qubba. Brief preliminary reports have appeared (Ball 1987, 79-80, Ball and Black 1987, 249-50).

By the end of February 1986 the waters of the dam had backed up as far as the site (Pl. 2), and by the end of April it was completely submerged. A last visit was made to Siyana in the autumn of 1988 from Tell al-Hawa, taking advantage of the seasonal drop on the level of the dam. To our astonishment, all traces of the site had been totally obliterated by erosion; there was no longer any evidence that a site had ever existed there. This report, together with the excavation records, is therefore the only evidence of the existence of Siyana Ulya.

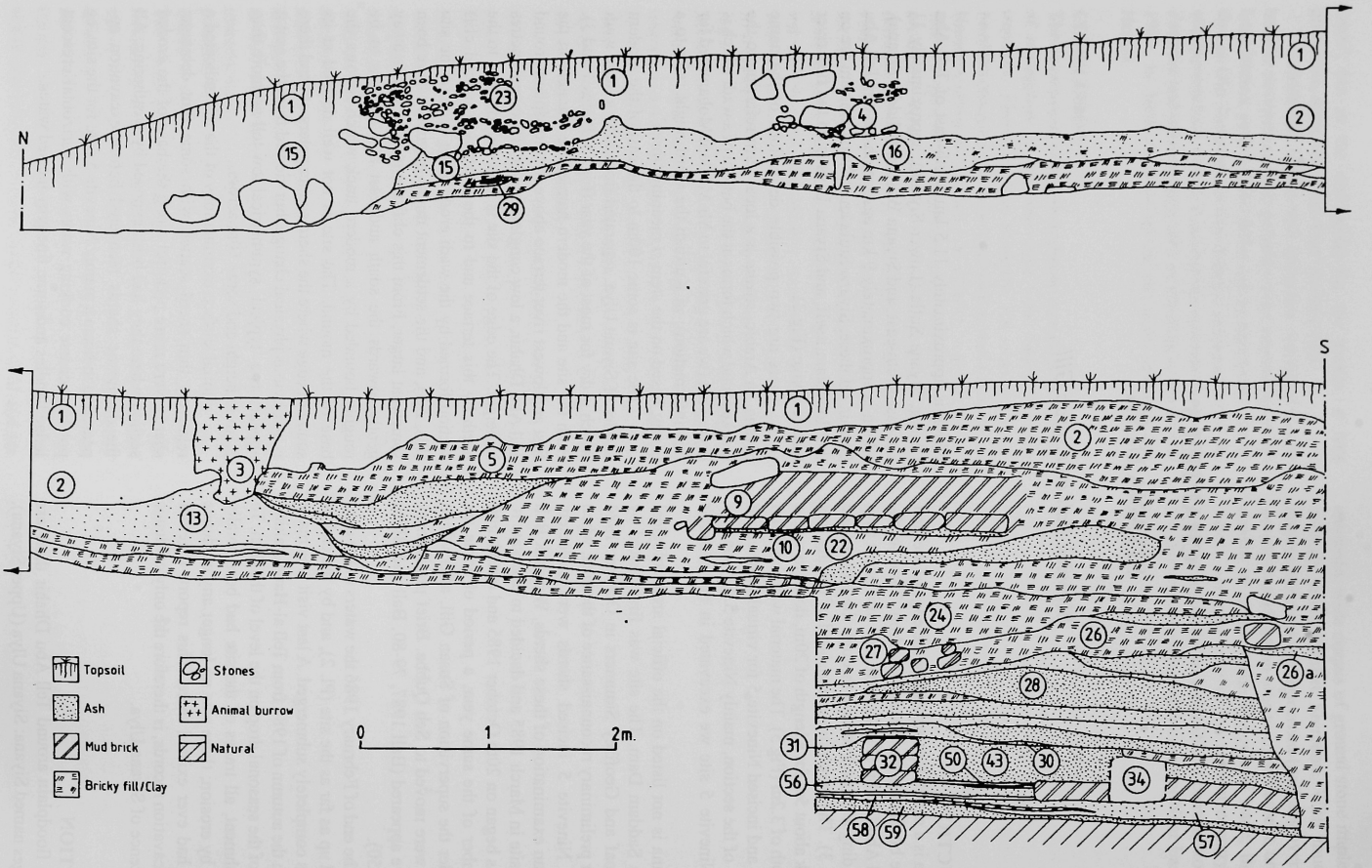
DESCRIPTION

Within the floodplain around Tell Abu Dhahir there are three villages named Siyana: Siyana Ulya (Upper Siyana), which is approximately 11.5 km south-east of Tell Abu Dhahir, Siyana Sufla (Lower Siyana), approximately 11 km east-south-east, and Siyana Wastani (Middle Siyana), which is approximately 9 km east-south-east of Tell Abu Dhahir. Of these, Siyana Sufla and Siyana Wastani are on the floodplain itself, and Siyana Ulya is on the first river terrace above (Fig 2).

There are two possible derivations of the name Siyana. In Arabic, *siyana* is a local term referring to the cracked mud which forms at the bottom of a wadi which is drying out (we are grateful to Mr Moslem Mohammed for this information); in Kurdish the word might refer to a trinity, based on the stem *si* meaning 'three'.

The site is some 100m to the east of the modern hamlet of Siyana Ulya, separated from it by a large wadi which is dry for most of the year (Figs 5, Plates 1 and 3). Both the site and the modern hamlet are situated on the first and lowest river terrace above the floodplain around Tell Abu Dhahir, a low conglomerate cliff several metres in height. The edge of the site is thus well defined to the north by this terrace and to the west by a natural cliff section formed by the wadi eroding the edge of the site (Pls. 2-3), and the settlement might originally have been somewhat larger. From this cliff the mound slopes away gently towards the south and east and appears to be roughly bounded by a modern track which follows the base of the mound. The site is not well defined at its southern edge where the sherd scatter peters out and there is no obvious physical change, but viewed from the east it appears as a 'typical' symmetrical low tell no more than 3.5m in height and some 50m across.

Initial surface examinations of the tell indicated a relatively thin sherd scatter, with some flint debitage; sherds were more plentiful along the base of the eroded section where they had been exposed by weathering. All the diagnostic sherds recovered before excavation appeared to indicate a mainly Ninevite 5 date for the site, eg pot lids, coarse cooking wares with horizontal crescent ledge handles and some fine grey incised wares.



5. Siyana: main east section

WORK STRATEGY

The surface of the mound was completely stripped of sherds during the course of the excavations. For this purpose, it was divided into two areas (since the surface of the mound itself gave no indication of any physical differences within the boundary of the sherd scatter). These were the mound itself and the face of the eroded slope to the west. The purpose of the excavations was to make a sounding and establish a pottery sequence for Siyana Ulya, and the most cost-effective method was to cut back the already eroded cliff section. This was done for a length of 20.4m (Trench [A]), and spoil was disposed of over the edge of the natural section into the wadi below. At the southern (widest) end of the trench the area excavated was just over 4.5m wide; over most of the trench, however, the width of the working area was only about 3m (with a certain amount of variation depending on the original line of the cliff face). The trench was excavated to a maximum depth of 1.6m over the whole area, at which point the entire deposit appeared to be composed of the same material, a pale yellow-orange clean bricky earth, apparently mud brick collapse. From this point the area of excavation was shortened to a 4m-long cut at the southern end of the original trench. This part was dug down to virgin soil (Figs 5-7).

THE EXCAVATIONS

There was a handful of painted sherds from various contexts which might conceivably have been Ubaid. Given the complete lack of any of the more familiar Ubaid types, however, these sherds were probably unfamiliar painted Uruk types rather than Ubaid. The possibility of an Ubaid foundation for the settlement, however, is at least worth mentioning.

PERIOD 5 LATER URUK

Phase 5.1 The 'granary rack' (Figs 5-7, Pl. 4)

This phase lay directly upon virgin soil. This was the only layer found which sloped (with the exception of a layer of bricky collapse immediately underlying topsoil), and was of an orange-brown gritty material. Immediately overlying virgin soil were several layers of ash (56)-(59) with an overall depth of 15-16 cm. These had been dumped or spread in such a way as to form a level area, either intentionally or unintentionally, in lenses separated by thin layers (2-3 cm thick) of orange collapse or clean fill. This presumably indicated settlement on some other part of the site at this time (the pottery from these levels was Later Uruk), probably in the immediately adjacent area. Above these ashy lenses the plan of a mudbrick complex was recovered.

This complex had undergone a certain amount of

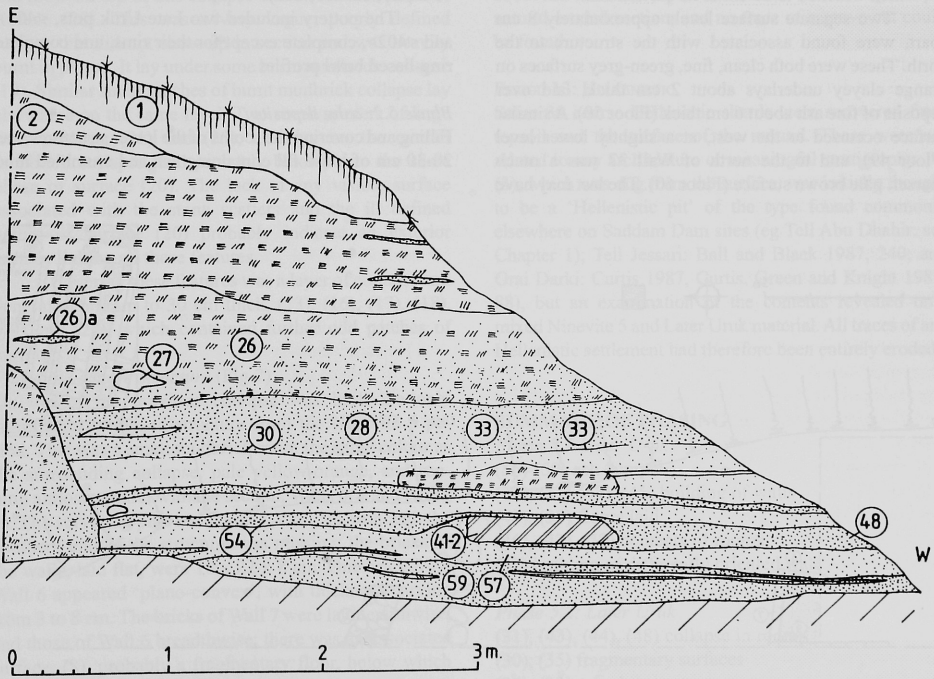


Fig 6. Siyana, south section

modification during the period of its use. Walls 37 and 42 (the latter contained a possible doorway/□opening) appeared to have been built first, as Wall 39 appeared to have been built abutting it. These walls were of relatively coarse brick, with a burnt inner face at the corner. Bricks were difficult to articulate and only three could be measured with any confidence. These measured 35 x 15 cm by perhaps 10 cm deep.

The walls forming the southern parts of the structure (39, 40, 41, 45) were probably built next as they appear to abut. Different methods of mudbrick construction had been used: along the inner faces of both long walls (39 and 41), the bricks had been laid on edge. These measured 25m x 12 cm in Wall 39 and 30m x 15 cm in Wall 41. The bricks of Wall 39 all seemed to be laid on edge, with a possible channel running along the middle of the wall about one course deep. Otherwise, the bricks were laid flat (and averaged 25 cm square in size). Mudbrick 'benches' one brick wide were laid alongside Walls 39 and 41, and another wall, 45, ran down the middle, leaving two long thin 'slots' measuring 2.95m by 35 cm on either side. The southern bench was formed by bricks laid flat (measuring 20 cm square), with the exception of two laid on edge (measuring 20 x 10 cm). The walls survived to an overall height of 30 cm and in general were 30-45 cm thick, with the exception of Wall 39, which widened to 60 cm at its eastern end.

Two separate surface levels approximately 8 cm apart, were found associated with the structure to the north. These were both clean, fine, green-grey surfaces on orange clayey underlays about 2 cm thick, laid over deposits of fine ash about 6 cm thick (Floor 50). A similar surface occurred to the west, at a slightly lower level (Floor 49), and to the north of Wall 37 was a much coarser, pale brown surface (Floor 60). The last may have been external, but the fineness of the other surfaces suggests an internal use, a suggestion perhaps confirmed by the very clean nature of the deposit (43) above this surface, which contained almost no pottery or animal bone.

Some time after the first surface of Floor 50 was laid down Wall 32 was built. This was of a higher quality construction than the rest of the structure, regularly formed of well laid bricks measuring 30 x 18 x 16 cm. Since the alignment, construction and date of this wall are different from the others, it may belong to a different, unexcavated structure.

The internal faces of the main structure bore traces of mud plaster at the eastern end. Inside the 'slots', beyond the plaster, a scatter of miscellaneous stone, bone and pottery had been deposited (Pl. 4); there was no trace of any carbonised deposit, ash or seeds. Although of varying density, the scatter (47) and (52) covered all the area of the two thin spaces available. The stones were mostly river- or water-washed large pebbles, with a small amount of flint debitage and some small fragments of obsidian (relatively rare at Siyana Ulya). The bones included a small scatter of unarticulated dog bones, and an articulated equid (donkey?) leg from the knee down (for a similar find and discussion of its possible significance at a Later Uruk site, *cf* Tell Rubeidheh: ed. Killick 1988, 21, 99-104, 116).

The pottery included two Late Uruk pots, <401> and <402>, complete except for their rims, and complete ring-based bowl profiles.

Phase 5.2: ashy deposits

Filling and covering the rooms of the lower structures was 20-30 cm of loose fill containing ash and crumbled mud

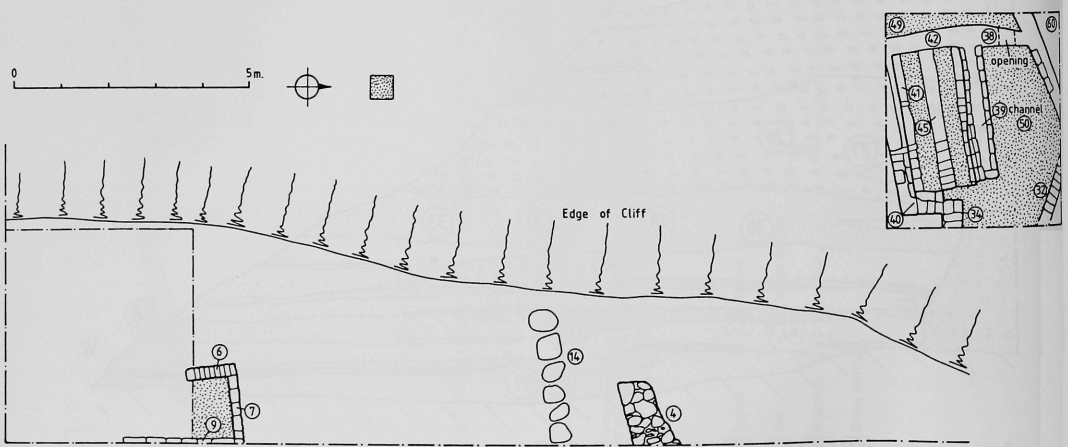


Fig 7. Siyana: plan of the Ninevite 5 structures, with the Later Uruk structures inset

brick, though very little bone or pottery, (31), (43), (44) and (48). This presumably marks the abandonment and collapse of the granary rack and associated structures. Sealing both these deposits and the lower structures was a grey-green, hard, compacted surface, (30) and (35), containing some charcoal flecks and small patches of burnt brick. Above this was a 30-50 cm thick layer of ashy deposits and amorphous collapse, (28) and (33), in several lenses ranging from light grey to black. These were not visible as separate entities during excavation and showed up in the section only after it had dried out. On top of these deposits was a scatter of large river boulders, (27), which included one reused basalt grinder, and, presumably associated with the boulders, a very fragmentary, ill-defined grey-green surface, (26a), in the south-east corner. This surface sealed a 1.4m deep pit going down almost to virgin soil (visible in both sections; see Figs 5 and 6). This pit was not recognised during excavation, and as a result the pit fill was only separated out from its adjacent units for the bottom 30 cm (54).

PERIOD 6 NINEVITE 5

Phase 6.1: surfaces and burnt collapse

Above the Phase 5.2 ash deposits was an amorphous, pale yellow-orange layer of mudbrick collapse, about 80 cm thick, containing one or two small ashy lenses, (24), (25) and (26). On top of this collapse was an isolated patch of surface (20). This was a very vague, poorly defined surface that did not show up in section and was heavily burnt in places. It lay under some burnt mudbrick collapse (19). Similar small patches of burnt mudbrick collapse lay elsewhere on the same level. Two small scatters of large river pebbles, (21) and (23), also lay on the overall mudbrick collapse, and probably belonged to the same phase of surface (20). The lack of any visible surface associated with the stone scatters and the ill defined nature of surface (20) probably indicate an exterior surface linking all these features.

Covering these features was a layer of collapse and general debris up to 30 cm thick, (13), (16), (17), (18), (19) and (22), which contained further odd patches of burning.

Phase 6.2 square structure (Fig 7)

On top of the previous collapse was built the only significant excavated structure from the Ninevite 5 period. This was a small mudbrick room the same colour as the surrounding collapse, pale yellow-orange, and running almost parallel with the section, Walls 6, 7 and 9 (Fig 7). The surviving plan measured 1.3 x 1.5m, although the southern end of the structure was missing; the bricks of the walls, laid flat, were 16 x 22 x 8 cm. One brick from Wall 6 appeared 'plano-convex', with thickness varying from 3 to 8 cm. The bricks of Wall 7 were laid lengthwise, and those of Wall 6 breadthwise; there was an associated surface, (8), probably a fragmentary floor, below which ran a very thin layer of ash (10). The small structure was filled with very clean fill, (11), containing little pottery. This pottery was mostly in the form of at least three different Ninevite 5 excised cups of grey fine ware (a flint blade also came from here). About three courses of brick in Wall 9 survived, to an average height of 40 cm, but only one course was fully articulated. Immediately adjacent to the structure to the north was a small, irregular patch of burnt collapsed brick (12).

To the north of the square structure, two more walls projected from the section, Walls 14 and 4 (Figs 5, 7). It is not certain whether they related to the square structure or to each other. Both were very rough, irregular stone walls, the latter slightly more substantial with three courses surviving. Above these structures was a layer of clean collapse about 80-90 cm deep, (1), (2), (5) and (15). An 80 cm deep pit (3) was dug into it from the surface about halfway along the section. This pit contained mixed Ninevite 5 and Later Uruk pottery. There was also a possible (unnumbered) pit at the northern end of the trench, from which came a seal impression <430>, and a small clay animal figurine <409>.

PERIOD 7 AKKADIAN (Fig 8)

A single burial (29) was found at Siyana, badly disturbed with only the abdomen and upper legs remaining intact (Fig 8), the remainder of the skeleton having been lost along the eroded cliff section. The grave was at a depth of about 2m from the top of the mound on the edge of the natural eroded section, and no trace of a grave cut could be found.

PERIOD 13: HELLENISTIC

Some 30 coarse Hellenistic sherds were recovered from topsoil and the surface of the mound. These were not related to any architecture or meaningful stratigraphy. Pit (3), which was dug from the surface, was initially thought to be a 'Hellenistic pit' of the type found commonly elsewhere on Saddam Dam sites (eg Tell Abu Dhahir: see Chapter 1); Tell Jessari: Ball and Black 1987, 240; and Grai Darki: Curtis 1987, Curtis, Green and Knight 1987/88), but an examination of the contents revealed only mixed Ninevite 5 and Later Uruk material. All traces of any Hellenistic settlement had therefore been entirely eroded.

SUMMARY OF PHASING

Phase 5.1 Later Uruk

(56)-(59) ash dumping
(34), (37)-(42), (45) building of walls
(49), (50) floors laid
(46), (47), (52) contents of rooms
(32) building of differently oriented wall

Phase 5.2: Later Uruk

(31), (43), (44), (48) collapse in rooms
(30), (35) fragmentary surfaces
(28), (33) ashy lenses
(27) stone scatter

(54) pit
(26a) fragmentary surface Later Uruk
Phase 6.1 Ninevite 5
(24), (25), (26) collapse and accumulation
(20), (21), (23) surfaces
(13), (16)-(19), (22) mudbrick collapse

Phase 6.2 Ninevite 5
(10) floor of square structure
(6)-(9) walls of square structure
(4), (14) miscellaneous walls
(11), (12) deposits on surfaces
(5), (15) collapse
(1), (2) topsoil
(3) pit
Phase 7 Akkadian
(29) burial

Phase 13 Hellenistic
(surface), (1) unstratified material

DISCUSSION

Apart from an intrusive Akkadian burial and some indeterminate Hellenistic presence in topsoil, the stratigraphic evidence suggests a smooth transition from Later Uruk to Ninevite 5, implying an unbroken continuity of occupation (though see below). In the four phases that were discerned for the Later Uruk-Ninevite 5, it must be emphasised that the divisions between the phases are fairly arbitrary, and that the Later Uruk-Ninevite 5 might well have been one continuous period at Siyana.

Period 5 Later Uruk

Although Tell Abu Dhahir was the larger settlement, Siyana was our 'type site' in the region from the archaeological point of view for the Later Uruk period. It had a better stratified sequence, and produced a better corpus of Later Uruk pottery and the only significant architecture.

The wide divergence in mudbrick sizes used in the Phase 5.1 structure suggests that they may have been handmade rather than 'mass-produced' in a mould, suggesting a fairly modest structure. The very flimsy nature of the walls further suggests a simple structure: the walls were not thick enough to support any great weight or height. This might mean that it had no roof. Perhaps the roof, if it existed, was a very insubstantial temporary shelter rather than the thick, heavy, wooden beam and mud roofs that are common in villages in the area today. In other words, it must have been a somewhat flimsy building for industrial or agricultural use, rather than a dwelling that would have required more substantial construction. There was no trace of any carbonised deposits associated with this structure, although there was a dense scatter of natural pebbles, pottery and bone between the internal partition walls. It is likely, given that no floor or surface could be defined below this scatter, that the low walls in turn supported a lightweight floor, presumably made of branches and matting, as no traces survived. This reinforces the insubstantial nature of this structure, raising questions over its intended function.

In terms of shape and size, similar structures have been found in Later Uruk or Ninevite 5 contexts at Khirbet Basila (*Sumer* 1987/88, 87), Tell Karana 3 (Fales *et al* 1987; Rova forthcoming) and Tell Rijim (Bielinsky 1987, 31) in the Saddam Dam project, and at Hassek Hoyuk (Behm-Blanke 1989, 74) on the Upper Euphrates. These are typically referred to as granaries: a deposit of carbonised wheat and barley was found associated with the Level 2 structure at Tell Karana 3 (*ibid*). They differ considerably in plan from the later heavily buttressed or reinforced mud brick 'granaries' excavated at Tell Atij and Tellul eth-Thalathat V (Fukai *et al* 1974).

The subject of granaries in the classical world has received thorough attention (Rickman 1971; *cf* also Fentress 1984). The four primary considerations are the need for the walls to withstand the considerable lateral thrust (approximately two-thirds of the vertical pressure) exerted by the grain, to keep the contents both dry and cool (the latter usually by allowing the free circulation of air by the use of a floor supported on low vented walls), and to prevent attacks by pests. The manner of construction of the above-mentioned Later Uruk and Ninevite 5 'granaries' certainly fulfils the last three requirements but seems too insubstantial to fulfil the first. Such structures have also been interpreted as external sleeping platforms (like those observed in the modern village of Seh Qubba: see Chapter 5, Period 19), but again the construction appears too flimsy.

An alternative interpretation is therefore preferred at Siyana. Such a structure might have functioned as a more general external drying rack for different substances prior to storage or use elsewhere. These might well have been cereals, but could also have included fruits, other vegetable matter, hides or even meat (as can be observed

in modern drying structures in Iran and Afghanistan: W Ball, pers obs). The scatter of material between the low 'sleeper' walls may represent *ad hoc* storage of objects coupled with bones hoarded by scavenging dogs (as observed in Bardiya village), or it may simply reflect the tipping of refuse in a convenient spot after disuse or removal of the overlying flimsy floor.[1]

As already noted. the different ashy lenses of Phase 5.2, (28) and (33), were not visible as separate entities during excavation and showed up in the section only after it had dried out, so it is not possible to say whether there was a smooth transition into the Ninevite 5. The whole ashy deposit, however, contained almost entirely Later Uruk material; the few Ninevite 5 sherds present might well have been the result of animal disturbance, an almost inevitable contamination factor with layers so close to a cliff section. Although the pit in the south-east corner of the trench (which, as we have seen, was dug from the top of these deposits) was also not recognised until after the section had dried out, the bottom 30 cm, (54), contained four sherds, all of which were Later Uruk. This phase therefore probably represents a continuation of the former phase, and the excavated areas were probably peripheral to activity elsewhere on the mound, with the exception of ash dumping.

The ceramics from both the Later Uruk phases are very similar to those from Tell Mohammed Arab and other Later Uruk excavations lower downstream on the Saddam Dam, generally grey, sandy-tempered fine and medium bowls (W Ball, pers obs). Also present were nose-lugs, vertical ribbed vessels, and vessels with various incised motifs, often in the form of triangles, to name only the main types represented. There were some painted sherds, including one whole pot, but these were rare. Only a few fragments of bevelled-rim bowls were found. This is in marked contrast to Tell al-Hawa, where apart from the presence of bevelled-rim bowls the Later Uruk assemblage was quite different; it mainly consisted of coarse, heavily chaff-tempered vessels, of which the open 'hammer-headed' bowls are the most common form.

The 'granary rack', together with the location of the site overlooking a fertile floodplain and its small size, suggest an agricultural economy, and Siyana was presumably an agricultural settlement or even a large farmhouse, perhaps one of a ring of similar agriculture-based settlements surrounding the larger market centre of Tell Abu Dhahir.

Period 6 Ninevite 5

Although Tell Abu Dhahir was the main settlement for the area in most periods, Siyana appears to be the more important settlement in this period from the archaeological point of view, as most of the material excavated from there was Ninevite 5. As such, Siyana was the main Ninevite 5 site we excavated.

The architecture was too fragmentary and had too few distinguishing characteristics to be worth discussing further here. The continuity apparent in both the stratigraphy and the coarse wares from the Later Uruk period suggests that there was no break in occupation at Siyana between the Later Uruk and Ninevite 5. However, Siyana did not have the great variety of painted Ninevite 5 types, representing an intermediate phase between the Later Uruk and Ninevite 5 incised, which were found at Tell Mohammed Arab. Indeed, apart from a very few poor fragments, Ninevite 5 painted sherds were almost entirely absent throughout the excavations. The few sherds that were found (mostly simple stripes) did not seem to form any particular concentration. This absence of painted wares has already been noted for this side of the river (al-Soof 1968, 76). This almost complete absence of painted Ninevite 5 wares, despite the suggestion of a 'painted ware period', might seem an anomaly here, but it is possible that a painted ware of this quality would be out of place in such a small village settlement as Siyana, which might be unable to afford 'luxury' pottery items (although note its presence at Tell Gir Matbakh, a similarly small settlement; see Chapter 7). Alternatively, it could be that the incised style was simply preferred locally, or that the two styles belonged to two groups of people distinguished by ethnic, tribal, industrial, social or other differences. The fact that northern Iraq must have been subject to the movement of peoples and the coexistence of different minority groups in Ninevite 5 times as much as today should not be overlooked. In other words, in the third millennium the area would have been home to the equivalent of Yazidis, Turkomans, Kurds, Assyrians, Shammar, Bedu and other modern cultural or ethnic groups, each leaving different settlements displaying the evidence of their own material culture.

For the incised types, however, most decorative types were represented, such as corrugated, rope-banded, gouged, impressed triangles and several varieties of incised, as well as undecorated. Bases were rounded, slightly pointed or pedestal. The fabrics were very fine buff through to metallic grey wares, though three rarer types stood out as distinctive fabric types: a yellower ware, usually gouged, a greener ware, also usually excised (though these may merely be overfired versions of the grey wares), and a highly distinctive dark grey to black fabric, generally with much finer and more complex incised designs. Excision seemed particularly popular; the extremely fine incised wares known from Tell Mohammed Arab and elsewhere, though present, were relatively rare. The most distinctive of the coarse wares were cooking pots with crescent handles and pot lids, often roughly decorated. The highly distinctive zig-zag motifs found at Tell Leilan are entirely absent from Siyana and elsewhere in the Zammar area (although a few fragments have been found at Tell al-Hawa).

1 We are grateful to St John Simpson for substantial contributions to the discussion of this structure.

Siyana is consistent with a general picture from the Later Uruk period of growth and continuity. The large number of small settlements in the countryside, of which Siyana is a typical example, suggests that there were fewer external threats and a greater measure of rural prosperity and stability in the Ninevite 5 period. Agriculture was probably the basis of this prosperity, as the large numbers of small sites seem to indicate predominantly rural communities. Again, the location of Siyana overlooking an agriculturally rich floodplain is entirely consistent with this pattern. The lack of any recognisable regional centre, which agricultural settlements such as Siyana would have required as a market, appears an anomaly in this pattern, since the Later Uruk regional centre of Tell Abu Dhahir contracted considerably in size in the Ninevite 5 period. Perhaps the regional centre moved away (eg to Tell Sellal (see Fig 2), a large site with Ninevite 5 material some 16 km downstream excavated by Mosul University and the Department of Antiquities), or perhaps the existence of a major Ninevite 5 central town at Tell al-Hawa over to the west diminished the need for provincial centres such as Tell Abu Dhahir.

PERIOD 7 AKKADIAN

The suggestion that the burial may be Akkadian in date must remain very tentative, since no material was found with the burial itself, but a few sherds of fine Taya ware were found in an adjacent spit. No grave goods were found with the burial and these sherds cannot be related to the burial with any certainty, but the possibility remains that they may be grave goods, as their very fine quality (fine Taya stoneware; miniature vessels) is consistent with Akkadian burials known from Tell Fisna, Tell Jigan and Tell Taya, and their presence would otherwise be difficult to explain at a site where no other traces of Akkadian activity were found (see Ii and Kawamata 1984/85, Numoto 1988, Reade 1971, 87-100). The position of the remains indicated that the body had been buried in an extended position on its back with its head to the north, indicating at least that it was pre-Islamic (Fig 8).

This probable Akkadian burial appears to be no more than an isolated incident with no relation to the settlement. In a very thorough sherding of the surface of the site not a single Akkadian sherd was collected (despite the distinctive appearance of Akkadian pottery), so it is unlikely that occupation continued into this period.

PERIOD 13 HELLENISTIC

The coarse ware sherds were identified as Hellenistic only by their shape, which was analogous to material from other Hellenistic sites in the region (eg Tell Deir Situn: Ball and Black 1987, 240, Curtis 1987b, Warwick Ball, pers obs), rather than by any strong characteristics of fabric or decoration. More familiar Hellenistic types, such as black- or red-slipped wares, 'fish-plates', stamped sherds, etc, were entirely absent from the Siyana assemblage.

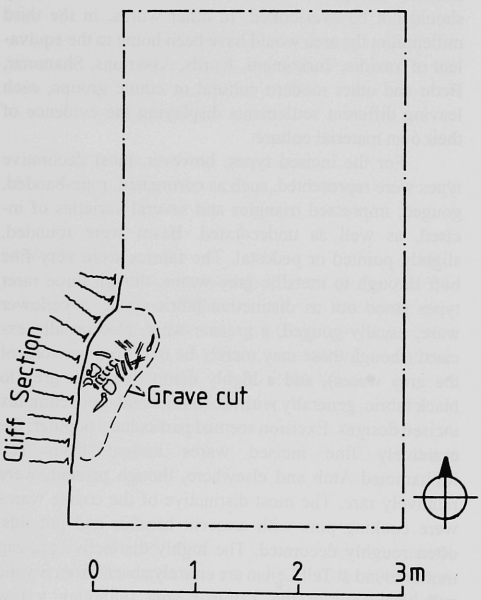


Fig 8. Siyana: the Akkadian burial

CONCORDANCES

This section is intended to provide a quick reference to the contexts excavated to facilitate use of the different parts of this report and the corresponding pottery report and illustrations. The concordances take the form of three lists: units, phases and small finds. In the list of units, each entry consists of the context and trench numbers followed by the phase, a brief context description, a summary of the types of bulk finds (Samples) and the numbers of any small finds from the context. The phase concordance gives the number of all the units in each phase. The small finds concordance lists the registration number, description, Iraq Museum number, unit and phase of each small find.

Abbreviations

P=pottery A=animal bone H=human bone L=lithics G=ground stone Sl=slag S=shell IM=Iraq Museum

Units

Unit	*Phase*	*Description*	*Samples*	*Small finds*
1	6.2	topsoil	P A L G	405, 421, 423, 429
2	6.2	topsoil	P A L	414
3	6.2	pit	P A L	413
4	6.2	stone wall	A	
5	6.2	fill/collapse	P A L	416, 418
6	6.2	mud brick wall		
7	6.2	mud brick wall		403
8	6.2	floor	P	
9	6.2	mud brick wall		
10	6.2	floor underlay	P L	
11	6.2	deposit over floor		
12	6.2	burnt collapse		
13	6.1	fill/collapse	P A G	428
14	6.2	stone wall		
15	6.2	fill/collapse	P A L	426
16	6.1	fill/collapse	P A L	409, 430
17	6.1	fill/collapse	P A	419
18	6.1	burnt collapse	P A L	
19	6.1	brick collapse		
20	6.1	surface		
21	6.1	stone scatter	G	420
22	6.1	fill/collapse	P	
23	6.1	stone scatter		
24	6.1	fill/collapse	P A L	
25	6.1	fill/collapse	P A L	
26	6.1	fill/collapse	P A L S	l417
26a	5.2	surface		
27	5.2	stone scatter	G	425
28	5.2	ashy fill	P A L S	1410
29	7	burial	H	
30	5.2	surface		
31	5.2	fill/collapse	P A L	
32	5.1	mud brick wall		
33	5.2	ashy fill	P A L	406, 408
34	5.1	mud brick wall		
35	5.2	surface		
36	6.1	fill/collapse	P A L	
37	5.1	mud brick wall		
38	5.1	mud brick wall		
39	5.1	mud brick wall		
40	5.1	mud brick wall		
41	5.1	mud brick wall		
42	5.1	mud brick wall		
43	5.2	fill/collapse	P A L	

44	5.2	fill/collapse	P A L	
45	5.1	mud brick wall		
46	5.1	room contents	P L	
47	5.1	room contents	P A L	402, 412
48	5.2	fill/collapse		
49	5.1	floor		
50	5.1	floor		
51	5.2	ashy fill	P A L	407
52	5.1	room contents	P A L	401
54	5.2	pit	P A	
55	5.1	all 5.1 walls	P S	
56	5.1	ashy fill	P A L	
57	5.1	ashy fill	P A L G	404, 411, 422, 427
58	5.1	ashy fill	P A L S	
59	5.1	ashy fill	A L	424
60	5.1	floor		

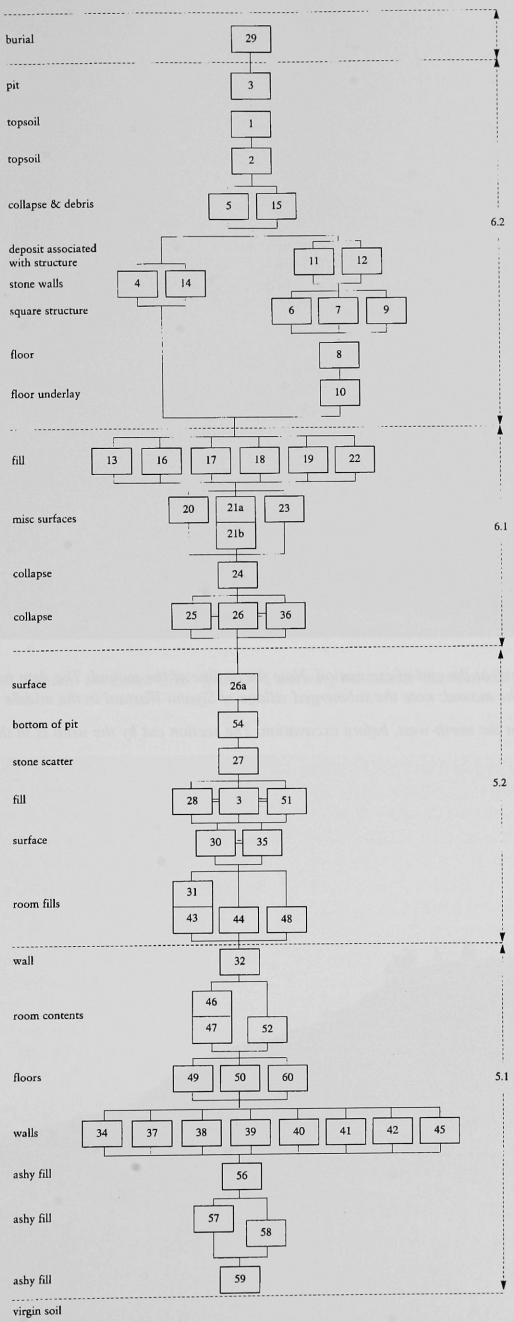
Phases

Phase	*Units*
5.1	32, 34, 37-42, 45-47, 59, 50, 52, 55-60
5.2	26a, 27, 28, 30, 31, 33, 35, 43, 44, 48, 51, 54
6.1	13, 16-26, 36
6.2	1-12, 14, 15
7	29

Small finds

Reg	*Description*	*IM no.*	*Unit*	*Phase*
401	pot	SU2	52	5.1
402	pot	SU3	47	5.1
403	clay vessel		7	6.2
404	?sealing		57	5.1
405	glass bracelet		1	6.2
406	figurine	SU4	33	5.2
407	figurine	SU5	51	5.2
408	figurine	SU6	33	5.2
409	figurine	SU7	16	6.1
410	bead	SU8	28	5.2
411	bead		57	5.1
412	clay vessel		47	5.1
413	pierced stone		3	6.2
414	clay vessel		2	6.2
415	clay pedestal		-	
416	?clay foot		5	6.2
417	sealing		26	6.1
418	pot		5	6.2
419	sealing		17	6.1
420	grinder		21a	6.1
421	grinder		1	6.2
422	grinder		57	5.1
423	grinder		1	6.2
424	grinder		59	5.1
425	grinder		27	5.2
426	stone weight		15	6.2
427	grinder		57	5.1
428	grinder		13	6.1
429	grinder		1	6.2
430	seal impr.	SU9	16	6.1

SIYANA SEQUENCE DIAGRAM



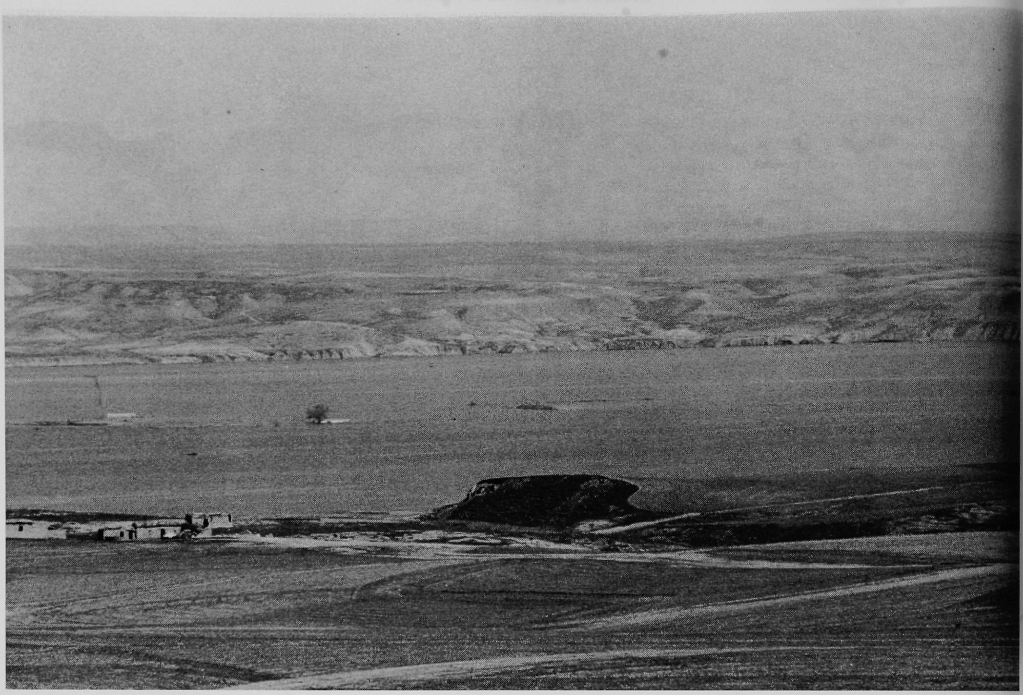


Plate 2. Siyana from the south-west, at the end of excavation. Note the outline of the mound. The dam has already backed up as far as the foot of the mound: note the submerged village of Siyana Wastani in the middle distance

Plate 3. Siyana from the north-west, before excavation. The section cut by the wadi is in the foreground

Plate 4. Siyana: the Later Uruk 'granary', showing the scatter between the foundations

CHAPTER 4

KHIRBET SHIREENA

Anthony Green

SUMMARY

The first of a string of small mounds upstream on the Wadi Suwaidiyya, Khirbet Shireena is sited on the left bank a little before the Tigris floodplain. The mound is less than 200m in diameter and reaches a maximum of just under 6m above local ground level. The excavations showed that the ancient settlement covered a maximum area of *c* 11,250 square metres.

A sondage excavated from the top of the mound to a depth of 3.1m, cut through the remains of two major archaeological periods without reaching virgin soil.[1] Three Period 8 ('Khabur') building phases were reached in the lower levels of the sounding. Period 11 (Late Assyrian) was represented by four distinct phases. Phase 11.1 was part of a building with substantial mudbrick walls and mudbrick and beaten earth surfaces. Cutting through this and the earlier Period 8 levels in the sondage was a large grain silo, Phase 11.2. Phase 11.3 was characterised by areas of paving constructed either of river pebbles or of blocks of soft sandstone, Phase 11.4 by paving composed mainly of the latter. Built into these pavements was also a quantity of disused ground stone tools. At least five burials also belong to the Late Assyrian period and provide evidence for mortuary practices at this time among the poorer sections of society. Period 12 (Post-Assyrian) is represented by material of Achaemenid and/or Hellenistic date recovered from large pits as well as from surface collections, Period 18 (Late Islamic) by surface sherds and some relatively recent graves.

The site was conveniently placed for the ready supply of water and construction materials, including sandstone, river pebbles and local clays. A plausible interpretation of the Late Assyrian settlement is as a small farmstead dependent on the larger settlement at Tell Abu Dhahir. Of particular interest, therefore, is a system of former field boundaries. These show as distinct cropmarks around the site and as walls or the footings of walls made of amassed river pebbles on the hills to the north. Their date is unknown, but they appear to be associated with the site and are certainly not recent.

1 In the first published report of Khirbet Shireena (Green 1987, 247-48) Levels 1, 2 and 3 are Phases 11.4, 11.3 and 11.1 in this report, and Levels 4, 5 and 6 are Phases 8.3, 8.2 and 8.1. The possible Middle Assyrian sherds in Green (*ibid*) are not included in this report.

INTRODUCTION

Location

The Wadi Suwaidiyya is a perennial stream rising in Syria and joining the Tigris at Tell Abu Dhahir. The site, known locally as Khirbet Shireena ('Shireena' is probably a Kurdish female name, from the Persian *shirin*, 'sweet'), is one of a number of small mounds on the lower end of the wadi, in this case on the left (north) bank just before where it debouches into the floodplain around Seh Qubba and Tell Abu Dhahir (Fig 2). It was initially thought to be that referred to as Site 99, Tell Ain Uwais, marked on the right (south) bank of the Wadi Suwaidiyya on the official Saddam Dam Salvage Project map. According to subsequent local information, however, the name 'Ain Uwais' refers to a quite separate locality much further to the west. The site was thereafter referred to as 'Wadi Suwaidiyya 1', and appears as such in the excavation notes (*cf* also Ball 1987a, 80) with its abbreviation, 'WS1', marked on the pottery. It was only towards the end of the excavations that its real name, Khirbet Shireena, was discovered, and it appears as such in later preliminary reports (Green in Ball and Black 1987, 247-8), with its abbreviation of 'KhS' marked on objects handed to the Iraq Museum.

No site was found on the right bank of the wadi in the exact location of Site 99 on the Saddam Dam map, and it could be referring either to Khirbet Wadi Suwaidiyya, a ruined mill (see below, Chapter 9: site 35), or to Khirbet Shireena itself, both on the left bank. One other site along this stretch of the Wadi Suwaidiyya has been excavated, Tell Derdarra, further to the west on the north bank, with painted and incised Ninevite 5, and 2nd millennium BC ceramics (Spanos 1988, 59-77).

The mound is small – a maximum of just under 6m above the surrounding plain – with an especially gradual gradient on its north and east slopes, and a comparatively steep one on its southern side (Fig 9, Pl. 5).

ACKNOWLEDGEMENTS

Excavations were supervised by Timothy Clayden between 3rd and 20th December 1985, and by Anthony Green between 1st and 21st February and again between 22nd and 31st March 1986. This represented a mere 29 working days on site (nine, eleven and nine days respectively), mainly because a good deal of time was lost due to inclement weather in December and February. Further periods were spent on site recording and the processing of material. The number of local workmen ranged between three and 21, averaging about 12, and one to three Sherqati foremen were occasionally employed. Jo Hall assisted with site recording for four days, and Martin Clarke excavated the ill-fated Grave 9. The contour survey and plan of the surrounding field system (Fig 17, Pls. 17-19) are the work of Bronwen Campbell. Further study on the material from this site, along with other work, was held at Nineveh between 1st and 28th June 1986 by the author, Heather Baker, Paul Croft, Edward Luby, Wendy Matthews and Tessa Rickards, all of whom are to be thanked for their hard and excellent work. Heather Baker in particular took on the difficult task of cataloguing the diagnostic pottery from the site, a project which she continued and completed at Tel'afar Castle between December 1987 and February 1988, aided by a grant from the G A Wainwright Fund for Near Eastern Archaeology, Oxford. This cataloguing was in addition to the main pottery recording system carried out on material from the 1985/6 excavations, and forms part of a separate study of Late Assyrian pottery. In addition, she completed a study of the corpus of ground stone tools from Khirbet Shireena (to appear in the volume of specialist studies). St John Simpson filled in missing details on the grinding stones, fired bricks and other material in Tel'afar in 1986-87. Edward Luby carried out a preliminary study on the human skeletal remains while funded by a grant from the American Schools of Oriental Research. Paul Croft carried out a preliminary study of the animal skeletal remains. Their reports will appear in the volume of special-

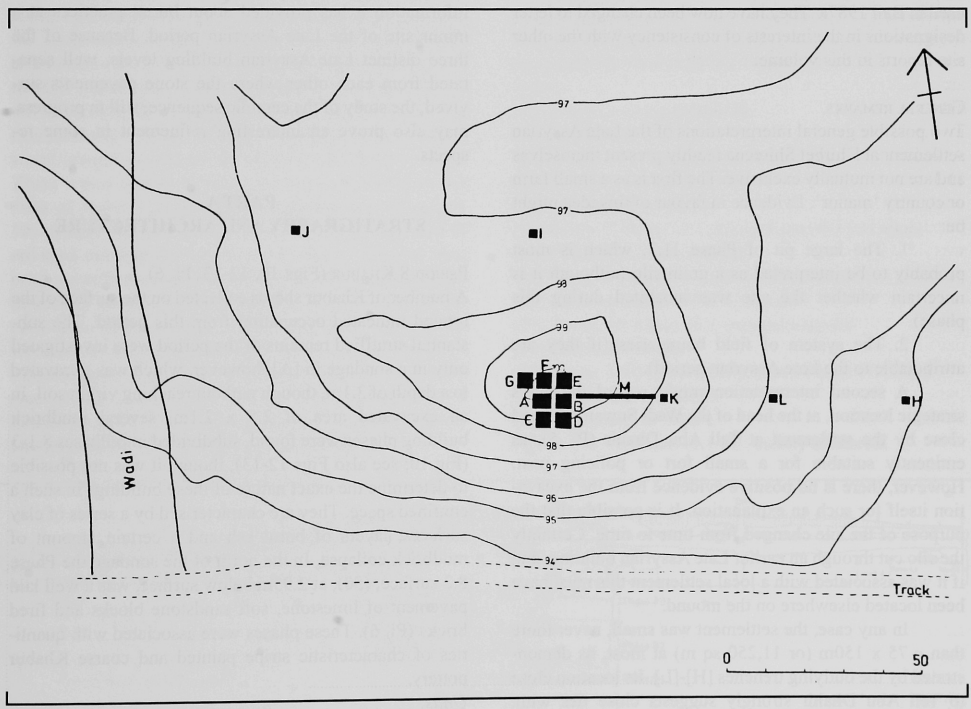


Fig 9. Khirbet Shireena: contour plan of the site

ist reports. In Britain, Tim Clayden has assisted with the post-excavation work preparatory to the writing of this report.

TRENCH LAYOUT *(Fig 9)*

Around an initial 5 x 4m trench [A], a grid of six 4 x 4m squares were excavated, [B]-[G], on the same grid, with 1m baulks between. Additionally, to test the overall size of the settlement, a total of five outlying 2 x 2m trenches, [H]-[L], was excavated down the eastern, northern and north-western slopes of the mound. Since [K], 23m east of the main excavation, proved to have a good depth of deposit, a 1 x 21m stepped slit trench, [M], was also excavated in the final days in an attempt to provide some stratigraphic link between [K] and the main area of excavation, including the other sounding in the north-west of [A] (see Fig 9). Altogether, we encountered six distinct building levels, without reaching virgin soil in the central excavations, although this was reached immediately beneath the topsoil in three of the outlying trenches, [H]-[J], and after 2.25m of deposit in [K] and 1.6m in [L]. For a sequence diagram of the unit numbers assigned to each trench, see below. Trenches [A]-[M] were originally labelled I-XII (respectively), and these designations were used in Ball 1987a. They have now been changed to letter designations in the interests of consistency with the other site reports in this volume.

GENERAL REMARKS

Two possible general interpretations of the Late Assyrian settlement at Khirbet Shireena readily present themselves and are not mutually exclusive. The first is as a small farm or country 'manor'. Evidence in favour of this idea might be:

1. The large pit of Phase 11.3, which is most probably to be interpreted as a grain silo (although it is uncertain whether the site was inhabited during this phase).

2. The system of field boundaries (if they are attributable to the Late Assyrian period).

A second interpretation might regard the site's strategic location, at the head of the Wadi Suwaidiyya and close by the settlement at Tell Abu Dhahir (Pl. 5), as eminently suitable for a small fort or policing post. However, there is no positive evidence from the excavation itself for such an explanation. It is possible that the purpose of the site changed from time to time. Certainly the silo cut through an earlier Late Assyrian building, and if it was associated with a local settlement this must have been located elsewhere on the mound.

In any case, the settlement was small, never more than *c* 75 x 150m (or 11,250 sq m) at most, as demonstrated by the outlying trenches [H]-[L]. Its location close to Tell Abu Dhahir strongly suggests close ties with, probably amounting to dependence upon, that larger settlement. Too little was excavated of the Period 8 (Khabur) phases at Khirbet Shireena to allow us to make any very accurate assessment of the nature of the settlement at that time. However, the sequence of at least three building phases of this period is itself suggestive of continued or seasonal occupation; it may be, therefore, that from its outset the site was associated with farming. The site was well situated for the ready supply of water and building materials, including soft, easily hewn sandstone (found in the hills on the opposite bank of the Wadi Suwaidiyya and in the wadi bed), river pebbles and local clays.

From our perspective, it cannot be claimed that the settlement would have been of anything more than minor importance in any period. However, along with the excavations at other small Late Assyrian mounds in the Saddam Dam Project, the excavations have provided some insight into the nature of a minor settlement in the Late Assyrian period which stands at the opposite end of the spectrum from the large urban sites that have (not unjustly) dominated the literature. We feel that the excavations at Khirbet Shireena contribute to the overall picture of life and death in the Late Assyrian period, as well as to our assessments of patterns of regional settlement and the exploitation of resources. Perhaps the main contribution of the work at Khirbet Shireena itself is the information it has provided about burial practices at a minor site of the Late Assyrian period. Because of the three distinct Late Assyrian building levels, well separated from each other where the stone pavements survived, the study of the ceramic sequence, still in progress, may also prove an interesting refinement in some respects.

PART A
STRATIGRAPHY AND ARCHITECTURE

PERIOD 8 KHABUR (Figs 10, 12-13, Pl. 6)

A number of Khabur sherds collected on the surface of the mound indicated occupation from this period. The substantial stratified remains of the period were investigated only in a sondage in [A], however, which was excavated to a depth of 3.1m, though without reaching virgin soil. In an excavated area of 2.5 x 2.1m, several mudbrick building phases were found, subdivided into Phases 8.1-3 (Fig 10; see also Figs 12-13), though it was not possible to determine the exact nature of these buildings in such a confined space. They are characterised by a series of clay surfaces, layers of burnt ash and a certain amount of mudbrick collapse. In the north of the sondage the Phase 8.2 surface, (50), at 2.95m below surface, was a well laid pavement of limestone, soft sandstone blocks and fired bricks (Pl. 6). These phases were associated with quantities of characteristic stripe painted and coarse Khabur pottery.

Units:

(42) fill of Phase 11.2 silo and Phase 8.3 occupation fill (mixed)

(45) fill of Phase 11.2 silo and Phase 8.2 occupation

fill (mixed)
(48) Phase 8.2 occupation fill (2.55-2.85m below surface)
(49) Phase 8.2 occupation fill (2.85-2.95m below surface)
(50) Phase 8.2 flagstone pavement
(51) Phase 8.3 occupation fill, between Phase 8.2 flagstone pavement and Phase 8.3 surface

PERIOD 11 LATE ASSYRIAN

Phase 11.1: mudbrick and beaten earth surfaces

(Figs 10-13, Pl. 6)

[A]

The earliest Late Assyrian phase was uncovered to any extent only in [A], where it was characterised by mudbrick and beaten earth surfaces running up against substantial mudbrick walls (Fig 11, Pl. 7). This level was sealed in this trench by the pebble and flagstone pavement of Phase 11.3. The intersection of the four mudbrick walls (a-d) was cut by the bottom of the Period 12 Pit A, but it is clear that the walls originally abutted each other, as there is scarcely room for a throughway between two separate enclosed areas. The walls thus divide four spaces.

It seems likely that the north-east, north-west and south-west areas (Rooms 1-3) were inside chambers, and the south-east area (Room 4) may have been external (or an internal court). Rooms 1-3 had floors of regularly laid reddish mudbricks, which in Room 1 we were able to articulate fully, as the grey mortar between the bricks was exceptionally visible. A near complete pottery vessel stood upright on one of the bricks of the Room 1 floor. There was a scatter of relatively large potsherds on the floor of Room 2, including the tapering base of a (type 10) storage jar, held upright by a small retaining wall of red mud cradling the vessel on two sides. This may have been a standard method on village sites for keeping large, inherently unstable vessels upright. Assyrian art depicts such jars held upright within specially constructed wooden or metal frames (eg on a palace relief of Assurbanipal: Barnett 1976, Pl LXIV, slab E). Just to the east of the storage jar, on the same surface, lay a limestone mortar. The floor of Room 3, also of regularly laid mudbricks, was virtually clean of material.

In Room 4 the floor was of beaten earth and yellowish clay, coated in places with a whitish material (a thin plaster or possibly decayed reed matting). At the southern edge of the trench a shallow burnt hearth (or possibly the remnants of a dismantled *tannur*) was sunk into the floor (60 x >58 cm). To its east, a small *tannur* retaining its wall (70 cm diameter) apparently also belonged to this phase (section, Fig 10). The room was probably unroofed and may have been a courtyard or other outside area. At some time after the surface was formed, a line of large limestone blocks, surviving one course high, was laid parallel to Wall d (the north wall of the 'room'), partitioning a northern corridor (Room 4A) from the southern area containing the fire installations (Room 4B). This stone 'wall' (e), possibly the foundation course for a mudbrick wall, is certainly later than the main Phase 11.1 mudbrick walls (section, Fig 10), although like them it is sealed by the Phase 11.3 stone pavement. This supports the impression that the south-east area was probably external. Since there is a difference of 37 cm in floor level between Room 4 and Room 3 to the north, it might be that the beaten earth floor in the south-east of [A], (34), as well as the stone Wall e, represents an intermediate phase, and that an unexcavated floor of laid mudbrick exists at a lower level in Room 4. However, the beaten earth floor of Room 4 is at a similar level to that of the mudbrick floor in Room 1 (Fig 10).

Units:

(19) Room 1 occupational fill
(20) Mudbricks of Wall a
(22) Room 1 fill immediately above Phase 11.1 floor
(23) Room 2 mudbrick tumble
(24) Mudbricks of Wall b
(25) Room 2 Phase 11.1 occupational fill and upper fill of Phase 11.2 silo (mixed)
(26) Room 3 Phase 11.1 fill, mainly mudbrick □tumble
(27) Stone partition 'Wall' e, Room 4
(28) Room 4B Phase 11.1 occupational fill
(29) Room 4B *tannur*
(30) Room 3 fill immediately above Phase 11.1 floor
(31) Mudbricks of Wall d
(32) Mudbricks of Wall c
(33) Room 4A Phase 11.1 fill, mainly mudbrick

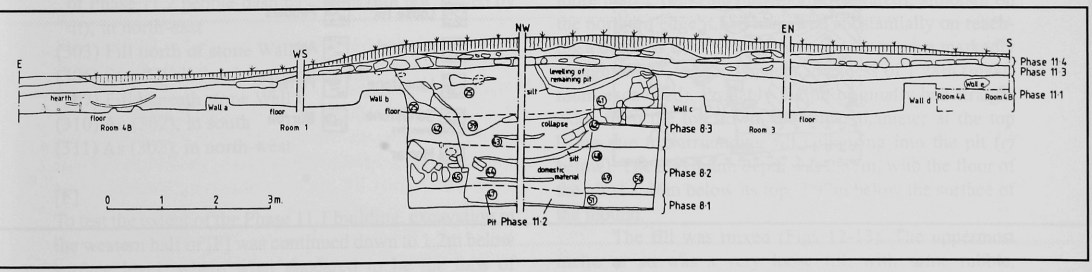


Fig 10. Khirbet Shireena: schematic sections of all four faces of Trench [A] with phasing

tumble
(34) Room 4 Phase 11.1 beaten earth and clay floor
(35) Room 4B hearth
(36) Arbitrary spit in area of Room 4A: Phase 11.1 flooring material and (Phase 8.3?) fill beneath
(37) Mud wall enclosing storage vessel in south of Room 2

[C] (Fig 14)
Phase 11.1 was encountered in the north-west corner of [C]. On clearing to the disturbed Phase 11.3 surface, a large pottery vessel was seen to survive substantially intact, partly beneath one of the larger sandstone blocks. This block was therefore removed and the area around cleared to the level of a beaten earth surface upon which the vessel stood, presumably the Phase 11.1 floor. The vessel was well preserved, probably by being covered by the Phase 11.3 paving stone above (Fig 14). It is a storage vessel, with a diameter of *c* 80 cm and a preserved height of *c* 60 cm. It is a Late Assyrian type, with flat base, straight sides and cable decoration around the neck. Other than the applied cable, it is undecorated, but in general form is very similar to a large figuratively decorated pottery vessel from the north-west Palace of Assurnasirpal II at Nimrud (Green 1985, 75, 80, Pl V II).
Units:
(204) Phase 11.1 occupational debris and fill above floor S [?] in north-west
(206) Phase 11.1 beaten earth floor

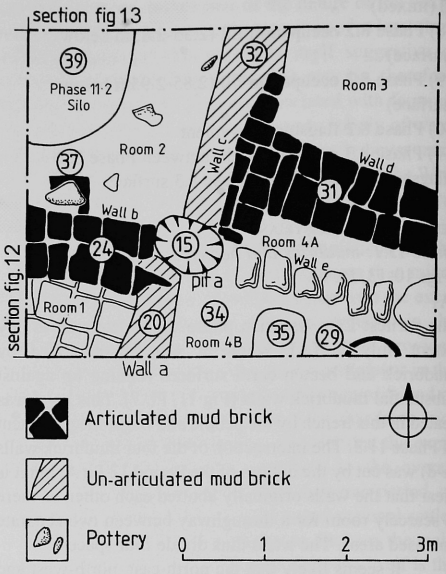


Fig 11. Khirbet Shireena: Trench [A], Phase 11.1 plan

[D]
It is possible, though not certain, that a stone wall (or wall foundation) running east/west across the south of [D]

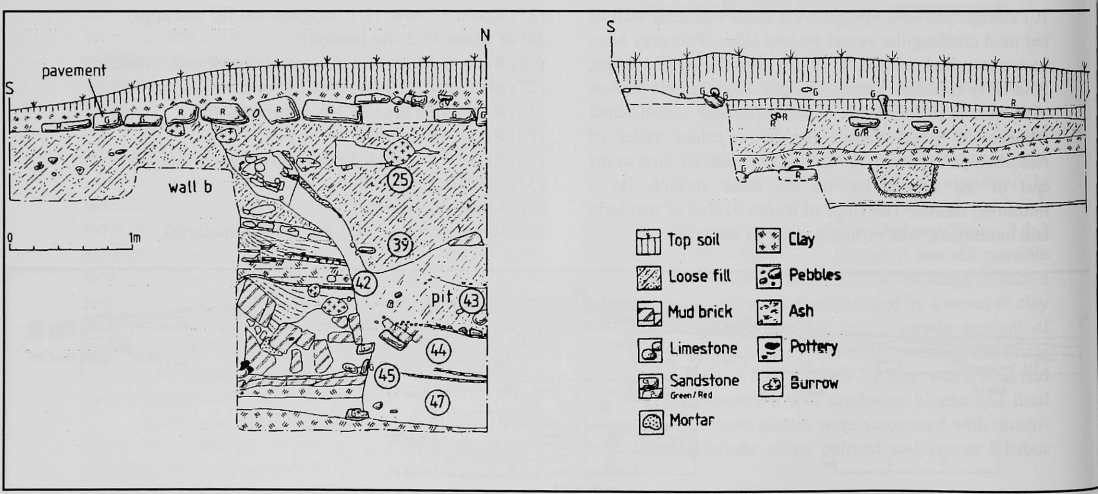


Fig 12. Khirbet Shireena: Trench [A], west face and Trench [G], reversed east face

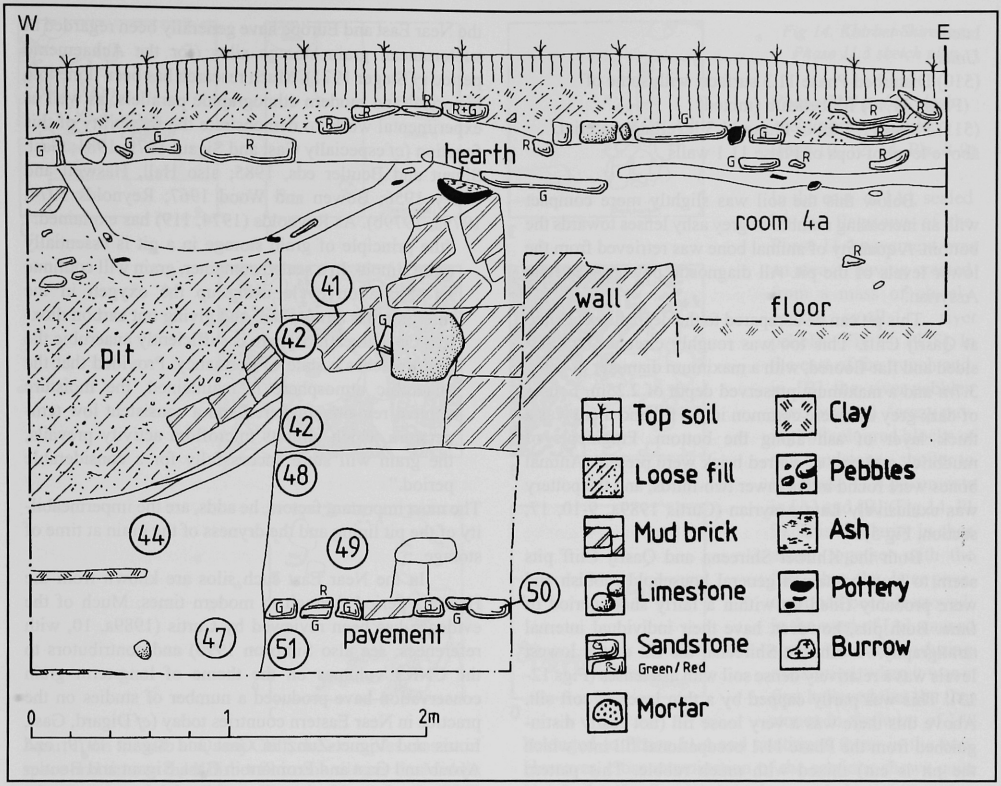


Fig 13. Khirbet Shireena: Trenches [A] and [B], east/west section, north faces

should be attributed to this phase (Wall f). It was a single course of stones high (maximum height 24 cm), a maximum of 44 cm in width and, like Wall e in [A], was constructed immediately over a surface of beaten earth. The layers above, however, if they ever existed here, had been eroded away entirely to give the present slope of the mound at this point.

Units:

(302) Debris, mainly mudbrick tumble, beneath level of Phase 11.2 pebble-dash pavement (but not sealed by it), in north-east
(303) Fill north of stone Wall f
(306) Stone Wall f and surrounding fill
(307) Fill beneath stone Wall f
(310) As (302), in south
(311) As (302), in north-west

[F]

To test the extent of the Phase 11.1 building, excavation in the western half of [F] was continued down to 1.2m below surface level, where what appeared to be the tops of substantial mudbrick walls were observed but not articu-

(512) Fill immediately above Phase 11.1 structures
(513) Tops of Phase 11.1 mudbrick walls

Phase 11.2: the silo (Figs 16, 20-1)

Description

In the north-west corner of [A], cutting Phase 11.1 and, in the sondage, all three Period 8 phases, but sealed by the stone pavement of Phase 11.3, was a large, roughly circular, deep pit, (Figs 10-13). At the top its diameter was more than 2.16m (the maximum excavated), although on the northern edge it had narrowed substantially on reaching a depth of 1.2m. Below this point the pit was markedly straight-sided, with a diameter in excess of 1.28m (maximum excavated). Probably the pit originally had straight sides from the top down, the wider diameter at the top being due to surrounding fill collapsing into the pit (*cf* below). The maximum depth was 2.57m, with the floor of the pit at 2.46m below its top, 2.97m below the surface of the mound.

The fill was mixed (Figs 12-13). The uppermost metre or so was a very loose fill, with some rubble, including mudbricks and fragments of soft sandstone.

lated.
Units:
(510) Disturbed Phase 11.3 surface, with some of (Phase 11.1?) fill beneath (mixed)
(511) Phase 11.1 fill or Phase 11.3 levelling material, above level of tops of Phase 11.1 walls

Below this the soil was slightly more compact with an increasing number of grey ashy lenses towards the bottom. A quantity of animal bone was retrieved from the lower levels of the pit. All diagnostic pottery was Late Assyrian.

This pit can be compared to the deep pit excavated at Qasrij Cliff. This too was roughly circular, straight-sided and flat-floored, with a maximum diameter of some 3.7m and a maximum preserved depth of 2.25m. Lenses of dark grey ash were common in the fill and there was a thick layer of ash along the bottom. Fragments of mudbrick and part of a fired brick were present. Animal bones were found in the lower two-thirds, and the pottery was exclusively Late Assyrian (Curtis 1989a, 9-10, 17, section, Fig 5).

Both the Khirbet Shireena and Qasrij Cliff pits seem to have contained general household rubbish and were probably filled up within a fairly short period of time. Both pits, however, have their individual internal stratigraphy. At Khirbet Shireena, the fill of the lowest levels was a relatively dense soil with ash lenses (Figs 12-13). This was partly capped by a thin layer of soft silt. Above this there was a very loose fill (not easily distinguished from the Phase 11.1 occupational fill into which the pit is cut) mixed with much rubble. This pattern perhaps suggests that after the lower part of the pit had been filled with rubbish and left for a time to settle and silt over, the surrounding fill and brickwork had collapsed into the pit on top at some slightly later date. This is a pattern seen also in the Hellenistic silos excavated at Grai Darki (Curtis, Green and Matthews forthcoming). Indeed, it may be this landsliding rather than any original and intentional shaping of the pit that accounts for its widened diameter in its upper part. The collapsing material seems to have left a shallow open pit on the eastern edge of the original pit; after some silting up (iv), this was probably deliberately in-filled (v) in order to level the ground immediately before the laying of the Phase 11.3 pavement. This pavement was laid directly over where the pit had been (this can be compared to the floors lying directly over the Grai Darki silos).

Original purpose
As far as the original purpose of the pit is concerned, Curtis (1989a, 10, 17) has interpreted the comparable pit at Qasrij Cliff as a disused grain silo. Although the interpretation is not universally accepted (Goffer, Molcho and Beit-Arieh (1983) have interpreted the large Achaemenid pits at sites such as Beer-Sheba as compost stores), at least the larger and deeper of the pits at sites in the Near East and Europe have generally been regarded as subterranean grain storage silos (for the Achaemenid period *cf* Stager 1971). Much research has been done into historical and modern ethnographic parallels, as well as experimental work, to demonstrate the feasibility of this function (*cf* especially Gast and Sigaut 1979, 1981; Gast, Sigaut and Beutler eds, 1985; also Hall, Haswell and Oxley 1956; Bowen and Wood 1967; Reynolds 1974, 1979a, 1979b). As Reynolds (1974, 119) has explained:

> "the principle of grain storage in a pit is essentially quite simple. In a sealed container, grain will continue its respiration cycle using up the oxygen in the intergranular atmosphere and giving out carbon dioxide. Once the atmosphere is sufficiently anaerobic the grain reaches a state of dormancy. Provided that the anaerobic atmosphere is maintained, the moisture content remains unaltered and a consistent low temperature which inhibits microflora activity prevails, the grain will store successfully for a considerable period."

The most important factors, he adds, are the impermeability of the pit lining and the dryness of the grain at time of storage.

In the Near East such silos are known from the Hassuna period through to modern times. Much of the evidence has been reviewed by Curtis (1989a, 10, with references; see also Simpson 1990) and contributors to the CNRS volumes on the theme of long-term grain conservation have produced a number of studies on the practice in Near Eastern countries today (*cf* Digard, Gast, Louis and Vignet-Zunz in Gast and Sigaut 1979, and Ayoub and Gast and Fromont in Gast, Sigaut and Beutler 1985). To the evidence collected by these reviewers, the following might be added. In modern times there has been observation of the practice of storing grain in underground silos in eastern Palestine (Wilson 1906, 37). A modern parallel, additional to that at Hasanabad cited by Curtis (1989a), can also be noted at Rudbar in south-east Iran, where Gabriel (1929, 166) witnessed the storage of grain in deep trenches, lined with straw and covered over with chaff and earth; here the grain was stored, often for a considerable time, until milling facilities were available (*cf* this instance cited by Wulff 1966, 277). The silos excavated at Tell Mohammed Arab, in the Saddam Dam Project, include one of Islamic date (Roaf 1984, 144). Evidence for the practice in northern Iraq in the Hellenistic period is reviewed elsewhere (Curtis, Green and Matthews forthcoming).

There is little doubt that the deep Late Assyrian pit at Khirbet Shireena should be considered one of this group of pits, generally interpreted as grain storage silos. That the Qasrij Cliff silo appears to be the only other recorded example of the Late Assyrian period is doubtless fortuitous. Normally such silos would probably be dug at some distance from the settlements and so would not easily be found in excavations. In any case, very little work has been done on small rural sites of this period.

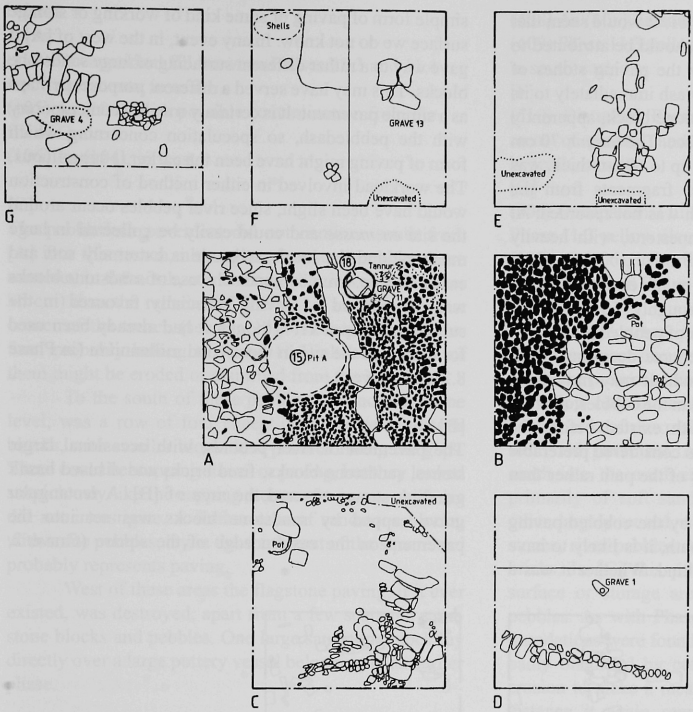


Fig 14. Khirbet Shireena: Phase 11.3 sketch plan

Phase 11.3 pebbledash and flagstone paving (Figs 10, 12, 14, Pls. 8-9)

In the east of [A], sealed by the flagstones of the Phase 11.4 pavement, was an area of paving created from a mass of closely packed small river pebbles (Fig 14, Pl. 8). In the east of the trench and in [B] the river pebbles gave way to 'crazy paving' of coloured blocks of soft sandstone, similar to the Phase 11.4 pavements in [A] and [B] (Fig 14, Pl. 9). This similarity in char acter, together with the fact that the later pavement had been destroyed in the west of [A], caused some confusion during excavation, when it was at first believed that the flag stones in the west of [A] belonged to Phase 11.4 and continued those in the east. However, close examination of the sections shows quite clearly that the flagstones in the west belong to the same phase as the pebbledash paving and that the later level was eroded at this point (Fig 10). In fact, both methods of paving were used in both phases, since, conversely, an area of Phase 11.4 pebbledash paving was uncovered in [G] where it abutted and clearly belonged with an area of flagstones (below; Fig 15).

No clear evidence was found of walls or wall foundations belonging with this Phase, and it is likely that the excavations covered an outside area. This idea is strengthened by the apparent 'path' of sandstone blocks running north/south through the pebbled area of [A]. Set beside this path at a certain point was a *tannur.*

The clear and well preserved paving of [A] and [B] did not extend into the other excavated trenches, where the remains of the level were patchy and disturbed (Fig 14). It therefore seems most useful to describe the findings trench by trench, rather than to arrange the discussion by supposed occupational units which may be postulated upon insufficient evidence.

[A]

In this trench the pavement of this phase was extensive and remained in good condition. The only major disturbances were the cut for the Period 12 Pit A, (15), and that

Apart from the silo at Qasrij Cliff, the examples closest in space and time to the Khirbet Shireena silo are the Middle Assyrian straight-sided cylindrical silos at Tell Mohammed Arab (noted by Curtis 1989a, 10) and the Hellenistic pits at Tell Jessari and Tell Abu Dhahir.

Since the Khirbet Shireena silo was dug from above Phase 11.1, but is directly sealed by the Phase 11.3 pavement, it must belong to a period between the two. This implies, in the area of [A], a break in occupation within the Late Assyrian period between Phases 11.1 and 11.3. Probably Khirbet Shireena itself continued to be occupied, but the settlement was moved to elsewhere on the mound. Alternatively, it is possible that during Phase 11.2 the entire site was nothing more than a storage depot attached to the settlement at Tell Abu Dhahir.

Units:

(25) Room 2 Phase 11.1 occupational fill and upper fill of Phase 11.2 silo (mixed)

(39) Fill of Phase 11.2 silo, from 1.33m. to 1.8m. below surface

(42) Fill of Phase 11.2 silo and Phase 8.3 occupational fill (mixed)

(43) Fill of Phase 11.2 silo

(44) Fill of Phase 11.2 silo

(45) Fill of Phase 11.2 silo and Phase 8.2 occupational fill (mixed)

(47) Fill of Phase 11.2 silo

in the north-east for the late Grave 11. It would seem that the *tannur* at this point, however, should be attributed to Phase 11.3, as it was covered by the paving stones of Phase 11.4 and had an area of grey ash immediately to its east; a little further east one limestone block, apparently in position, had a burnt upper surface. The *tannur,* 70 cm maximum diameter with a wall of up to 60 cm thick, was filled with ash and small *tannur* fragments from the collapsed roof. Its preserved depth was not recorded. At the base were three blocks of limestone, with heavily burnt upper faces.

The *tannur* was positioned on the eastern side of a line of soft sandstone blocks, roughly 50 cm wide, running north/south between areas of pebbledash paving. These flagstones were a single course deep and in all probability were used as a footpath. It may have been considered easier to walk across than the cobbles; alternatively, it is possible that the path existed before the pebbledash paving, and that it was considered preferable to run the cobbles up to the edges of the path rather than to remove the sandstone blocks.

What purpose was served by the cobbled paving itself? Especially in view of the path, it is likely to have been an outside surface of some kind. Whether it was a simple form of paving or some kind of working or storage surface we do not know. In any event, in the west of [A] it gave way to a rather different surfacing of large sandstone blocks. This may have served a different purpose, perhaps as a simple pavement. It is certainly roughly contemporary with the pebbledash, so speculation concerning which form of paving might have been the earlier is superfluous. The workload involved in either method of construction would have been slight, since river pebbles occur around the site *en masse* and could easily be collected in large numbers, and the local sandstone is extremely soft and easily broken, even by hand. The use of sandstone blocks was the method of paving especially favoured in the subsequent Phase 11.4, though it had already been used for paving at the site in the second millennium (in Phase 8.2, see above).

[B]

The pavement of river pebbles, with occasional larger stones, sandstone blocks, fired bricks and disused basalt grinding stones covered the area of [B]. A rectangular grave capped by sandstone blocks was set into the pavement on the eastern edge of the square (Grave 2,

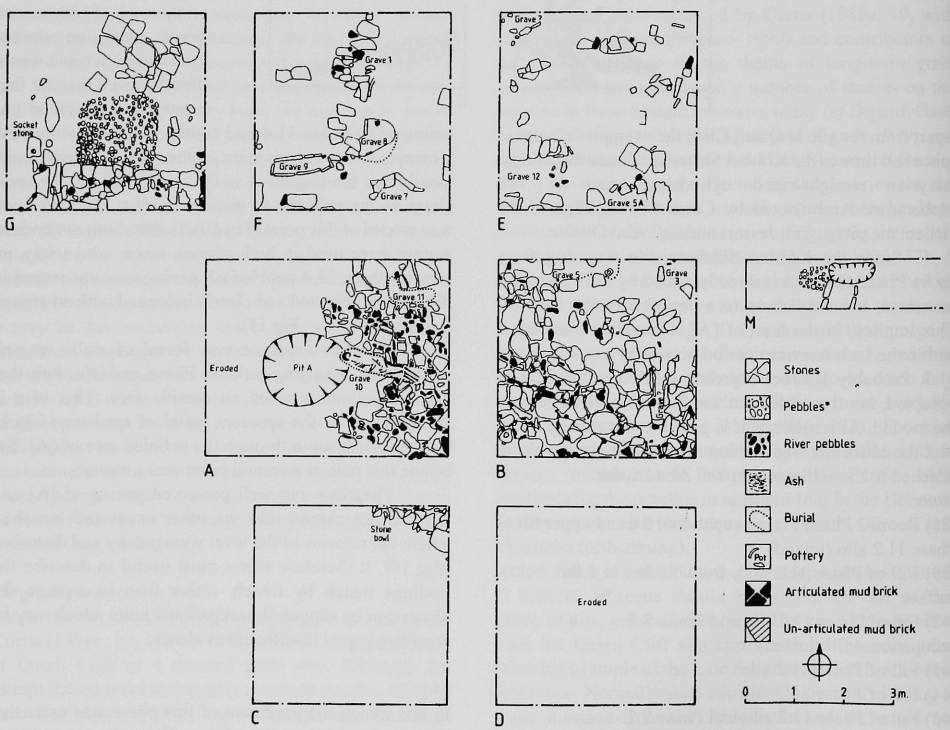


Fig 15. Khirbet Shireena: Phase 11.4 plan

below).
Units:
(104) Occupational fill between Phases 11.3 and 11.4 stone pavements, in east
(105) As (104), with possible contamination from the fill of Grave 3
(106) As (104), in west

[C]
The pebbledash pavement did not continue south from [A] into this trench, although a few stray pebbles were scattered in the north, at a considerably lower level (over 10 cm) than the remains of Phase 11.4 in the north-east corner of the trench (see Fig 14). These pebbles, therefore, probably belong to Phase 11.3, although some of them might be eroded or disturbed from the later level.

To the south of these pebbles, at much the same level, was a row of four exceptionally large sandstone blocks, with smaller blocks and pebbles filling the gaps. These could be stepping stones or paving, but they looked suspiciously like the capping stones of a grave which we did not investigate. A further area of sandstone blocks, with some pebbles, lay in the south-east of the square and probably represents paving.

West of these areas the flagstone paving, if it ever existed, was destroyed, apart from a few scattered sandstone blocks and pebbles. One large sandstone block lay directly over a large pottery vessel belonging to an earlier phase.

[D]
In the far north of [D] an area of pebbledash paving survived immediately below the topsoil, but to the south it was eroded off the edge of the mound.
Units:
(305) Phase 11.3 pebbledash paving
(309) As (305)

[E] - [G]
In the area north of [A] and [B], higher up the mound, the Phase 11.3 deposits were badly disturbed by deep ploughing. There were scattered areas of stone paving and areas of a (very disturbed) yellow clay surface, which could only be followed in places. The clay surface was best preserved in the north-east corner of [E], where a limestone mortar <42>, was probably in its original position. Another element of disturbance was the late graves, which in some cases cut this phase as well as the later Phase 11.4. Grave 4, however, may have belonged to Phase 11.3.
Units:
[E]
(405) Debris between Phase 11.4 and Phase 11.3 surfaces
(406) Fill immediately above Phase 11.3 surface, in north-east
(407) As (406), in north-west
(408) As (406), in south
(409) Phase 11.3 yellow clay surface, with stone covering in south-east
[F]
(510) Disturbed Phase 11.3 yellow clay surface, with areas of paving, and (Phase 11.4?) fill immediately beneath, in west
[G]
(606) Occupational fill between Phase 11.1 pavement and Phase 11.3 yellow clay surface
(607) As (606), in north-west, down to Phase 11.3 paving
(608) Disturbed Phase 11.3 flagstone paving

Phase 11.4 flagstone pavement (Fig 15, Pl. 10)
The uppermost occupational phase, some 10 to 35 cm below the present surface of the mound, was characterised by yellow clay and beaten earth surfaces, overlain in the central area of our main excavation in [A] and [B] by a well laid pavement, reaching north-west into [G] and south into the north-east corner of [C]) and consisting primarily of soft sandstone blocks, intermingled with other, largely reused, stones, limestone and basalt ground stones, river pebbles and complete or fragmentary fired bricks. In [G] this pavement abutted a small working surface or storage area (?) of closely set small river pebbles. As with Phase 11.3, no obvious walls or wall foundations were found, and the whole area had been too badly disturbed by cuts, modern ploughing and wind-erosion to make a meaningful plan (see Fig 15). In this instance it again seems most useful to describe the findings trench by trench, followed by some general remarks.

[A]
Following the removal of the topsoil, an area of stone paving was revealed in the east of the trench. In the west and central area of the trench this pavement was no longer preserved; it was cut by the central Pit A of Period 12 (see below) and by other disturbance, including recent ploughing and our own removal of some stones in picking through the topsoil, and in the west the paving of this level had apparently been destroyed by erosion. The pavement was composed of reasonably level and fairly closely laid soft sandstone blocks, or, in one case, a fired brick, the interstices filled with small river pebbles or, again in one case, a fired brick fragment. Here the only major breaks in the closely compact stones were the cuts for Graves 10 and 11.
Units:
(7) pavement in west
(8) pavement in east

[B] (Fig 15, Pl. 10)
To the east, in [B], the 'crazy paving' continued, mostly with closely laid blocks of sandstone, although becoming very uneven, with wide differences between the surfaces of the stones. Apart from irregularly shaped sandstone

blocks, the paving consisted of the occasional limestone blocks, or reused ground stone (eg <57>, <64>, <67>, <81>, <86>) or fired bricks. Again, the interstices were filled with river pebbles, and the occasional pottery sherd (including rim sherd WS.103.06) or fragment of ground stone or fired brick. In the south-west corner of the square was a limestone socket stone <81>, probably also reused, but since it was laid the correct way up, and the flagstones were not present to its south, it is not impossible that it was in position at a doorway (see Pl. 10). No doorway was apparent in the south and west sections of the square, but the soil here was disturbed by recent ploughing.

In the north-east of the square the paving gave way to a beaten earth surface with only the occasional sandstone block or river pebble, fired brick fragment or sherd. This was, at least in part, due to the removal of material by heavy ploughing at the point where the gradient of the mound rises. It is probable also that the pavement edge, whether well defined as in [G] or gradually fading out (apart from the occasional stepping stone) was around here – or a little further north – since in [E] there was only the occasional stone or brick sitting on a very clean surface which had other material lying upon it.

Apart from this area, the paving in [B] was broken only in a small rectangular area in the south-east. It seemed likely that this might have represented a north/south oriented grave, being about the right length north/south, and having large stones set on edge (including a reused limestone socket stone) along its long eastern and western sides, in the style of a number of our graves. If it ever was a grave, however, no human remains survived within it, and probably it was never so used. An actual grave, aligned east/west, was discovered in the north (Grave 5). In the area the sandstone blocks were already thin on the ground, but those that remained partly sealed the burial, which was probably an intramural interment below the surface, contemporary with or a little earlier than the pavement.

Unit:

(103) pavement

[C]

In [C] we picked up the south-western limits of the pavement. Among the sandstone blocks, river pebbles and fired brick fragments of which it was composed, was also a fragment of a finely carved basalt bowl. Abutting the flagstones, to the west, was the edge of an area of river pebbles, perhaps originally similar to the pebble surface in [G], but much disturbed. Any Phase 11.4 deposits that may originally have existed further south had been entirely eroded away, the slope-wash lying immediately above the stone surfaces of Phase 11.2.

Units:

(201) slope-wash immediately above Phases 11.4 and 11.3 pavements

(203) pavement

[E]

The uppermost level here had been somewhat disturbed by ploughing and by graves, but in the east a substantial area of beaten earth surface survived, in places overlain by sparsely distributed sandstone blocks, river pebbles and fragmentary fired bricks. In the north-east a surface of yellow clay survived and, sitting upon it, the crushed remains of a large Late Assyrian Type 10 storage jar. Immediately to the west of this, and partly beneath it, was a small fragment of bitumen-coated matting, upon which the vessel may originally have stood. Apparently there was very localised destruction in this area: patches of the surface and some of the surrounding stones were burnt, and a fired brick immediately to the south had apparently been partly refired in the intensity of the heat. A heavily burnt fragment of a clay figurine of a quadruped <17> is from this area; it was found at the very bottom of the topsoil, but may in fact have been associated with the yellow clay surface only 5 cm below.

Units:

(401) topsoil, above and partly disturbing Phase 11.3 deposits

(403) yellow clay surface, with bitumen matting and large storage jar fragments

(404) beaten earth surface (much disturbed) over the rest of the square

[F]

In [F] the Phase 11.4 deposits were very much disturbed, both by ploughing and by the many graves. All that remained in places was a very broken-up beaten earth surface, with occasional flagstones, river pebbles and fired brick fragments, mostly out of position; only in the area around the western edge of Grave 7 did the stones give any impression of being undisturbed, but even here they were, in part at least, reused as a wall to the grave, since they were largely piled up one upon another, unlike the Phase 11.4 pavement elsewhere, and the skull of the burial partly overlay a couple of them. Among the stones around this grave was a reused door socket stone laid inverted among the stones to the north.

Units:

(501) subsurface; topsoil with disturbed Phase 11.4 deposits over entire square

(506) area of stones around Grave 7

(507) disturbed Phase 11.4 deposits in north-east quarter of square

(508) disturbed Phase 11.4 deposits in south-east quarter of square

(509) disturbed Phase 11.4 deposits in west half of square

[G]

In [G] the slope of the mound had saved the uppermost level of deposits from the heavy ploughing to the east, and they were, in fact, fairly well preserved. The flagstone pavement of [A] and [B] extended from the southern and

eastern baulks of [G] northward for just under a metre into the square and westward to within half a metre of the western baulk; at these limits it had virtually straight, well defined, edges. Whether the sandstone block with socket(?) set at its north-west corner marked one side of a doorway or was out of position is unclear.

Abutting the northern edge of the pavement was a surface formed entirely of pebbles, in area *c* 1.5m square. Its purpose is difficult to judge, for its small area and very uneven nature make it appear unsuitable as a simple pavement; perhaps it was some kind of working or storage area, the gaps between the stones providing a means of keeping items upright or free from damp. Slightly north-east of this cobbled surface was another paved area of sandstone and limestone blocks and fired bricks, some of the latter wholly or virtually complete (sizes 35 x 20 x 70 cm and 18.5 x 16 x 7.5 cm). Perhaps this very localised 'patio' was another surface associated with the square of pebbles, providing easy access to it from the north to complement that from the main pavement to the south. Over some parts of the rest of the square we traced the beaten earth surface of Phase 11.4, but it was not easily located and followed here, although where we were able to clear down to it, it was not much disturbed.

Units:

(601) topsoil and disturbed Phase 11.4 deposits, above beaten earth surface
(602) beaten earth surface, with some stones
(603) cobbled surface
(604) flagstone pavement
(605) 'patio' of flagstones and fired bricks, in north-east

[M] (Figs 15-16)

Just beneath the topsoil at the west end of [M], we uncovered one end of a small channel or drain, apparently belonging to Phase 11.4 (Fig 15). The structure ran approximately north/south, its walls constructed of two parallel lines of fired bricks set on edge (single course), *c* 1 cm thick and set 25 cm apart. A stretch of 50 cm (two bricks on either side) was exposed in the 1m-wide trench. At the northern end was a pit or flooded area, filled with very loose greenish silt. This may have been a water retention area, but as it had no lining of any sort it was more probably an overflow. To the east at this point an area of river pebbles perhaps served as a standing area or as some kind of soakaway. The whole structure rested upon a deposit of loose greenish fill, 72 cm deep and 93 cm across, appearing in section similar to a pit (Fig 16), but possibly rather an area of general ground flooding.

Unit:

(1201) Unstratigraphic spit, 20 cm long (x 10 cm wide), a maximum of 1.2m deep, at the extreme west end of [M]

Phase 11.4 general remarks

The only significant feature of Phase 11.4 is the pavement, constructed primarily of soft sandstone blocks, but also of hewn limestone, river pebbles, reused ground stone and limestone artefacts and fragmentary fired bricks. Its original dimensions must have been something in excess of 13.4m by about 7.85m, to judge from its western and northernmost limits in [G] and southernmost in [C]. The eastern edge was not properly excavated but may have been at some 1.7m east of the western edge of [M], Fig 15, giving an overall area for the pavement of *c* 17.1 x 7.85m.

The materials used for the construction of the pavement were largely to be found ready at hand. The hills around the site, especially those to the south, are composed of very soft sandstone, easily quarried even with very simple tools (it can often be broken up with the bare hands). Red sandstone comes from the hills on the far side of the Wadi Suwaidiyya and from the bed of the wadi itself, and similar deposits of green sandstone can be found on the heights and in the gullies slightly further to the south. These are the two types of sandstone which predominate on the site, and no doubt a further search of the local landscape would identify in their natural setting the other colours which are more rarely encountered. River pebbles occur in proliferation also on the hills, as well as at the wadi banks. Limestone is not to be seen locally, but was rarely used, and the occasional blocks of basalt were clearly in most cases reused grinding stones.

Because the Phase 11.4 surfaces lay immediately beneath the topsoil, which naturally contained a mixed collection of pottery of different styles and periods, we do not have a pottery corpus associated with them. We are extremely fortunate, therefore, to have found the fragmentary upper profile of a large storage jar of a very distinctive form (Type 10) sitting upon the surface in [E]. The type is comparable with examples from Nimrud (Lines 1954, 167, Pl XXXIX, 2-3) and Khirbet Khatuniyeh (Curtis and Green 1987, 76, Fig 4, 14-15), and seems to date this level to perhaps the mid to late 7th century BC. The published examples from Nimrud are from a room which contained a cache of tablets dated to between 666 and 626 BC (Lines 1954, 164). Similar storage jars apparently belonging to the reign of Esarhaddon were found in the British Museum excavations in Fort Shalmaneser at Nimrud in 1989 (pers obs). The main destruction at Khirbet Khatuniyeh, at first tentatively dated to between 550 and 500 BC (Curtis and Green 1987, 77) is now thought to date to the fall of the Assyrian Empire in 612 BC (Curtis and Green et al 1997, 9-10).

PERIOD 12 POST-ASSYRIAN

A number of pits and graves, certainly not all contemporaneous, were apparently dug from or from above the present surface level. Their dates are uncertain, though they must be later than Assyrian. Pit K is probably Hellenistic; Pit A might be Late Islamic.

Pit A (Figs 14-15)
Towards the eastern edge of [A] a large circular pit, some 35 cm in depth and initially of 1.75m maximum diameter, cut through the flagstone and pebble pavements of Phases 11.4 and 11.3 (see Figs 14-15). It bottomed out *c* 25 cm below the latter, its maximum diameter reduced to *c* 75 cm, disturbing the mudbrick walls of Phase 11.1 (Fig 11). The fill was a brown crumbly soil, with mudbrick debris towards the bottom, doubtless from the cutting of the Phase 11.1 walls. The pit contained undiagnostic sherds of pottery and an unidentifiable fragment of animal bone.
Units:
(15) upper 15 cm of pit, cutting stone pavements of Phases 11.3-4
(17) lower 10 cm of pit, with bricky fill, cutting walls of Phase 11.1

Pit K (Figs 9, 16)
A 2m-square trench, [K], was laid out at 23m distant from the eastern edge of the main excavation in [B], down the slope of the mound to the east (Fig 9). Beneath the turf and a thin (*c* 10 cm) band of new black topsoil was a homogeneous very soft greenish-brown deposit over deep brown loam, throughout the area and in all sections, apparently the fill of a large pit whose dimensions exceeded those of the trench. It is unclear whether the limits of this pit extended into [M] as suggested in Green 1987, 247 (Fig 16). The fill contained much pottery, largely of apparently Achaemenid or Hellenistic date (with earlier material mixed in) and fragments of *tannur* and animal bone, the latter identified as cattle, pig and caprines. Clusters of such material gave the impression of having been thrown into the pit as rubbish. Stones, small and large, also appeared to be general rubbish tip deposits.

The pit was bottomed at *c* 1.8m below surface by the occupational fill just overlying a Period 8 surface.
Units:
(1001) topsoil + upper pit-fill, especially in west (max

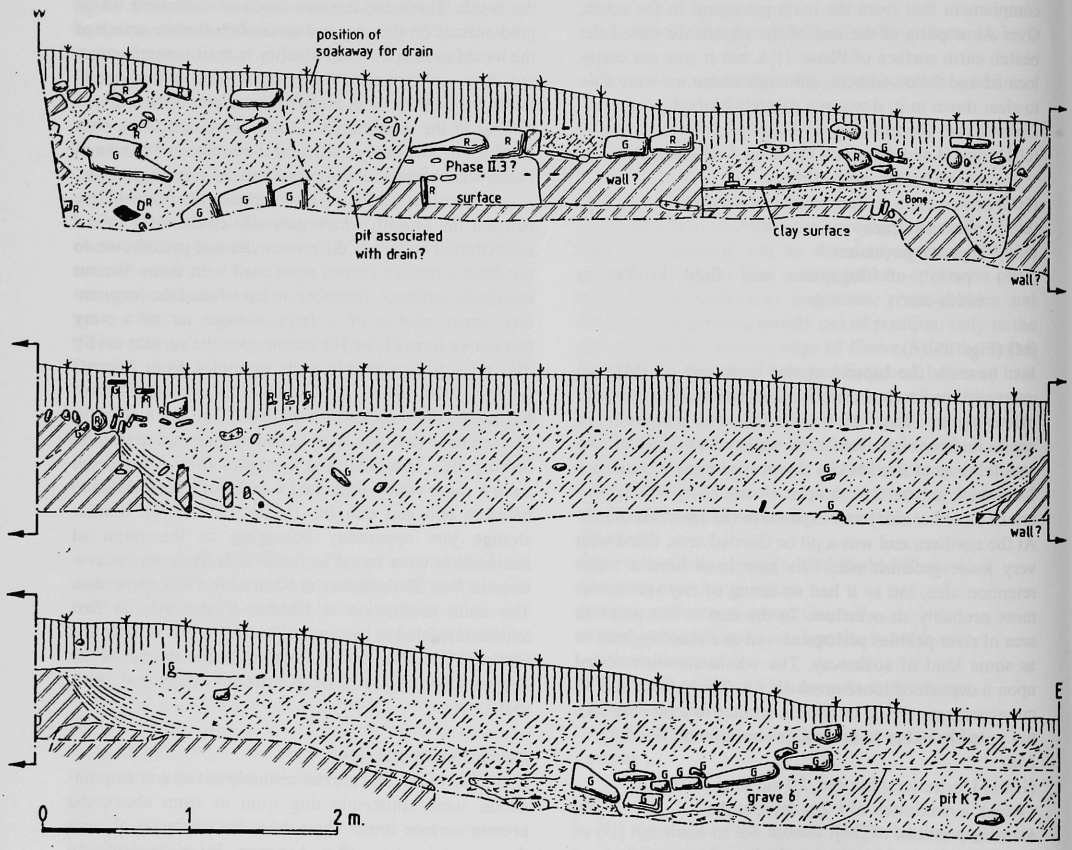


Fig 16. Khirbet Shireena: Trench [M], north section

c 10 cm)
(1002) upper pit fill (depth *c* 0.7-2m), homogeneous very soft greenish-brown loam, very crumbly and particulate
(1003) cluster of rubbish within upper pit fill at western edge of square
(1004) lower pit fill (depth *c* 80-95 cm), more compact homogeneous soft deep brown loam

Pit L (Fig 9)
Another 2m-square sounding, [L], was made further down the eastern slope of the mound, at 28m to the east of [K], 53m from [B]. Beneath the turf and up to three layers (in the south) of seasonal topsoil, at between *c* 20 cm below surface level in the north and *c* 65 cm to the south, was a soft loose pinkish-brown particulate fill containing many small stones and heavy sherdage, largely of Hellenistic wares (mixed with some earlier material). This fill continued down for up to 1.6m, where the bottom of the pit in the east of the square cut some 20 cm into virgin soil. At 90 cm below surface level a small socket stone of calcareous rock was found where it had been thrown into the pit.
Units:
(1101) topsoil + upper fill in north of square (up to max 25 cm)
(1102) pit fill below topsoil within [L], from 63 to 81 cm below surface
(1103) pit fill beneath (1102) in east half of square, down to maximum limit of excavation by 21-2-86 at 1m below surface
(1104) pit fill, as (1103), in west half of square, and below (1103) over entire trench down to 1.26m below surface
(1105) pit fill from 1.26m to 1.6m below surface
(1106) fill at very bottom of pit, which in the east of the square cuts into natural. Bottomed at maximum depth of 1.72m in west, 1.8m

PERIOD 18 LATE ISLAMIC
Graves
Of the thirteen graves excavated and five suspected (but not excavated), all but a few were noticed on the surface or immediately below the topsoil. However, they are not all modern burials, as some contained incomplete but substantial pottery vessels. In fact, a number of burials lying just below the topsoil presented some evidence of belonging with Period 11; Graves 10-13, however, were certainly later. For details of all the graves, see Part B, below, and the skeleton report in Volume 4.

Eroded levels and topsoil
With the possible exception of some of the graves, the only very recent disturbance to the site seems to have been from modern cultivation, but both the level of some of the graves, which were very close to the present surface, and some of the post-Assyrian pottery found in surface collection and topsoil batches, suggest that at least a metre of deposit had been eroded from the top of the mound. The position of the site, at the head of the valley of the Wadi Suwaidiyya and hence exposed to the fierce easterly winds, makes this degree of erosion more than likely.

Surface collection units: [A]: (0); [B]: (100); [C]: (200); [D]: (300); [E]: (400); [F]: (500); [G]: (600); [H]: (700); [I]: (800); [J]: (900); [K]: (1000); [L]: (1100); [M]: (1200)

Topsoil units: [A]: (1-4); [B]: (101); [C]: (201); [D]: (301); [E]: (401); [F]: (501); [G]: (601); [H]: (701); [I]: (801); [J]: (901); [K]: (1001) (topsoil and upper pit-fill), [L]: (1101) (recent and old topsoil)

PART B
THE GRAVES

One of the more important contributions of the site was the evidence provided for Assyrian burial practices. Of the thirteen graves excavated, five (not, after reconsideration, seven, as stated in Green 1987, 247) certainly belong to our Late Assyrian Period 11 (or at the latest are slightly post-Assyrian), another one most probably does so and three more may; the remaining four seem to be comparatively recent. Since there has been no synthesis of the evidence for Late Assyrian funerary practices (nor indeed of Mesopotamian burials in general), it is difficult to comment upon how these data fit within the overall picture and we have not felt that this is the appropriate place to review the wide-ranging evidence from other sites, which is in any case not generally very fully published. However, the record of Late Assyrian burials from Khirbet Shireena does provide a body of data for some of the most impoverished graves of the period, which stand at the opposite end of the social spectrum from the fabulously wealthy royal tombs discovered beneath the domestic wing of the Northwest Palace on the acropolis at Nimrud (Wilkinson and Matthews 1989, George 1990, Harrack 1990, and contemporary press reports).

None of these burials had much in the way of grave goods. Only Grave 6 had definite funerary items, although the animal bones in Grave 3 might represent a food offering. The pair of shell beads from Grave 4 are perhaps rather to be seen as personal ornaments rather than mortuary goods in the usual sense of the term, and this is undoubtedly the case for the bracelet worn by the occupant of Grave 12. Graves 1 and 5 contained broken pottery vessels, actually no more than large sherds but possibly deliberately included. All the other excavated burials were devoid of objects; in spite of the dry sieving of all excavated grave fills, even minor items such as beads were not found.

For the purposes of this report, the graves are

numbered in rough chronological order. The skeletal materials from Graves 1-8 were subjected to a preliminary study by Edward Luby. This report will appear in the volume of specialist reports and is utilised in the discussion of these graves. Shortage of time at the close of the season precluded more thorough study then or the investigation of the skeletal material from the other less well stratified and probably comparatively modern burials. The skeletal remains from the site, however, will form part of a full report upon all of the skeletal material from the excavations reported in this volume to be published by Dianna Bolt.

PERIOD 11 LATE ASSYRIAN

Phase 11.1 or 11.2

Grave 1 ([D])

Close to the centre of [D], at between 33 and 63 cm below surface level (as measured from the north-east corner of the trench), were human skeletal remains, identified as a child of five to seven years. The body (poorly preserved, but probably not significantly flexed) was oriented east/west, with head to the east, facing north, and therefore lying on the right side. There was no grave cut; the body lay at the bottom of up to 30 cm of mudbrick tumble. The child had either been thrown or placed into this debris, as a rough form of burial, or had been accidentally buried in the collapse. Since this level of mudbrick debris was in the extreme north of the square sealed by the pebbledash paving of Phase 11.3, it must antedate that phase and represent either the collapse of an earlier phase, presumably Phase 11.1, or levelling material used at the time of the construction of Phase 11.3; if the latter, the debris was presumably derived from Phase 11.1 ruins, but the child's body might have been placed among this material at the beginning of the Phase 11.3 rebuild.

Not far beneath the skull (at 76 cm below surface at the north-east corner of [D]), and possibly associated, was a large potsherd, the inverted rim, neck and shoulder of a type 10 Late Assyrian jar. Another diagnostic Late Assyrian sherd (type 391) lay over the skull. An apparently second millennium BC sherd type (392) lay close to the skull to the south-east. A fragment of *unio Tigridis* shell was found just to the north-west of the skull (at 33 cm below surface level, measured from the north-east corner of [D]) and may have been a deliberate inclusion with the body.

Units:

(302) pre-Phase 11.2 debris, mainly mudbrick collapse

(304) debris in immediate vicinity of child skeleton ('Grave 1'), between 33 and 63 cm below surface, measured from north-east corner of [D]

(308) debris in immediate vicinity of child skeleton at 76 cm below surface, as measured from north-east corner of [D]

Phase 11.3

Grave 2 ([B]) (Pl. 11)

Grave 2 was built into the Phase 11.3 pavement at the eastern end of [B]. Its position was clearly indicated, on a pavement primarily composed of tightly packed river pebbles, by an area of limestone and (red and green) sandstone slabs. The rectangular burial chamber was constructed of roughly dressed limestone blocks set on edge, capped by larger limestone and sandstone slabs. With these capping stones, the burial chamber rose some 10-15 cm above the general level of the Phase 11.3 pavement. Like the pavement itself, Grave 2 was sealed by the pavement of Phase 11.4.

Including its immediate wall, the rectangular burial chamber measured 1.9m in length (east/west) by a maximum of 73 cm width (north/south). Internally it measured a maximum of 1.75 x 0.49m. It narrowed to 40 cm (20 cm internally) at the west end, 20 cm (9 cm internally) at the east. It thus fitted closely to the shape and position of the body, lying supine with the lower legs together. Presumably, therefore, either the pre-existing form of the chamber influenced the position in which the body was laid, or the tomb was constructed around the place where the corpse had previously been laid out. In any event, the construction had been made long enough for the dead person, an adult, possibly a woman, to be laid in extended position. The deceased was aligned with the chamber east/west, head to the west. Although she (or he) lay on the back, the torso rested slightly more heavily on the right side and the head was turned to face south. The right arm was placed straight along the right side, the left bent sharply at the elbow with the lower part of the limb lying across the belly, the left hand draped over (or clutching) the right side. The feet of the deceased were missing. Apart from this well preserved skeleton, the chamber was empty. There were no grave goods. The only fill was a very loose light greyish dust which had presumably seeped in from the surrounding soil through the small crevices between the capping stones.

Unit:

(113) loose greyish fill within stone tomb, Grave 2

Phase 11.3 or 11.4

Grave 3 ([B]) (Fig 15)

Along the eastern edge of [B] were human and animal remains ('Grave 3'), close to the north-east corner of the square, lying upon the sandstone blocks and river pebbles of both the Phase 11.3 paving and the capping for Grave 2 (and sealed by the Phase 11.4 pavement). They were in a very poor state of preservation and it was not possible to determine the original alignment of the human remains. Osteological examination, however, suggests that these were possibly the remains of an adult of undetermined sex. The context makes an attribution to the Late Assyrian period certain, although it was not clear whether it was a below floor burial of Phase 11.4 or in some way associated with Grave 2 of Phase 11.3.

Unit:
(112) fill around human and animal bones of 'Grave 3'

Grave 4 ([G]) (Fig 14, Pl. 12)
This grave, in the south-west quarter of [G], was a simple pit burial partly sealed by the pebbledash and flagstones of Phase 11.4 and flanked by somewhat disturbed areas of flagstone paving of Phase 11.3, with a row of flagstones set upright at an angle on the northern side. It might be attributable to Phase 11.3 or represent an underfloor burial of Phase 11.4 disturbing and reusing the Phase 11.3 pavement.

The burial was of a child, aged between five and nine years (probably around seven), lying in extended, non-flexed, posture, on the right side, head to the west, feet to the east, facing south. From the state of preservation it was not possible to determine the original position of the arms. The burial pit was 73 cm (north/south) x *c* 1m (east/west), although the edge was not established with certainty on the east side; as preserved and traced the pit was only 29 cm in depth (top at 31 cm below surface, base at 60 cm), although it may have been dug from a slightly higher level than that at which the cut was recognised. The fill was virtually identical to that of the surrounding soil (though perhaps a little cleaner), a rather compact but soft dark brown loam with white chalky flecks. The only objects present were personal adornments, namely a pair of beads made by piercing small cowrie shells which had apparently been secured to the ankles.
Unit:
(611) soft dark brown, chalk speckled, fill of burial-pit, Grave 4

Phase 11.4?
Grave 5 [B] (Fig 15, Pl. 10)
This grave was situated at the northern limit of [B], the pit extending into the baulk between [B] and [E] (although probably only slightly, as the entire body was within the excavated area in [B]). There was (as shown on Fig 15), a mostly unexcavated burial 5A at the southern end of [E], but this was probably a separate, and later, grave. Although the burial superficially resembled Graves 10-11 in lying (partly) within a gap within the Phase 11.4 pavement, it did not apparently cut through this pavement, and appeared to be partly sealed by some sandstone blocks of the pavement which seemed to be still in position over the body (Figs 14-15), although it is, of course, a possibility that the burial is later and that part of the pavement, after being dug up, was relaid over the grave. However, a large potsherd representing the complete rim and neck of a Late Assyrian vessel (type 10) was sited in front of the feet and may have been its original position. (If intentionally included, this and another large but undiagnostic potsherd in the north section of [B] were the only burial goods in the excavated part of the grave.) It seems more likely, therefore, that this is a subfloor (intramural or extramural) burial of Phase 11.4.

Again, the grave was a simple, unlined pit, measuring 2.3m east/west by (as far as excavated) 60 cm north/south. The very soft, dark brown fill was not easily distinguished from the (slightly more grey and less dense) topsoil, but presumably had its upper limit at the level of the Phase 11.4 pavement (here *c* 20 cm below surface level). The bottom of the grave cut was some 40 cm below that, some 5 cm above the Phase 11.3 pavement.

The body lay *c* 5 cm above the floor of the grave pit. The adult man or woman, 1.65-1.67m in height, lay in extended position, on the right side, the legs only very slightly bent at the knees. The hands were drawn up before the face. The body was aligned east/west, head to the west, facing south.
Unit:
(102) soft dark brown fill of burial pit

Phase 11.? (indeterminate)
Grave 6 ([M]) (Fig 16)
Although hardly a wealthy burial, Grave 6 was the richest of the graves excavated at Khirbet Shireena and the only Late Assyrian burial to contain funerary goods. It was situated well down the eastern slope of the mound, at between 17.68 and 18.86m from the western edge of [M], and therefore close to the eastern edge of [M] (see Figs 9, 16). Since this trench was hurriedly excavated in rough spits to gain a long section through the mound, we have no understanding of the construction of the grave, except for what may be concluded from the south section of [M]. This shows that the grave chamber, containing very loose particulate mixed grey and brown ashy fill, was mostly overlain by sandstone slabs. These were restricted to the area of the grave, and are therefore presumably capping stones rather than paving in the style of Phases 11.3 and 11.4 in the main excavations. Enough skeletal material was preserved for a possible identification of the deceased as an adult male ([M] was in the main excavated crudely with large picks and shovels, and the skeletal remains initially suffered, although more care was taken in extracting material once it was recognised that a grave had been encountered). No plan of the body *in situ* was possible, but since the retrieved bone consisted of skull and neck fragments, most of the body was presumably not excavated and lies within that part of the grave undisturbed by our slit trench. Since the cut for Grave 6 showed only in the northern section of the trench, not in the southern, [M] must have cut through the southern end of the grave chamber. Possibly, therefore, the body was oriented north/south, with head to the south.

The grave goods retrieved from the excavated part of the burial consisted of a pair of iron blades <6>, and a bone weaver's 'beater-in' <10>. The latter item would appear securely to date the burial within the 1st millennium BC (*cf* Curtis 1984, 45), and therefore almost certainly to the Late Assyrian period.

Units:
(1207) 7th unstratigraphic spit in [M], from c 13.5-16m from western edge of trench, to depth of up to 1m below surface
(1208) 8th unstratigraphic spit in [M], from c 16-18.5m from western edge of trench, to depth of up to 90 cm below surface

Phase 11.3 or Period 16
Grave 7 ([F]) (Fig 15, Pl. 13)
To the north of [F], north of Graves 8 and 9, was a pit burial surrounded and partly capped by a mass of large stones, slabs of red, green, brown and grey sandstone, white limestone and large river pebbles and, to the north, a reused, upside-down limestone door socket stone. Although this grave lay immediately below topsoil, and the area was rather disturbed, its position appeared to associate it with Phase 11.4: the stones lay directly upon the beaten earth surface of that phase into which the grave pit was sunk, and must in all probability be seen as contemporaneous with the flagstone pavement some 3m to the south in [A]. (On the other hand, the only skeletal material, the skull of a five- to seven-year-old child, lying on the left side, facing south-east, lay immediately above a large river stone.)

Although there were no definite grave goods (in spite of dry sieving of the grave-fill, no other human remains nor any small artefacts such as beads were recovered), there were a number of potsherds in the deep brown clay fill, including a diagnostic Late Assyrian vessel base (type 213).

The maximum depth of the grave was 19 cm. Including the stones, the length of the grave east/west was 92 cm; the width north/south between the stones was 30 cm.
Unit:
(503) clayey deep brown fill of Grave 7

Grave 8 ([F]) (Fig 15)
Grave 8 was a pit burial in [F], north-east of Grave 9 and south of Grave 7. It was dug into, or perhaps originally sealed by, the beaten earth surface of Phase 11.4, and partly overlain (on its western edge) by stone slabs which lay upon that floor. However, since the area was badly disturbed, it was difficult to be certain whether it could have been cut from a later level.

The grave was filled with a soft but compact deep brown loam. The pit was roughly circular, *c* 92 cm (north/south) x 76 cm (east/west), and 22 cm deep. The skeletal material lay in the south of the cut. A partially intact skull, of a five- to seven-year-old child, lay in the south-west, on its right side and facing south. Some 10 cm to its south were further cranial fragments, identified as of a child of five years plus or minus 16 months; these may well belong to the same individual, although the two groups of material were separated by a large thick-walled potsherd (with rope decoration, Late Assyrian, type 435), set on edge. There were no other grave goods.
Units:
(504) soft, compact deep brown fill of burial pit, Grave 8
(505) similar fill in extreme south of Grave 8

Grave 9 ([F]) (Fig 15, Pl. 14)
This grave was located towards the south-west of [F], to the north-west of Graves 10 and 11 in [A] (and the suspected grave in the south-east corner of [F]) and to the south-west of Graves 7 and 8. It was a rectangular (east/west) pit, but the sides were lined by a construction of red, green, lime green and grey sandstone blocks set upright on edge. The burial was sunk into the beaten earth surface of Phase 11.4 and may have belonged to this phase, but if the Phase 11.4 flagstone pavement originally extended this far north it was no longer preserved here, and the whole area was so badly disturbed that Grave 9, which lay immediately below the topsoil, could as easily be a relatively modern burial. The construction of the burial chamber, however, closely resembles that of Grave 2, which was certainly of Late Assyrian date.

The top of the stones enclosing the grave lay almost immediately beneath the present surface of the mound (after some 10 cm of topsoil), at exactly the same level as the Phase 11.4 flagstone pavement to the south. The maximum depth of fill (a soft deep brown loam) was 25 cm. The area enclosed by the upright slabs (including the slabs themselves) was 1.28m (east/west) x 0.36m (north/south).

The deceased was a child. The body was very slightly flexed with the head towards the west, lying on the right side, facing south. The hands were drawn up before the face. There were no grave goods.
Unit:
(502) soft deep brown fill of Grave 9

PERIOD 18(?): LATE ISLAMIC
Grave 10 ([A]) (Fig 15)
This simple pit burial in the east of [A] had been dug from or above the present surface of the mound and cut through the Phase 11.4 pavement (Fig 15). It was discovered immediately after the removal of the topsoil, at 22 cm below surface level. The base of the grave cut was 8 cm below that. The grave pit measured 1.8m (north-west/south-east) x a maximum of 16 cm (north-east/south-west); the nature of the fill is unrecorded. The deceased was an adult, apparently female, *c* 1.56m tall, the body oriented roughly north-west/south-east, with head to the north-west, facing north-east, and thus lying on the left side. The body was only slightly flexed. The hands were drawn up before the face. There were no grave goods, nor any potsherds in the fill. There was no grave lining. The presumption is that the burial is comparatively modern.
Unit:
(5) fill of burial pit, Grave 10

Grave 11 ([A]) (Figs 14-15, Pl. 15)
Also in [A], approximately a metre and a half to the north of Grave 10, was another simple pit burial cutting the Phase 11.4 pavement, this time of a child of less than five years. The grave and body were again aligned north-west/south-east with skull to the north-west, but facing south-east; the child thus lay on its right side. As with Grave 10, the body was only slightly flexed; the hands were again drawn up before the face. The burial pit measured 1m (north-west/south-east) x 12 cm (north-east/south-west). Their was no grave lining. The pit fill was a crumbly dark brown soil, distinct from the greyish topsoil above, and contained a few sherds. There were no grave goods. The change in soil type occurred at 18 cm below the mound surface, the grave cut, as with Grave 10, bottoming out at 30 cm below surface. Again, the burial is probably fairly modern.
Unit:
(6) crumbly dark brown fill of burial pit, Grave 11

Grave 12 ([E]) (Fig 15)
This burial was discovered immediately after removal of the topsoil (upper 10 cm) in [E]. It was marked out by a row of red, green, grey and fire-blackened sandstone slabs lying along its northern edge, by more randomly sited sandstone and limestone slabs along its southern edge and by a scatter of stones, mostly river pebbles, in the east. Without these stone markings, the limits of the grave pit would have been difficult to determine, as it had apparently been backfilled with the same soil that had originally been dug out from it, a grey-brown and orange soft, but rather dense, loam. However, knowing where the burial was situated, it was possible to distinguish the edges of the burial pit in section. The grave fill was slightly more loose than the surrounding soil and in part burnt to ash (presumably in the same fire that blackened some of the sandstone slabs on the northern edge). The burial pit was up to 50 cm in depth (60 cm from surface level) and 1.66m wide (north/south); the width between the stones was *c* 70 cm. The eastern edge of the grave was at 1.4m from the western edge of the square; probably the burial extended another 1.1m to the west, since the edges of two sandstone blocks which would appear to mark the western edge of the grave reached 10 cm into [F] (see Fig 15).

The body, apparently of an adult, lay at the bottom of the pit, oriented east/west with head to the west, facing south (therefore lying on the right side). Apparently some kind of structure had been erected around or over at least part of the body, for the skull was situated on the west section line of the trench, where it could be seen to be flanked by a pair of individual mudbricks set on edge. Around the left(?) wrist of the deceased was a glass bracelet <33>, originally complete. This bracelet is probably Islamic, and the burial comparatively recent.

Two days after its excavation, Grave 12 was thoroughly destroyed by human or animal agents. Therefore although this grave was fully and carefully excavated so far as it lay within [E], we regrettably have no photograph of it intact. Furthermore, the skeleton, originally well preserved, was left in a very fragmentary state. The originally complete glass bracelet was broken, and in spite of a long search and dry sieving of the surrounding soil, only about half of it was retrieved.
Unit:
(410) soft but compacted grey-brown/orange loam and ashy fill of Grave 12

Grave 13 ([F]) (Fig 14)
Grave 13 was located in the south-east of [F] and gave the impression of having been dug from the level of the (admittedly rather disturbed) Phase 11.3 beaten earth surface, although as the ploughed-up topsoil itself reached down some 35-40 cm, almost to this level, it is probable that the shaft was actually sunk from a later level, no longer visible in section. Moreover, if the burial really was dug from Phase 11.3, the pit would have been exceptionally shallow, *c* 13 cm, and the body placed immediately below floor level.

The grave was a simple pit burial. The perimeter of the cut was not found, but the pit was in excess of 50 x 50 cm. The grave fill was a rather bricky and crumbly orange-brown soil, not easily distinguished from the surrounding occupational debris. The bottom of the pit was at 63 cm below surface (13 cm below the Phase 11.3 floor); the body was at 53 cm below surface. A child lay on its right side, aligned east/west, with head to the west, facing south; the legs were only slightly flexed; the hands were drawn up to the face. There were no objects in the grave.
Unit:
(514) bricky orange-brown fill of Grave 13

Unexcavated graves
Given the priorities of the excavation, a number of structures encountered within the trenches which appeared possibly or probably to be relatively modern burials were left unexcavated. Their positions are shown on the plans of Figs 14-15. Human bone (five parietal skull fragments) was retrieved from the surface of the burial in the south-east of [E] (unit (402)).

PART C
THE FIELD SYSTEM

Fig 17 shows the plan of the ancient field boundaries surrounding the site, as they could be observed from the ground and from the aerial views provided by the heights on the opposite bank of the wadi. The plan was made by the cooperation of a team on the ground and an observer on those southern heights, directing the surveyor to the intersections of the fields, whose cropmarkings on the southern side of the mound were very clear from that vantage point (Pls. 17-18). The boundaries on the hills to the north of the site were marked by lines of amassed

stones surviving above the surface (Pl. 19). Cropmarks in the valley on the eastern and western sides of the mound were not clear enough at the time of planning to be plotted, but it was clear that the fields originally surrounded the site on all sides.

As can be seen on the plan and in photographs, the fields were relatively small rectangular strips, undoubtedly representing a system of crop allocation known from Late Babylonian field surveys, which often provide land measurements and details of crops and yields (Nemet-Nejat 1982; for the less detailed Neo-Sumerian, Old Babylonian and Middle Babylonian field plans, see references cited *ibid*, 14). Although they are certainly premodern, however, there is no physical evidence to indicate which period the field boundaries at Khirbet Shireena belong to.

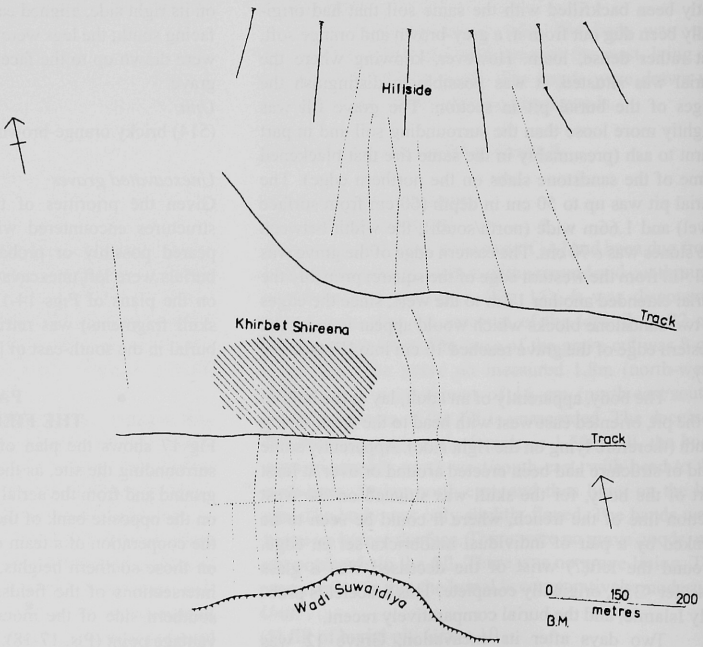


Fig 17. Khirbet Shireena: ancient field boundaries, plan

LIST OF SMALL FINDS

Reg. no	*Description*	*IM no*	*Trench*	*Unit*	*Phase*
1	dimple beaker	KHS1	B	109	11.1
2	globular jar	KHS2	A	22	
3	shallow dish	KHS3	B	110	
4	jar	-	C	206	11.1
5	clay object	KHS9	surface		
6	iron blades	KHS3	M	1208	11
7	iron rod	-	E	406	11.4
8	bronze hook	-	M	1204	
9	pierced stone	KHS4	E	407	
10	beater-in	KHS5	M	1208	11
11	bead	KHS6	A	45	
12	shell bead	KHS7	E	404	
13	2 shell beads	KHS8	G	611	11
14	clay pendant	KHS9	surface		
15	figurine	KHS10	surface		
16	figurine	KHS11	K	1007	
17	figurine	-	E	401	11.4
18	wheel	KHS12	surface		
19	loomweight	KHS13	M	1209	
20	bracelet	-	E	410	18
21	clay object	-	A		11
22	pedestal	-	F	501	
23	ceramic disc	-	A	39	
24	ceramic disc	-	A	39	
25	ceramic disc	-	A	39	
26	ceramic disc	-	A	46	
27	ceramic disc	-	D	301	
28	ceramic disc	-	D	301	
29	ceramic disc	-	D	302	
30	ceramic disc	-	D	309	
31	ceramic disc	-	E	408	
32	ceramic disc	-	F	509	
33	ceramic disc	-	F	510	
34	ceramic disc	-	G	609	
35	ceramic disc	-	H	701	
36	ceramic disc	-	K	1006	
37	ceramic disc	-	K	1006	
38	ceramic disc	-	K	1007	
39	ceramic disc	-	L	1101	
40	ceramic disc	-	L	1102	
41	ceramic disc	-	L	1106	
42	ceramic disc	-	L	1106	
43	grinding slab	-	M	1203	
44	grinding slab	-	E	409	
45	grinding slab	-	A	7	11.4
46	grinding slab	-	A	3	
47	grinding slab	-	F	501	
48	grinding slab	-	A	47	11
49	saddle quern	-	E	409	11.3
50	saddle quern	-	E	409	11.3
51	saddle quern	-	B	110	11.3
52	saddle quern	-	D	307	11.4
53	saddle quern	-	E	409	11.3

54	saddle quern	-	F	510	
55	saddle quern	-	A	8	11.4
56	saddle quern	-	E	409	11.3
57	saddle quern	-	A	7	11.4
58	saddle quern	-	G	602	11.4
59	saddle quern	-	M	1202	
60	saddle quern	-	K	1002	12
61	saddle quern	-	B	103	11.4
62	saddle quern	-	A	40	8.3
63	saddle quern	-	A	3	
64	saddle quern	-	E	409	11.3
65	grinding slab	-	D	305	11.3
66	grinding slab	-	E	409	11.3
67	grinding slab	-	E	409	11.3
68	grinding slab	-	B	103	11.4
69	grinding slab	-	A	surface	
70	grinding slab	-		surface	
71	grinding slab	-	B	103	11.4
72	rotary grindstone	-	A	38	11.4
73	handstone	-	A	48	8.2
74	handstone	-	G	603	11.4
75	handstone	-	F	509	11.4
76	basalt mortar	-	L	1103	12
77	basalt mortar	-	B	101	
78	basalt mortar	-	K	1007	
79	basalt mortar	-	A	25	11.1
80	mortar	-	A	22	11.1
81	mortar	-	A	7	11.4
82	mortar	-	A	25	11.4
83	mortar	-	A	surface	
84	mortar	-	E	409	11.3
85	mortar/socket	-	B	103	11.4
86	socket	-	G	604	11.4
87	socket/mortar	-	C	303	11.1
88	mortar/socket	-	M	1202	
89	socket	-	A	41	8.3
90	ground stone	-	B	103	11.3
91	ground stone	-	D	301	
92	ground stone	-	M	1205	

KHIRBET SHIREENA SEQUENCE DIAGRAM

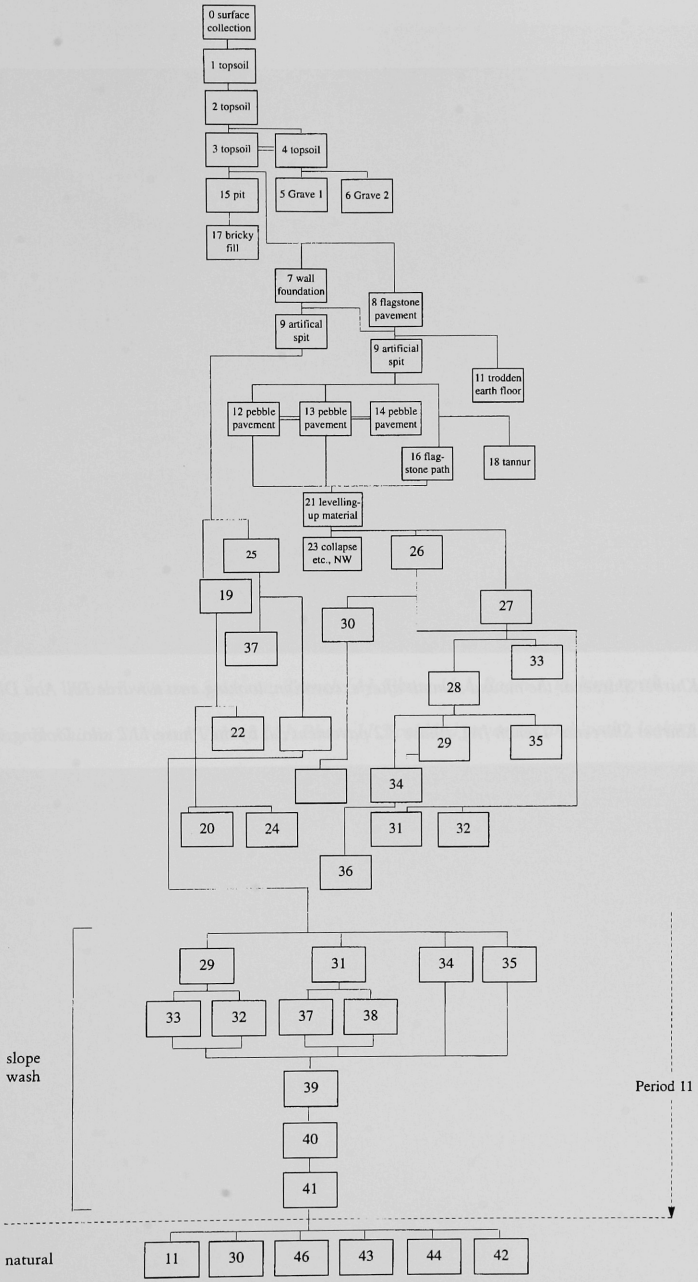


Plate 5. Khirbet Shireena: the mound summit after excavation, looking east towards Tell Abu Dhahir

Plate 6. Khirbet Shireena: Trench [A], Phase 8.2 pavement cut by the Phase 11.2 silo, looking south

Plate 7. Khirbet Shireena: Trench [A], Phase 11.1, Room 3, looking north

Plate 8. Khirbet Shireena: Trench [A], Phase 11.3 cobbled pavement and 'path', looking south

Plate 9. Khirbet Shireena: Trench [B], Phase 11.3 cobble and flagstone pavement, looking south-west

Plate 10. Khirbet Shireena: Trench [B], Phase 11.4 flagstone pavement and Grave 5, looking west

Plate 11. Khirbet Shireena: Grave 2, looking west

Plate 12. Khirbet Shireena: Grave 4, looking south

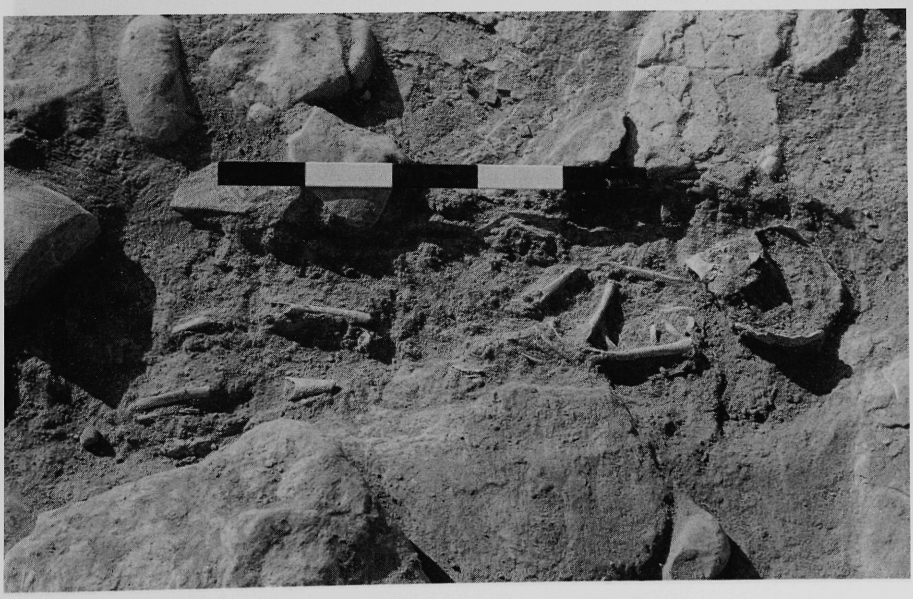


Plate 13. Khirbet Shireena: Grave 7, looking west

Plate 14. Khirbet Shireena: Grave 9, looking south

Plate 15. Khirbet Shireena: Grave 11, looking south

Plate 16. Khirbet Shireena: Grave 13, looking east

Plate 17. Khirbet Shireena: ancient field boundary crop marks, view looking north-west

Plate 18. Khirbet Shireena: ancient field boundary crop marks, view looking north with site in the middle distance

Plate 19. Khirbet Shireena: ancient field boundary crop marks, detail view looking north

CHAPTER 5

SEH QUBBA

Warwick Ball and Susan Gill[1]

INTRODUCTION (Fig 18, Pls. 20-25)
Seh Qubba is marked Site No. 100 on the official Saddam Dam archaeological map, where Periods XI-XII and XVIII, Old and Middle Assyrian and Islamic are recorded as present. Warwick Ball and Michael Roaf made a first visit to the site in March 1985, and excavations were carried out from 21st January to 10th March 1986, a period of ten weeks. Preliminary notes on the results appeared in Ball 1987a and Ball and Black 1987; a description and discussion of the Roman remains at Seh Qubba were published in Ball 1989, and a description of the pottery appeared in Campbell 1989. This report incorporates and expands the discussion in Ball 1989. Susan Gill supervised the excavations with a workforce of

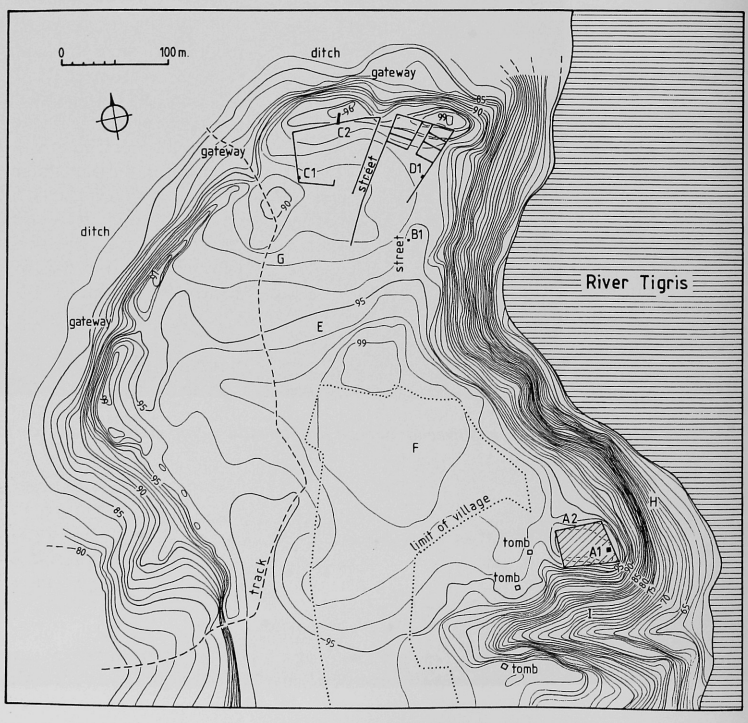


Fig 18. Seh Qubba: Contour plan of the site

1 In general, the excavation report was written by Susan Gill and the discussion by Warwick Ball. St John Simpson has also provided many valuable comments. However, there has naturally been considerable overlap, and all of this report reflects the work of both authors.

some 20 men, after which rising floodwaters turned the site into an island; she would like to express particular thanks to the Shergati pickman, Khalaf, for his skill and organisation throughout the excavations. The floodwaters, however, will not entirely inundate Seh Qubba, and excavations continued throughout 1987 and 1988 under Mr Salem Yunis of the Iraq Antiquities Department. A brief note on these excavations has appeared in *Sumer* 1987-88, 87.

The name Seh Qubba is Kurdish and means 'three domes' or 'three tombs', referring to three small square domed burial structures of stone and mortar on the site (Pls. 22-23). There are in fact four 'qubbas' in the village cemetery, but one of these is very ruinous and now barely recognisable as a tomb. Only one is still venerated: the dome is freshly painted and it is the only one with its enclosure wall and flagpoles still intact (Pl. 22, foreground).

Most of the excavations were concentrated in Area A, the most prominent and hence best defended part of the site, immediately overlooking the river to the east (Figs 18, Pls. 21-24). Here, a deep sounding, [A1], was excavated down to bedrock and wall clearance operations, [A2], were carried out on remains visible on the surface. In addition, three soundings, [B1], [C1] and [D1], were excavated in the lower, more open part of the site to the north, where one would most expect to find domestic occupation, and a fourth trench, [C2], was cut across the ramparts (Fig 25).

LOCATION OF THE SITE

Seh Qubba was one of the most spectacular sites we excavated. It occupies a dramatic and very commanding position on a rocky bluff some 40m high overlooking the right bank of the Tigris, 2 km upstream from Tell Abu Dhahir (Fig 18, Pls. 20-24). It dominates the river valley which surrounds Tell Abu Dhahir, overlooking one of the main fords across the Tigris north of Mosul (Oates 1968, 77) which Sir Aurel Stein speculated may have been the route of Alexander the Great's army (Gregory and Kennedy 1985, 128-29), and it commands the Wadi Suwaidiyya, an important seasonal tributary that enters the Tigris from the west just below Seh Qubba. Upstream, there is a clear view of Tell Gir Matbakh and the river beyond as far as the gorge behind Khirbet Jem Laklak (Pl. 25). Its position is therefore a very strategic one, commanding local routes, resources and other centres.

The summit of the bluff is some 26 hectares in area, almost all of which is occupied by the site (Fig 18). The southern part of this bluff is occupied by the modern village of Seh Qubba, now deserted, though part of it was still occupied while we were excavating, about half of the habitable buildings being in use. The village itself is bisected by an east/west wadi (Pl. 23); a smaller north/south wadi runs into this. The cemetery of the modern village is in the south-east part of the mound, on both sides of the smaller wadi. Nearly all the graves are to the north of the large wadi, but a few graves and one 'qubba' are to the south of it; the cemetery is separated from the village only by the width of a track.

Those parts of the site not covered by the village consist of low eroded mounds and stone and mortar wall foundations, the whole covered by a thick scatter of rubble and general building debris and some pottery. Among these surface remains, a wide paved street running north/south with several walls alongside it, together with several depressions marking rooms or courtyards, are visible. Two other walls run north/south up to the gate in the centre of the north rampart, and other walls lie just below the top of the ramparts (Fig 18). All of these walls go up and over the rampart mounds, so must date from a period considerably after their disuse. The ramparts consist of a line of low mounds about 5m high (Pls. 26-28), which can be traced along the northern, north-western and western edges of the bluff, before disappearing under the modern village to the south. At least three breaks in these mounds indicate the positions of gateways (Fig 18, Pl. 28). The contours suggest a square corner tower or similar structure at the north-east corner. The site is protected on the east side by the very steep sides of the conglomerate escarpment which drop down into the Tigris (Pl. 21).

Outside the enclosed area to the north were the remains of a ditch which cuts through part of the escarpment above the river (Pl. 27), and it is possible that a water channel ran down to the river here. According to local information, the main wadi bisecting the site (Pl. 23) once had the remains of a long water channel or drainage ditch. Before the waters of the river began to rise, a small, 6m square opening that might have been a covered drain (although the bottom was choked with silt and it may well have been deeper originally) could be seen under a patch of conglomerate at the river's edge where the women went to fetch water.

WORK STRATEGY

SURFACE COLLECTIONS

The entire area was sherded during the course of the season; since it was spring, the progressively thicker growth of grass and other vegetation will have affected the efficiency of the later collections. Only diagnostic sherds (rims, bases, feature and decorated sherds) were retained, from the following areas (Fig 18):

A—the main promontory at the south of the site, where wall clearance was also being carried out; this area included the village cemetery and the small north/south wadi

B—the north-east part of the enclosed area, including the north-east section of the rampart

C—the north-west area of the enclosure and north-west ramparts

D—the north-central area and rampart

E—the area immediately to the north of the village, ie the more recently abandoned stone structures

F—individual house compounds within the village, aban-

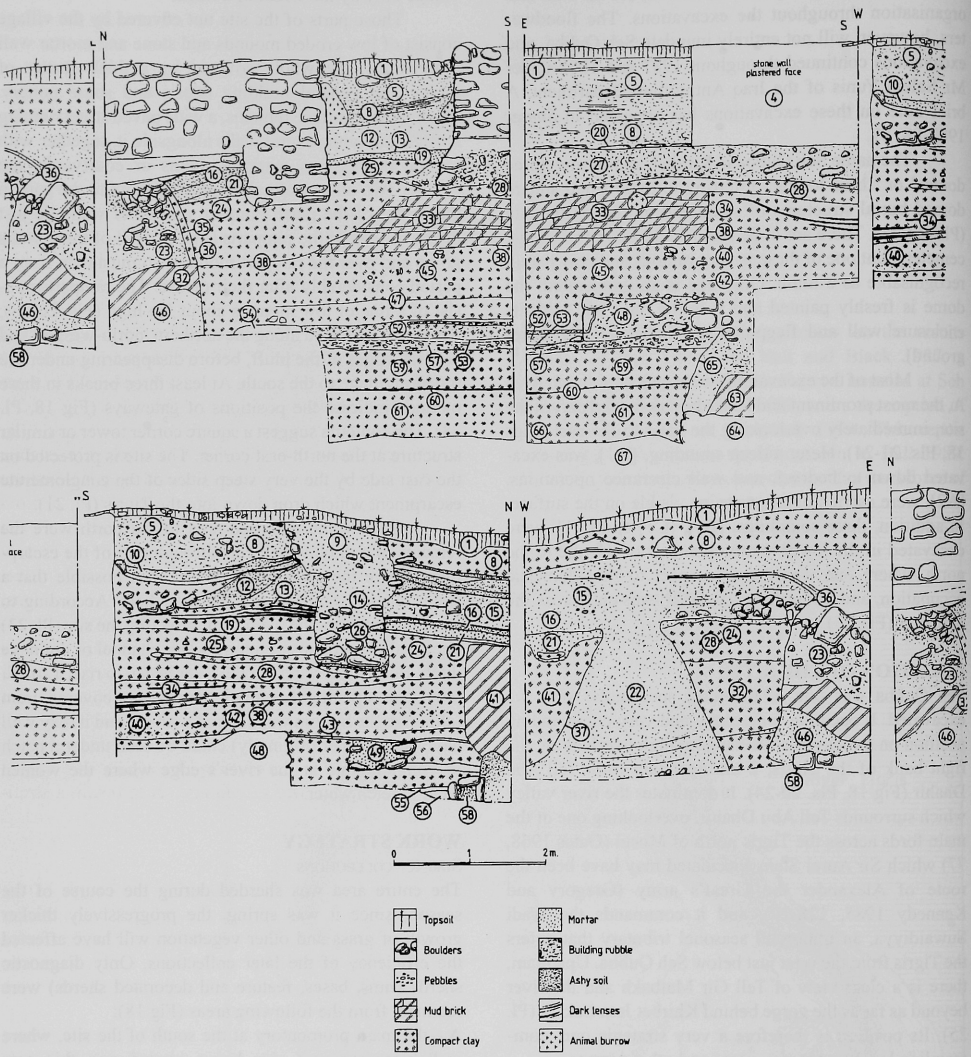


Fig 19 (a and b). Seh Qubba: Trench [A1], sections

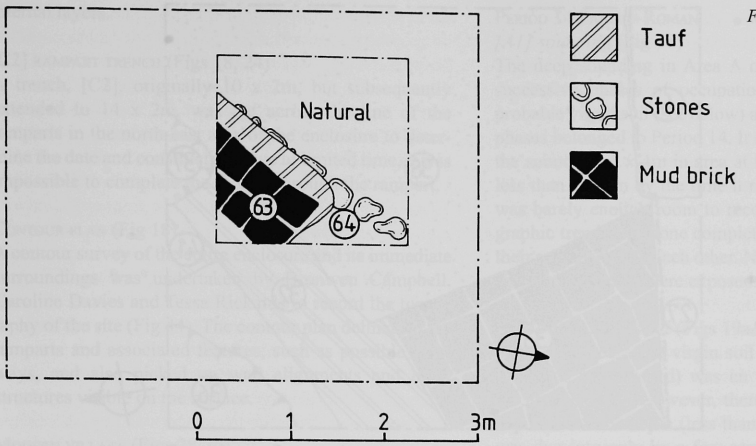


Fig 20. Seh Qubba: Trench [A], Phase 14.1 plan

doned in the last few months or years
G—the centre of the enclosed area
H—the eastern slope of the mound and the immediate river bank
I—the east-west wadi

Some sherds were also collected from the brief reconnaissance in the spring of 1985, or were found before the division of the site into different areas. The sherd scatter at Seh Qubba was relatively thin, with no particular concentrations except in the wadi (Area I), where erosion from upper levels had caused a thicker concentration.

[A2] WALL CLEARANCE
Within Area A, wall clearance was carried out to obtain, in the event only partially, the plan of a large Islamic building, the remains of which were partly visible on the surface (Fig 28). Contexts and associated material from this operation were labelled [A2] to distinguish them from [A1], which was the deep sounding (see below). Pottery and other finds were separated according to individual rooms to see if there were any spatial distinctions, although obviously all these contexts were topsoil or subtopsoil and were probably disturbed to some extent, as indicated by the presence of a coin of King Faisal II (1939-58) which was found during clearance, along with a yellow glass playing marble.

[A1] DEEP SOUNDING (Figs 18-28, Pls. 30-33)
A sounding, [A1], was dug in Area A to obtain a strati-

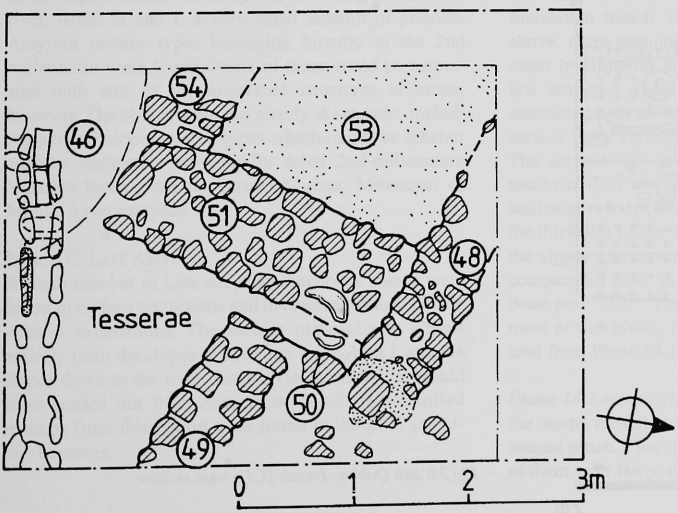


Fig 21. Seh Qubba: Trench [A], Phase 14.2 plan

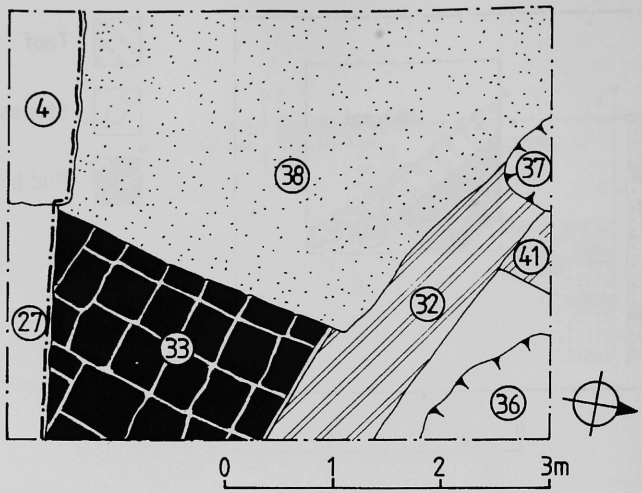


Fig 22. Seh Qubba: Trench [A], Phase 15 plan

graphic sequence for this part of the site. This area was chosen for the following reasons:

—it was relatively free of later structures (although the cemetery was beginning to encroach);

—it was the most prominent part of the site, so might be expected to show any strategic aspects of the settlement here;

—it could provide a more three-dimensional view of the history of the obviously major building cleared in Operation A2; for this reason, the sounding was situated against a wall of this building.

The sounding measured 4 x 5m initially, although it was soon reduced in area by stone walls projecting from the south baulk and was subsequently reduced again to 2 x 2m as time ran short. Probable virgin soil (not bedrock) was reached at a depth of 4.33m.

[B], [C] AND [D] SOUNDINGS (Figs 18, 23)

Three soundings, [B1], [C1] and [D1], were dug in the northern area of the enclosure. These were to ascertain the depth of deposit in an area which appeared to be rather shallow, and to see if there were any differences in the type of deposit that might be expected from the surface. [B1], measuring 3 x 3m, was dug in the angle of the street and an abutting wall. [C1], measuring 5 x 2m (although this was soon reduced to 2 x 2m), was dug in the angle of walls forming a room. [D1], measuring 2 x 3m, was placed across one of the two long parallel walls running north/south to the gate in the centre of the north rampart, to see if there was any difference between street and

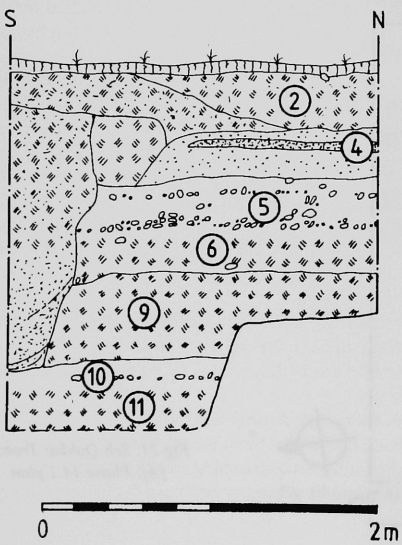


Fig 23. Seh Qubba: Trench [C1], west section

internal layers.

[C2] RAMPART TRENCH (Figs 18, 24)
A trench, [C2], originally 10 x 2m, but subsequently extended to 14 x 2m, was cut across the line of the ramparts in the north-east area of the enclosure to determine the date and construction. Due to limited time, it was impossible to complete the section through the rampart.

CONTOUR PLAN (Fig 18)
A contour survey of the entire enclosure and its immediate surroundings was undertaken by Bronwen Campbell, Caroline Davies and Tessa Rickards to record the topography of the site (Fig 44). The contour plan delineated the ramparts and associated features, such as possible gateways, and also picked up wall alignments and other structures visible on the surface.

MODERN VILLAGE (Figs 28-30)
Advantage was taken of the gradual desertion of the modern village to examine some of the house compounds as far as the limited time allowed (Figs 65-7). This had the aim of providing ethnoarchaeological parallels for the excavations at Seh Qubba and elsewhere in the project and creating at least a basic record of village styles and ways of life that are fast disappearing. In this context it is worth emphasising that the new settlements built to rehouse villagers displaced by the floodwaters (eg Bardiya and New Zammar) are completely different in building techniques, layout and lifestyle from the traditional settlements they have replaced. This recording operation therefore fulfils the rescue side of the project as much as the excavations.

RESULTS OF INVESTIGATIONS

PRE-1ST MILLENNIUM BC
In the large wadi and the steep slopes leading down to the river, Areas H and I, a very small amount of possible Assyrian pottery types belonging broadly to the 2nd millennium were found. None of them could be associated with any of the excavated structures or strata, however. The sherds were not clearly diagnostic, including general stripe-painted types which might be Khabur and the distinctive but broadly dated 2nd-millennium 'channel bases', but no classic Khabur, Mitannian or Middle Assyrian types.

PERIOD 11 LATE ASSYRIAN
A small number of Late Assyrian diagnostic sherds were found in surface collections and in residual contexts in the Area A excavations. The surface material was almost entirely from the slopes of the large wadi, Area I, and the slopes down to the river, Area H (ie contexts that would have eroded out from Area A deposits). No stratified remains from this period were found in the [A1] sounding, however.

PERIOD 14 PARTHO-ROMAN
[A1] sounding (Fig 18)
The deep sounding in Area A cut down through seven successive phases of occupation/construction to reach probable virgin soil (see below) at 4.33m. The lowest two phases belonged to Period 14. It must be emphasised that the sounding, 5 x 4m in area at the top, was confined to less than 2 x 2m by the time it reached the bottom. This was barely enough room to recognise even basic stratigraphic trends, let alone complete architectural units and their relationship to each other. Nevertheless, a number of important features were exposed.

Phase 14.1 large wall (Figs 19a&b-20, Pl. 29)
What appeared to be virgin soil (the conglomerate bedrock was not reached) was an orange grainy material, 4.33m deep (67). However, there was only a very small exposure at this depth (less than 2 square metres) and it was dug into only by a few centimetres; in view of the surprising depth of virgin soil in [C1] and the presence of pre-Roman pottery in residual contexts, virgin soil might in fact have been deeper. It was completely level; it is possible that this was deliberately levelled before a very shallow, 30 cm-deep foundation trench, (66), was dug into it for a wall foundation of undressed stone, (64), which ran diagonally across the sounding. This consisted of a facing of two courses of very large undressed stones with a core of loosely packed small pebbles and gravel. It was not possible to ascertain the total width of the wall due to the restricted space at this depth; its maximum visible width was 1.3m, but presumably it would have been wider than this by at least another facing of large stones. Above this was the mudbrick superstructure (63). Not all the bricks in the wall could be articulated, but those which could measured 38 x 36 x 9 cm.

The mudbricks in the southern part of the sounding had been cut to the level of the stone foundation by the foundation trench, (65), of the Phase 14.2 wall, (48), above. Over presumed natural was laid some 60 cm of clean levelling-up infilling, (61) and (62), containing a few scattered stones. Sealing this fill and presumably associated with the wall was a compacted yellow-orange surface (60), containing flecks of charcoal and plaster. The surface was at the same level as the top of the mudbricks, so it was not certain whether it abutted the wall or covered it. It was probably external, to judge from the thickness of the wall and its proximity to the edge of the slope. Above surface 60 was some 45 cm of clean compact fill (59), in which was found a fine decorated bone pin <368>. This fill possibly marks the abandonment of this phase. Relatively little material was recovered from Phase 14.1.

Phase 14.2 mosaic floor (Fig 21, Pls. 30-32)
Far more meaningful architecture was exposed in the second phase. This consisted of parts of two rooms, both of them with fairly substantial floors. Walls were of dry-

or mud-bonded large undressed stones throughout.

Walls 51 and 54 (90 cm-1m wide and at least 75 cm wide respectively) were bonded together and cut by a secondary wall, 48 (55-65 cm wide). Wall 49 (60 cm wide) was also secondary, though it was on the same alignment as the earlier walls. It is possible that Walls 51 and 54 might have fallen out of use when Walls 48 and 49 were built, as the latter rested on Layers 53 and 55, which abutted Walls 51 and 54. The walls survived to heights between 20 and 50 cm. Most of this level was not excavated below these walls, so the depth of any associated foundation trenches is not known, except for Wall 48 which had a cut (65), about 90 cm deep.

The floor of the northern room was made of good quality white plaster (53), laid on a 14 cm thick underlay of packed gravel and pebbles (57), which underlay Wall 48. The floor plaster, however, continued up the adjacent wall faces, including Wall 48, to their fullest surviving height (at least 20 cm). An iron arrowhead <375> came from the material that lay on this floor (52).

The floor of the southern room had several important features. Close to the baulk was a slightly curved water channel 3m long and 25-30 cm deep, (58: Figs 19a&b, Pl. 31). It was formed of rectangular slabs of roughly dressed stone (including one slab of mortar containing two fired bricks), all set on edge. At least part of the channel had been covered with undressed stone slabs as well. Two almost complete drainpipes were recovered <376> and <377>, as well as several fragments. The length of the individual pipes was 34 cm, with an exterior diameter of 14 cm; the channel was about 14-22 cm wide at the top, and about 18 cm wide at the bottom.

The drain appeared to be a sub-floor feature. Adjacent to the drain, but outside the area disturbed by Pit 37 (see below), lay a very fragmented plaster surface (55), which included the remains of a mosaic (56), somewhat scattered and with no original design retrievable (Pl. 32). All the tesserae <361> were of stone and were at least partly squared (some had only one surface squared off and were in other respects still rounded pebbles, but most had been completely squared). Most (118) were white, but 43 were black or dark grey, and 3 were pink; several more tesserae <363>, presumably from this mosaic, were found in adjacent contexts. They were not all the same size: most were 15mm square (with varying thickness), but there were a few, mostly white, which were only 5mm square. Surface 55 also had many fragments of glass <349> lying on it, and more glass fragments, <341> and <343>, came from the contexts that overlay this surface. Wall 49 was built over this surface.

Phase 14.2 was heavily disturbed by a number of pits dug from the Period 17 Islamic building (similar pits have also contaminated some of the Period 14 and 15 contexts). Pit 36 cut Walls 51 and 54, so the full width of Wall 54 and the length of Wall 51 are not clear, and Pit 36 also cut the eastern end of the drain. Pit 37 disturbed about 1.75m of the western end of the drain, which lost all its capping stones and drainpipes for this length, and this disturbance also obscured the relationship of the drain to the mosaic.

The disuse and collapse of the building was marked by Feature 50, a heap of stones between Walls 48 and 49. This was at first thought to be an additional wall linking Walls 48 and 49, but was subsequently found to be collapse, probably from Wall 48. It included two halves of a circular grinding stone, one half found lying on the highest surviving course of Wall 54 and the other half among the stones of Feature 50. Covering both this collapse and the walls there was about 50 cm of fairly compact, clean fill, (44) and (47), presumably indicating a period of abandonment.

[B1], [C1] and [D1] soundings (Figs 18, 23)

The three soundings in the open area of the ancient settlement, [B1], [C1] and [D1], also contained pottery from Period 14, albeit in lesser quantities. Due to shortage of both time and resources, it was not possible to analyse the stratigraphy of these three soundings in as much detail as one would have wished. All but [C1] in any case contained fairly simple stratigraphy without any structures (Fig 23). Even the meagre structures of [C1] consisted only of two successive floor levels, both probably belonging to the Sasano-Byzantine period, though Partho-Roman material was mixed throughout. Since virgin soil in [C1] was still not reached after 2.2m (when it became necessary to finish the excavations), it seems likely that this Partho-Roman material belongs to lower strata as yet unexcavated.[2] [D1] contained considerable quantities of Partho-Roman pottery, particularly in its lowest layer (4), immediately above virgin soil, though it also contained similar amounts of Sasano-Byzantine pottery. Inconclusive though the evidence from these three trenches may appear, it does at least indicate the presence of Period 14 settlement in this part of the site.

Surface collections

Period 14 pottery was picked up in surface collections from most parts of the site. Although Period 14 pottery was not found in as great a quantity as later pottery, there was enough to confirm that the settlement spread over the full area of the site in this period; the lesser quantities probably reflect the fact that levels of this period were obscured by later deposits, rather than a smaller area of settlement.

Period 15 Sasano-Byzantine

[A1] sounding

Phase 15.1 disintegrated plaster surface

(Figs 19a&b, 22)

Period 15 is marked by a change in building technique to mudbrick or *tauf*, as opposed to stone. Wall 33 was at

2 ([C1] is discussed in more detail in Period 15 below)

least 1.9m wide, consisting of very regular square mudbricks, 43 x 43 x 10 cm, four courses high. Along its edge lay what appeared to be half-bricks. The individual bricks themselves were made particularly clear by the alternating use of hard orange and soft green sandy material in their composition. Directly below Wall 33 were some 40 cm of hard, grey-brown clay containing some fired brick fragments and few potsherds, (45), on an identical alignment to the wall. This clay was completely different in nature from the layer immediately adjacent to it on the same level, (44), underlying Surface 42, though no line separating the two adjacent contexts was seen either in excavation or in the sections. Since Surface 42 stopped just short of Layer 45 (Figs 19a&b), ie on the same line as Wall 33 but 40 cm lower down (and covering the same area as the subsequent Phase 15.2 surface higher up, (38), which was definitely associated with the two walls), this hard clay must have been some sort of packed, trench-filled foundation for Wall 33, despite the lack of any visible line dividing it from adjacent contexts. Surface 42 was probably a very eroded plaster surface, as some flecks and larger patches of white plaster survived in places, and under it there was a 5-10 cm deep matrix of grey plaster and stones, (43); a few isolated tesserae <362>, were found in the fill (40), immediately above the surface (although these might have originated from the Phase 14.2 mosaic). In the room in the north-east corner of the sounding, formed by Walls 32 and 41, was found some still fibrous, yellow matted straw on the floor, although most of it had been obscured by the Period 17 pit (36).[3]

Wall 32 was *tauf*, which appeared to be cut into Wall 33. Its northern end was cut by the Period 17 Pit 37. It had a 65 cm-wide layer of *tauf* on top of it, (30), probably representing a secondary stage of construction. A feature interpreted as a stump of mudbrick wall, (41), although no bricks were articulated, ran along the northern section of the sounding, with a maximum width of 40 cm and height of 1.2m. This was the only construction which definitely continued in use with both surfaces known in this phase (42 and 38), though its exact relationship with Wall 32 is uncertain as it was cut by Pit 37.

Period 15.2 sandy surface (Figs 19a&b, 22)
Above Surface 42 was a layer of clean dark brown clayey fill (40), containing a patch of broken mudbricks and little pottery. It had no appearance of occupation, but was probably build-up to the next surface (38). This was a very even, orange-brown sandy surface, containing no signs of occupation. Surface 38 was built against the faces of all three walls, (32), (33) and (41).

The rooms were filled with approximately 50 cm of general debris and accumulation, (29), (31), (34) and (39), followed by a further 50 cm or so of similar accumulation, (24), 25) and (28), which covered all structures. This presumably represents the disuse and abandonment of the building.

The [B1], [C1] and [D1] soundings (Figs 18, 23)
[B1] This 3 x 3m trench was dug to a depth of 40 cm. It was dug stratigraphically (there were only two contexts)

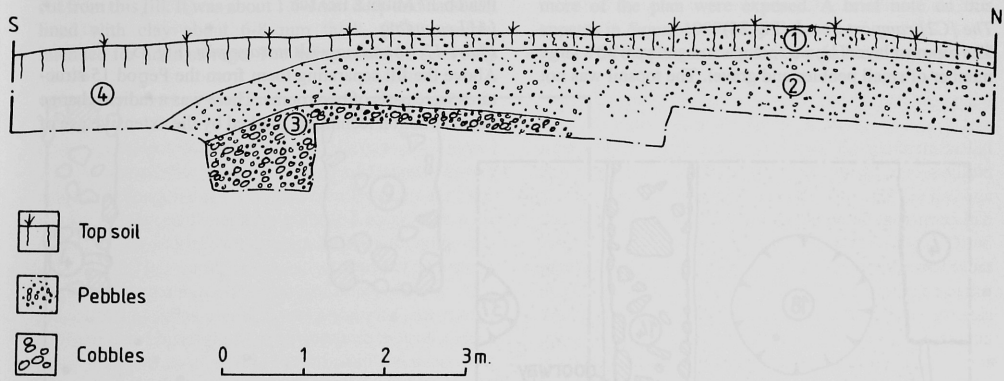


Fig 24. Seh Qubba: Trench [C2], section across the ramparts

3 (Note that this was not in the pit, but clearly outside it and therefore not part of any pit lining)

but largely without supervision. The topsoil (1), was 15-20 cm thick, and the deposit below this (2), was dug for another 20 cm through orange clayey material containing a few scattered stone blocks, before reaching an orange grainy material, very clean and empty, which appeared to be virgin soil.

[C1] (Fig 23) This was the last of the three soundings to be dug and the first to indicate that virgin soil in this part of the site must be at some depth (this sounding was dug to a depth of 2.2m, when it had to be discontinued for logistical reasons without virgin soil being reached). Some slight mixing may have taken place because the work here had to be unsupervised for part of the time, but most of the material was Sasano-Byzantine from all layers. The only signs of structures were two pebble surfaces, one at a depth of 80-100 cm, (5), and the other at a depth of almost 2m, (10). In the accumulation, (9), immediately above Surface 10, were found fragments of several glass vessels <319>. A wall of large undressed stones, (8), was possibly associated with Floor 10. Part of a pit some 1.6m deep was picked up in the section from 20 cm below topsoil.

[D1] This trench also had very simple stratigraphy (two layers (3)-(4)) and contained no trace of structures. It contained one glass fragment <342>. It was dug to a depth of 1.4m before finding virgin soil. This was an orange grainy clay usually identified as virgin soil elsewhere in the excavations, although in view of the unexpected depth of [C1] nearby this assumption may be questioned. However, the soundings did at least serve their purpose by demonstrating the shallow depth of the architectural remains visible on the surface.

The [C2] rampart trench (Fig 24)

The topmost layer (1), was orange and grainy with a large number of small pebbles and gravel. The topsoil was not the relatively rich dark brown soil found in [B1], [C1] and [D1]. It was 30-40 cm thick and contained one sherd, probably Islamic. Below this was 50-100 cm of dark brown soil (2), almost solidly hard-packed pebbles and gravel, again with almost no pottery. This layer was not bottomed, but towards the southern end of the trench began to curve downwards steeply. Layer (3), 25 cm to 1m thick, again consisted entirely of pebbles and gravel which began as a straight line visible in the section and stretching for at least 3m. Again, this layer was not bottomed, but began to slope steeply at the southern end. Layer (4) was the topsoil from the inside of the rampart, which was unlike the grainy topsoil, (1), but more like the brown crumbly topsoil from the nearby soundings.

Surface collections

Pottery from Period 15 was found fairly consistently all over the site. Two surface finds deserve special mention: a Byzantine *follis* in a very weathered condition <354>, recovered from the subsidiary wadi, and a very heavily weathered fragment of carved sandstone <383>, which was probably part of a Byzantine-style capital

PERIOD 16 EARLY ISLAMIC

No recognisable Early Islamic occupation or architecture was found in the excavations. A few Early Islamic glazed sherds were found out of context in both the [A1] sounding and [A2] clearance, and a few more on the surface in Area A, but they were not found in great quantities or in any concentration. The most significant surface find (unprovenanced) was a coin of the caliph Mustansir (1226-42) <355>.

PERIOD 17 MIDDLE ISLAMIC

[A1] sounding

Phase 17.1 building with storage pits (Fig 25)

Above the fill separating them from the Period 15 structures were parts of two rooms. There was a radical change in construction technique, marked by the extensive use of

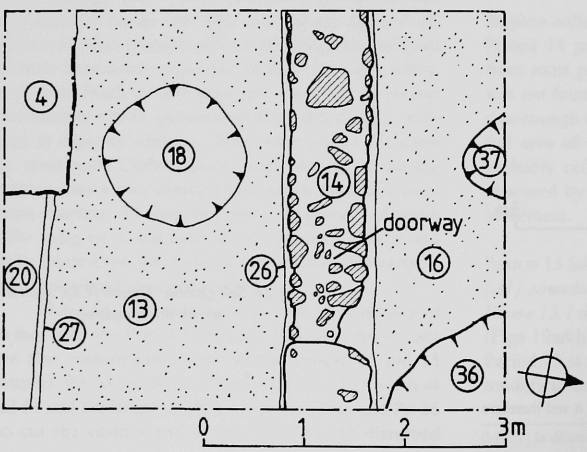


Fig 25. Seh Qubba: Trench [A1], Phase 17.1 plan

mortar. The structure consisted of two walls, (20)/(27) and (14)/(26). Both consisted of superstructures, (20) and (14), resting on foundations, (27) and (26) respectively, which were some 5-10 cm wider. Wall 14/26 appeared to have a doorway, the threshold resting directly on the foundation wall (26). Both walls were built of hard mortar and stone, with the plaster on the wall faces smoothed and finished. Only a suggestion of foundation trenches was visible in the section.

The floors of both rooms, (13) and (16), were surprisingly flimsy in view of the solidity of the walls, consisting of compacted earth with patches of plaster, built on loose earth and rubble underlays, (19) and (21). A regular circular pit (18), with a flat bottom, 95 cm deep, 1.2m top diameter and 1.3m bottom diameter, was dug from Floor 13 of the southern room and contained loose grey ashy fill (17), in which were found a fragment of a glass bowl <347>, and a semi-complete double-handled jar with combed decoration.

Cut from Floor 16 in the north room was another pit (37), with a very pronounced bell-shape. Its diameter could not be obtained, but in the section its width at the top was 60 cm and at the base some 2m. The pit had been filled with amorphous loose grey ash (22), which was largely uniform apart from a few lenses of harder-packed material near the bottom.

Phase 17.2 rebuilding (Fig 26)

About 36-40 cm of fill, (12) and (15), accumulated above Floors 13 and 16 before Walls 14/26 and 20/27 were used as foundations for Walls 9 and 4 respectively. In the north-east corner of the trench a bell-shaped pit (36), was cut from this fill. It was about 1.6-1.8m deep and had been lined with clay about 6-8 mm thick, (35), possibly intended for grain storage. The lining could be seen only as far down as the brick collapse, which could indicate a change of function for the pit after the base had filled up. The bottom 60 cm (46), was filled with loose ashy debris; above that was 20-40 cm of amorphous brick collapse and above that was 90 cm-1m of building rubbish (23), mostly stone (undressed, but including a large roughly squared stone block) with some mortar and occasional patches of ash.

Walls 9 and 4 were both on the same alignment as their predecessors and of the same mortar and stone construction, although much rougher (Wall 4 was plaster-faced, but Wall 9 was not), and slightly wider (Wall 9 was 1.06m wide). More mortar and less stone had been used. Both walls were also shorter, with jambs at their eastern ends. Associated with this phase was a fragmentary plaster floor (10)/(11), containing slight traces of very dark ash. The rooms were filled with a grey ashy fill, (5), (7) and (8), about 60 cm deep, below topsoil.

The [A2] wall clearance (Fig 27)

The exterior walls and part of the interior plan of a large Islamic secular building were recovered. The 17.1 and 17.2 phases in [A1] formed a part of this. As much of the building plan was already visible on or near the surface, only the walls were traced; the [A2] unit numbers refer to horizontal clearance areas rather than vertical stratigraphic units. Thus, Unit 12 would refer to the area on either side of Wall 12, etc. It was not possible in the time available to clear down to floors except in the sounding, although in places it was apparent that a surface had been reached. This area was the focus of Salem Yunis's subsequent excavations, in which floor levels and considerably more of the plan were exposed. A brief note on this appears in *Sumer* 1987-88, 87.

Of the plan as a whole it is possible to say only that

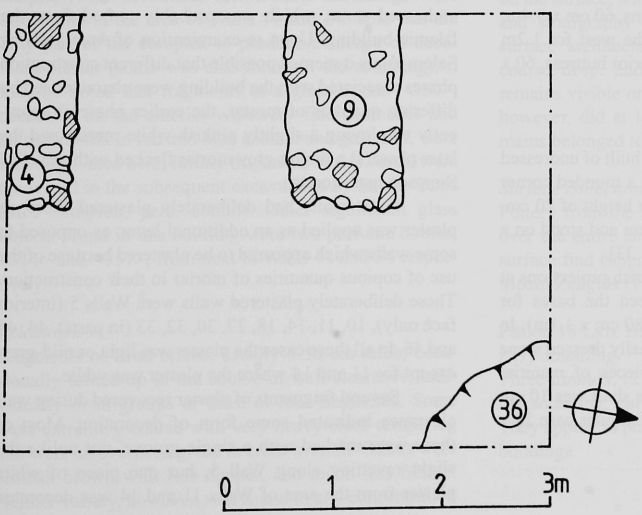


Fig 26. Seh Qubba: Trench [A1], Phase 17.2 plan

there were rooms along each exterior wall of the building, and also some structures in the middle. The western 10-15m was encroached upon by the cemetery of the modern village, which obscured that part of the plan to the extent that although the line of the west wall could be traced it was not possible to see whether it contained the main entrance, as seemed possible. In this connection it should be noted that short lengths of wall, 2m long at most, were visible in the cemetery across the subsidiary wadi. These were of the same stone and mortar construction and on the same alignment as the large building, but this area was very densely occupied by graves which prevented any plan being traced.

Methods of construction

The complex was built of undressed stone and mortar, which tended to be grey, heavily flecked with white; walls were usually 35-40 cm wide (Wall 2, however, had been doubled in width from 36 to 80 cm).

Both the exterior walls to the north and east were irregular for much of their length; the wall on the north appeared only as an approximate line, largely of rubble, of varying widths. Its original definition had been lost for about half its total length of some 60m, mostly in the centre. The wall to the east had a very regular and completely plastered inner face. This was in contrast to the outer face, which resembled the north wall, which may have been partly removed or have fallen down the slope.

Buttressing

The east wall had two definite buttresses, both roughly the same size, c 80 cm x 1.3m (the edges were slightly irregular), and both abutting rather than bonded. The main south wall had several projecting features: two buttresses (80 cm x 1.4m), again abutting, and a small spur wall or long thin buttress, which appeared to be bonded. The main west wall also had slight projections, 60 cm x 3.4m, and a wall which disappeared off to the west for 1.2m before breaking off. Wall 11 had an interior buttress, 60 x 80 cm.

Columns and column bases

Walls 28 and 29 had column bases, also built of undressed stone and mortar. The western one was a rounded corner pilaster with a diameter of 50 cm and a height of 20 cm. The eastern one had a diameter of 65 cm and stood on a square, stepped base, 88 x 0.94 cm (Pl. 33).

It is possible that the small squarish projections at either end of Wall 38 could have been the bases for columns (west end 1 x 1.1m; east end 80 cm x 1.1m). In addition, a small column base in diagonally dressed stone was found reused as one of many pieces of material decorating a grave in the cemetery. The shaft was 10 cm high with a diameter of 16 cm on a rectangular base 28 x 18 cm and 8 cm high.

Doorways

It was impossible to obtain the dimensions of doorways in most cases, either because they were not present (presumably where only the foundation level of the wall survived) or because they were badly eroded.

The only doorway which could be measured was the one in Wall 2, which also appeared in the section of the [A1] sounding and was 1.4m wide. A large break at the south-west corner of the building some 5m long might indicate a possible approach from the river and up the wadi, but even if this were the case it would have been too steep for a major entrance. As there is no large entrance from the east (again an extremely steep slope), one may assume that the main entrance was probably along the western wall, now largely obscured by graves.

A small room (interior measurements 1.15 x 2.3m) near the north-east corner of the complex at the top of the slope had two steps at the top which suggested a stair turning and descending to the right. This room was on almost the same alignment as two 3m-long parallel lines of stone and mortar construction visible about halfway down the slope. It was not possible for logistical reasons to investigate this any further, but subsequent excavations in 1986 and 1987 by Salem Yunis confirmed the existence of a stairway down to the river.

A possible stone door socket and associated channel were found in Wall 37. The doorway here was only 65 cm wide.

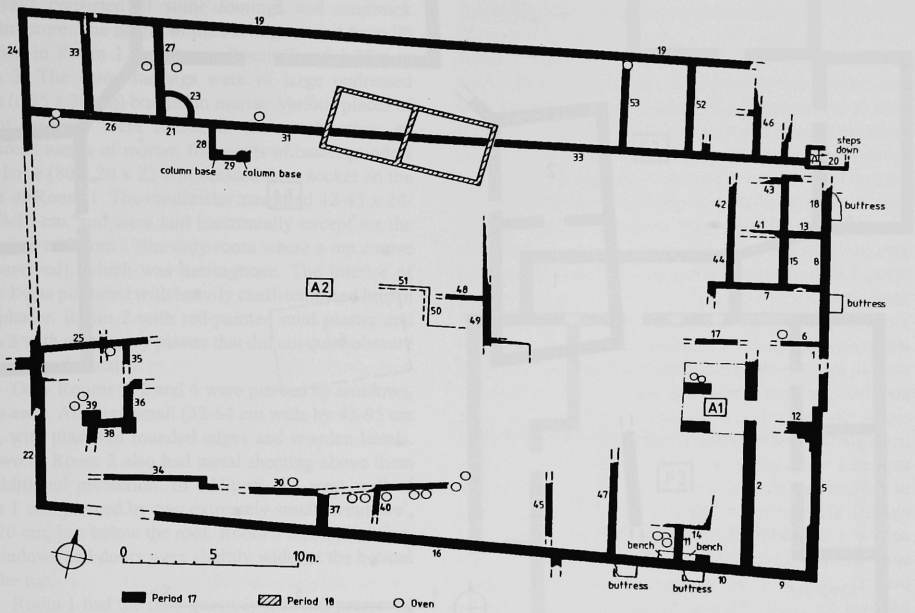
Mortar and plaster

Mortar, grey with white flecks, was used in the construction of all walls, and its use was particularly generous when the wall was made of small, undressed stones. This is in contrast to the modern building subsequently constructed over the northern part of the building, which is entirely without mortar, except for that used in blocks like undressed stone, which was probably reused from the Islamic building. Upon re-examination of Area [A2] by Salem Yunis it seemed possible that different construction phases associated with the building were characterised by differing qualities of mortar, the earlier phase(s) apparently employing a slightly pinkish-white mortar and the later phase(s) a darker grey mortar flecked with ash (St J Simpson, pers comm).

Some walls had deliberately plastered faces, ie plaster was applied as an additional layer, as opposed to some walls which appeared to be plastered because of the use of copious quantities of mortar in their construction. These deliberately plastered walls were Walls 5 (interior face only), 10, 11, 14, 18, 27, 30, 32, 33 (in parts), 44, 45 and 46. In all these cases the plaster was light or mid-grey, except for 11 and 14 where the plaster was white.

Several fragments of plaster recovered during wall clearance indicated some form of decoration. Most of these were marked with a single groove, not unlike the slight revetting along Wall 5, but one piece of white plaster from the area of Walls 11 and 14 was decorated

Fig 27. Seh Qubba: Period 18 'administrative building'



with triangles cut in relief <371>. Some moulded pieces with curved decoration <372>, presumably hand-made, were found here and in the upper level of the sounding. One of these was a piece of plaster curved in such a way as to suggest that it was from a fallen archway. Some simple, round-sectioned, architectural mouldings were also found in the area of Walls 11 and 14. This was the only part of the complex to produce evidence of decorated plaster (some was also found in the sounding); it may be noted that fragments of a glass beaker <350>, decorated on the exterior with very fine geometric and animal motifs in red and blue enamel and gold leaf, were also discovered here; further fragments of this vessel were recovered in the subsequent excavations by Salem Yunis (St J Simpson, pers. comm). Other significant glass objects found in this building were two perfume bottles, <314> and <351>, from next to Walls 44 and 34 respectively.

Brickwork

Fragments of fired bricks, usually 8-10 cm thick, occasionally turned up in the course of wall clearance, individually or in groups of three or four fragments. Some were extremely coarse with very heavy chaff tempering and were an overfired green in cross-section. Others were reddish brown with less temper, and much less friable. Neither variety, however, was found in any concentration or with any evidence of brick construction, and their isolated occurrences suggest that they were reused.

The [B], [C] and [D] soundings

These trenches were all sited on or next to remains visible on the surface, with the main aim of determining the depth and stratigraphy of the remains. In the event, all the surface architecture so tested proved to be only one course deep, and the stratigraphy did not reflect the remains visible on the surface. This 'negative evidence', however, did at least demonstrate that such surface remains belonged to one of the latest phases at Seh Qubba.

Surface collections

Pottery from the surface confirmed a settlement spread over the entire site for this period. The most significant surface find (unprovenanced) was an Atabeg coin of the Mosul Zengids (1127-1228), <356>.

PERIOD 18 LATE ISLAMIC

[A1] sounding

Three *tannurs*, (2), (3) and (6), were built in the area of the sounding, cut from the surface into the topsoil (1). They appear to postdate the destruction of the Phase 17.2 building.

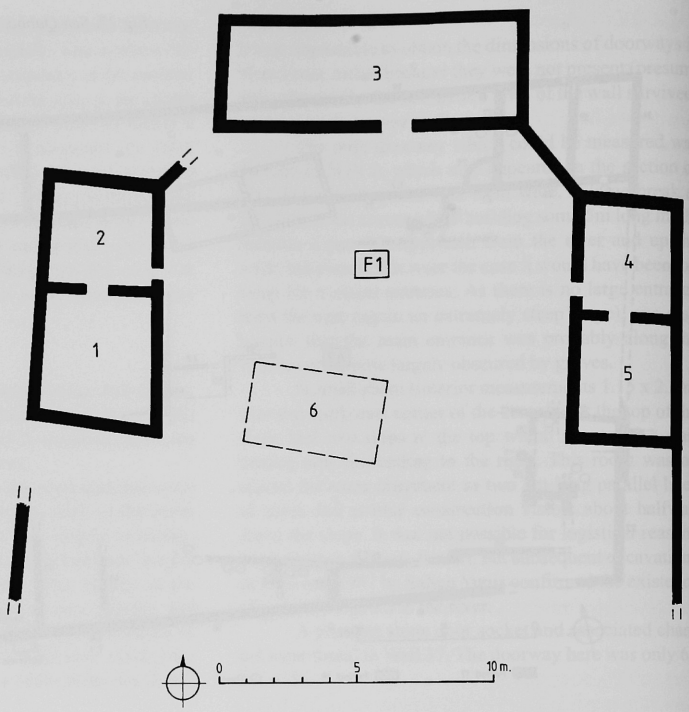


Fig 28. Seh Qubba: House F1, measured sketch plan

The [A2] wall clearance (Fig 27)
The area of the administrative building contained many more *tannurs*, approximately 20 in all (Fig 27). They presumably postdate the building considerably, as some at least cut the walls. It is possible that these ovens are associated with the modern two-roomed structure overlying the northern part of the Islamic building, which now survives only as stone footings (external dimensions: 14.3 x 4.4m). The *tannurs* were all roughly the same size; the smallest had a diameter of 40 cm, and the largest a diameter of 70 cm (most were 50-60 cm).

PERIOD 19 RECENT
General observations
The modern village was not situated on the highest part of the site, Area A, but was further back on another raised area to the south, straddling the small east/west wadi. During the excavations in February 1986 about half the village was still inhabited, mainly the southern half, and the other half was abandoned at various times. Some structures were still standing to roof height or the roof itself was still preserved, and others survived only as a course or two of undressed stone, with the now empty rooms and courtyards given over to sheep grazing. In view of this slow rate of desertion, obviously spread over some time, there is almost certainly some overlap with Period 18.

The cemetery was dominated by the four tombs (*qubbas*). According to the villagers, one was recent, one was only a little older, and the other two were 'old' (Pls. 34-35). This was borne out by the state of repair. There were graves on both sides of the east/west wadi, but mainly to the north encroaching on Area A. Only one of the tombs was to the south, surrounded by a few graves.

House compound F1 (Fig 28)
This compound was constructed of undressed stone facing bonded with mud, with a mud filling. Walls generally consisted of a course of larger stones (c 30 x 45 x 20 cm) followed by several courses of smaller stones (c 15 x 15 x 20 cm), laid either in straight rows or 'herringbone'. There were also some blocks of mortar reused from earlier buildings. All walls were a standard 35-40 cm thick, and survived to a maximum height of 1.15m.

Rooms 1 and 2 on the plan in Figure 28 were said locally to be women's quarters, 3 was a reception room, 4 the kitchen and 5 possibly a *hammam* or bathroom. Room 6 may have been a sleeping platform for the summer. The compound was probably used by a multi-generational family.

House compounds F2 and F3 (Fig 29)
Recorded only in plan

House compound F4 (Fig 30)

The walls consisted of stone footings and mudbrick superstructure. The height of the footings varied from 90 cm-1.1m in Room 1 to 1.7m in Room 2 and 1.35m in Room 3. The stone footings were of large undressed stones (c 35 x 20 cm) bonded in mortar. Various pieces of ancient masonry were reused in the construction, eg occasional lumps of mortar, fragments of basalt grinders and a large (80 x 20 x 22 cm) dressed door socket on the corner of Room 1. The mudbricks measured 42-43 x 24-27 x 9-10 cm, and were laid horizontally except for the top course of Room 1 (the only room where a top course still survived), which was herringbone. The interior of Room 1 was plastered with heavily chaff-tempered brown mud plaster, Room 2 with red-painted mud plaster and Room 3 with rough grey plaster that did not quite obscure the stones in the wall.

Only Rooms 1, 2 and 4 were pierced by windows, two in each. All were small (32-64 cm wide by 43-95 cm high), with plastered rounded edges and wooden lintels. The two in Room 2 also had metal sheeting above them for additional protection. In addition, the west wall of Room 1 was pierced by two extremely small 'windows', 15 x 20 cm, just below the roof. Room 3 had no lighting. All windows and doors were slightly wider at the bottom than the top.

Room 1 had the only doorway that was preserved to its full height (1.6m) and unblocked. All had wooden lintels (where surviving). Widths seemed to be a standard 80-85 cm. Room 1 also had the only surviving roof. It was supported by a central post, 9 cm thick and 2.3m high, resting in a large irregular posthole. This post held up two thick longitudinal beams (each c 15 cm thick) that rested in a short wooden cradle or 'capital' that formed a 'T' with the central post. These beams were higher than the walls parallel to them, so as to form the ridge of a slightly pitched roof. They supported 18 smaller transverse beams, on which rested the matting and chaff-tempered mud plaster of the roof.

Room 3 was later divided by the addition of a small mudbrick partition wall. The doorway from Room 4 into the courtyard was blocked off and a new door into its south wall opened up, so that it formed part of an adjoining compound (Room 1 of Compound F5). There was no *tannur* visible, either in the rooms or the courtyard.

House compound F5 (Fig 30)

Considerably more stone was used in the construction of this house than in the others, sometimes for the entire height of a wall (eg Room 4), although gables were invariably of mudbrick. Larger-sized stones were laid flat in courses, but smaller stones (*c* 10 x 15 cm) were laid in a herringbone pattern. Both types were bonded with considerable amounts of mud mortar, in some cases almost obscuring the stones. Mudbricks (43 x 24 x 10 cm) were used mainly for enclosure walls and secondary

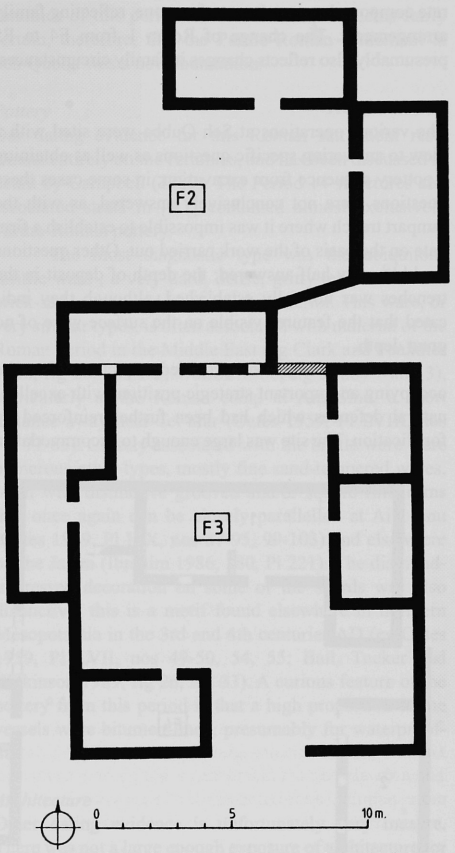


Fig 29. Seh Qubba: House F3, measured sketch plan

blocking.

Room 1 was plastered with a heavily straw-tempered mud plaster painted red then overpainted green on three walls. The only decoration was a red frieze around the walls, *c* 80 cm high, two hand impressions on the north wall above the frieze, and *Allah* in red paint on the east wall. Room 2 was plastered in plain white plaster. No other rooms were plastered.

Rooms 1 and 2 were also the only rooms with windows. All were small, between 30 and 80 cm high and 30-60 cm wide, about 1.5m above ground, and had wooden lintels. Doors in Rooms 1 and 2 were slightly trapezoidal in shape, 1.35m high; doors in other rooms were simply gaps in the walls.

Roofs were standard beam, matting and mud construction, and all were pitched. The north door of Room 1, leading into House Compound F4, had been blocked, presumably converting it from an F4 room to an F5 room. F5 compound was therefore perhaps originally two sepa-

rate compounds opened out to form one, reflecting family arrangements. The change of Room 1 from F4 to F5 presumably also reflects changes in family circumstances.

DISCUSSION

The various operations at Seh Qubba were sited with a view to answering specific questions as well as obtaining a pottery sequence from excavation; in some cases these questions were not conclusively answered, as with the rampart trench where it was impossible to establish a firm date on the basis of the work carried out. Other questions could be only half answered: the depth of deposit in the trenches was not fully established, although they indicated that the features visible on the surface were of no great depth.

Our investigations provided a picture of a site occupying an important strategic position, with excellent natural defences which had been further reinforced by fortification. The site was large enough to accommodate a reasonably substantial population rather than being only a fort, and may therefore have been a military settlement. It is the military aspects of the site which seem to be a constant theme through most of the periods in which Seh Qubba was occupied.

PRE-1ST MILLENNIUM

No evidence was found of any early (pre-2nd millennium) settlement at Seh Qubba, despite the highly strategic location of the site (or perhaps because of it, since its height above the river may have been too inconvenient for normal rural settlement). A fragment of what appeared to be a bevelled-rim bowl was found in a Period 17 pit in [A1], (23), but this alone cannot be taken as evidence of a Later Uruk settlement. It may have been an isolated piece brought up from Tell Abu Dhahir during the Middle Islamic period, or alternatively the fragment in question might have belonged to a much later coarse chaff-tempered vessel with a superficial resemblance to a bevelled-

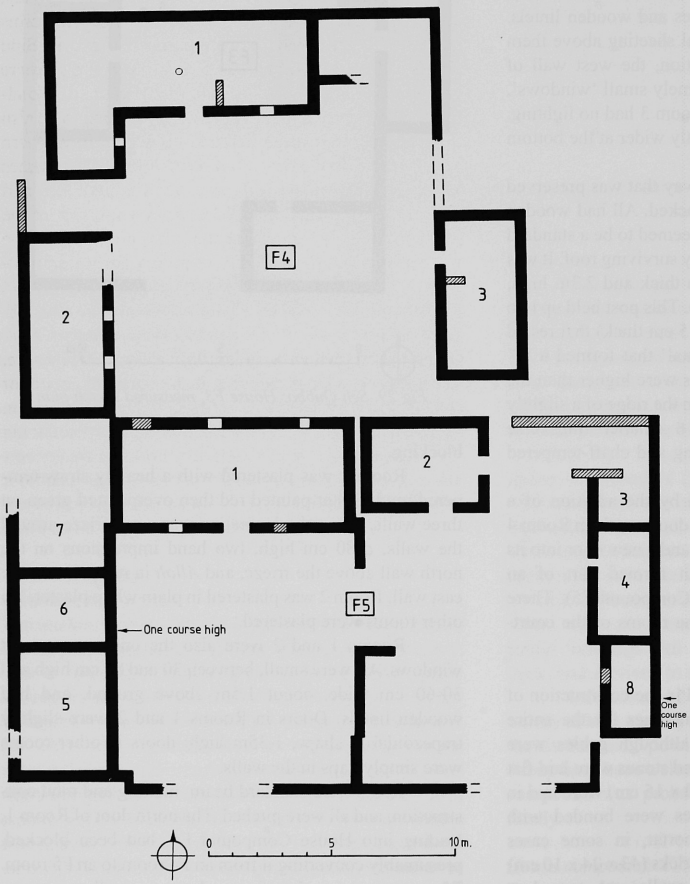


Fig 30. Seh Qubba: Houses F4 & F5, measured sketch plan

rim bowl (it consisted only of a base fragment, not the more characteristic rim fragment which makes bevelled-rim bowls so unmistakeable). Similarly, an obsidian blade was found in a Phase 14.1 deposit; the use or reuse of lithics in late historical periods in the Near East has been discussed by Miller (1984).

The 2nd-millennium sherds found in the wadi might have been eroding out from a part of the site which was not investigated fully (although no such sherds appeared in other areas of the site). Another possibility, suggested by the bottom of the [A1] sounding, is that the area was levelled when Phase 14.1 was constructed; if there had been a thin settlement deposit there, this would have been removed and thrown into the neighbouring wadi. Certainly the top of 'natural' was very even and gave the impression almost of a deliberately flattened surface. Alternatively, pre-Roman occupation may not have been reached in the [A1] sounding, as it was not conclusively demonstrated that virgin soil had been reached. Area A was also the most prominent and thus perhaps the most attractive part of the site for settlement, at least to the security-conscious. It would be surprising if this prominent location remained uninhabited while other parts of the site were occupied.

All one can say, therefore, is that there was some slight 2nd-millennium presence at Seh Qubba, but it is not possible either to date it more accurately or to say anything about the nature of the settlement during this long period except that it was not on a scale comparable even to the minor 2nd-millennium settlements in the vicinity (eg Tell Gir Matbakh, Khirbet Shireena and Khirbet Karhasan).

Period 11 Late Assyrian

Sherds from the Late Assyrian period were slightly more numerous and more diagnostic than those from the 2nd millennium. They included many plain vegetable-tempered forms familiar from the excavations at Khirbet Shireena and elsewhere. It seems likely, therefore, that there was Late Assyrian occupation at Seh Qubba, albeit of a very meagre nature. Since most of these sherds were found in and around Area A, the highest part of the site immediately overlooking the river, it seems likely that the Late Assyrian settlement had a military/strategic purpose, possibly a garrison or 'police post' rather than a domestic or rural settlement such as in other later Assyrian settlements in the area (eg Khirbet Shireena, Tell Abu Dhahir and Khirbet Karhasan). Certainly the highly strategic location of Seh Qubba would have proved a very attractive position for such a military-minded people as the Late Assyrians.

Period 14 Partho-Roman

Surprisingly, there was virtually no evidence for Hellenistic occupation: the one red-glazed sherd identified as Hellenistic could equally well belong to the Partho/Roman period, given the present state of knowledge of the ceramics of this period in northern Iraq. It seems fairly certain, therefore, that the Partho-Roman settlement at Seh Qubba was a new foundation.

Pottery

Our dating evidence for this Roman settlement rests almost entirely on the ceramics, and has been discussed in detail by Campbell (1989). The Period 14 structures and associated strata in [A1] contained almost exclusively Partho-Roman pottery.

The most diagnostic type was the ubiquitous 'brittle ware', a very hard, dense, gritty tempered ware, brick-red to grey and black on the exterior. This ware, or very similar types, is often associated with material of the Roman period in the Middle East (eg Clark and Faulkner 1986, fig 20, nos 1-2; Watson 1986, fig 3, nos 1 and 3), particularly at the Roman camp at Ain Sinu, a short distance away near Tel'afar (Oates 1959, Pl LVIII, nos 75, 77-85). Closely associated with the brittle ware were numerous other types, mostly fine sand-tempered wares, often with distinctive grooved and/or square rim forms that once again can be closely parallelled at Ain Sinu (Oates 1959, Pl LIX, nos 87-95, 99-103) and elsewhere on the Jazira (Ibrahim 1986, 180, Pl 221). The diamond-impressed decoration on some of the sherds was also distinctive; this is a motif found elsewhere in northern Mesopotamia in the 3rd and 4th centuries AD (eg Oates 1959, Pl LVII, nos 49-50, 54, 55; Ball, Tucker and Wilkinson 1989, fig 26, no. 33). A curious feature of the pottery from this period is that a high proportion of the vessels were bitumen-lined, presumably for waterproofing.

Architecture

Other dating evidence is unfortunately very meagre. There was not a large enough exposure of architecture for any distinctive plans to be identified, and the construction techniques of the Period 14 walls in the deep sounding were distinctive only of this area of northern Iraq generally rather than of any particular period. The mosaic floor and associated terracotta pipes found in these levels were certainly suggestive of a Roman date, especially in Iraq where mosaic is extremely rare. Not nearly enough of this most tantalising Phase 14.2 building was exposed to be able to identify its function. Nevertheless, its position on the highest part of the site, together with the very distinctive features that were exposed—a plaster-lined room, a mosaic floor (the tesserae might have fallen from a wall, but wall mosaics tend to have smaller tesserae), a sophisticated water supply or drainage system—must surely indicate a building of some importance.

The 2m or so depth that was reached in [C2], the rampart trench, indicated a construction of tightly compressed layers of gravel and pebbles. It was almost entirely sterile, and the few sherds recovered were at best undiagnostic. They appeared to be Sasano-Byzantine, hence the description of the [C2] excavation in Period 15

above, but the sample was too small, too undiagnostic and too near the surface to be conclusive. Although there is no reason to doubt that the ramparts were in use in Period 15, it is worth reviewing the possibility that they were founded in Period 14.

The area enclosed by the ramparts had a uniform distribution of Partho-Roman ceramics on the surface, which implies that the site was at least delimited to this extent by this period. The rigid planning of Roman military architects meant that fortifications usually followed a standard four-square design, familiar throughout the Roman world, not least in Mesopotamia where the pattern is repeated almost to text-book specifications at Ain Sinu (Oates 1959). Indeed, so standard is this design that Sir Aurel Stein was led into mistakenly identifying almost any square remains in the region as a Roman *castellum* (Gregory and Kennedy 1985). When topography dictated, however, Roman fortifications followed natural contours, as at Sinjar (Gregory and Kennedy 1985, 10) and Karamildan (Sevin and Derin 1989). The ramparts at Seh Qubba are entirely consistent with such a practice. The layered, packed stone and gravel construction of the Seh Qubba ramparts is also consistent with the type of earthworks thrown up to defend Roman camps. Whether this layering technique formed a part of a casemate construction, as at the Roman camp at Ain Sinu (Oates 1959; the technique was also found in the Late Assyrian period in the Haditha Dam Salvage Project (M Roaf, pers comm)), or whether they were merely earthworks (or more correctly gravelworks) could not be discerned in such a small exposure. The construction is also similar to the Phase 14.1 Wall 64 in [A1]. However, given the abundance of building stone in the vicinity and the popularity of stone and mortar construction in the area during the 1st millennium AD, it seems likely that building an earthworks may be evidence of hasty construction. Again, this would be consistent with a Roman occupation at the site, for reasons we will review below.

Background

For the Roman period as a whole, it is obviously attractive to see the settlement at Seh Qubba as having a military function, both from its strategic position within the site and the locality and because of the known history of the area as a frontier region between Rome and Parthia. To understand the area of northern Iraq and the northern Jazira in the first few centuries AD it is necessary to unravel the formidable tangle of historical events surrounding the conflict between Rome and Persia, when this area constituted the meat in the sandwich. Beginning in the reigns of Trajan in Rome and Pakores in Parthia in the early 1st century AD, the frontier shifted back and forth against a background of military campaigns, political alliances and successive advances or withdrawals by both sides. This history has been summarised elsewhere (eg Oates 1968; Angeli Bertinelli 1976; Campbell 1989, 53-55; Winter 1989) and in any case is not always helpful in trying to pinpoint exactly which places belonged to which side at which particular time, since sources for the geography of the area are few and epigraphic evidence on the ground even rarer. When trying to establish a historical background on which to embroider the archaeological evidence for Romans in northern Iraq, it is perhaps sufficient to observe that it came under Roman rule first under Trajan, when it formed a province from AD 114-117, and after a relatively brief Antonine occupation (AD 164-166) was re-established by Septimius Severus in AD 199 as a province with its capital at Nisibis, until its final loss to the Sasanians in the 4th century.

It is from this last period, beginning with the Severans, that the Roman remains at Seh Qubba presumably date, although the apparently hasty construction of the ramparts might be evidence of briefer and earlier campaigns, such as those by Trajan or by Avidius Cassius under Marcus Aurelius. Indeed, the earlier phase of Roman occupation in the deep sounding may be the remains of just such an earlier campaign; in this connection it is worth noting that our one possible Hellenistic sherd came from this context and observing the similarity in construction between Wall 64 and the ramparts. The continuity of occupation that the evidence of the Sasano-Byzantine remains suggests, however, would indicate a Severan foundation or refoundation, when the establishment of an outlying frontier post in newly subjugated territory could just as easily explain the construction of such hastily erected ramparts.

The three main centres for the area in this period were Nisibis (the capital), Singara and Castra Maurorum. The locations of Nisibis and Singara are well known, and the ruins of Singara (modern Sinjar) are still very impressive today, but Castra Maurorum, probably so named because of Moorish auxiliaries stationed there (Oates 1968, 77, note 4), has neither the conspicuous physical remains nor the toponymic evidence that identify Singara and Nisibis so easily, and therefore remains more elusive. We know from a passage in Ammianus Marcellinus (XXV, 7, 9) that it was one of the three fortresses named when the area was ceded to the Sasanians in 363 in a treaty between Jovian and Shapur II (Winter 1989, 556-57), the others being Nisibis and Singara, and Castra Maurorum must therefore have been a substantial place with important fortifications. The only clue to its location is an earlier passage in Ammianus Marcellinus (XVIII, 6, 9) when it was remarked that 'smoke and gleaming fires constantly shone from the Tigris on past Castra Maurorum and Sisara' during the campaign of Gordian III against the Sasanian emperor Shapur in the mid-3rd century. Rolfe (Ammianus Marcellinus XVIII, 6, 9, note 3) accordingly locates Castra Maurorum north of Nisibis, but Oates (1968, 77, note 4) places it in the area just to the west of the Tigris around Tell Hugna or Tell al-Hawa, some 20 km south or south-west of Seh Qubba respectively. An examination of the large fortified site of Tell Hugna as well as the sites around it in 1986 failed to

reveal any remains of the Roman period, however, despite its identification as such by Stein (in Gregory and Kennedy 1985, 103-5), and an intensive survey of the area around Tell al-Hawa in 1986 and 1987 (Ball, Tucker and Wilkinson 1989) revealed only relatively minor traces of Roman material; the 'Roman fort' mentioned in Fiey (1964, 111) proved on investigation to be Islamic (Site 58; T Wilkinson, pers comm).

Seh Qubba, however, fits all the requirements for Castra Maurorum. Its location on the Tigris agrees with Ammianus Marcellinus' description; indeed, the highly strategic and easily defensible position of Seh Qubba would make it an obvious choice for locating an important frontier post there. The site is large enough to be considered one of the three fortresses of sufficient importance to be mentioned in the treaty of 363 ceding northern Iraq to the Sasanians. Furthermore, it was heavily fortified. Last but not least, it produced abundant material dating from the Roman period. Not only are all these factors perfectly consistent with an identification as Castra Maurorum, they make Seh Qubba by far the most likely choice. The possibly public nature of the mosaic building excavated in the deep sounding receives added significance in this context.

That Seh Qubba was Roman can be inferred from the remains, but it can never be certain that it was indeed Castra Maurorum without epigraphic evidence from the site itself. Nonetheless, a cautious identification of the building with the mosaic in [A1] as the residence of the Roman military commander for Castra Maurorum would certainly not be inconsistent with the remains, the date and the political background that we have reviewed, and can at least be presented as a starting point for further discussion. Seh Qubba/Castra Maurorum therefore probably represents the easternmost Roman site excavated, with the possible exception of Arikamedu near Pondicherry in southern India (see Wheeler 1955).

Period 15 Sasano-Byzantine

Continuity into the period following the Roman was provided by large amounts of pottery and associated structures that we rather loosely call 'Sasano-Byzantine'. The pottery was generally coarser and grittier than the Partho-Roman, and was characterised by the continuation of brittle ware and brittle ware derived types. The corpus included Late Sasanian types known from elsewhere in Mesopotamia, such as honeycomb ware and smeared ware, known at Ana (Northedge *et al* 1988, 76-82, fig 38.18) and Samarra (Northedge 1985, 122-23, fig 4.1), and a variety of sherds with stamped motifs, some bearing animal motifs, known at Khirbet Deir Situn (Curtis 1989b) and again at Samarra (Northedge and Faulkner 1987, 163, fig 10.34). Such pottery is usually recognised as Sasanian, but other factors might suggest a Byzantine presence: a stamped cross motif on one or two of the sherds, the surface finds of the Byzantine *follis* (although coins are notoriously mobile) and the possible Byzantine column capital. Roman and Byzantine coins, however, occur frequently on known Sasanian sites (eg Kish: Moorey 1978, 141-42), and there is no evidence of these types of stamped pottery (such as the one with the cross) west of the Sasanian empire; crosses on Sasanian pottery have been attributed to indigenous Christians, such as the Nestorians, rather than Byzantine imports (Campbell Thompson and Hutchinson 1931, 111; we are indebted to St John Simpson for this information on Sasanian stamped pottery; now see Simpson 1996). The evidence, therefore, is inconclusive.

The history of this border area indicates an extremely fluid political situation at this time. The area remained a frontier zone, and we can assume that the area around Seh Qubba continued as a battleground between the rival Byzantine and Sasanian empires, since the ramparts continued in use and may even have been restored in this period. It is a moot point whether the Roman connection could have been politically sustained by the Byzantine empire which inherited the problems of this frontier region (Oates 1968), but military activity undoubtedly continued in the north of Iraq and was accompanied by a brief period of hegemony. This sort of political see-saw is extremely difficult, if not impossible, to trace in the archaeological record, which in all probability would indicate a cultural continuum, hence the preference here for the cautious term 'Sasano-Byzantine'.

Period 16 Early Islamic

The merging of the Sasanian into the Umayyad and Abbasid periods is again extremely difficult to pinpoint exactly (again, it is in essence a political movement rather than a cultural one), particularly at Seh Qubba where the evidence is elusive. No architecture or stratified remains from this period were identified, only occasional surface and residual finds. Some 'Sasanian' ceramic types are believed to have continued into the Early Islamic period, such as honeycomb ware and certain types of stamped jars (Northedge 1985, 121). In general, distinctive Early Abbasid types, such as 'thinwares' (Northedge et al 1988, 82-83, 86-87, fig 40), appear to be absent, although a series of as yet undated moulded wares at Seh Qubba might prove on further study to be Abbasid.

The surface find of the coin of Mustansir (1226-42) <355>, however, indicates that settlement of some sort at least continued into the latter part of this period. The sources for this period make no mention of any settlements on the Tigris between Balad (modern Eski Mosul) and Jazira Ibn Umar (modern Cizre in Turkey: Le Strange 1905, 93-94, 99-100; *Hudud al-'Alam*, 33-34), as the main route was further to the west in the Jazira (the so-called 'Abbasid Road': see Fiey 1964). Presumably the Tell Abu Dhahir area was not important enough to be mentioned in itineraries. All one can say of Seh Qubba, therefore, is that it appears to have continued as a settlement, albeit of uncertain nature and unknown name. The scarcity of Early Islamic ceramics would suggest that

it was much diminished.

Period 17 Middle Islamic

In the period after the Seljuq conquest Seh Qubba seems to have recovered its fortunes once more, and expanded to become a town covering the whole area within the ramparts, to judge from the surface survey and the disparate soundings. This presumably corresponds to a re-emergence of north-western Iraq and the Jazira as an important area under the Zengid dynasty based in Mosul (Bosworth 1967, 121-22). The ramparts themselves appeared to have fallen into disuse, assuming much of their modern appearance, as Middle and Later Islamic wall lines covered them in many places. Most of the wall foundations that appear on the surface seem to date from this period, the most important being those that make up the large complex in Area A. Although it was not possible to trace the complete plan of this complex in the time available, enough of it was recovered (Fig 28) to identify it as a public building, presumably an administrative headquarters or perhaps a *khan*. Its position on the most prominent part of the site would support the former identification. In this one is reminded of the probably contemporary fortified *khan* or *qasr* at Eski Mosul, a very similar building both in its position on a high bluff overlooking the river and its layout consisting of many rooms surrounding a central courtyard (Reitlinger 1938, 145-46). This *qasr* was presumably the administrative centre for medieval Balad, so a similar function can be inferred for the Seh Qubba building as well. The construction, of rough stonework set in gypsum mortar, was standard in north-western Iraq from the 1st millennium AD or earlier, and survived until its recent replacement by the use of concrete blocks.

Relatively few glazed ceramics were associated with this period. The most distinctive of the decorated sherds were barbotine decorated jar fragments, familiar from excavations at the Atabeg site of Beshtabiya in Mosul. Other distinctive wares from this period included a quantity of very heavily chaff-tempered sherds with coarse incised decoration, usually from large vessels. These sherds in fact often have a superficial resemblance to Later Uruk coarse incised ware, with even some of the decorative motifs such as hatched triangles being repeated. Although coarse, these sherds sometimes had very elaborate incised and applied decoration on them, and occasionally were additionally decorated with small blobs or 'windows' of blue glaze. This category of chaff-tempered decorative wares is not otherwise known outside northern Iraq, but has been excavated within the Dam Project at sites such as Khirbet Deir Situn (Curtis 1989b).

The sources once again make no mention of a name for this settlement, concentrating on the itinerary between Mosul and Nisibis, though Balad and Jazira Ibn Umar are still mentioned (Le Strange 1905, 93-94 and 99-100; Fiey 1964). The existence of a route directly connecting Balad and Jazira Ibn Umar which would have passed through Seh Qubba can, however, be inferred from the existence of the bridge dated 1213-14 crossing the Wadi al-Murr just outside Eski Mosul (Reitlinger 1938, 146-47). This route must have been of some importance to warrant the construction of such an impressive bridge. The emergence of another Middle Islamic town at Jazruniya (see overview and Chapter 8) is further evidence of the rise in importance of this route. Perhaps the main route moved further east from the less protected area of the open Jazira Plain to the greater security afforded by the hills bordering the river in order to escape raids from nomads. Seh Qubba was presumably an administrative centre on this route, probably governing an area corresponding to the modern Zammar region.

Period 18 Late Islamic

Seh Qubba probably witnessed a slow long-drawn-out decline between the Mongol and the Ottoman periods. The administrative building gradually crumbled, occupied by squatters, and only modest domestic buildings such as the one whose foundations overlie the ruins of the administrative building were built. Two at least of the tombs were probably built in this period. Seh Qubba slowly merged into the recent settlement with little discernible break. The reason for this decline was probably initially the Mongol conquest. Although Seh Qubba itself may never have been sacked by the Mongols (it was probably too minor to be worth their while) the general decay of the area that the Mongol conquest effected led to the slow abandonment of many of the smaller towns, such as Jazira Ibn Umar upstream from Seh Qubba (Le Strange 1905, 93). After the revival of the area's fortunes under the Ottomans, the regional centre was probably re-established downstream at Zammar, as the gap in the hills bordering the river valley at Zammar would have made it more accessible to wheeled transport.

The most notable feature of this period is the large number of *tannurs* found in and around the [A2] administrative building, dating from after the building had become a ruin. These *tannurs* appear too small to have had any industrial function: they resemble village bread ovens of the type still in use today. On the other hand, they appear far too numerous for the provisioning of a modest-sized settlement such as Seh Qubba.

The most distinctive pottery from this period was atype we named 'rouletted ware', a very hard, silt-tempered fabric decorated with slotted impressions made by a toothed wheel or cog. The most frequent small finds were glass bracelet fragments. The numerous clay pipe fragments (a total of 23) that were also recovered are typical of Ottoman and later sites. These are being published separately by Timothy Matney in the specialist volume (see also Curtis 1986b and Simpson 1990).

Period 19 recent

Seh Qubba, like Tell Abu Dhahir, was inhabited until 1985/86. At that time Tell Abu Dhahir had the bigger population and greater local importance, possessing a

school, a clinic and a mosque. Of the two settlements, Seh Qubba was more pastoral and Tell Abu Dhahir more agricultural.

CONCORDANCES

This section is intended to provide a quick reference to the units or contexts excavated to facilitate use of the different parts of this report and the corresponding pottery report and illustrations. The concordances take the form of three lists: units, phases and small finds. In the list of units, each entry consists of the context and trench numbers followed by the phase, a brief context description, a summary of the types of bulk finds and the numbers of any small finds from the context. The phase concordance gives the number of all the units in each phase. The small finds concordance lists the registration number, description, Iraq Museum number, unit and phase of each small find.

ABBREVIATIONS

A=animal bone Br=bracelet (glass) Bt=bitumen Cl=clay pipe G=ground stone Gl=glass H=human bone M=metal P=pottery S=shell Sl=slag IM= Iraq Museum

UNITS

Unit	*Phase*	*Description*	*Samples*	*Small finds*
A		surface	Br Cl	300 301 310
A1 1	18-19	topsoil	P A Cl M	
A1 2	18	*tannur*	A	
A1 3	18	*tannur*		
A1 4	17.2	stone wall		
A1 5	17.2	fill	P M	
A1 6	18	*tannur*	A M	
A1 7	17.2	collapse	P A M	
A1 8	17.2	ashy fill	P A S Br M Cl Bt	303 307 309 332 378 379 385
A1 9	17.2	stone wall		
A1 10	17.2	surface		
A1 11	17.2	surface		
A1 12	17.1	room fill	P A Br	316
A1 13	17.1	surface		
A1 14	17.1	stone wall		
A1 15	17.1	room fill	P A S	382
A1 16	17.1	surface		
A1 17	17.1	pit fill	P A S Gl M	347
A1 18	17.1	pit cut		
A1 19	17.1	underlay	P A Gl	345
A1 20	17.1	stone wall		
A1 21	17.1	underlay	P A Gl M	330 360
A1 22	17.1	pit fill	P A	389
A1 23	17.1	pit fill	P A M	359
A1 24	15.2	room fill	P A	
A1 25	15.2	room fill	P A Gl	348
A1 26	17.1	stone wall		
A1 27	17.1	stone wall		
A1 28	15.2	fill	P A Sl	
A1 29	15.2	room fill	P A Br Gl Bt	338
A1 30	15.1	*tauf* wall		
A1 31	15.2	room fill	P M	
A1 32	15.1	*tauf* wall	P A	
A1 33	15.1	mudbrick wall	P	
A1 34	15.2	room fill	P A M	
A1 35	17.1	pit lining		
A1 36	17.1	pit cut		
A1 37	17.1	pit cut	A	
A1 38	15.2	surface		
A1 39	15.2	room fill	A	

A1 40	15.2	room fill	A Gl M	362
A1 41	15.2	mudbrick wall		
A1 42	15.1	surface		
A1 43	15.1	underlay		
A1 44	14.2	fill	A Gl	341
A1 45	15.1	sub-wall	P S Gl G M	346 395
A1 46	17.1	pit fill	P A	
A1 47	14.2	room fill P	A Gl G M	343 353 363 [shown as surface on 48 c]
A1 48	14.2	stone wall		373
A1 49	14.2	stone wall		
A1 50	14.2	room fill		
A1 51	14.2	stone wall	G	
A1 52	14.2	room fill	P S M	375a
A1 53	14.2	surface		
A1 54	14.2	stone wall		
A1 55	14.2	surface	Gl	349
A1 56	14.2	mosaic		361
A1 57	14.2	floor underlay	P	
A1 58	14.2	channel	P	376 377
A1 59	14.1	fill	P A M	367 368
A1 60	14.1	surface		
A1 61	14.1	fill	P A	
A1 62	14.1	stones		
A1 63	14.1	mudbrick wall	P A	
A1 64	14.1	stone wall		
A1 65	14.2	foundation cut		
A1 67		natural		
A2 1	17	wall clearance	P A	
A2 2	17	wall clearance	P A m Cl	364
A2 3	"	*tannur*		
A2 4	"	grave	H	
A2 5	"	wall clearance	P A	
A2 6	"	" "		
A2 7/8	"	" "	P A Gl	
A2 9	"	" "		
A2 10	"	" "	P A	
A2 11	"	" "	P A S 371	
A2 12	"	" "	P A Br M Cl Sl	329 333 334 369 375 380 394
A2 13	"	" "	P A M	
A2 14	"	" "	P A Br Gl m Cl	311 320 324 325 350 372
A2 15	"	" "	P A Gl	317 344
A2 16	"	" "	P A Br	322 328
A2 17	"	" "	P	
A2 18	"	" "	P A	
A2 19	"	" "	P A Br	339 340
A2 20	"	" "	P A Br Gl Cl	305 313 336
A2 21	"	" "	P A	
A2 22	"	" "	P A	
A2 23	"	" "	P A Cl	
A2 24	"	" "	P A	
A2 25	"	" "	P Br m Cl	306 335
A2 26	"	" "	P A Cl	
A2 27	"	" "	P A	
A2 28/29	"	" "	P A Br Gl Cl	331 337
A2 30	"	" "	P A S Br M	315
A2 31	"	" "	P A Br m Cl	318 358

A2 32	"	"	"	P A Cl	
A2 33	"	"	"	P A Br m Cl	302 352 388
A2 34	"	"	"	P A Br Gl M	323 326 327 351 387 390 391 392 393
A2 35	"	"	"	A Cl	
A2 36	"	"	"	P A Cl	
A2 37	"	"	"	P M	357
A2 38/9	"	"	"	P A m Cl	
A2 40	"	"	"	P A	
A2 41/2	"	"	"	P A S	386
A2 43	"	"	"	P	
A2 44	"	"	"	P A Gl Cl	314 321
A2 45	"	"	"	P A Cl	
A2 46	"	"	"	P A	370
A2 47	"	"	"	A	
A2 48/9	"	"	"	P A	
A2 50	"	"	"	P A	
A2 51	"	"	"	P A Br	304
A2 52	"	"	"	P A	
A3		surface		P	
A4		surface		P Br	308 384
B		surface		P	356
B1 1		topsoil		P A	381
B1 2		fill		P A	
C		surface		P	366
C1 1		topsoil		P	
C1 2		topsoil		A Br	312
C1 3	15	stone wall			
C1 4	15	sub topsoil		P A	
C1 5	15	surface			
C1 6	15	floor underlay		P A	
C1 7	15	ashy fill	P A Sl		
C1 8	15	stone wall			
C1 9	15	fill		P A Br Sl	319
C1 10	15	surface			
C1 11	15	fill		P	
C2 1	15?	rampart		P	
C2 2	15?	rampart		P A	
C2 3	15?	rampart		P	
C2 4		topsoil		P	
D		surface		P	
D1 1		topsoil			
D1 2		topsoil			
D1 3	15?	fill		A	
D1 4	15?	fill		A S Br	342
F1 19		house compound		P	
F2 19		"	"	P	
G		surface		P	
H		surface		P	
I		surface		P	

SMALL FINDS

Reg	*Description*	*IM no.*	*Unit*	*Phase*
300	pot		A	
301	2 glass bracelets		A	
302	glass bracelet		A2 33	17
303	glass bracelet		A1 8	17.2
304	glass bracelet		A2 51	17
305	glass bracelet		A2 20	17
306	glass bracelet		A2 25	17
307	glass		A1 8	17.2
308	glass		A4	
309	glass		A1 8	17.2
310	glass bracelet		A	
311	glass		A2 14	17
312	glass bracelet		C1 2	
313	glass		A2 20	17
314	glass bottle		A2 44	17
315	glass bracelet		A2 30	17
316	4 glass bracelets		A1 12	17.1
317	glass		A2 15	17
318	glass bracelet		A2 31	17
319	glass		C1 9	15
320	glass bracelet		A2 14	17
321	glass handle		A2 44	17
322	glass bracelet		A2 16	17
323	glass bracelet		A2 34	17
324	glass		A2 14	17
325	glass		A2 14	17
326	glass		A2 34	17
327	glass bracelet		A2 34	17
328	glass bracelet		A2 16	17
329	glass bracelet		A2 12	17
330	glass		A1 21	17.1
331	glass bracelet		A2 28/9 17	
332	glass		A1 8	17.2
333	2 glass bracelets		A2 12	17
334	glass bracelet		A2 12	17
335	glass bracelet		A2 25	17
336	glass bracelet		A2 20	17
337	glass handle		A1 29	15.2
338	glass		A1 29	15.2
339	glass bracelet		A2 19	17
340	glass bracelet		A2 19	17
341	glass		A1 44	14.2
342	glass		D1 4	
343	glass		A1 47	14.2
344	glass bracelet		A2 15	17
345	glass rims		A1 19	17.1
346	glass rim		A1 45	15.1
347	glass rim		A1 17	17.1
348	glass		A1 25	15.2
349	glass rims		A1 55	14.2
350	glass bowl		A2 14	17
351	glass bottle		A2 34	17
352	copper spoon	SQ 1	A2 33	17
353	copper pin	SQ 2	A1 47	14.2

354	coin			
355	coin	SQ 3		
356	coin	SQ 4	B	
357	iron		A2 37	17
358	iron nail		A2 31	17
359	4 iron nails		A1 23	17.1
360	iron nail		A1 21	17.1
361	tesserae		A1 56	14.2
362	tesserae		A1 40	15.2
363	tesserae		A1 47	14.2
364	lapis bead		A2 2	17
365				
366	figurine		C	
367	bone tube	SQ 6	A1 59	14.1
368	bone pin	SQ 7	A1 59	14.1
369	pot	SQ 8	A2 12	17
370	pot	SQ 9	A2 46	17
371	wall plaster		A2 11	17
372	moulded plaster		A2 14	17
373	worked stone		A1 48	14.2
374	worked stone		A1 49	14.2
375	iron button		A2 12	17
375a	iron arrowhead		A1 52	14.2
376	ceramic drain pipe		A1 58	14.2
377	ceramic drain pipe		A1 58	14.2
378	grinding wheel		A1 8	17.2
379	stone door socket		A1 8	17.2
380	millstone		A2 12	17
381	millstone		B1 1	
382	stone door socket		A1 15	17.1
383	stone capital			
384	glass bracelet		A4	
385	glass bracelet		A1 8	17.2
386	clay pipe frag		A2 41/2 17	
387	lamp		A2 34	17
388	glass		A2 33	17
389	iron nail		A1 22	17.1
390	pottery disc		A2 34	17
391	bitumen sealing		A2 34	17
392	iron nail		A2 34	17
393	clay pipe frag		A2 34	17
394	faience bead		A2 12	17
395	cowrie shell		A1 45	15.1

SEH QUBBA SEQUENCE DIAGRAM

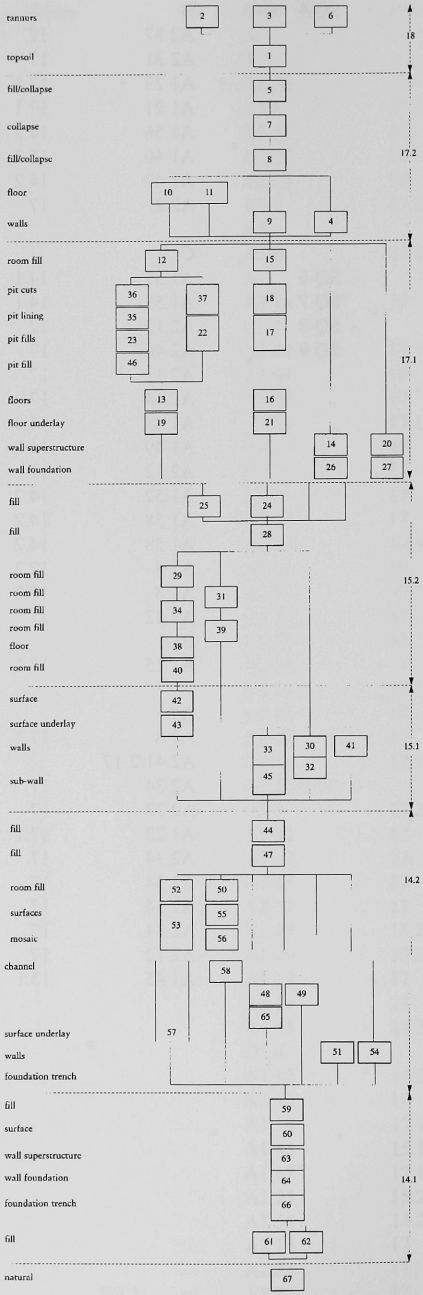


Plate 20. Seh Qubba: general view from Tell Abu Dhahir

Plate 21. Seh Qubba: general view from the north, showing the main bluff overlooking the Tigris

Plate 22. Seh Qubba: general view of the bluff and tombs

Plate 23. Seh Qubba: the main wadi with two of the tombs on the right

Plate 24. Seh Qubba: general view towards Tell Abu Dhahir, partially submerged, with excavation of the Period 17 'administrative building' in the foreground. Note the rising floodwaters have encircled Tell Abu Dhahir.

Plate 25. Seh Qubba: general view upstream towards Gir Matbakh, visible in the middle distance outlined against the hills

Plate 26. Seh Qubba: view along the ramparts

Plate 27. Seh Qubba: view of the ramparts, showing the ditch

Plate 28. Seh Qubba: view of the ramparts, showing a gateway

Plate 29. Seh Qubba: Trench [A1], Phase 14.1 structures

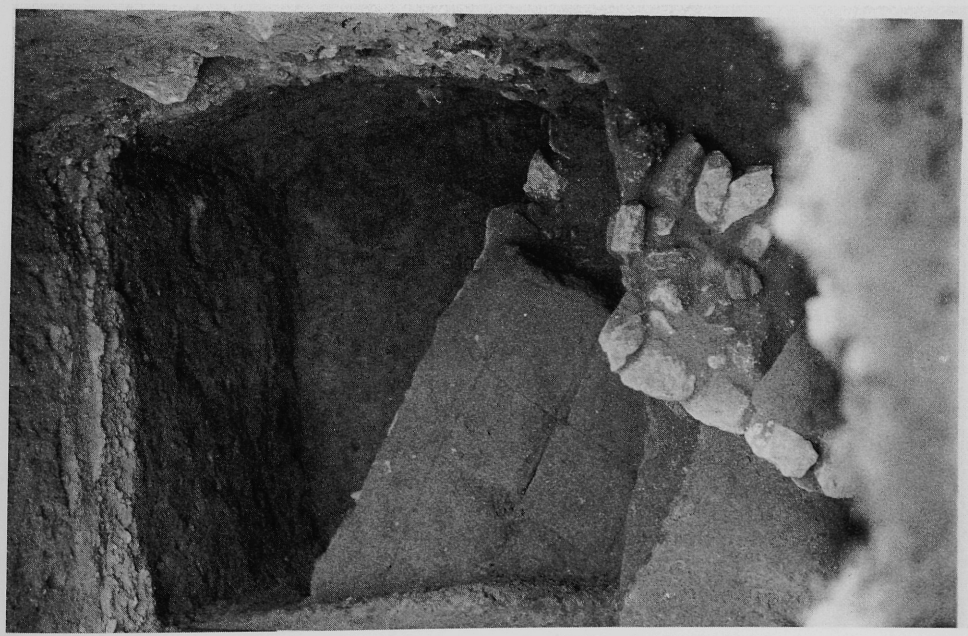
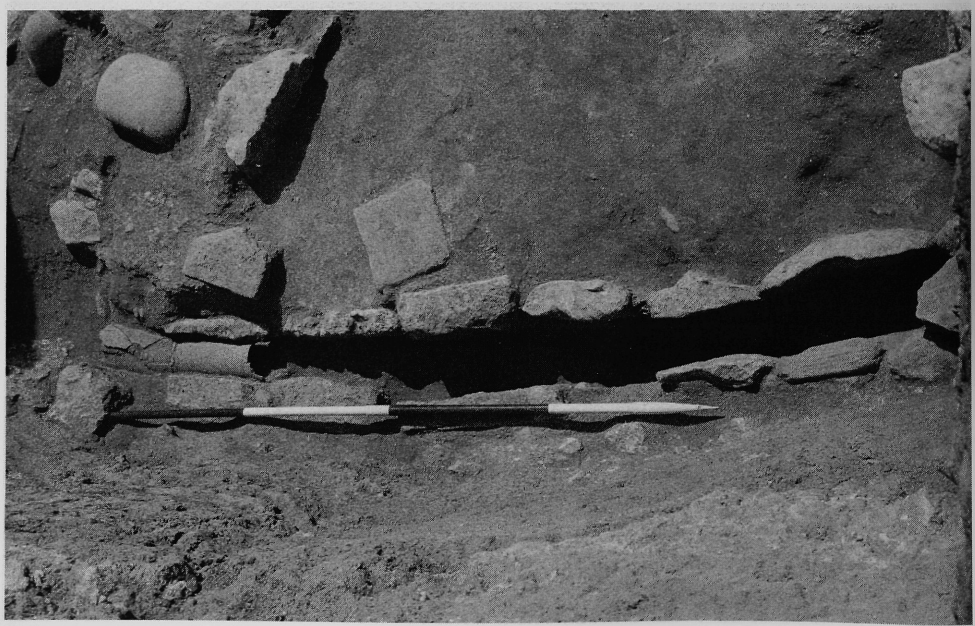


Plate 30. Seh Qubba: Trench [A1], Phase 14.2 structures

Plate 31. Seh Qubba: Trench [A1], Phase 14.2 channel



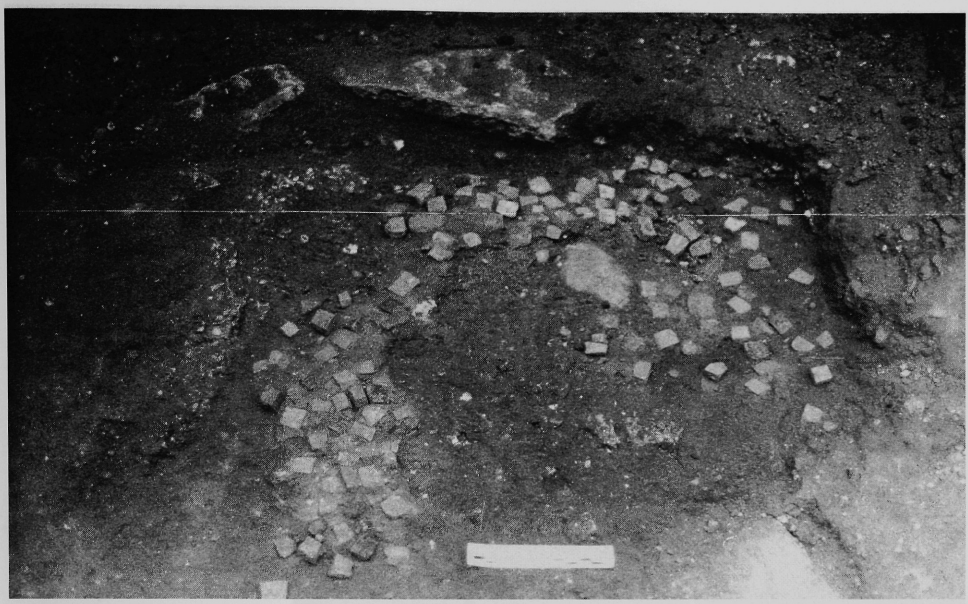


Plate 32. Seh Qubba: Trench [A1], Phase 14.2 tesserae

Plate 33. Seh Qubba: Trench [A], Phase 14.1 structures

Plate 34. Seh Qubba: Trench [A], Period 17 column base

Plate 35. Seh Qubba: exterior of a tomb

Plate 36. Seh Qubba: interior of a tomb

CHAPTER 6

KHIRBET KARHASAN

David Tucker

INTRODUCTION

Identification of the site

The site is on the official Saddam Dam map as Site No. 94: Khirbet Karhasan (in English), *Khirbet Garhasan* (Arabic version). Periods XVII and XVIII (Sasanian and Islamic) are recorded as present. It was visited by Michael Roaf and Geoffrey Summers of the British Archaeological Expedition to Iraq in October 1984, and Khabur, Late Assyrian, Islamic and possible Sasanian sherds were collected. It was subsequently visited by Michael Roaf and Warwick Ball in March 1985, and a decision was made to excavate. A preliminary report has already appeared (Ball 1987a, 80).

On 1st February 1986 the British Archaeological Expedition to Iraq began excavating a small exploratory sounding on the mound, under the supervision of the author. Excavations were carried out over a period of 25 days with up to 20 local workmen under the Sherqati pickman, Khalaf, to whom thanks are due for his keen and enthusiastic supervision. Much of the excavations were carried out under considerable pressure from both rising floodwaters and advancing heavy earth-moving equip-

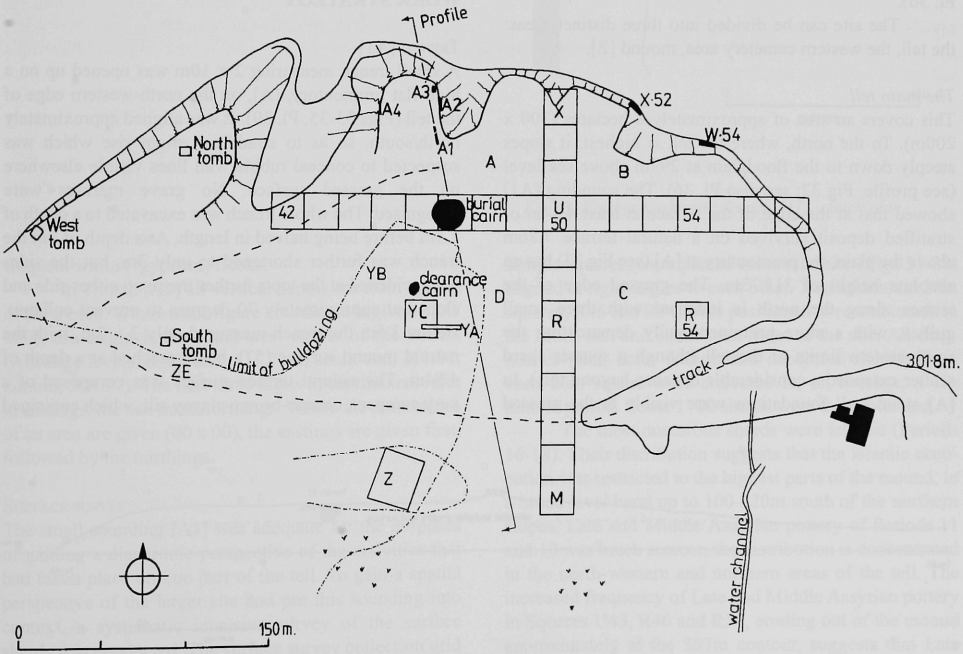


Fig 31. Khirbet Karhasan: sketch plan of the site

ment. Indeed, the excavation of the most spectacular find of the entire season, the faience jewellery hoard, was completed at night with the aid of car headlights at the end of the Karhasan excavations.

RESEARCH AIMS

The aim was to excavate a small sounding to ascertain the occupational sequence of the mound. In particular, good contexts of stratified pottery were sought. It was hoped that the ceramic sequence would complement those from the other excavated sites to produce a combined typological sequence. Little more than a sounding could be attempted. Within six weeks of the start of the excavations a significant area of the mound was inundated by the rising water of the dam, and a further two hectares were destroyed by bulldozing associated with the construction of a pumping station immediately above the site (Pls. 37-38).

DESCRIPTION

Khirbet Karhasan is situated on a prominent bluff in the first river terrace overlooking the floodplain. It is the same river terrace which rises from the riverbank at Seh Qubba and on which Tell Abu Dhahir and Siyana are situated (Fig 2). The site is sheltered by the low hills of the escarpment, which rise to an absolute height of some 350m immediately to the south of Karhasan (Figs 31-32, Pl. 36).

The site can be divided into three distinct areas: the tell, the western cemetery area, mound [Z].

The main tell

This covers an area of approximately 6 hectares (300 x 200m). To the north, where the tell is highest, it slopes steeply down to the floodplain at 299m above sea level (see profile, Fig 32; see also Pl. 36). The sounding [A1] showed that at the edge of the terrace at least 4.84m of stratified deposit survived on a natural terrace 7.86m above the plain; the promontory at [A] (see Fig 33) has an absolute height of 311.73m. The grassed edge of the terrace along the north is indented with three small gullies, with a more prominent gully demarcating the south-eastern limits of the tell (though a sparser sherd scatter extended a considerable distance beyond this). In [A] stone wall foundations were visible in the grassed surface (see plan, Fig 33); in [B] (grid ref W/X 50/51) some small cairns concentrated on a slight mound (at 313.1m the highest part of the tell) marked the positions of at least nine burials. The most prominent feature on the tell was a large cairn (grid ref U47; see profile, Fig 32); a smaller cairn was located 30m further south-west (grid ref S46).

The western cemetery area

This occupied some 2 hectares at the west end of the bluff. The cemetery covered a roughly triangular area, at the limits of which were three stone tombs or shrines (*qubbas*) separated from the main tell by a deep grassed gully (Figs 38-39). The most prominent (north) tomb was sited high on the natural terrace, which here reached approximately 311m above sea level. A second (south) tomb on a slight mound marked the south-eastern limit of the cemetery. The third tomb to the west was in a ruinous condition. Careful examination of upcast from the many graves within this area failed to produce any evidence for stratified occupation.

MOUND [Z]

This is a low mound approximately 1.5m high, separated by some 40m from the gentle southern slope of the main tell. It has an area of approximately 0.33 hectares.

WORK STRATEGY

TRENCH [A1]

A small trench measuring 2 x 10m was opened up on a high flat promontory, [A], on the north-western edge of the tell (Figs 33-35, Pl. 39). It was aligned approximately north/south, so as to straddle a slight rise which was suspected to conceal rubble wall lines visible elsewhere on the grassed surface. No grave markers were recognised. The whole trench was excavated to a depth of 1.5m before being halved in length. At a depth of 2m the trench was further shortened to only 3m, but the sides were widened at the top a further metre on either side and sloped at approximately 70 degrees to prevent collapse. Below 3.5m the trench measured only 2 x 2m, with the natural mound surface (57), being reached at a depth of 4.84m. The natural terrace surface was composed of a very compact, orange-brown clayey silt, which contained

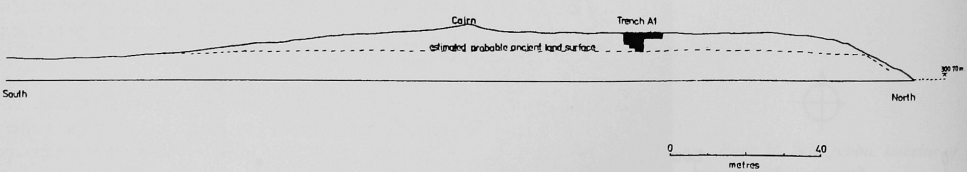


Fig 32. Khirbet Karhasan: profile across the mound

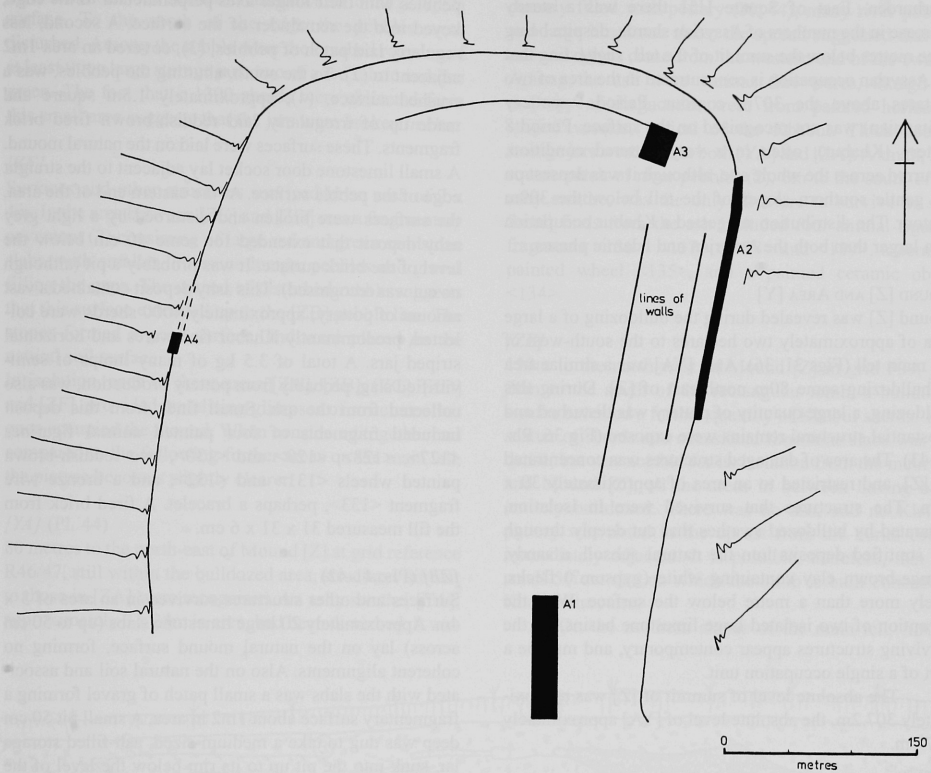


Fig 33. Khirbet Karhasan: Trench [A1], sketch plan

frequent white (?gypsum) flecks.

In Trench [A1] all vertical depths are from the top of the trench. Where a six-figure coordinate is given (000/000), the origin is the south-west corner of the trench. (Absolute levels: north end, 311.73m; south end, 311.61; natural, 306.77). The first three digits in centimetres refer to eastings, the last three northings. Where the dimensions of an area are given (00 x 00), the eastings are given first, followed by the northings.

SURFACE SURVEY

The small sounding [A1] was adequate for the purposes of gaining a diachronic perspective of the activities that had taken place on one part of the tell. To gain a spatial perspective of the larger site and put this sounding into context, a systematic intensive survey of the surface sherds was conducted. The surface survey collection grid was oriented on magnetic north.

Two transects, together divided into 27 x 20m sample squares, were placed across the site (Figs 31-32) aligned at right-angles to each other. Two additional 20m squares, R46 and R54, were positioned to record trends in the south-east and south-west areas of the site. All diagnostics (rim, base, feature and decorated sherds) from each 20m square were collected in, on average, a 12-minute period. Some 1700 sherds were thus collected.

The most numerous sherds were Islamic (Periods 16-18). Their distribution suggests that the Islamic occupation was restricted to the highest parts of the mound, in a broad level band up to 100-120m south of the northern slopes. Late and Middle Assyrian pottery of Periods 11 and 10 was much scarcer; the distribution is concentrated in the north-western and northern areas of the tell. The increased frequency of Late and Middle Assyrian pottery in Squares U43, R46 and R54, eroding out of the mound approximately at the 307m contour, suggests that Late and Middle Assyrian deposits lie beneath the Islamic

overburden. East of Square U51 there was a steady decrease in the numbers of Assyrian sherds, despite being three metres below the summit of the tell, suggesting that the Assyrian occupation is concentrated in the area of two hectares above the 307m contour. Period 9 pottery (Mitannian) was not recognised on the surface. Period 8 pottery (Khabur), often in a very battered condition, occurred across the whole site, although it was densest on the gentle southern slopes of the tell below the 309m contour. The distribution suggested a Khabur occupation area larger than both the Assyrian and Islamic phases.

MOUND [Z] AND AREA [Y]

Mound [Z] was revealed during the bulldozing of a large area of approximately two hectares to the south-west of the main tell (Figs 31, 36). Area [YA] was a similar area of bulldozing some 80m north-east of [Z]. During this bulldozing, a large quantity of pottery was disturbed and substantial structural remains were exposed (Fig 36, Pls. 40-43). The area of damaged structures was concentrated on [Z], and restricted to an area of approximately 30 x 25m. The structures that survived were in isolation, separated by bulldozed swathes that cut deeply through the stratified deposits into the natural subsoil, a sandy, orange-brown clay containing white (gypsum?) flecks, rarely more than a metre below the surface. With the exception of two isolated large limestone basins, all the surviving structures appear contemporary, and may be a part of a single occupation unit.

The absolute level of summit of [Z] was approximately 307.2m, the absolute level of [YA] approximately 307.1m.

OTHER

The site was mapped by measured pacing (Fig 31) and a transect across the site was surveyed by dumpy level (Fig 32). Remains visible on the surface were recorded, including the recent tombs (Figs 38-39) and some walls visible in [A] (Fig 33). In the latter case, some excavation was carried out to clarify specific features, [A2]-[A4].

THE ARCHAEOLOGICAL INVESTIGATIONS

PERIOD 8 KHABUR

The earliest occupational phase (Period 8 Khabur) identified at Karhasan was not clearly recognized in the stratigraphic sounding, [A1], but mainly in peripheral areas around the tell, notably Mound [Z]. Here, five main areas of structures survived. These are called [ZA], [ZB], [ZC], [ZD] and [ZF].

[ZA] (Fig 36, Pl. 40)

Surfaces and other structures survived in an area of 3 x 6m. A patch of small (<20 cm) river-worn pebbles (2) with one good edge to the north covered an area of 150 x 50 cm. The edge was formed by a row of tightly set pebbles with their longer axes perpendicular to the edge, keyed into the remainder of the surface. A second, less regularly laid patch of pebbles, (3), covered an area 1m2 adjacent to (2). To the south, abutting the pebbles, was a crushed surface, (4), approximately 1.5m square and made up of irregularly laid reddish-brown fired brick fragments. These surfaces were laid on the natural mound. A small limestone door socket lay adjacent to the straight edge of the pebble surface. At the eastern end of the area, the surfaces were broken and disturbed by a light grey ashy deposit that extended for some 40 cm below the level of the brick surface. It was probably a pit (although no cut was recognised). This ashy deposit contained a vast amount of pottery; approximately 4000 sherds were collected, predominantly Khabur fine wares and horizontal striped jars. A total of 3.5 kg of many lumps of semi-vitrified slag, probably from pottery production, was also collected from the ash. Small finds from this deposit included fragments of four painted animal figurines <127>, <128>, <129> and <130>, two reddish-brown painted wheels <131> and <132>, and a bronze wire fragment <133>, perhaps a bracelet. A fired brick from the fill measured 31 x 31 x 6 cm.

[ZB] (Pls. 41-42)

Surfaces and other structures survived in an area of 3 x 4m. Approximately 20 large limestone slabs (up to 50 cm across) lay on the natural mound surface, forming no coherent alignments. Also on the natural soil and associated with the slabs was a small patch of gravel forming a fragmentary surface about 1m2 in area. A small pit 50 cm deep was dug to take a medium-sized, ash-filled storage jar, sunk into the pit up to its rim below the level of the surface.

[ZC] (Pl. 43)

Surfaces and other structures survived in an area of 2 x 2.5m. A fired brick surface (2), consisting of 19 tightly laid bricks, lay on the natural surface. Five of the larger orange bricks measured 43 x 33 x 7 cm and one 46 x 33 x 7 cm. The four green bricks tended to be square, and bore traces of bitumen on one surface, two measuring 33 x 33 x 5.5 cm and the other two 30 x 29 x 5.5 cm and 32 x 30 x 5.5 cm respectively. Three others measured 34 x 32, 35 x 33 cm and 35 x 33 cm square respectively. The fired brick surface (2), abutted a row of four substantial limestone slabs (3), each greater than 50 cm across (which appeared to be the full extent of the row). Between the slabs were smaller fragments of limestone and river pebbles. Abutting and perpendicular to the line of slabs was a row of three large river pebbles (4). To the south, beyond the brick surface, was another row of large river pebbles. This appeared to be a continuation of the (4) row of pebbles.

[ZD]

Surfaces and other structures survived in an area of 1 x 3m. An area of small river pebbles forming a straight edge

2.5m long, (2), was similar in construction to the [ZA] (2) surface. To the south of the edge the pebbles were disturbed. Among the rubble were the crushed remains of at least three large storage jars, two of a red fabric and one green. The fact that *c* 1300 sherds were collected from this small area suggests that the jars were broken *in situ*.

[ZF]
Surfaces and other structures survived in an area of 2 x 4m. In the area between [ZC] and [ZD] was a fragmentary pavement (2) consisting of large red and green sandstone slabs, with smaller limestone lumps, pebbles and gravel filling the gaps. The spread of disturbed rubble suggests that this surface extended up to the [ZD] pebble line. The stones formed a good surface, and were placed on the natural soil surface.
In isolation, each of these areas [ZA], [ZB], [ZC], [ZD] and [ZF], provided tantalising glimpses of structures that once occupied the mound. When considered together and compared to the following further areas on the main tell, the picture becomes slightly clearer.

[YA] (Pl. 44)
80 metres to the north-east of Mound [Z] at grid reference R46/47, still within the bulldozed area, structures similar to those in [ZA] were recognised. An ashy swathe, [YA], approximately 3 x 24m in area, had been disturbed. It was densely filled with pottery (Pl. 44), many river pebbles and large limestone slabs; the spread suggested that this ash and debris came from the western end of the swathe. Among the ash were various fine wares, though the majority of diagnostics were from painted horizontal striped vessels, typical of the Khabur. Thick coarser storage jars were rare in both [YA] and [ZA]. A small, 3m-square patch of river pebbles (2), 6m to the south of the ashy swathe, was the only structure to survive *in situ*. Small finds from the ash included four animal figurine fragments <136>, <137>, <138> and <139>, a ceramic painted wheel <135>, and a painted ceramic object <134>.

[ZE]
150m to the north-west of Mound [Z] in grid P39, just 20m to the south of the rectangular tomb, a bulldozed swathe revealed a further quantity of Khabur sherds. This scatter of sherds and occasional limestone slabs was not dense, but was notable for its isolation from the main tell and Mound [Z], all the areas in between having been entirely bulldozed. There was no ash, and no Khabur pottery was noted in the upcast from the burial cairns immediately adjacent. It is possible, therefore, that the small 50 cm rise on which the tomb is built conceals a Khabur structure.

On the northern slopes of the main tell, further

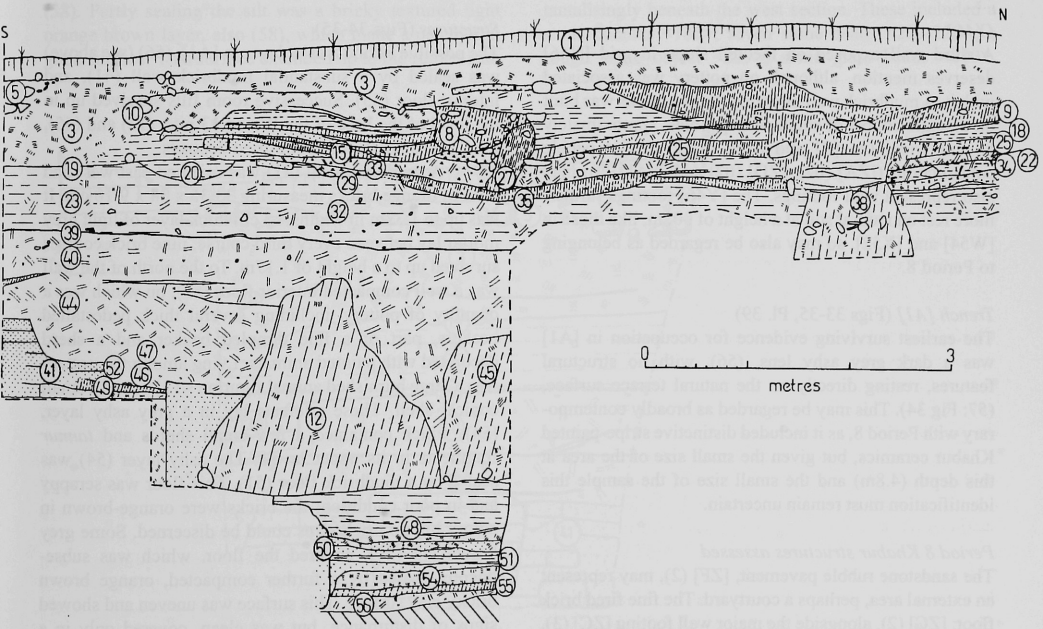


Fig 34. Khirbet Karhasan: Trench [A1], west section

evidence of the Period 8 Khabur occupation was found in grid area [W54] and [X52].

[W54]
Part of a roughly constructed, east/west rubble wall was found. It was built predominantly of medium-sized river pebbles with occasional lumps of red and green sandstone and limestone, and included three reused concave basalt grindstones in its construction. Also within the wall a medium-sized jar was standing upright, swollen and distorted from poor firing. The jar was decorated with horizontal painted stripes, and contained a quantity of Period 8 pottery similar to that from [ZA], [ZE] and [YA]. The wall survived to a length of 4.5m and a height of 50 cm, and its foundation was at a height of 301.8m, just 3m above the level of the floodplain.

[X52] (Pls. 37, 45)
Substantial wall footings of an east/west wall were revealed below the level of the rising lake waters. They were built of large limestone and red sandstone slabs (50 cm across). In the narrow gaps in between were small river pebbles and sherds of Period 8 striped pottery. Clear traces of mudbrick survived on top of the slabs, although no brick sizes were discernible. The wall was exposed for a length of 5m, and its foundation was at a height of 301.4m, similar to the wall in [W54], 40m to the south-east.

[Y46]
A third wall exposed on the tell slope in grid [Y46] deserves mention, although no pottery was associated with it. A mudbrick wall of orange-brown bricks was built on a single course of small river pebbles, approximately 80 cm wide. On [Z] and Area [YA], similar pebble constructions ([ZA] (02), [ZD] (02) and [YA] (02)) may also represent wall footings. The [Y46] footings furthermore rest on natural soil at a height of 302m, like those in [W54] and [X52], so may also be regarded as belonging to Period 8.

Trench [A1] (Figs 33-35, Pl. 39)
The earliest surviving evidence for occupation in [A1] was a dark grey ashy lens, (56), with no structural features, resting directly on the natural terrace surface, (57: Fig 34). This may be regarded as broadly contemporary with Period 8, as it included distinctive stripe-painted Khabur ceramics, but given the small size of the area at this depth (4.8m) and the small size of the sample this identification must remain uncertain.

Period 8 Khabur structures assessed
The sandstone rubble pavement, [ZF] (2), may represent an external area, perhaps a courtyard. The fine fired brick floor, [ZC] (2), alongside the major wall footing [ZC] (3), which was of similar construction to the footings [X52] (2), may represent a threshold opening onto the pavement, [ZF] (2), to the east, through the wall on large pebble footings, [ZC] (4)/(5). The southern extent of the [ZF] (2) pavement was limited by Wall [ZD] (2) which bounded an internal storage area to the south. Both areas [ZD] and [ZB] might be best regarded as peripheral storage facilities to the occupation areas [ZA] in between. Area [ZA] had a poor quality brick floor, [ZA] (4), and a door socket associated with wall footings, [ZA] (2/3). The ashy pit feature is undoubtedly contemporary with these structures. The scarcity of pottery, ash, charcoal and slag outside this pit in Areas [ZB], [ZC] and [ZF] was notable; these cleaner areas may represent the primary living areas with the [ZA] ashy feature a peripheral dump.

Period 8 Khabur synthesis
Period 8 structures occurred over an extensive area of the tell and peripheral areas. Areas [Z], [YA] and possibly [ZE] suggest discrete occupation areas, which together may have formed part of a loosely scattered village settlement spread over at least 5 hectares. The vast areas cleared by bulldozing down to the natural subsoil exposed real gaps and peaks in the distribution of Period 8 material culture. Although residual Period 8 sherds appeared in the [A1] sounding, it need occasion no surprise that major Period 8 stratified occupation was not found, since this sounding fell in one of the gaps.

PERIOD 9 MITANNIAN

Structures (Figs 34-35)
The possible Period 8 ashy layer in [A1], (56) (see above) was sealed by a substantial mudbrick wall (41), and interior floor (55). Successive room fills survived up to the level of the base of the Period 13 pits, (12) and (45), totalling some 75 cm of stratified deposits.

A mudbrick wall (41) was oriented east/west and built of orange bricks measuring 33/35 x 34 x 9/10 cm. It was up to 1.32m in width. A 3 cm thick layer of light grey mortar lay between every third course; nine brick courses survived up to a height of 1.17m. To the north of the wall was a well compacted interior floor (55), on which was a quantity of pottery, including several thick pedestalled beakers, part of a fine dimpled beaker and a sherd decorated with painted animals. Lying among the pottery was a large burnished animal figurine <125>, and a small conical shell. These artefacts lay in a grey ashy layer, (54), which contained a few small sherds and *tannur* fragments in its upper levels. The ashy layer (54) was sealed by a mudbrick floor (51). This floor was scrappy and in poor condition; the bricks were orange-brown in colour but no brick sizes could be discerned. Some grey brown silt (50), covered the floor, which was subsequently sealed by a further compacted, orange brown bricky clay surface. This surface was uneven and showed signs of disturbance, but was clean, covered only in a brown mixed bricky fill (48), with some traces of two fine dark lenses within it. This bricky fill seems to represent an

abandonment of the structure, of which Wall (41) was a part, and an end to Period 9 (see section, Fig 74).

The bricky fill was cut by a shallow scoop, also (48), that cut back the north face of Wall (41) by 40 cm. The scoop contained several brown and brown grey sandy silt layers, which sloped down to the north, having accumulated against the disturbed face of Wall (41).

There is no direct stratigraphic relationship between Period 9 and Period 10 above, the Period 9 strata to the north of Wall (41) being truncated by the cuts of the two Period 13 pits, (12) and (45).

Period 9 Mitannian remains assessed

Although a relatively small sample, the Mitannian material was well sealed, and stratigraphically distinct from the Period 8 and 10 material. The Mitannian levels at Karhasan are therefore extremely important, representing the only stratified Mitannian remains found within the BAEI excavation area.

PERIOD 10 MIDDLE ASSYRIAN

Structures (Figs 34-35)

Structures were restricted to a small area of approximately 4m2 to the south of the cut of Pit (12) in [A1].

The upper courses of the earlier Period 9 wall (41) survived, albeit heavily eroded. The deposits accumulated against this face are light brown silt at least 50 cm thick (58). Partly sealing the silt was a bricky textured light orange brown layer, also (58), which made a patchy but good surface. This surface extended up to the ruined stub of Wall (41), on the same level as the base of Wall (53), although not extending up to that wall. Wall (53) was built on top of and at right-angles to Wall (41). It was built of coarse-textured brown bricks with frequent white flecks, with two bricks measuring 45 x 42 x 9 cm and 41 x 40 x 9 cm. The wall survived to a height of 60 cm (see south section, Fig 35).

Within the top of the light brown silt (58/59), a scatter of artefacts was found which included several glass and faience beads <232>, <234>, <235>, <236>, <237> and <238>. In a rodent channel, in the silt (59), was a large faience rosette <158>, lying on edge. In the matrix adhering to its surface were several perforated shell beads <275>. Nearby were more shell beads <275>, a glass bead <239>, several glass bead fragments <240>, and three shell disc beads <233>. Further down the rodent channel was a bronze disc <261>. All the artefacts had been disturbed by rodent activity; they undoubtedly derive from the point of interface between the compact brown silt (58), with the overlying bricky mass (47) and (52).

The faience hoard (Pls. 46-47)

Lying on the surface, part of (58), was a distinctive fine grey ash (49), which contained occasional flecks of charcoal and small sherds; its spread was restricted to an area approximately 1m2 along the west section. The ash produced a wide range of small artefacts, which trailed tantalisingly beneath the west section. These included a stone counter <186>; seven stone beads <222-228>; a rough stone object <229>; some glass beads <210>,

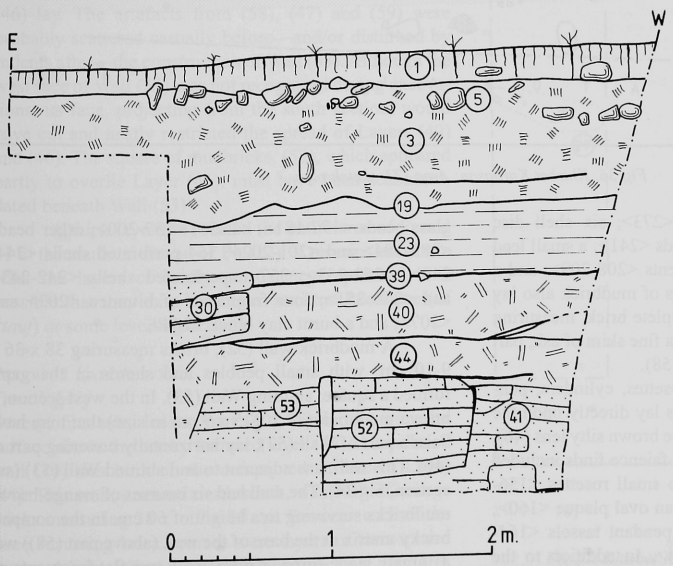


Fig 35. Khirbet Karhasan: Trench [A1], south section

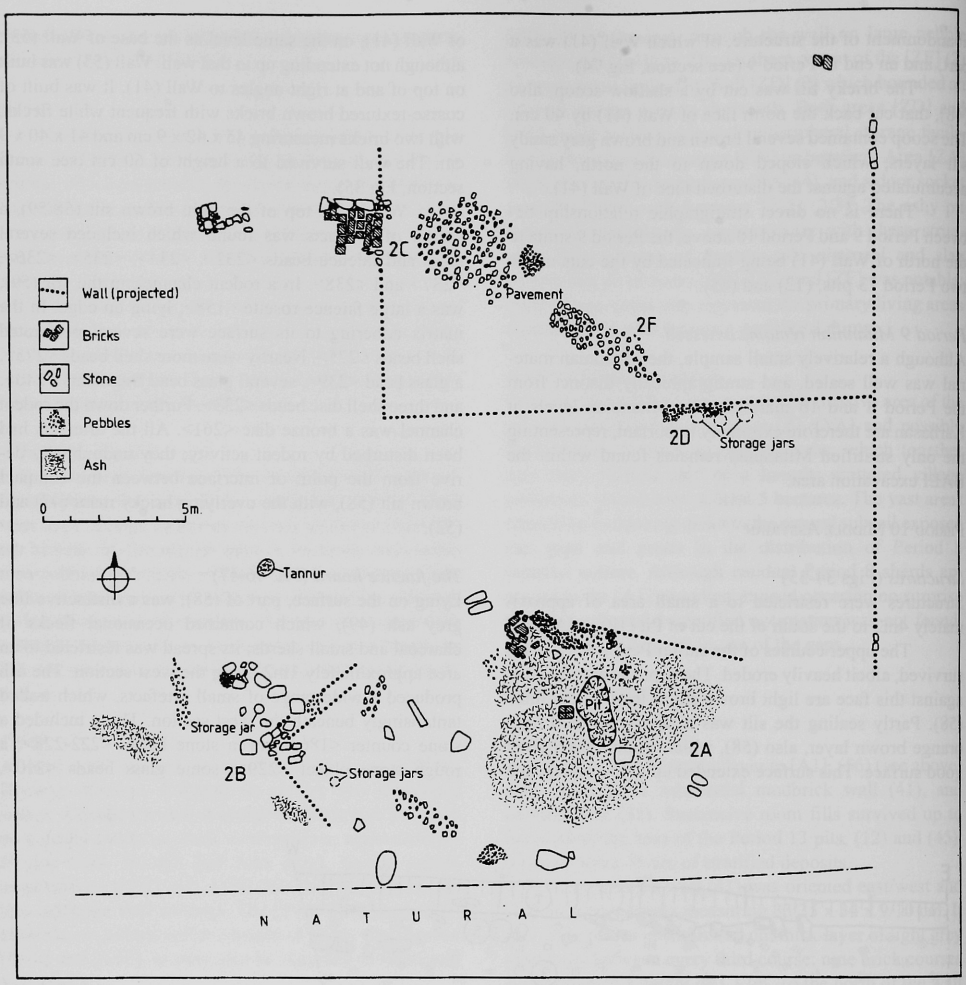


Fig 36. Khirbet Karhasan: Area [Z], sketch plan

<211>, <213>, <215-221> and <273>; six shell disc beads <212>; three large shell beads <241>; a small lead lump <231>; five bitumen fragments <208-209>; and a glass cylinder <230>. Large lumps of mudbrick also lay in the ash (49); one probably complete brick, measuring 40 x ? x 7 cm, lay horizontally on a fine skim of ash, part (49), on the surface, at the top of (58).

A vast array of faience rosettes, cylinders, pendants, glass beads and small shells lay directly upon the ash (49). The hoard lay within a fine brown silty lens (46), with frequent charcoal flecks. The faience finds included 13 large rosettes <143-155>; two small rosettes <156-157>; a triangular plaque <159>; an oval plaque <160>; three cylinders <161-163>; four pendant tassels <164-169>; and five buttons <170-174>. In addition to the glass beads <177-181>, <185>, <187-200>; other beads <183-184> and <201-202>; 364 perforated shells <244-249>, <252-253>; 257 unperforated shells <242-243> and <250-251>; four fragments of bitumen <203> and <207>; and a burnt clay block <264>.

A mudbrick wall (52), bricks measuring 38 x 36 x 9-10 cm, with small pebbles and sherds in the gaps, formed a square, abutting Wall (53). In the west section, a brown mudbrick (38 x >25 x 9 cm in size) that may have been a part of Wall (52), lay horizontally covering part of (46). This wall was adjacent to and abutted Wall (53) (see section, Fig 34). The wall had six courses of orange-brown mudbricks surviving to a height of 60 cm. In the compact bricky matrix at the base of the wall (above part (58)) was a small lead lump <204>, and two flat fragments of

faience pieces there was a wide variety of beads and shells. These included an ornate glass knob <182>; some bitumen <205> and <206>.

On a hard surface partly covering the top of Wall (52) (see south section, Fig 35) was a fine grey ash lens (49). This dipped down sharply (see west section, Fig 34) over a confused bricky mass and partly covered the single brick described above overlying (46) and the faience hoard. This lens, Layers (46) and (47) and Wall (53) were sealed by a thick deposit of a compact bricky consistency, (44), containing frequent white flecks. It contained no brick lines or bricky lumps and few sherds. A single bone disc ring <119> came from this deposit. This deposit marks an end to Period 10.

The context of the faience hoard

In the west section (Fig 34), layers (49) and (46) ran up against the south face of Wall (41). When the section was cut back to expose more of the hoard, the subsequent second section showed no change in the position of Layer (49), but Layer (46) continued over the top of Wall (41). This implies that Wall (41) was an eroded stub, and the Period 9 structure had been abandoned by this time. Although the beads in Layer (49) trailed loosely into the west section, the bulk of the overlying faience hoard was contained in an oval area of approximately 60 x 75 cm. The faience hoard appears to represent a strung assemblage in two tight clusters connected by strings of shell beads. The hoard is interpreted as the possible remains of ceremonial horse harness (Tucker 1992). The mudbrick wall (53) is probably best regarded as broadly contemporary with the surface at the top of (58) (obscured in section by Pit 12), on which Layers (49) and subsequently (46) lay. The artefacts from (58), (47) and (59) were probably scattered casually before—and/or disturbed by rodents after—the construction of Wall (53). Although the west face of Wall (53) was not recognized during excavations, its face, projecting from the south section, would have cut and neatly restricted the spread of Layers (49) and (46). The square of mudbricks, (52), which appeared partly to overlie Layer (46), must have been accommodated beneath Wall (53).

A thick layer (44) sealed the entire area of Period 11 to the south of the cut of Pit (12). It remains uncertain what the layers of bricky consistency represent; it is possible that they may have been structural collapse (of *?tauf*) or some levelling activity.

PERIOD 11 LATE ASSYRIAN

Trench [A1]

Several fine ashy lenses, part (40), formed an irregular surface above the bricky textured layer (44). A mudbrick wall (30) was built on the compacted surface of Layer (44). This wall, oriented north/south, was built of orange bricks measuring 38 x >17 x 10 cm. Between each of the three surviving brick courses were layers of brown mud mortar. A light yellow dusty brown compact silt, part (40), covered the ashy lenses and accumulated against the west face of Wall (30). The surface (39) formed the irregular top of the silty layer (40); scattered sherds lay upon it, including the crushed base of an upturned jar. The top of Wall (30) protruded just above the level of Surface (39). A compact light brown clayey silt, (23/32/37), sealed Surface (39) and covered the entire 10m length of the trench. The silt contained frequent irregular buff-coloured particles (<0.3 cm); sherds were sparse and, where present, tended to be concentrated on or just above Surface (39). Small finds included in this silt were a whetstone <108>, and a basalt grinder <256>.

This silt accumulation (40) may represent an external area. Surface (39) might be an open area of mound surface at a time when Wall (30) and its associated structure were still extant. The general character of the overlying compact silt (23/32/37) was reminiscent of local natural horizons. The absence of recognisable structures in the silt might have resulted from sustained ploughing mixing the layers. It is possible that the unusually undulating surface (19) (south section, Fig 35) may have been caused by ploughs scarring the surface of the old mound. The silt must represent a major abandonment of this part, and probably of the whole mound.

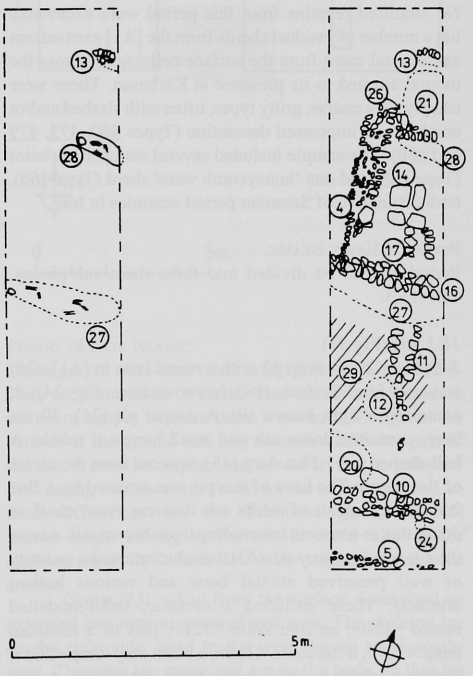


Fig 37. Khirbet Karhasan: Phase 16 & 18 plans

Other
Late Assyrian pottery was also found scattered fairly evenly across the surface of the main part of the site (ie excluding Area [Z]). In Area [YC], bulldozing exposed the remains of a cremation in a jar (grid ref R46). It lay 1m below the original mound surface, and was *in situ*, though it had been crushed by the bulldozer and the rim and upper part of the body were missing. The jar was a familiar vegetable-tempered Late Assyrian type (Type 474). In Area [YB], a small area of less than 10 square metres of ash containing fired brick fragments, Late Assyrian pottery and pottery slag were also disturbed by bulldozing (grid ref S45).

PERIOD 13 HELLENISTIC
A small number of probable Hellenistic sherds were found on the surface, not associated with any structures or stratigraphy. These were high ring-bases with traces of brown and/or orange slip in the interior, of characteristic fine sandy Hellenistic fabric (Type 161). None of the more familiar Hellenistic types, such as palmette stamps or 'fish plates', were found. These bases indicate a probable although elusive Hellenistic presence.

PERIOD 15 SASANO-BYZANTINE
No stratified remains from this period were excavated, but a number of residual sherds from the [A1] excavations and several more from the surface collections across the mound attested to its presence at Karhasan. These were usually very coarse, gritty types, often with slashed and/or combed and impressed decoration (Types 460, 475, 479 and 480). The sample included several stamped varieties (Type 488) and one 'honeycomb ware' sherd (Type 466), both distinctive of Sasanian period ceramics in Iraq.

PERIOD 16 EARLY ISLAMIC
Period 16 can be divided into three main sub-phases, 16.1-16.3.

16.1 pits (Fig 37)
A shallow 20cm-deep pit with a round base in [A1], (20) was cut into Surface (19) (west section, Fig 34); it contained a light brown silt. A deeper pit (36), 40 cm deep, contained loose ash and small lumps of rubble. A bell-shaped pit, 1.58m deep (45), was cut from the centre of the trench. The base of this pit was covered by a fine 2cm-thick deposit of white ash deriving from chaff or dung; this in turn was covered by thick brown silt. Above the silt was fine grey ash (43), which contained a quantity of well preserved animal bone and various broken artefacts. These included a ceramic, hand-modelled mould <120>, an iron knife <121>, part of a moulded lamp <124>, a flat stone <265>, a burnt clay lump <268>, and two unbaked clay lumps <269> and <270>. A fist-sized lump of iron slag <122> came from the mixed deposits, part (42), above the ash. In the south of the trench a small circular hole (24), containing dark brown ash, cut Surface (19).

16.2 structures (Figs 34, 37)
On Surface (19), from which Pits (20), (36) and probably (45) were cut, lay several patchy gypsum surfaces, (29) and part (35). Surface (29) ran up to a rubble wall, (11/17). Wall (11/17) was oriented north/south and was built predominantly of limestone rubble with occasional lumps of gypsum mortar surviving in three courses to a height of 65 cm, facing a packed earth core 55 cm wide. A square of three sandstone slabs, (14), abutted the north end of Wall (11/17). The gypsum surface (29) was sealed by a succession of brick and rammed clay surfaces (15), up to 30 cm thick.

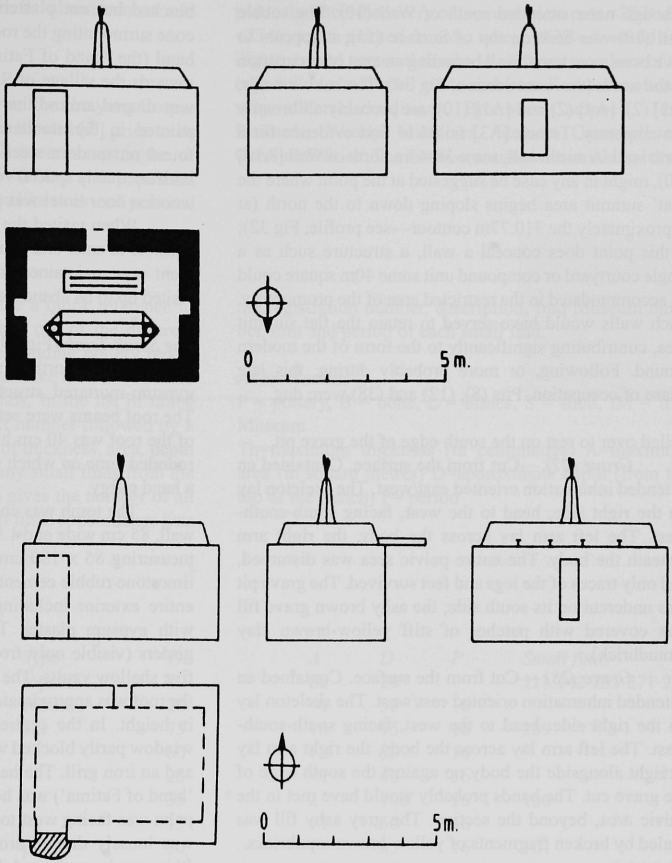
The upper metre of the trench above Surface (19) was extensively disturbed by the cuts of pits and graves, which have left fragments of wall and rubble strewn across the area hindering structural interpretation. All layers above Surface (19) were poorly defined, and must be regarded as mixed. Four prominent walls were recognised, (10), (16), (4) and (5). Two parallel walls, (10) and (16), were oriented east/west. They were of similar pebble and limestone construction containing occasional lumps of gypsum mortar, and measured 45 and 50 cm wide respectively. A 50cm-wide rubble wall, (4/part 2), in the north half of the trench was oriented north/south. Three courses survived, with wall faces formed by tightly set rows of pebbles with their long axes keyed into the wall. Each course was deeply bedded in a 5 cm-thick earth layer. Another rubble wall, (5), oriented east/west, was built of river pebbles with a single lump of red sandstone; it was the latest wall in the trench.

In Area [A] around Trench [A1], the lines of several rubble walls that were probably contemporary with Wall [A1] (10) (Fig 33) were visible in the grassed surface. Trenches [A2] (0.6 x 20m), [A3] (2 x 3m) and [A4] (1 x 5m) were opened up to clarify these structures. In [A2] a wall face, (2), was traced for 17m. It was built of limestone rubble and gypsum mortar, surviving to a height of at least 60 cm. Two parallel walls, 1.6 and 6m to the west of Wall (2), were traced for 15m. To the east of Wall (2), the mound edge sloped away steeply. In [A4], 40m to the west of Wall [A2] (2), a parallel wall of similar construction was found, [A4] (2). The area between these two walls was flat or slightly sunken. To the west of Wall [A4] (2), the promontory edge sloped away steeply. Trench [A3] did not reveal any structures, although it was not excavated below topsoil.

16.3 pits (Figs 34, 37)
Three pits, (8), (12) and (38), 30 cm, 3.2m and 1.3m deep respectively, were dug from a surface (mixed in (3)), that did not survive. A small U-shaped pit (8) contained ash mixed with small pebbles, gypsum mortar fragments and limestone rubble. Its upper fill was of a decayed bricky consistency. A single iron nail <101> came from this fill. A second pit (12) was bell-shaped in section, with its base

Fig 38. Khirbet Karhasan: north tomb, plan and elevations

Fig 39. Khirbet Karhasan: south tomb, plan and elevations



at 307.93m. In the lower ashy fill were several clusters of animal bone, a bone needle <117>, and fragments of several glass vessels <115>, <116> and <118>, which were probably from bowls. The upper fill was very mixed. At the point where the pit shaft narrows the pit had been recut to a depth of approximately 1m below Surface (29). This secondary fill was packed tightly with limestone and pebble rubble. Pit (38) was probably bell-shaped (but was excavated only to a depth of *c* 60 cm), and the top part was again filled with ash mixed with pebbles and gypsum mortar rubble.

Period 16 summary

Pits (20), (36) and (45) were dug from an open mound surface (19). Subsequently, a structure with a gypsum floor (29), and Walls (11/17) and (14) was built. succession of floors (15) was laid above Surface (29), although none extended south of Wall (10). The rubble wall (10) was built on top of Surface (15); it appears to have been an external wall bounding an area of occupation to the north (see west section, Fig 34). The rubble walls, [A2] (2), [A4] (2) and [A1] (10), are probably all broadly contemporary. Trench [A3] failed to find evidence for a north wall. A north wall, some 38-43m north of Wall [A10] (10), might in any case be suggested at the point where the 'flat' summit area begins sloping down to the north (at approximately the 310.77m contour—see profile, Fig 32); if this point does conceal a wall, a structure such as a single courtyard or compound unit some 40m square could be accommodated in the restricted area of the promontory. Such walls would have served to retain the flat summit area, contributing significantly to the form of the modern mound. Following, or more probably during, this late phase of occupation, Pits (8), (12) and (38) were dug.

PERIOD 18 LATE ISLAMIC

Three graves were excavated in [A1], (13), (27) and (28). They are assumed to be earlier than the Period 19 modern cemetery simply because there were no markings on the surface of the mound and they were in a different part of the site. It must be emphasised, however, that no independent dating evidence was found for the cemetery areas, so these differences may not be chronological; the [A1] graves might belong to Period 19. Refer also to the skeleton report by Dianna Bolt in the volume of specialist studies.

Grave (13) —Cut from the surface. Contained an extended inhumation oriented east/west. The skeleton lay on the right side, head to the west, facing south-southwest. The arms lay under and across the body, so that the hands rested near the pelvis. The pelvis and lower arms were not excavated. Alongside the north edge of the grave cut was a narrow (single stone width) pebble wall cor-

A succession of floors (15) was laid above Surface (29), although none extended south of Wall (10). The rubble wall (10) was built on top of Surface (15); it appears to have been an external wall bounding an area of occupation to the north (see west section, Fig 34). The rubble walls, [A2] (2), [A4] (2) and [A1] (10), are probably all broadly contemporary. Trench [A3] failed to find evidence for a north wall. A north wall, some 38-43m north of Wall [A10] (10), might in any case be suggested at the point where the 'flat' summit area begins sloping down to the north (at approximately the 310.77m contour—see profile, Fig 32); if this point does conceal a wall, a structure such as a single courtyard or compound unit some 40m square could be accommodated in the restricted area of the promontory. Such walls would have served to retain the flat summit area, contributing significantly to the form of the modern mound. Following, or more probably during, this late phase of occupation, Pits (8), (12) and (38) were dug.

belled over to rest on the south edge of the grave pit.

Grave (27) —Cut from the surface. Contained an extended inhumation oriented east/west. The skeleton lay on the right side, head to the west, facing south-south-west. The left arm lay across the body, the right arm beneath the body. The entire pelvic area was disturbed, and only traces of the legs and feet survived. The grave pit was undercut on its south side; the ashy brown grave fill was covered with patches of stiff yellow-brown clay (?mudbrick).

Grave (28) —Cut from the surface. Contained an extended inhumation oriented east/west. The skeleton lay on the right side, head to the west, facing south-south-west. The left arm lay across the body, the right arm lay straight alongside the body up against the south edge of the grave cut. The hands probably would have met in the pelvic area, beyond the section. The grey ashy fill was sealed by broken fragments of yellow brown mudbricks.

Period 19 the recent cemetery area

The North Tomb (Fig 38)

A rectangular white gypsum-mortared tomb surmounted the top of the north edge of the terrace. It measured 3.38-3.45 x 5.6-5.63m in area. The roof began at a height of 2.05m with a flattened dome a further 50 cm high, surmounted by a mortared cone with an effigy of a hand on its rounded point which rose approximately another 1m, making a total height of 3.55m in all.

The tomb was entered through a door in the south wall. The door was 90 cm wide and 1.8m high and closed by a standard modern steel door. An exterior threshold was provided by a small 50 cm wide patch of concrete. The walls were constructed of limestone rubble and cemented in gypsum mortar. The entire exterior was covered with gypsum plaster, roughly applied by hand on the walls and finely smoothed on the roof. The roof was supported by four steel H-section girders, which projected some 1.13m from the north side. In the centre of the north wall was a small window 50 cm wide, which was blocked but not plastered over. On top of the rounded cone surmounting the roof was a glove or effigy of a right hand (the 'hand of Fatima'), with the palm facing west towards the village of Sahm. A pale green and white rag was draped around the wrist and fingers. The door was painted in the standard reddish-pink paint commonly found on modern steel doors in Iraq. It was decorated with unequally spaced vertical lines in dark green paint. A wooden door lintel was painted red.

When visited the tomb was locked, and it was not possible to enter and plan the interior features. The monument was maintained in good condition and frequently visited up to its abandonment and flooding.

The South Tomb (Fig 39)

Similar to the north tomb, this was a rectangular white gypsum-mortared structure measuring 4.8-4.9 x 5.5m. The roof beams were set at a height of 2.05m and the top of the roof was 40 cm higher, surmounted by a plastered rounded cone on which was placed a metal stake bearing a hand effigy.

The tomb was entered through a door in the north wall, 85 cm wide and 1.93m high, closed by an iron door measuring 85 x 180 cm. The walls were constructed of limestone rubble cemented with gypsum mortar, with the entire exterior including the roof cone hand-smoothed with gypsum plaster. The roof consisted of four iron girders (visible only from the interior) which supported five shallow vaults. The conical structure in the centre of the roof was approximately 50 cm in diameter and 1-1.2m in height. In the centre of the south wall was a small window partly blocked with rubble. It had a wooden lintel and an iron grill. The hand effigy on top of the tomb (the 'hand of Fatima') was held in place by an iron stake. The palm was facing west towards the village of Sahm. A rag was loosely draped around the supporting metal stake (this may have slipped down from the hand).

In the interior, the east wall had a shallow niche 40 cm square and 30 cm deep, 55 cm above the floor. In the opposite west wall was another niche 36 x 40 cm square, 30 cm deep and 60 cm above the floor. A flat piece of wood lined the bottom of this niche. Lying on the wood was a small log. In the centre of the tomb were two white plastered grave covers oriented east/west. The south cover measured 200 x 50 cm in area by 15 cm in height. Along the top was a central ridge 15 cm wide and 20 cm high, raised a further 12 cm at either end. The entire grave cover was covered in hand-smoothed white plaster. Adjacent was a second, larger grave cover, 210 x 75 cm in area and 33 cm in height. This also had a central ridge along the top, 25 cm wide and 12 cm high, raised a further 15 cm at either end. The ends of the grave cover were rounded. Beside the grave covers was a free-standing metal and string device, 80-100 cm long, which could be swung to and fro.

No interior plan of the tomb was made. The tomb

was not locked; it was maintained in good condition and was also frequently visited until its abandonment and flooding.

ACKNOWLEDEGMENTS

I would like to thank personnel from the Hanyang Corporation who allowed us to work on Mound [Z] prior to its imminent destruction, and for their keen interest in the of two complete pots <263> and <274>, and a painted ceramic wheel <132>. I would also like to extend personal archaeological proceedings, in particular their discoveryin particular their discovery of two complete pots <263> and <274>, and a painted ceramic wheel <132>. I would also like to extend personal thanks to all those members of the expedition who ferried me to and from Karhasan, often in very adverse conditions, Bronwen Campbell, Tessa Rickards, Wendy Matthews, Stewart Campbell and Caroline Davies. The last also assisted me in taking levels.

CONCORDANCES

This section is intended to provide a quick reference to the contexts excavated to facilitate use of the different parts of this report and the corresponding pottery report and illustrations. The concordances take the form of three lists: units, periods and small finds. In the list of units, each entry consists of the context number followed by a brief context description, details of thickness, area, depth and period, and the numbers of any small finds from the context. The period concordance gives the number of all the units in each period. The small finds concordance lists the registration number, description, Iraq Museum number, unit and period of each small find.

Abbreviations

P = pottery, B = bone, L = lithics, S = shell, IM = Iraq Museum

Th=maximum thickness (in centimetres) A=maximum area (in square metres) D=approximate depth (from the top of the trench) P= period

[A1] Units

No		*Context*	*Type*	*Th*	*A*	*D*	*P*	*Small finds*
01		layer	topsoil	20	20	20	-	111 142 255 271 272
02		stones	rubble	20	<1	50	16	
03		layer	silt	75	16	95	16	259
04	stones	wall		60	1.5	80	16	
05	stones	wall		25	<1	48	16	
06	layer	ash		35	2	100	16	100
07	stones	rubble		15	<1	50	16	
08		fill	pit	30	1	85	16	101
09	layer	ash		35	<1	100	16	
10	stones	wall		40	1	70	16	
11	stones	wall		65	1	115	16	
12		fill	pit	320	1-4	375	16	115-118
13		fill	grave	10	0.5	90	18	
14	stones	?		20	0.5	110	16	
15	layer	spit		70	13.5	110	16	102 103 113 114 266
16	stones	wall		30	1	110	16	
17	stones	wall		20	0.5	110	16	
18	surface	clay		0		8	110	16
19	surface	mound		0		7	95	11
20	fill	pit		20	1	110	16	
21	layer	ash		5		1	115	16 104
22	surface	gypsum		5		2	115	16
23	layer	silt/clay		50	5	150	11	108 256
24	fill	hole		10	0.2	115	16	
25	layer	ashy		15	7	125	16	105 107
26	stones	wall?		20	<1	110	16	
27	fill	grave		20	1	135	18	
28	fill	grave		25	1.5	146	18	

No	*Context*	*Type*	*Th*	*A*	*D*	*P*	*Small finds*
29	surface gypsum		10	1.5	110	16	
30	mudbrick	wall	47	1	175	11	
31	stones rubble		20	<1	95	16	
32	layer silt/clay		60	3	175	11	
33	layer ash		2		1	100	16
34	layer clayey		15	2	130	16	112
35	layer mixed		20	9	144	16	109 110
36	fill pit		50	2	174	16	
37	layer silt/clay		60	9	170	11	
38	fill pit		120	1	200	16	
39	surface mound		0		6	165	11
40	layer silt		40	5	190	11	
41	mudbrick	wall	180	4	480	9	
42	layers spit		20	4	200	11	122 257
43	fill	pit	25	<1	328	16 120	121 124 265 268-270
44	layers spit		60	4	250	11	119
45	fill	pit	160	1	380	16	123
46	layer silt		5	<1	280	10	143-203 207 242 243-253 264
47	mudbrick	wall	60	2?	264	10	204-206
48	layers spit		40	4.5	422	9/10	
49	layer ash		12	1	288	10	208-231 241 273 277 279
50	surface mudbrick		10	4	436	9	
51	bricky floor		10	4	448	9	
52	mudbrick	lay	10	1	268	10	
53	mudbrick	wall	60	2	280	10	
54	layer ash		14	4	472	9	125
55	floor clay		10	4	472	9	
56	layer ash		7		4	482	(8)
57	natural terrace		0		4	484	-
58	layers spit		10	2.5	295	10	232 234-238
59	fill	animal hole	8		0.3	290	(10) 233 239 240 261 275

Periods in [A1]

Period	*Units*
8	56
9	41, 48, 50, 51, 54, 55
10	46-49, 52, 53, 58, (59)
11	19, 23, 30, 32, 37, 39, 40, 42, 44
16	01-12, 14-18, 20-22, 24-26, 29, 31, 33-36, 38, 43, 45
18	13, 27, 28

Small finds

Reg	*Description*	*IM No.*	*Unit*	*Period*
100	glass tube		A1 06	16
101	nail		A1 08	16
102	glass rim		A1 15	16
103	glass rim		A1 15	16
104	glass frags		A1 21	16
105	glass base		A1 25	16

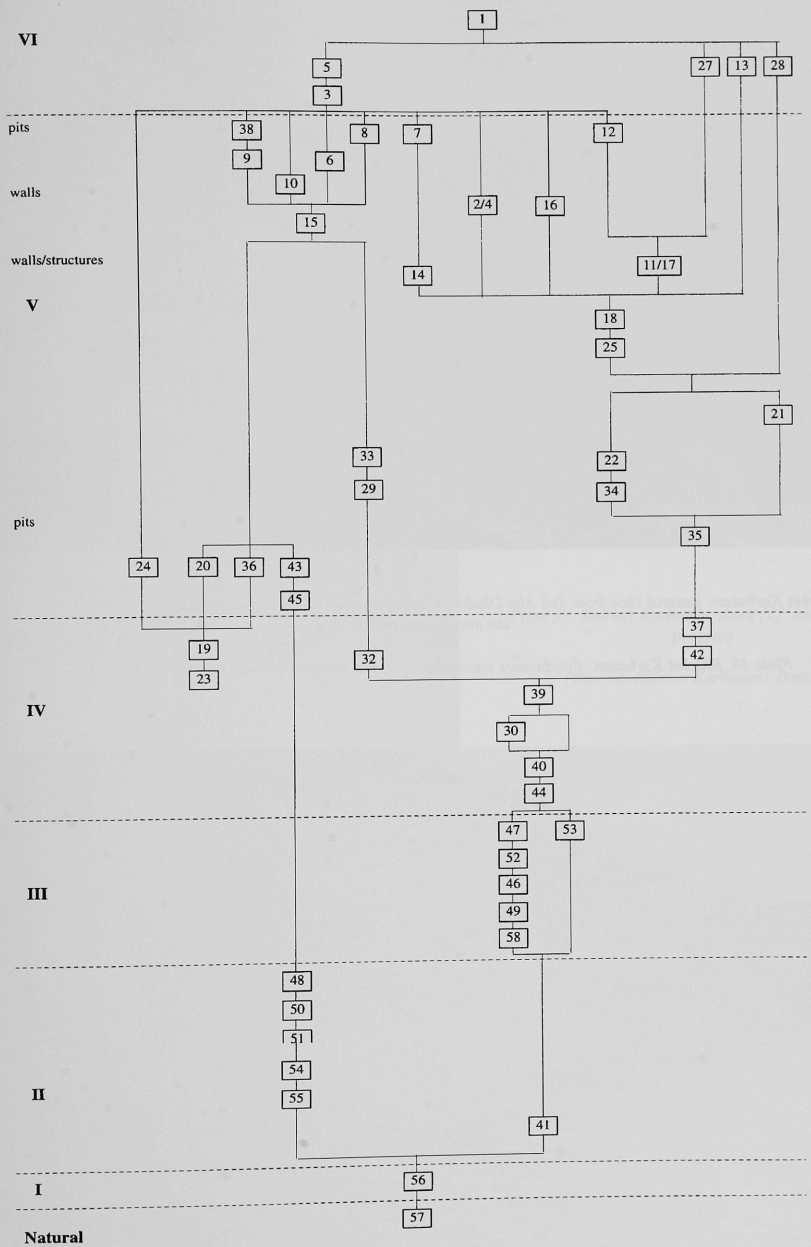
Reg	*Description*	*IM No.*	*Unit*	*Period*
106	[see 254]			
107	glass rims		A1 25	16
108	whetstone		A1 23	11
109	glass handle		A1 35	16
110	iron sickle		A1 35	16
111	glass frags		A1 01	-
112	glass frags		A1 34	16
113	iron lump		A1 15	16
114	iron lump		A1 15	16
115	glass rim		A1 12	16
116	glass frag		A1 12	16
117	bone point	KH 1	A1 12	16
118	glass rims		A1 12	16
119	shell disc	KH 2	A1 44	11
120	clay dish?		A1 43	16
121	iron blade		A1 43	16
122	iron lump		A1 42	11
123	ceramic object		A1 45	16
124	oil lamp		A1 43	16
125	figurine	KH 3	A1 54	9
126	sherd disc		A4 01	-
127	figurine	KH 5	ZA	8
128	figurine	KH 6	ZA	8
129	figurine	KH 7	ZA	8
130	figurine	KH 8	ZA	8
131	ceramic wheel	KH 9	ZA	8
132	ceramic wheel	KH 10	ZA	8
133	bronze ?bracelet		ZA	8
134	ceramic rod	KH 11	YA	8
135	ceramic wheel	KH 12	YA	8
136	figurine	KH 13	YA	8
137	figurine	KH 14	YA	8
138	figurine	KH 15	YA	8
139	figurine	KH 16	YA	8
140	ceramic disc	KH 17	S50	-
141	worked pebble		D	-
142	glass stem	KH 18	A1 01	-
143	faience rosette	KH 19	A1 46	10
144	faience rosette	KH 20	A1 46	10
145	faience rosette	KH 21	A1 46	10
146	faience rosette	KH 22	A1 46	10
147	faience rosette	KH 23	A1 46	10
148	faience rosette	KH 24	A1 46	10
149	faience rosette	KH 25	A1 46	10
150	faience rosette	KH 26	A1 46	10
151	faience rosette	KH 27	A1 46	10
152	faience rosette	KH 28	A1 46	10
153	faience rosette	KH 29	A1 46	10
154	faience rosette	KH 30	A1 46	10
155	faience rosette	KH 31	A1 46	10
156	faience rosette	KH 32	A1 46	10
157	faience rosette	KH 33	A1 46	10
158	faience rosette	KH 31	A1 46	10
159	faience plaque	KH 34	A1 46	10
160	faience plaque	KH 35	A1 46	10
161	faience cylinder	KH 36	A1 46	10
162	faience cylinder	KH 37	A1 46	10

Reg	*Description*	*IM No.*	*Unit*	*Period*
163	faience cylinder	KH 38	A1 46	10
164	faience pendant	KH 39	A1 46	10
165	faience pendant	KH 40	A1 46	10
166	faience pendant	KH 41	A1 46	10
167	faience pendant	KH 42	A1 46	10
168	faience pendant	KH 41	A1 46	10
169	faience pendant	KH 42	A1 46	10
170	faience button	KH 43	A1 46	10
171	faience button	KH 44	A1 46	10
172	faience button	KH 45	A1 46	10
173	faience button	KH 46	A1 46	10
174	faience button	KH 47	A1 46	10
175	[joined to 155]			
176	faience rosette bud	KH 48	A1 46	10
177	bead	KH 49	A1 46	10
178	bead		A1 46	10
179	bead		A1 46	10
180	bead		A1 46	10
181	bead		A1 46	10
182	button	KH 50	A1 46	10
183	bead		A1 46	10
184	bead		A1 46	10
185	bead		A1 46	10
186	stone ?counter	KH 51	A1 49	10
187	bead		A1 46	10
188	bead/pendant?		A1 46	10
189	bead		A1 46	10
190	bead		A1 46	10
191	bead	KH 52	A1 46	10
192	bead	KH 53	A1 46	10
193	bead	KH 54	A1 46	10
194	bead		A1 46	10
195	bead		A1 46	10
196	bead		A1 46	10
197	bead		A1 46	10
198	bead	KH 55	A1 46	10
199	bead		A1 46	10
200	bead		A1 46	10
201	bead		A1 46	10
202	assorted bead frag		A1 46	10
203	bitumen		A1 46	10
204	lead		A1 47	10
205	bitumen		A1 47	10
206	bitumen		A1 47	10
207	bitumen		A1 46	10
208	bitumen		A1 49	10
209	bitumen		A1 49	10
210	bead		A1 49	10
211	bead	KH 56	A1 49	10
212	6 disc beads	KH 57	A1 49	10
213	bead	KH 58	A1 49	10
214	bead	KH 59	A1 49	10
215	cylinder bead	KH 60	A1 49	10
216	bead		A1 49	10
217	bead(?)		A1 49	10
218	bead		A1 49	10

Reg	*Description*	*IM No.*	*Unit*	*Period*
219	bead		A1 49	10
220	bead	KH 61	A1 49	10
221	assorted broken beads		A1 49	10
222	stone bead	KH 62	A1 49	10
223	stone bead	KH 63	A1 49	10
224	stone bead	KH 64	A1 49	10
225	cylinder	KH 65	A1 49	10
226	stone bead	KH 66	A1 49	10
227	stone bead	KH 67	A1 49	10
228	stone bead	KH 68	A1 49	10
229	worked stone	KH 69	A1 49	10
230	cylinder	KH 70	A1 49	10
231	lead?		A1 49	10
232	bead		A1 58	10
233	3 disc beads	KH 57	A1 59	10
234	bead		A1 58	10
235	bead	KH 61	A1 58	10
236	bead		A1 58	10
237	bead	KH 61	A1 58	10
238	assorted bead frags		A1 58	10
239	bead		A1 59	10
240	assorted bead frags		A1 59	10
241	3 perforated shells	KH 71	A1 49	10
242	shell	KH 71	A1 46	10
243	shell	KH 71	A1 46	10
244	perforated shell	KH 71	A1 46	10
245	perforated shell	KH 71	A1 46	10
246	perforated shell	KH 71	A1 46	10
247	4 perforated shells	KH 71	A1 46	10
248	2 perforated shells	KH 71	A1 46	10
249	5 perforated shells	KH 71	A1 46	10
250	131 shells	KH 71	A1 46	10
251	124 shells	KH 71	A1 46	10
252	185 perforated shells	KH 71	A1 46	10
253	165 perforated shells	KH 71	A1 46	10
254	glass rim		A3 01	18
255	stone disc		A1 01	-
256	ground stone		A1 23	11
257	ground stone		A1 42	11
258	2 curved bricks		A2 01	-
259	curved brick		A1 03	16
260	worked stone		D	-
261	bronze disc	KH 72	A1 59	10
262	clay pipe		Q 50	-
263	pot	KH 73	surface ?	11
264	clay lump		A1 46	10
265	pebble lid?		A1 43	16
266	bitumen		A1 15	16
267	glass frags		surface	-
268	clay lump		A1 43	16
269	clay lump		A1 43	16
270	clay lump		A1 43	16
271	bead	KH 61	A1 01	-
272	perforated shell	KH 71	A1 01	-

Reg	*Description*	*IM No.*	*Unit*	*Period*
273	bead	KH 74	A1 49	10
274	jar	KH 75	surface	11
275	8 perforated shells	KH 71	A1 59	10
276	figurine	KH 76	surface	?8
277	3 shells	KH 71	A1 49	10
278	rosette frags		unstrat	10
279	sealing frag		A1 49	10

KHIRBET KARHASAN SEQUENCE DIAGRAM



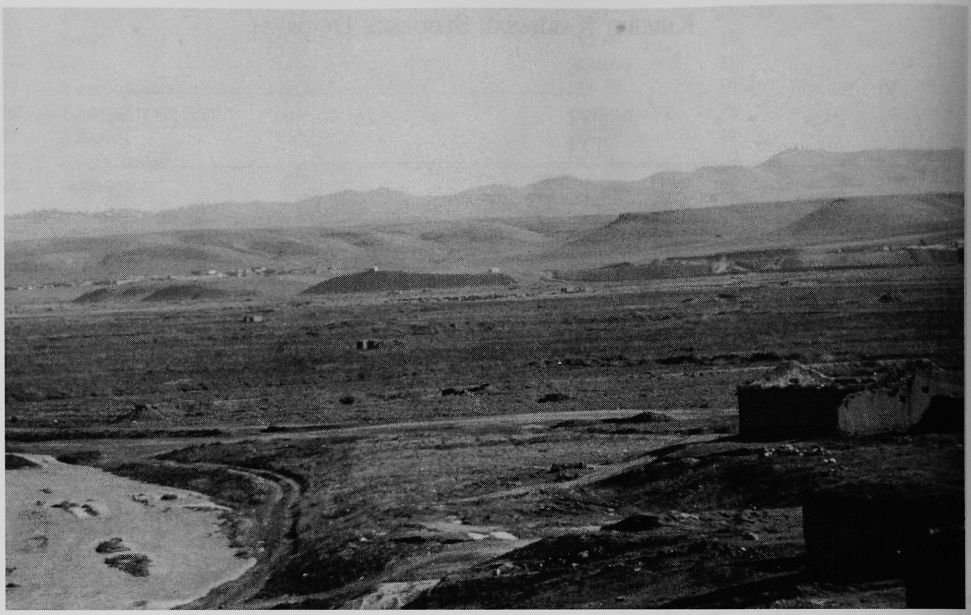


Plate 37. Khirbet Karhasan: general view from Tell Abu Dhahir. Karhasan is marked the two tombs of the western cemetery area in the middle distance.

Plate 38. Khirbet Karhasan: floodwaters encroaching on the site during excavation of Area [X52]

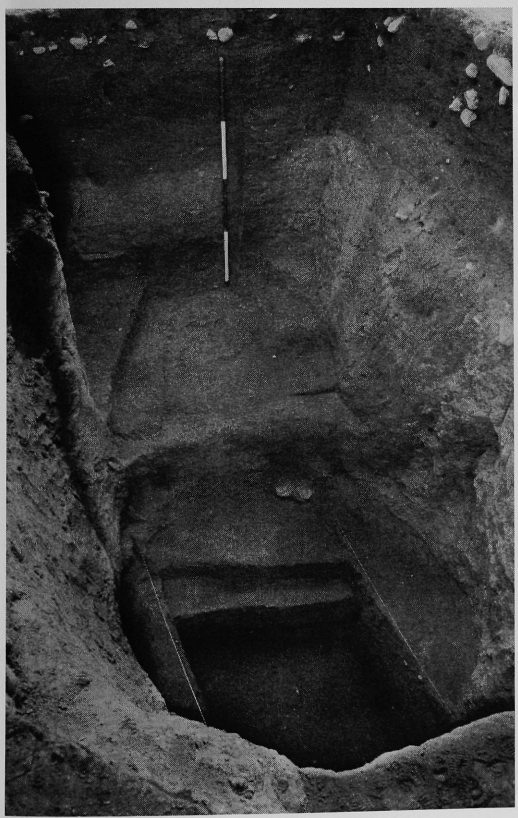


Plate 39. Khirbet Karhasan: Area [Z], excavations in progress

Plate 40. Khirbet Karhasan: Trench [A1]

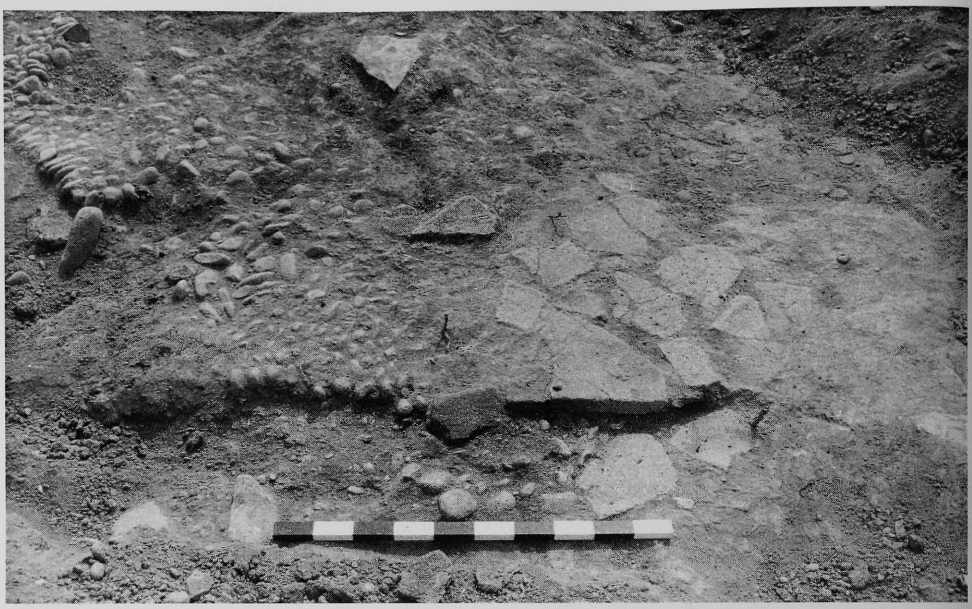
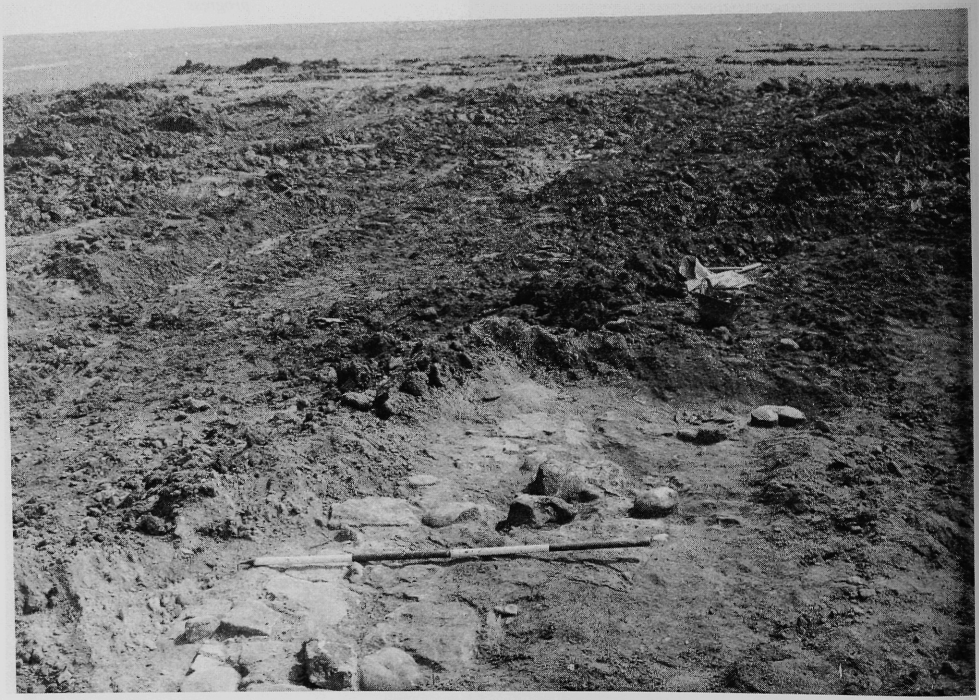


Plate 41. Khirbet Karhasan: Area [ZA]

Plate 42. Khirbet Karhasan: Area [ZB]



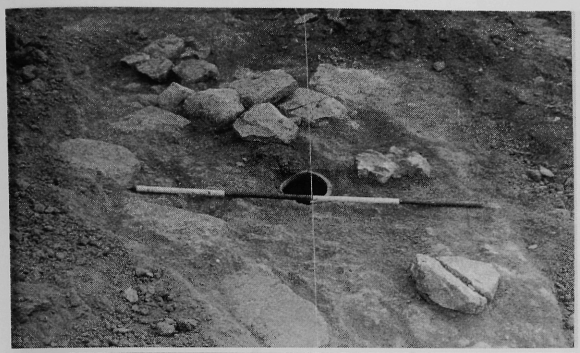


Plate 43. Khirbet Karhasan: Area [ZB], buried pot

Plate 44. Khirbet Karhasan: Area [ZC]

Plate 45. Khirbet Karhasan: Area [X52], wall footing

Plate 46. Khirbet Karhasan: Area [YA], Khabur pottery exposed through bulldozing

Plate 47 . Khirbet Karhasan: Trench [A1], faience hoard during excavation

Plate 48. Khirbet Karhasan: Trench [A1], faience hoard during excavation

CHAPTER 7

TELL GIR MATBAKH

Stuart Campbell

SECTION 1: INTRODUCTION

DESCRIPTION AND LOCATION (Figs 2, 40, Pls. 25, 48)
Gir Matbakh is a small but high tell situated on the right bank of the Tigris about four miles upstream from Tell Abu Dhahir (Fig 2, Pl. 25). When the site was excavated, the fields around the tell were dry farmed, mainly for cereals, by villagers from Seh Qubba. However, there seems to have been quite widespread use of irrigation close to the river, probably before a Kurdish village about one kilometre south-west of the site was abandoned in the early 1970s. The area is also used extensively for grazing sheep and goats. The name *gir matbakh* is a Kurdish one, meaning 'kitchen mound', although the tautological 'Tell Gir Matbakh' was in common usage locally.

Before the valley was flooded by the dam, the site was 50m from the modern course of the Tigris at a point where the river made a wide bend. The right bank of the river was flanked by 4m- to 5m-high conglomerate cliffs, and the opposite bank sloped gently but steadily up to the north. There was no evidence that the course of the river had changed to any great extent in the past. During the

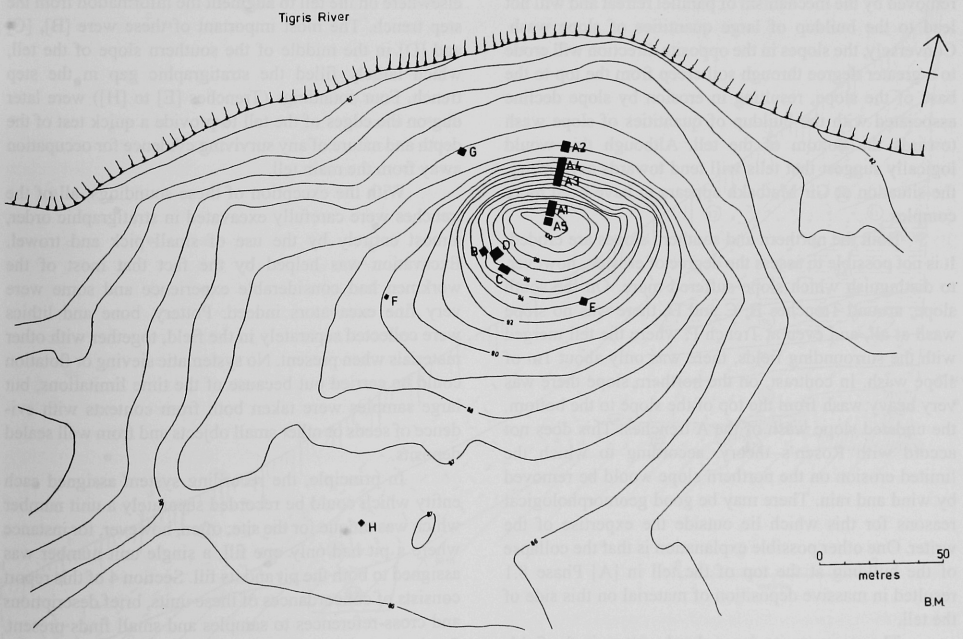


Fig 40. Gir Matbakh: contour plan of the site

excavation, cattle were regularly driven across at this point, and small boats would occasionally ferry people across, choosing this site for a crossing because of the gentle slope on the left bank and the lowering of the cliff on the right bank to the east of the site.

The tell is slightly oval, measuring approximately 100m by 130m with a maximum height of 15m above the level of the surrounding land (Fig 40, Pl. 48). Like many of the tells in this area, the profile of the mound is markedly asymmetrical: the north face is very steep whereas the southern slopes are comparatively gentle. This shape can be partly accounted for by the fact that the tell is founded on a natural rise which seems also to have been steep on its northern side. Erosion by the frequently strong northerly winds was probably an equally important factor, however, as well as the tendency, seen at many other tells, for settlement to concentrate on the more sheltered southern side of high tells, leading to a gently sloping 'tail' to the south.

Rosen (1986, especially 31-33, 52) has advanced a general theory of the formation of the typical asymmetrical tell shape, based mainly on examples in the Levant but applicable elsewhere. Essentially, Rosen's thesis suggests that slopes which face the prevailing wind, normally to the north or north-east, will suffer less erosion than southern slopes, because of greater vegetal cover. Furthermore, what erosion there is on the northern slopes will be removed by the mechanism of parallel retreat and will not lead to the buildup of large quantities of slope wash. Conversely, the slopes in the opposite direction will erode to a greater degree through soil creep from the top to the base of the slope, resulting in erosion by slope decline associated with the buildup of quantities of slope wash towards the bottom of the tell. Although this would logically suggest that tells will tend towards asymmetry, the situation at Gir Matbakh appears to have been more complex.

Both the northern and southern slopes are eroded. It is not possible to assess the degree of erosion, however, to distinguish which slope suffered more. On the south slope, around Trenches B, C and D, there was no slope wash at all, and even at Trench F, where the tell merged with the surrounding fields, there was only about 1m of slope wash. In contrast, on the northern slope there was very heavy wash from the top of the slope to the bottom, the undated slope wash of the A trenches. This does not accord with Rosen's theory, according to which the limited erosion on the northern slope would be removed by wind and rain. There may be good geomorphological reasons for this which lie outside the expertise of the writer. One other possible explanation is that the collapse of the building at the top of the tell in [A] Phase 8.1 resulted in massive deposition of material on this side of the tell.

There were quite dense sherd scatters in the fields immediately around the tell, especially to the south. The sherds were large and not particularly worn; they seemed both too densely scattered and to have too marked a drop-off in density away from the tell to be purely the result of scatter from the tell through ploughing or manuring. It seems most probable that there was a band of activity around the tell which is not represented by the present contours of the tell. To judge from several small trenches away from the main tell, this activity has not led to the build up of any significant deposits and there may never have been many structures away from the tell.

The excavations

The excavations took place from 2nd February to 20th March 1986 for a total of 30 working days under the supervision of the writer. The number of workmen ranged from seven to 22, although there were generally 13 to 15. Preliminary reports have appeared (Ball 1987a, 80, Ball and Black 1987, 238; a discussion of some of the results appears in Ball and Wilkinson forthcoming).

The original aim of the excavation was to obtain a stratified pottery sequence based on a 3m-wide step trench in the north face of the tell, Trenches [A1] to [A5] (Fig 40, Pl. 48). Unfortunately, the step trench could not be completed in the time available, partly due to the unanticipated quantity of slope wash lower on the slope and the resultant quantity of earth which had to be removed to reach good levels. As a greater number of workmen became available, extra trenches were opened elsewhere on the tell to augment the information from the step trench. The most important of these were [B], [C] and [D] in the middle of the southern slope of the tell, which largely filled the stratigraphic gap in the step trench. Four soundings (Trenches [E] to [H]) were later dug on the edges of the tell to provide a quick test of the depth and nature of any surviving evidence for occupation away from the main tell.

With the exception of these soundings, all of the trenches were carefully excavated in stratigraphic order, almost entirely by the use of small pick and trowel. Excavation was helped by the fact that most of the workmen had considerable experience and some were very fine excavators indeed. Pottery, bone and lithics were collected separately in the field, together with other materials when present. No systematic sieving or flotation could be carried out because of the time limitations, but large samples were taken both from contexts with evidence of seeds or other small objects and from well sealed deposits.

In principle, the recording system assigned each entity which could be recorded separately a unit number which was unique for the site; often, however, for instance where a pit had only one fill, a single unit number was assigned to both the pit and its fill. Section 4 of this report consists of concordances of these units, brief descriptions and cross-references to samples and small finds present. Section 2 is a summary of the sequence and section 3 consists of a detailed stratigraphic analysis of the sequence in each trench or group of trenches.

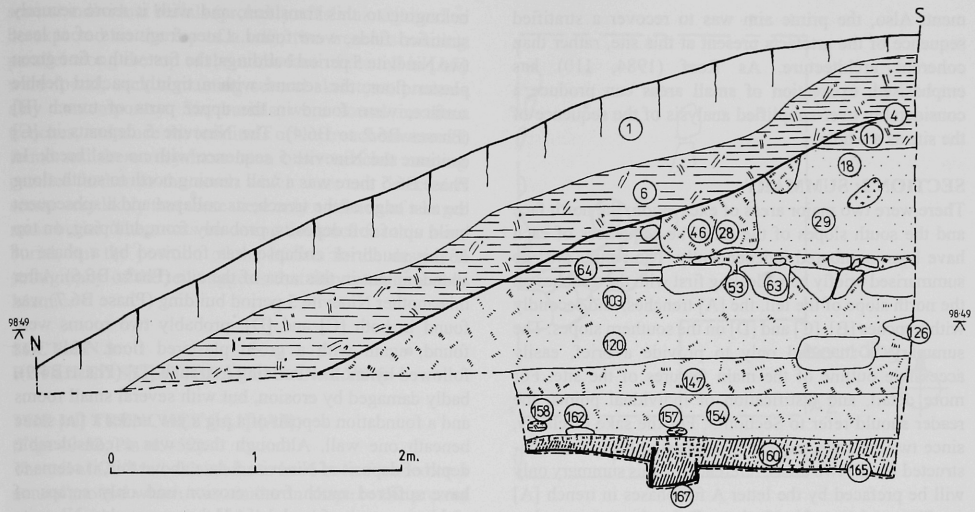


Fig 41. Gir Matbakh: Trench [A1], east section

Throughout this report, it should be borne in mind that this site was dug as a rescue project with only one season of work possible prior to flooding, and at times the method of excavation had to be adapted to that require-

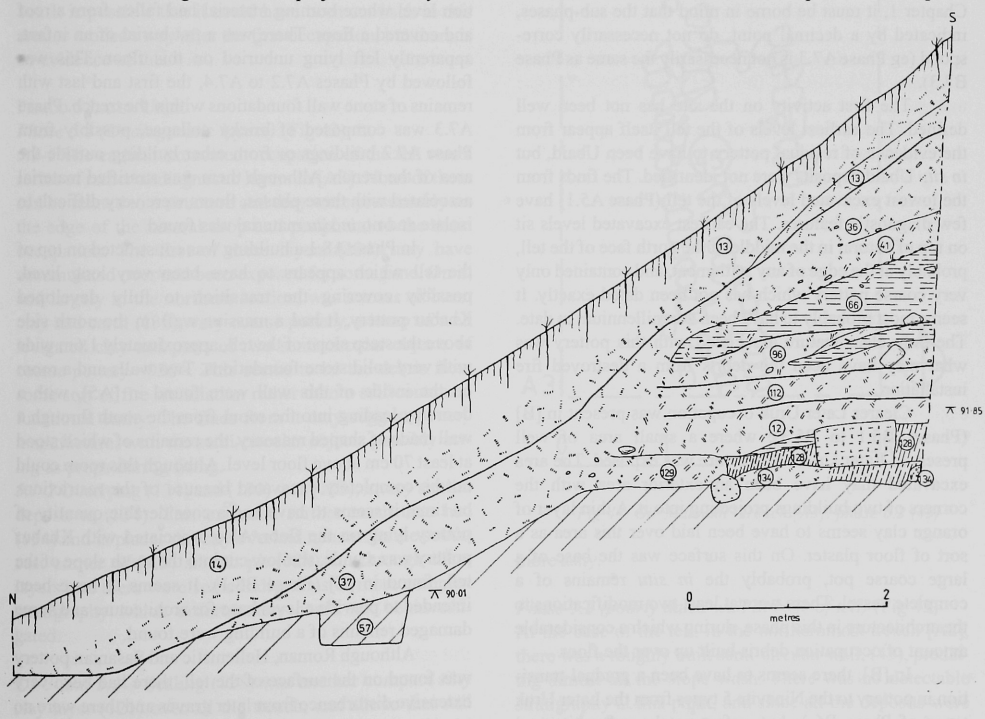


Fig 42. Gir Matbakh: Trenches [A3]&[A4], east section

ment. Also, the prime aim was to recover a stratified sequence of the artefacts present at this site, rather than coherent architecture. As Roaf (1984, 110) has emphasised, excavation of small areas can produce a considerably over-simplified analysis of the sequence of the site as a whole.

SECTION 2: SUMMARY

There were two major areas of excavation: the north face and the south slopes of the tell. The sequences of each have been numbered independently. The results will be summarised briefly here, dealing first with the trenches on the north slope of the tell, the [A] trenches, and secondly with trenches [B], [C] and [D] on the southern slopes. The summary is intended only to provide a brief, easily accessible outline of the main features of the site. For more detail, and justification of individual points, the reader should refer to Section 3. For the sake of clarity, since two separate sequences of phasing have been constructed for the two areas, references in this summary only will be prefaced by the letter A for phases in trench [A] (eg Phase A6.1) and by the letter B for phases in trenches [B], [C] and [D] (eg Phase B7.2). Although the main period numbers in each trench correspond (eg Period A7 in Trench [A] is the same as period B7 in Trench [B]), and conform to the Zammar provisional sequence described in Chapter 1, it must be borne in mind that the sub-phases, indicated by a decimal point, do not necessarily correspond (eg Phase A7.3 is not necessarily the same as Phase B7.3).

The first activity on the site has not been well defined. The earliest levels of the tell itself appear from the evidence of residual pottery to have been Ubaid, but *in situ* Ubaid deposits were not identified. The finds from the lowest excavated levels of the tell (Phase A5.1) have few diagnostic features. The earliest excavated levels sit on top of natural in the middle of the north face of the tell, probably at the edge of any settlement, and contained only very coarse pottery which has not been dated exactly. It seems most probably to have been 4th millennium in date. The only clear feature associated with this pottery was what may have been the debris from a destroyed fire installation.

Clearer Later Uruk occupation was present in [B] (Phases B5.1 to B5.3), where a small area of well preserved Later Uruk architecture was exposed. The area excavated may have been an exterior area with the corners of two buildings projecting into it. A thin layer of orange clay seems to have been laid over this area as a sort of floor plaster. On this surface was the base of a large coarse pot, probably the *in situ* remains of a complete vessel. There were at least two modifications to the architecture in this phase, during which a considerable amount of occupation debris built up over the floor.

In [B], there seems to have been a gradual transition in pottery to the Ninevite 5 types from the Later Uruk types of Phase B6.1, but unfortunately no architecture belonging to this transition, and with it more securely stratified finds, were found. Later fragments of at least two Ninevite 5 period buildings, the first with a fine green plaster floor, the second with a tightly packed pebble surface, were found in the upper parts of trench [B] (Phases B6.2 to B6.4). The Ninevite 5 deposits in [C] continue the Ninevite 5 sequence with no real break. In Phase B6.5 there was a wall running north to south along the east edge of the trench; its collapse and a subsequent build up of soft deposits, probably from dumping, on top of this mudbrick collapse was followed by a phase of abandonment in this area of the site (Phase B6.6). After this another Ninevite 5 period building (Phase B6.7) was found in both [C] and [D]; probably two rooms were found, again with a green plastered floor. This was followed by another building in trench [D] (Phase B6.9), badly damaged by erosion, but with several small rooms and a foundation deposit of a pig's jaw under a flat stone beneath one wall. Although there was a considerable depth of deposit of Ninevite 5 date above this, it seems to have suffered much from erosion and only scraps of architecture were found. In [A3] there were clear Ninevite 5 deposits but no architecture (Phase A6.1).

In [A1] well stratified Akkadian remains of clear occupational origin were picked only up at the top of the slope in Phase A7.1. Here there was a probable destruction level where burning material had fallen from a roof and covered a floor. There was a pot burial of an infant, apparently left lying unburied on this floor. This was followed by Phases A7.2 to A7.4, the first and last with remains of stone wall foundations within the trench. Phase A7.3 was composed of bricky collapse, possibly from Phase A7.2 buildings or from other building outside the area of the trench. Although there was stratified material associated with these phases, floors were very difficult to isolate and no *in situ* material was found.

In Phase A8.1 a building was constructed on top of the tell which appears to have been very long lived, possibly covering the transition to fully developed Khabur pottery. It had a massive wall on the north side above the steep slope of the tell, approximately 1.6m wide with very solid stone foundations. Two walls and a room on the inside of this wall were found in [A5], with a doorway leading into the room from the south through a wall made of shaped masonry, the remains of which stood at least 70 cm above floor level. Although this room could not be completely excavated because of the restrictions on time, it seems to have had a considerable quantity of pottery lying on the floor. Also associated with Khabur pottery was a wide, shallow cut into the south slope of the tell, found in [C] (Phase B8.1). It seems to have been intended to provide a level base for architecture and some damaged remains of a building were found.

Although Roman, Hellenistic and Sasanian pottery was found on the surface of the tell, there had been very extensive disturbance from later graves and there were no secure contexts later than the Khabur period. As well as

several individual burials (probably of Islamic date and to be expected on the top of a tell), two trenches running parallel along the top of the north face of the tell in [A5] were found, each containing several skeletons, presumably contemporary. Six burials were found in these trenches, and since the terminals of the trenches were not found and there may have been other trenches running parallel further to the south which were not detected it seems very likely that these were only a portion of a larger mass burial. There was no dating evidence for this mass burial, but the position of the burials in the destroyed stratigraphy of the tell suggests that they were probably Islamic.

SECTION 3: DETAILED STRATIGRAPHIC ANALYSIS

THE [A] TRENCHES ([A1]-[A5])

(Figs 40-52, Pls. 49-52)

The tell at Gir Matbakh seems to have been founded on a natural mound which was similar in shape to the present mound, with a steep slope on the north and a more gentle slope to the south. However, this natural mound was reached only in trenches [A2], [A3] and [A4] (Fig 42). There it rose very sharply from an absolute height of 87.46m in [A2] to over 90m in [A3] in a distance of about 8m. It is possible that it could have been cut back in this area or eroded away after the first occupation, but there is no evidence of this.

PERIOD 5 LATER URUK

Phase 5.1 (Undiagnostic layers) (Fig 42)

5.1-1 The earliest excavated occupation of the tell was a series of rather undiagnostic layers in [A3]. None of them can be related to a structure and they were presumably on the edge of the natural drop and peripheral to the main occupation. The first of these layers (134) may have accumulated over and been exposed for some time. On it, and largely in the northern section, was a mass of burnt clay and earth (130), very coarse pottery, a lump of well levigated clay and parts of two semi-circular objects of coarse pottery <936>. This seems to be the debris from some sort of fire installation rather than a self-contained functional entity. The finds from it may suggest pottery manufacture, with the semi-circular objects possibly acting as props during firing.

5.1-2 Overlying (134) and (130) was (129), a very similar deposit to (134). This extended further north than had (134) and in places directly overlaid natural. In the south-east corner of [A3] an ash pit (128) cut through these layers and there were some indications of more complex stratigraphy which unfortunately could not be investigated.

5.1-3 and 5.1-4 Sealing (128) was another compact silty clay layer (121) over all the trench, and above that still another (115) in the east, (112) in the west where it was more ashy.

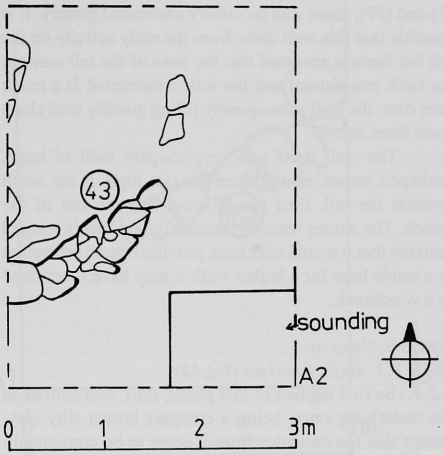


Fig 43. Gir Matbakh: Trench [A2], phase 5.2 (43)

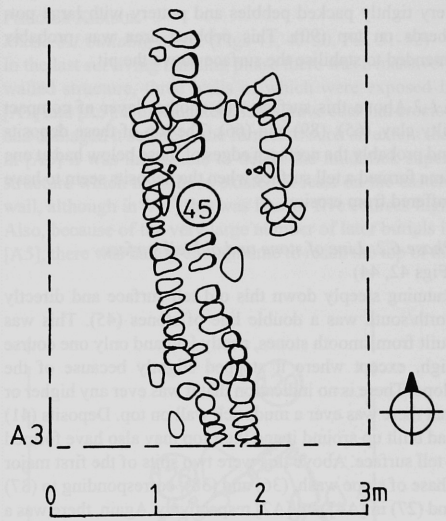


Fig 44. Gir Matbakh: Trench [A3], phase 6.2 (45)

Phase 5.2 (poorly dated wall at base of tell) (Fig 43)

At the base of the tell, in the northernmost trench [A2], there was a roughly built semi-circular wall, (43), predating almost all the slope wash. There was no detectable stratigraphy at this point, and since all the deposits were

made up of soft slope wash with occasional bricky lumps, (7) and (27), there was no clearly associated pottery. It is possible that this wall dates from the early activity on the tell but there is no proof that the base of the tell was not cut back into natural and the wall constructed at a much later date, the wall subsequently filling quickly with slope wash from above.

The wall itself was very roughly built of large, unshaped stones, two or three courses high. It ran south towards the tell, then curved west and ran out of the trench. The stones were so insecurely laid that it seemed unlikely that it would ever have provided much protection or a stable base for a higher wall; it may have functioned as a windbreak.

Period 6: Ninevite 5

Phase 6.1: surface and pit (Fig 42)

6.2-1 The first deposit of this phase, (96), was similar to the underlying ones, being a compact brown silty clay, except that the ceramics from it seem to be consistently Ninevite 5. It probably corresponds to the start of Period 6 in [B]. A shallow pit (97) was cut into it. On the top of (96) there was a hard level surface (84), which along the west side of the trench on top of the pit was made up of very tightly packed pebbles and pottery with large pot-sherds on top (90). This pebbled area was probably intended to stabilise the surface above the pit.

6.1-2 Above this surface was another layer of compact silty clay, (65), (89) and (66). The top of these deposits and probably the northern edges of those below had at one time formed a tell surface when the deposits seem to have suffered from erosion.

Phase 6.2: Line of stone and old tell surface
(Figs 42, 44)

Running steeply down this old tell surface and directly north/south was a double line of stones (45). This was built from smooth stones, neatly laid and only one course high, except where it stepped slightly because of the slope. There is no indication that it was ever any higher or that there was ever a mudbrick wall on top. Deposits (41) had built up around it and their top may also have formed a tell surface. Above this were two spits of the first major phase of slope wash, (36) and (38), corresponding to (37) and (27) in [A4] and [A2] respectively. Again, there was a distinct surface on top of these deposits, apparently the third old tell surface before the present. The latest phase of slope wash (13), or, in [A4], (14) lies above this.

Period 7 Akkadian

Phase 7.1 Occupation and destruction layers
(Fig 41, Pl. 50)

After an unexcavated vertical gap of some 4.2m from the surface of (84/90), clear occupation deposits were picked up in [A1]. No walls belonging to this phase were excavated, but a good floor was exposed over an area of about 3 x 3m. This floor, (165), was made up of hard-packed yellow clay, apparently laid down deliberately with pure clay. A clay walled feature (167) was partly cut into it at the east baulk, but part of its preserved wall stood up above the floor and it appeared to have been contemporary. The walls of this feature were very fragile but it was roughly circular in plan, probably with a domed superstructure. Although it was filled with ash, the walls were only lightly, and evenly, baked. It is likely that it was a *tannur*.

Lying on its side on the floor was a complete Akkadian jar (166) <938>, with the mouth to the east. In it was found the skeleton of an infant, 6-9 months old (identified by Keith Dobney), with its head to the north-east, facing north-west and tightly crouched. The lower third of the jar was filled with brown friable silty clay and the upper part was of the same mix of ash and clay as the surrounding deposits (160), lying on top of floor (165). The pot was clearly within the ashy clay matrix of the surrounding deposits and lying directly on top of the floor; it seems highly unlikely that an undetected grave pit, perhaps the obvious initial explanation for the pot, should have been dug down to the exact level of the floor and backfilled with the excavated material to the extant that no pit cut was visible even above the level of ashy clay debris. Furthermore, the upper part of the pot was severely burnt by the fire discussed below, which had burnt on the top of the ashy clay layer. Thus, this pot burial seems to have been lying exposed on the floor for an unknown length of time prior to the deposition of the layers on the floor around it.

It must be pointed out that these layers contained almost exclusively Ninevite 5 material; the pot burial itself was the only datable Akkadian artefact. As discussed above, there was evidence that the Akkadian pot is definitely associated with the surrounding deposit. These layers, in spite of their contents, must therefore represent an Akkadian redeposition of earlier Ninevite 5 material.

This phase was ended by what seems to have been an intense fire. The deposit (160), which was on top of the floor, was composed of two thoroughly intermixed components, large quantities of ash and areas of yellow to orange clay. Although there is no direct evidence, it is possible that this was the burnt remains of the roofing of this area. In that case it would seem to have consisted mainly of wood (perhaps brushwood or reeds rather than large beams, judging from the lack of large pieces of charcoal) and clay, probably applied as a coating. After this deposit had accumulated or fallen there seems to have been an intense fire, most probably part of the same process which had destroyed the roof. The uppermost part of pot (166) <938>, which was not deeply covered by (160), had been refired and warped to such an extent that, had it not been found *in situ*, one would not have guessed that the refired and unrefired portion were from the same pot.

One area (168) in the heterogeneous deposit (160) over the floor was distinctive because it contained a dense

concentration of very small potsherds in an area of about 30 cm diameter and 15 cm deep. This was on top of a patch of very dark ash slightly above the level of the floor. It is not the fill of a cut and may be the contents of a bag or other organic container which had fallen from above and burnt. The sherds were remarkably similar, mainly 2-3 cm across, never more than 5 cm, and all with very worn edges. As far as can be determined, most of the sherds came from only 4 or 5 different vessels, although because of the worn edges few actual joins were present. These distinctive characteristics imply a particular function or possibly industrial purpose. When diagnostic, they were again all Ninevite 5. This type of pit filled with sherds is known from Ninevite 5 contexts at Tell Mohammed Arab and Early Dynastic 1 contexts at Tell Madhhur (M Roaf, pers comm).

Phase 7.2 building phase (Fig 45)
Immediately above these burnt deposits, a new wall, or at least a wall foundation, (162), was constructed running north-east to south-west across the trench. It was constructed of large stones, one of which, adjacent to a gap in the wall, had a shallow cupped socket in the upper surface and was presumably used as a door socket. There was little sign of mudbrick over the stones, however. The deposits to the north and south of the wall were dark and quite soft, (158) and (157) respectively. They produced very few diagnostic sherds. Only to the south of the wall, beneath (157), was there an associated surface of beaten earth.

Phase 7.3 bricky collapse (Fig 41)
Over these deposits were about 50 cm of apparently non-structural deposits, found in two main layers, (154) and (147). The lower, (154), was a hard orange brown clay with many fragmentary bricks, either the collapse from the wall of Phase 7.4 or from structures outside the trench. The upper layer, (147), was much softer, although still with many degraded bricky fragments. The pottery was mainly Akkadian, but with a large mixture of Ninevite 5. It is most likely, therefore, that these deposits represent the collapse of the Phase 7.2 structure and possibly a period of disuse of this area.

Phase 7.4 building phase (Figs 41, 46)
In this phase a new structure was founded, although it was badly damaged by later levelling. A short stretch of stone wall footing and its return (126), were found. This was more carefully constructed than most such footings at Gir Matbakh with long, narrow stones laid lengthwise and the interstices packed with smaller stones. The deposits of its level to the north and south were (120) and (119). Along the east baulk, within (120), were large quantities of fallen mudbrick. Much of these deposits was disturbed both by later levelling and a quantity of animal burrows unusual at this site. The pottery was mainly redeposited Ninevite 5, but with a large quantity of Akkadian.

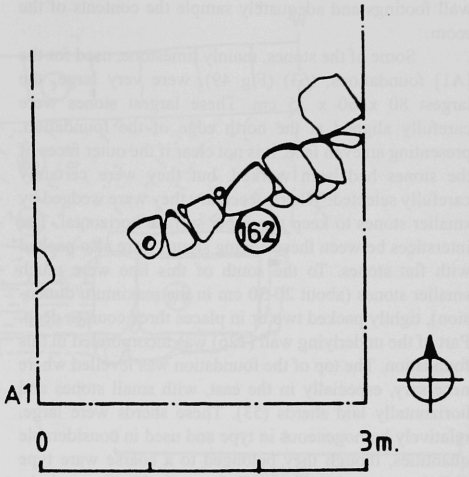


Fig 45. Gir Matbakh: Trench [A1], phase 7.2 (162)

PERIOD 8 KHABUR
Phase 8.1 building phase (Figs 41, 47-50, Pls. 51-52)
In the last surviving building phase there was a massively walled structure, three walls of which were exposed in [A1] and [A5]. Unfortunately, later grave cuts and erosion had damaged it severely, the former to such an extent that in [A5] it was impossible to detect the mudbrick superstructure which must have existed at least on the eastern wall, although in [A1] this was four or five courses high. Also, because of the very large number of later burials in [A5], there was barely enough time to reach the top of the

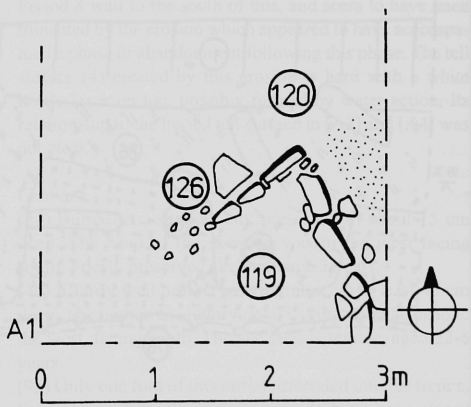


Fig 46. Gir Matbakh: Trench [A1], phase 7.4 (126)

wall footings and adequately sample the contents of the room.

Some of the stones, mainly limestone, used for the [A1] foundations, (63) (Fig 49), were very large, the largest 80 x 60 x 35 cm. These largest stones were carefully aligned at the north edge of the foundation, presenting an even face; it is not clear if the outer faces of the stones had been worked, but they were certainly carefully selected. Where necessary they were wedged by smaller stones to keep the upper surface horizontal. The interstices between these edging stones were also packed with flat stones. To the south of this line were much smaller stones (about 20-30 cm in the maximum dimension), tightly packed two or in places three courses deep. Part of the underlying wall (126) was incorporated in this foundation. The top of the foundation was levelled where necessary, especially in the east, with small stones and horizontally laid sherds (53). These sherds were large, relatively homogeneous in type and used in considerable quantities, though they belonged to a coarse ware type (34) that occurs in both the Khabur and Akkadian periods.

The mudbrick superstructure of this wall, (29) (Fig 50), was fairly well preserved, although it had been cut along the north edge by burials (46) and (95) as well as by erosion, so that the north face was not intact. There seemed to be four good courses, and (18) was probably a degraded upper course. The bricks, mainly 40 x 18 x 10 cm, were carefully laid in five rows with the bricks laid lengthways along the line of the wall. In a small area in the south-east corner much smaller bricks were used; small rectangular bricks measuring 20 x 10 cm and square ones 10 x 10 cm were presumably quarter and eighth size of the normal bricks. This was probably due to the junction of wall (29) with wall (178). The minimum, and most probable, width of wall (29) was 1.6m at the level of the foundations.

The stone wall foundation (178), found only in [A5], must have joined with wall (63) beneath the baulk between [A1] and [A5]; the inner corner is probably just visible in [A1] (Fig 49). Although remnants of mudbrick were preserved, none could be isolated *in situ*, so that the wall is represented solely by its stone footing. As with wall (29/63), it was made of limestone with carefully laid larger edging blocks on its west side and less carefully laid smaller stones in the centre. The stones are somewhat smaller than those of (63) (about 30 x 40 cm at most) and were laid in at least two courses, although it is not clear if the bottom was reached. The wall ran along the east side of the trench. Its east side was not found, but it was at least 1m wide.

Running along the south baulk of [A5], and only just within the trench, was wall (177) (Fig 48). It was overlain in the south-east corner by wall (178), although whether this means (178) was a later addition or simply later in a unitary phase of construction is unclear: certainly both were in use at the same time. Unlike either wall (178) or (29/63), this wall was constructed of well-squared worked stone, some of it simple limestone, some anhydrate (the so-called 'Mosul marble'). Some of these stones were large slabs; one was 1m long over another which was 40 cm thick. In the south-west corner there were at least three courses of stone standing 70 cm high, although again the base was not definitely reached. Next to them a large flat stone seemed to form a threshold 90 cm wide.

Because of lack of time, the fill (170) of the room defined by these walls could not be excavated with the care it warranted; essentially it was only loosened and all the visible sherds collected. A layer taken out above (170), (164), was partly contaminated by the later grave cuts and its finds are not considered here. The finds from (170) can be accepted with confidence as being from room fill, for several reasons. Assuming the top of the stone foundations was above floor level, (170) was above the base of the stones and only slightly above the top of the walls. Secondly, the deposit

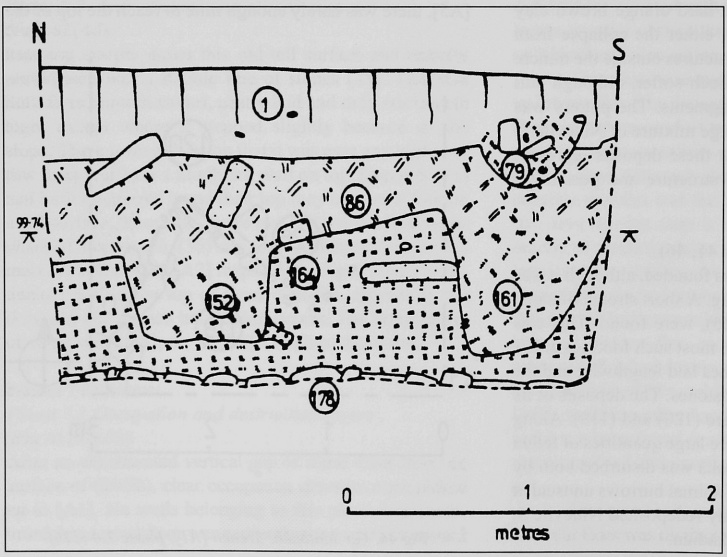


Fig 47. Gir Matbakh: Trench [A5], east section

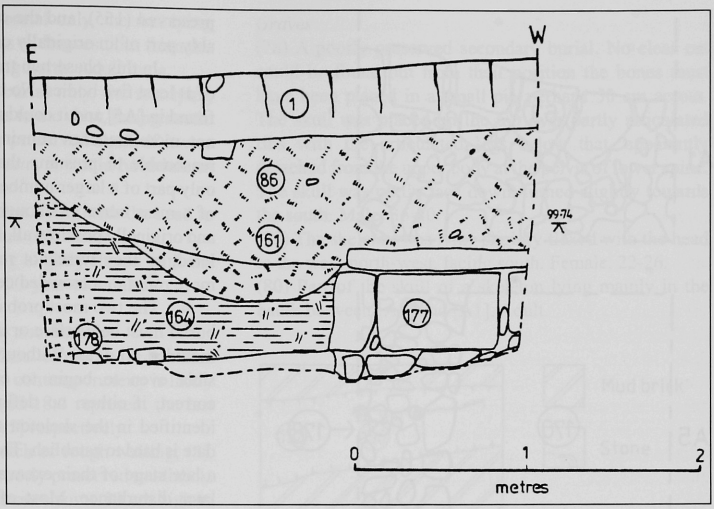


Fig 48. Gir Matbakh: Trench [A5], south section

was homogeneous and undisturbed, with organic inclusions, as might be expected in a room fill; it was certainly not structural in origin. Thirdly, only a small number of vessels were represented by large numbers of coarse Khabur sherds, including ones with fresh breaks for which no joins were found. Given that large portions of pots were retrieved, it can reasonably be argued that the portions of pots represented in the main complete or nearly complete vessels, possibly *in situ* in the room. The probable number of vessels was as follows:

1. At least four pot stands.
2. A large jar with the upper body painted in stripes.
3. Two jars with different styles of applied bands, the largest parts of which seem to have lain outside the trench to the west.
4. One or, possibly, two sieve vessels.

All of these are characteristic Khabur types.

Phase 8.2 abandonment

This building probably stood for a considerable period of time. After a quantity of brown silt (64) had accumulated against the exterior north wall, a single row of rounded stones (30) was placed along the north edge somewhat above the level of the top of the footing. This was probably to reduce erosion at the base of the mudbrick, now level with the exterior ground surface. If the pottery laid on top of the stone footings (53) can be taken to date the construction, and the room fill (170) to date the last occupation (in however general terms) the lifespan of the building would appear to have run from the late floruit of the Akkadian unpainted pottery through into that of the stripy painted Khabur.

Period 18 Late Islamic

Phase 18.1 graves and damaged structures (Fig 51)

This phase was recognised in [A1] but could not be clearly traced in [A5]. It may be broadly contemporary with Phase 18.2 in [A5] in that both were directly above the Period 8 structure, but this is conjectural. The only remains from this phase were a probable scrap of wall, three graves and one pit, which may itself have been the edge of a grave, all truncated and sealed by an old tell surface. Although there was a limited amount of stratigraphic differentiation amongst these features, they will be dealt with as the same phase because of associated remains.

A line of tightly packed stones (17) ran for about 85 cm out of the north baulk directly on the eroded top of the Period 8 building. It sealed a grave (24). Above and around this stretch of wall was a generally undistinguished deposit of compact silty clay. Cut through it in the south-west corner was a pit running for about 1m along the south baulk and about 30 cm deep. As it only extended some 20 cm into the trench it may have been a grave cut, the body (31) lying further to the north. It was sealed by silty deposit (11), which was present over all the small area of this phase excavated. Two graves, (46) and (95), cut the Period 8 wall to the south of this, and seem to have been truncated by the erosion which appeared to have accompanied a phase of abandonment following this phase. The tell surface (4) created by this erosion is hard with a white brittle layer on top, possibly formed by water action. Its relationship to the buried tell surface in [A3] and [A4] was not clear.

Graves

(24) Buried in a shallow cut, preserved to about 15 cm deep. The head of the skeleton was to the west facing south. Poorly preserved skeleton, age 3 years.

(46) A fairly well preserved burial in a cut at least 45 cm deep. The body was slightly flexed, lying with the head to the west, facing south. The skeleton is female, aged 22-6 years.

(95) Only one foot of this burial protruded into the trench. From its position, the body appears to have been placed with its head to the west and facing south. Adult skeleton.

The skeletal information for these and the following graves has been provided by Dianna Bolt. The full

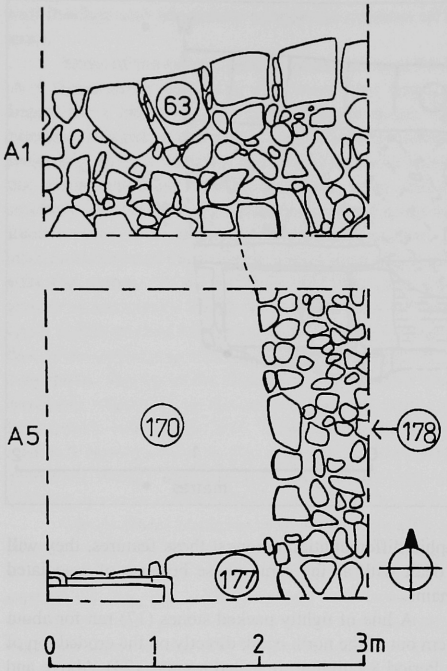


Fig 49. Gir Matbakh: Trenches [A1] & [A5], Phase 8.1 walls

report will appear in the specialist volume.

Phase 18.2 two mass burial trenches (Figs 47, 52)
In this phase, represented only in [A5], two cuts were dug across [A5]: (152) and (161). Cut (152) ran east/west across the north of the trench with both terminals outside the trench. Although its upper portion was badly damaged by later cuts, its lower part had well defined sides, especially visible in the east section where it was a typically well preserved, steeply sloping and with an almost flat bottom. There was no sign of gradual silting in the bottom and the soft fill contained large fragments of mudbrick, presumably from wall (178) which it had cut through. Both these points would support the conclusion that it was backfilled immediately after being dug.

There were at least three skeletons in this trench (156), (125) and (138); burial (124), which lay slightly higher than the clear cut but within its presumed upper bounds, was probably a fourth. All the skeletons lay with heads to the west and two faced south. The other cut (161) lay parallel to (152) across the southern part of the trench. In most respects it was very similar to (152), having straight, in places almost vertical, sides where they were better preserved, filled with soft earth containing many brick fragments. In it were two burials, one very poorly preserved (155), and the other only a skull (153), probably part of an originally complete burial.

In this phase two trenches were dug for the burial of at least five bodies. No terminals for the trenches were found in [A5] and it could not be assumed that there were not more trenches running parallel to the south. It is reasonable to presume that the excavated burials were only part of a larger number and that this was the remains of a mass burial. Although preservation was bad, most, and originally possibly all, the skeletons were fully articulated, so they were not reburials, for instance to make more room in a crowded cemetery.

The two most probable explanations for this mass burial must be warfare or disease, particularly since they included all ages. Without further analysis, it is impossible even to begin to establish which hypothesis is correct, if either: no definite evidence for disease was identified in the skeleton analysis by Dianna Bolt. The date is hard to establish. The cuts were not identified until a late stage of their excavation because of the degree of later disturbance. Most of the pottery which might be associated with them was probably contained in (123) which also contained the pottery from the disturbed walls of Period 8 but probably not much from later contamination. The skeletons' positions, as with most of the later Gir Matbakh burials, conform with Islamic practice, so it is probable, although not certain, that their burial falls somewhere late in the Islamic era. The position of the burials high in the stratigraphy supports this, and although not associated with the trenches the recovery of a small number of Late Islamic sherds from the surface of the site confirms that there was some activity in at least part of this period.

Burials
(124) A skeleton, lying slightly flexed with the head to the west, facing south. The line of a cut running close to the south side of the skeleton may have been the line of the upper part of (152). Male, 4 years old.

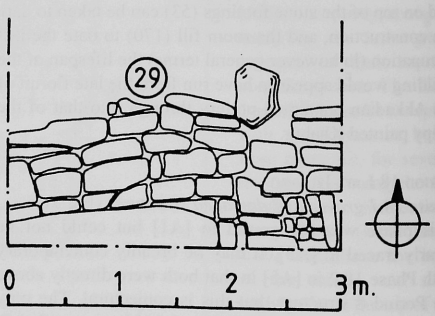


Fig 50. Gir Matbakh: Trench [A1], Phase 8.1 wall superstructure

(125) The lower portion of a burial only, the rest lying outside the trench. The head was to the west, but from the position of the legs, it was facing north. Adult male.
(138) The lower portion of a burial only, the rest lying outside the trench. The head was to the west, facing south.
(153) An isolated, very poorly preserved skull; if it was part of a skeleton destroyed *in situ*, it would have lain to the west, facing south. 11 years.
(155) A poorly preserved skeleton, lying with the head to the west, facing south. *c* 40 years old.
(156) A burial, 1.8m long, lying slightly flexed with the head to the west, facing south. 20-year-old male.

Phase 18.3 ephemeral building and burials
As with Phase 18.2, this phase cannot be correlated between [A1] and [A5]; general contemporaneity is likely but unprovable. Phases 18.3 and 18.4 represent the last tangible activity in [A1] and [A5] respectively.

In [A1] there was a stretch of rough walling, (5), built partly of stone, partly of poorly preserved mudbrick. Apart from a single course of stones some 30 cm high in the east of the trench, the bricks were preserved only to a height of 5-10 cm. It ran east/west along the edge of the tell directly on top of (4).

Two burials were found, both badly preserved and probably of children: (12) and (16). The main deposit of this phase, through which the graves may have been cut, was a 30-40 cm thick layer of slope wash, running down the side of the tell. Its top may have formed a tell surface; it certainly marked a distinct phase of slope wash before the formation of the present top soil.

Graves
(12) A very fragmentary burial, disturbed by animal burrows. From its size it must have been of a child. No clear orientation was preserved.
(16) Some bones and part of a skull protruding into the south-west corner of the trench. The burial appeared to have been oriented with the head to the east, but this was not certain. Adult.

Phase 18.4 burials and disturbed deposits (Fig 47)
This phase in [A5] was made up of a very disturbed layer cut by burials, mostly of sub-adults from the size of the skeletons. The deposit, which was not excavated with the burials, was recorded as (86); it was very mixed because the grave cuts usually could not be isolated due to the amount of disturbance. (86) included both earlier material, including mudbricks, which had been dug up and redeposited and later material carried down. Many of the burials were badly disturbed by other burials, and the use of this area for burials seems to have been long-lived, possibly associated with an undetected settlement near the tell. The general position of the bodies, with the head to the west, facing south, indicates a probable Islamic date for the burials. No other dating evidence was available.

Graves
(78) A poorly preserved secondary burial. No clear cut could be found but from their position the bones must have been placed in a small pit, perhaps 50 cm across. The skull was placed on the top over partly articulated ribs with the articulated legs below that, apparently detached from the upper body at the pelvis of lower spine. The skull was partly face down, turned slightly towards the south. Male, 36-40.
(79) The skeleton was lying slightly flexed with the head to the west-north-west, facing south. Female, 22-26.
(80) Part of the skull of a skeleton lying mainly in the baulk between [A5] and [A1]. Adult.

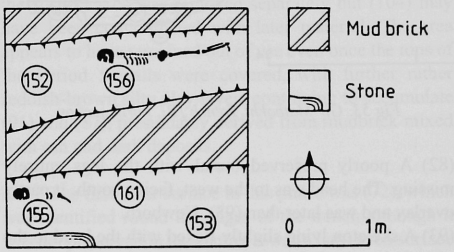


Fig 51. Gir Matbakh: Trench [A5], plan of Phase 18.2 late burials

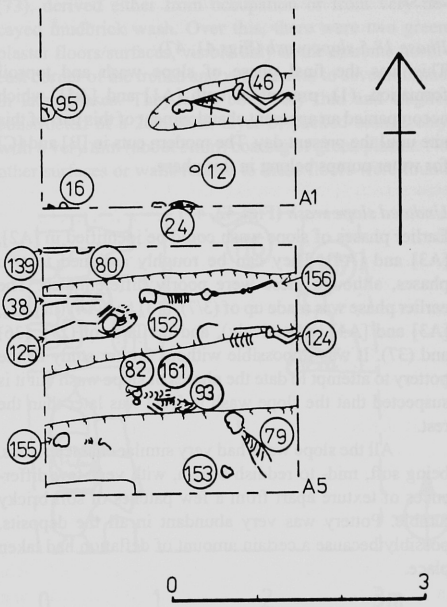


Fig 52. Gir Matbakh: Trenches [A1] & [A5], plan of Phase

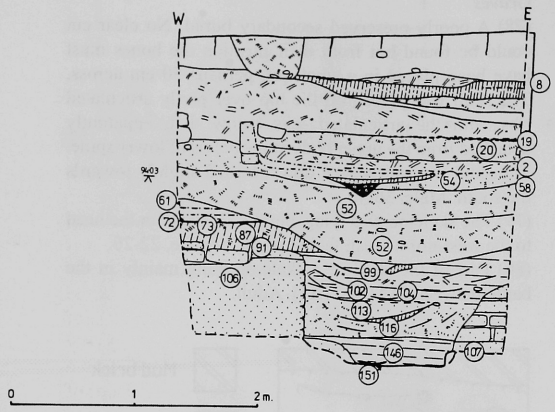


Fig 53. Gir Matbakh: Trench [B], north section

(82) A poorly preserved burial with the legs entirely missing. The head was to the west, facing south. It partly overlay and was later than (93). Newborn.
(93) A skeleton lying slightly flexed with the head to the west facing south. It was partly overlain by (82). 3 years.
(139) Part of the legs of a burial protruding into the trench, apparently lying with the head to the west. Male, 28-32.

Phase 18.5 slope wash (Figs 41, 47)
This was the final phase of slope wash and topsoil formation, (1), present in both [A1] and [A5], which accompanied an apparent abandonment of this part of this site until the present day. The modern cuts in [B] and [C] for water pumps belong in this phase.

Undated slope wash (Figs 42, 47)
Earlier phases of slope wash could be identified in [A2], [A3] and [A4]. They can be roughly assigned to two phases, although these were poorly differentiated. The earlier phase was made up of (3/7), (13) and (14) (in [A2], [A3] and [A4] respectively), and the later of (27), (36) and (37). It was impossible without further study of the pottery to attempt to date the phases of slope wash but it is suspected that the slope wash in [A1] was later than the rest.

All the slope wash had very similar characteristics, being soft, mid- to reddish-brown, with very few differences of texture apart from a few patches of soft bricky tumble. Pottery was very abundant in all the deposits, possibly because a certain amount of deflation had taken place.

THE [B], [C] AND [D] TRENCHES

(Figs 40, 53-60, Pl. 53)
When the fields around the tell were being irrigated, several cuts were made in the slopes of the tell to provide stances for water pumps above the level of the surrounding plain. The sections of two of these cuts were cleaned in the first few days of excavation and proved to cut through strata with Ninevite 5 pottery and to have associated architecture immediately below the surface. To augment the sequence in the [A] trenches it was decided to open up two small trenches here, [B] and [C] (approximately 3 x 3m and 2 x 4.5m, although the dimensions were partly decided by the existing cuts). Later a 4 x 4m trench, [D], was opened between them but slightly upslope to get a deeper, linked sequence.

PERIOD 5 LATER URUK

Phase 5.1 building and two modifications
(Figs 53-55, Pl. 53)
5.1-1 The lowest levels reached in this area consisted of two well preserved walls (106) and (107), and a good related surface (173), on which there was some Later Uruk material *in situ*. The walls appeared to be the corners of north/south and east/west walls, preserved up to a height of 1m. If wall (106) was indeed the corner of two walls, rather than a platform base, it must have been at least 1m wide; wall (107) need only have been 50 cm wide. However, in neither case was the full width of the wall exposed. Both walls were of very similar construction, with a single foundation course of large stones, laid on or about the same level as the contemporary surface with courses of mudbrick above. The bricks were approximately 27 x 12 x 9 cm and did not appear to have been laid in a totally systematic manner, although the wall faces were smooth and vertical; this was probably because the walls were excavated only at the corners.
The surface (173) which appeared to be contemporary with the walls was made up of a very thin layer of orange clay over earlier hard-packed deposits which were not excavated. It is likely that the orange layer was deliberately laid as it was of very even thickness and nature wherever it was preserved in the trench; had it been accidentally laid either during the construction of the walls or during the initial use of the building it might have been expected to be less homogeneous and level. In the centre of the trench, away from the walls, the orange layer was absent, presumably worn away by activity in the area.

On the surface next to wall (106) was the rounded base of a large coarse vessel with half of a Later Uruk broken bowl wedged beneath it, apparently to keep it level (151). In the south of the trench was a small pit (174), with a socketed stone in it. It may have been deliberately aligned with the east face of wall (106), possibly indicating a doorway to the south of the wall, which would fit well with the wear pattern observed on the orange clay surface.

5.1-2 In this sub-phase, a wall (172) was added (Fig 54), probably running along the south face of wall (106). Its nature could not be certainly established because it projected only about 5 cm into the trench. It was only 27 cm thick but was preserved to a height of 90 cm, with bricks of the same size as those used in Phase 5.1-1. It may have been some form of revetment or facing to wall (106).

By this stage a small amount of occupation deposit (146) had built up on the original surface, especially in the south-west corner where it was perhaps 3-4 cm thick. In the corner formed between the end of wall (172) and the south face of wall (106) was found a possible stamp or seal <901>, in a position which suggested it was probably lost or deliberately hidden rather than simply discarded.

5.1-3 After a time in which more occupation debris built up (still excavated as (146), or (132) along the east baulk where it was thicker) a further wall was added, represented only by the foundation stones (105), abutting wall (106) (Fig 55). (105) was made up of rows of large rough-surfaced limestone blocks laid to provide an approximately horizontal surface for further building in mudbrick. The total width was about 70 cm. There was a little mudbrick debris among the stones, probably used for levelling, but no sign of any superstructure of mudbrick on these stones. It could not be determined whether this wall was ever finished, or whether its bricks were removed for reuse. Since the level of the foundation course was below the preserved top of wall (106), one might have expected any upper part of wall (105) to have been similarly preserved. There was no occupation deposit associated with this level and any doorway to the south of wall (106) must have been disused by this time.

PERIOD 6: NINEVITE 5

Phase 6.1 phase of non-architectural use (Fig 53)

6.1-1 At the start of this phase the buildings of Period 5 were disused and a series of deposits were starting to build up over (146) in the area between the walls. The first was a thick (c 5 cm) layer of fallen mudbrick (113) and (116), with some incomplete bricks visible within it, but also with ashy lenses and clear tip lines indicating a gradual decay of the building rather than a sudden collapse. Similar layers accumulated in the area with increasingly decayed mudbrick intermixed with heterogeneous deposits (99), (102) and (104).

Unfortunately, there may have been a pit in the south of this trench cutting through these layers; most of the suspect area was removed separately but (104) may have been contaminated with later material. The area appears to have remained out of use even once the tops of the Period 5 walls were covered, with further rather reddish-brown silty clay layers continuing to accumulate (91) and (87), presumably derived from mudbrick mixed with ash and dark deposits.

6.1-2 The first clear surface in this phase was (72), which was identified round the edges of the trench although it was not preserved in the centre. It was a hard even surface with no associated features except for an almost complete Later Uruk spouted pot <913>, halfway along the west baulk. The surface was covered by a thin layer of deposit (73), derived either from occupation or from very decayed mudbrick wash. Over this, there were two green plaster floors/surfaces, visible only in the extreme north-east corner of the trench and very similar to several found in later phases. They were both very thin and fragile, constructed of a 2cm-thick layer of packed orange clay with a very thin (about 3mm) coating of green plaster. No other surfaces or walls related to these floors were found

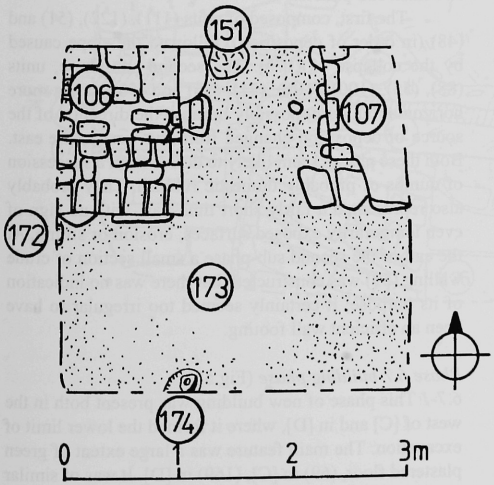


Fig 54. Gir Matbakh: Trench [B], Phase 5.1 plan

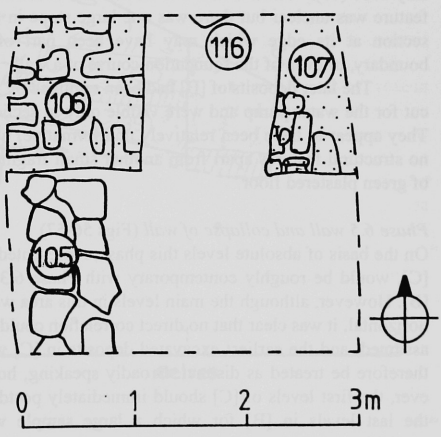


Fig 55. Gir Matbakh: Trench [B], Phase 5.1 plan

except in the south-east corner where pebbles and sherds were laid flat, indicating a possible surface in a position in which it would not have been destroyed by later disturbance. The later deposits of this phase make up a composite unit (61).

Phase 6.2 cut and fill (Fig 53)
Most of the deposits of the preceding phase were removed by a shallow cut (52) in the centre of the trench. The fill of the hollow formed by this cut was markedly soft and silty and the bottom had fine dense silting lines. Presumably this hollow filled up gradually through silting during a period when there was no active use of this part of the site. The top of these deposits had a hard crust (58), probably where (52) was exposed for some time, although it was not sufficiently well defined to indicate activity. Above (58) harder deposits, possibly mudbrick wash, built up and were excavated as (54). By this point, the extent of the deposits within the trench was severely limited by the cut for the water pump platform.

Phase 6.3 building (Fig 53)
On top of (54) there was a small section of building best illustrated by the section in Figure 53. The wall, only some 25 cm thick, was made of mudbrick and resembled all the walls of definite Ninevite 5 date on the site in having no stone foundation. The floor of this building (2) was of green plaster which also ran up the inner wall face to its preserved height of 35 cm. This green plaster coating was only about 5 mm thick and at least three replasterings had taken place.

Phase 6.4 floor (Fig 53)
After a phase of infilling over this floor (20), another floor/surface of a completely different nature was constructed. It was made up of pebbles densely packed into a clay base (19). Whether this was an internal or external feature was unclear but there was one large stone in the section at its edge which may have been part of a boundary, or even of the foundation course of a wall.

The later deposits of [B] had been removed by the cut for the water pump and were visible only in section. They appear to have been relatively uninformative, with no structural features apart from another small fragment of green plastered floor.

Phase 6.5 wall and collapse of wall (Figs 56-57)
On the basis of absolute levels this phase, represented in [C], would be roughly contemporary with Phase 6.3 in [B]. However, although the main levels in this area were horizontal, it was clear that no direct correlation could be assumed, and the earliest excavated deposits in [C] will therefore be treated as distinct. Broadly speaking, however, the first levels of [C] should immediately postdate the last levels in [B] for which a large sample was available.
6.5-1 The earliest phase in [C] was visible only as a wall in the east section, exposed during the final section-cleaning. This seemed to consist of two walls with a blocked doorway (176). The brick size was (on a rather approximate estimate) 35 x 14 x 11 cm, notably different from the consistent size of Phases 6.1 to 6.3. The doorway was 90 cm wide and from the very indistinct bricks and the angle of the courses may have been blocked by collapse from the upper structure of the wall. No deposits clearly associated with this wall were excavated but it is probable that the deposit to the west (150) was occupation build up contemporary with the use of the wall, at least in its last phase, since it was sealed by the collapse of the wall (94) and (110), in Phase 6.5-2. Some other rather ephemeral structural units were appearing when excavation ceased which may relate to this phase. An area of pebble surfacing similar to (19) in [B] existed in the north-east of the trench and a tightly packed group of stones visible in the north section west of (150) may have been structural.

6.5-2 During this phase, the building represented by (176) collapsed and the mudbrick tumble and wash from it sloped away from the east section. It was removed in two spits (94) and (110). Both of these were pure brick collapse and wash with little or no occupation debris. There could have been a hiatus at this point in the sequence, but stratigraphically there was no positive evidence for one.

Phase 6.6 gradual build up of soft deposits (Fig 56)
6.6-1 and 6.6-2 Following the collapse of (176) at the end of the preceding phase there seems to have been a period of gradual accumulation characterised by many localised soft deposits of non-structural origin. This occurred in two main sub-phases.

The first, composed of units (111), (122), (51) and (48) (in order of deposition), followed the slope caused by the collapse of (176). The second sub-phase, units (88), (55), (100), (101), (71), (56) and (50), saw a more horizontal build up, possibly because the direction of the source of deposition changed from the west to the east. Both these phases seem likely to derive from a succession of dumps of probably domestic rubbish. They probably also represented a fairly short timespan, with no sign of even temporarily exposed surfaces, erosion or silting. At the end of the second sub-phase a small section of crude walling (59) was constructed, but there was no indication of its purpose; it certainly seemed too irregular to have been an efficient wall footing.

Phase 6.7 building phase (Fig 58)
6.7-1 This phase of new building was present both in the west of [C] and in [D], where it formed the lower limit of excavation. The main feature was a large extent of green plastered floor, (69) in [C], (169) in [D]. It was of similar construction to those of Phases 6.1-2 and 6.3 in [B] with a thin layer of red-brown clay topped by green plaster

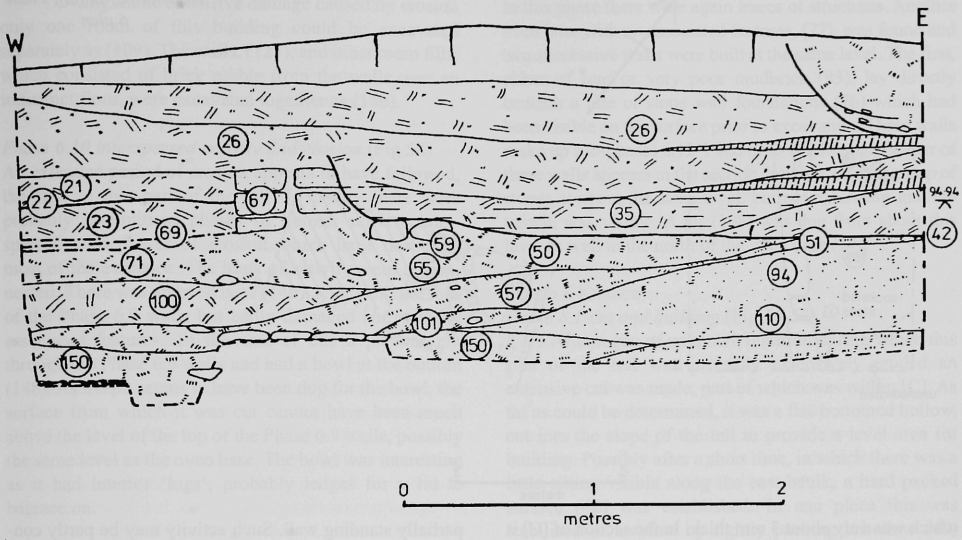


Fig 56. Gir Matbakh: Trench [C], north section

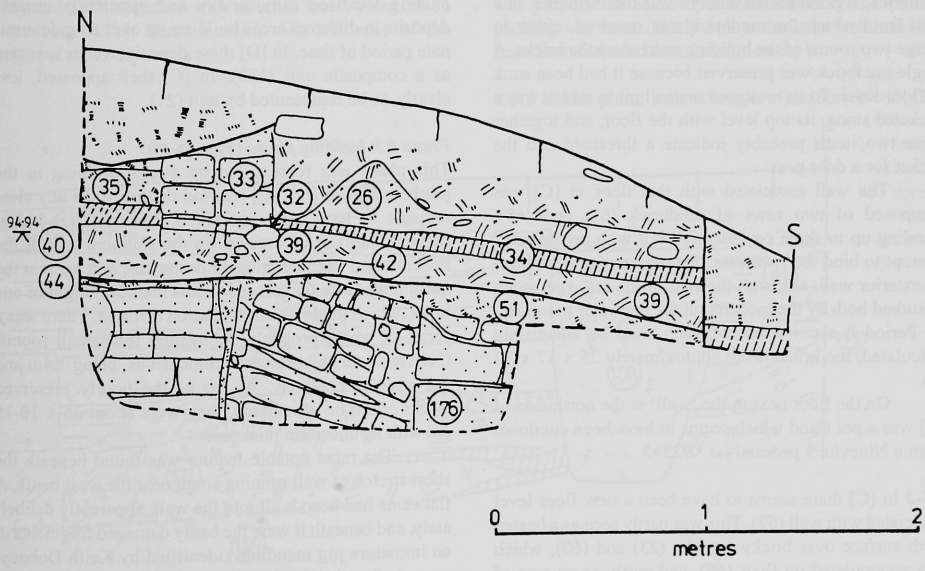


Fig 57. Gir Matbakh: Trench [C], east section

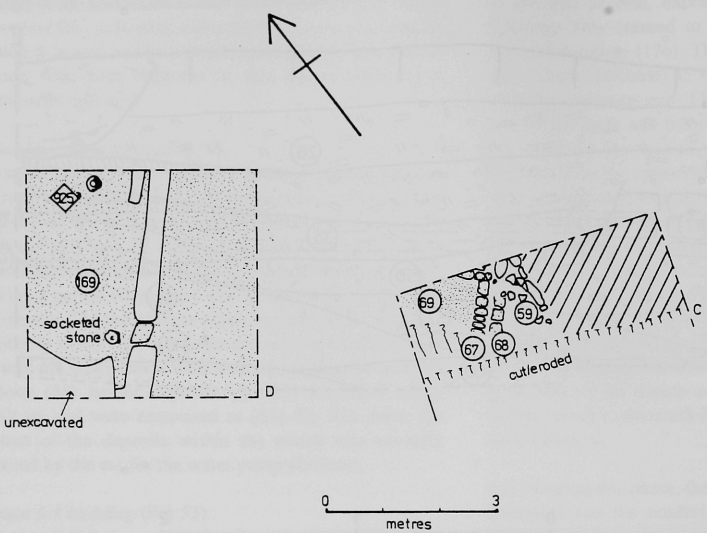


Fig 58. Gir Matbakh: Trenches [C] & [D], Phase 6 plan

which was only about 3 mm thick. In the section of [C] it was clear that the floor had been twice resurfaced close to wall (67/68).

In [D] there was a linear strip 35-50 cm wide and bare of plastering (175), running north/south across the trench. Except at one point there was no evidence of mudbrick. It is suggested that this was the 'negative' of a wall from which the mudbrick was removed, either to merge two rooms of the building or to reuse the bricks. A single mudbrick was preserved because it had been sunk to floor level. To its west was a small pit in which was a socketed stone, its top level with the floor, and together these two items probably indicate a threshold and the socket for a door post.

The wall associated with this floor in [C] was composed of two rows of mudbrick (67) and (68), standing up to three courses high but with no apparent attempt to bind the two rows. This appears to have been an exterior wall, although the area to the east was much disturbed both by the modern cut for the water pump and by Period 8 activity. Where they could be adequately articulated, the bricks were approximately 25 x 17 x 12 cm.

On the floor next to the 'wall' at the north side of [D] was a pot stand which seems to have been cut down from a Ninevite 5 pedestal jar <925>.

6.7-2 In [C] there seems to have been a new floor level associated with wall (67). This was partly seen as a beaten earth surface over bricky tumble, (23) and (60), which had accumulated on floor (69), and partly as an area of large horizontal sherds (22). As this surface could not be detected in [D], and overlay bricky tumble, it may simply have represented some form of activity in the lee of a still partially standing wall. Such activity may be partly contemporary with Phase 6.8 in [D].

Phase 6.8 phase of abandonment (Fig 58)
In [D] there followed a phase of abandonment, similar to Phase 6.6 in [C], with very heterogeneous deposits including localised ashy, bricky and apparently organic deposits in different areas building up over an indeterminate period of time. In [D] these deposits were excavated as a composite unit (133). In [C] they appeared, less clearly, to be represented by unit (21).

Phase 6.9 building phase (Figs 58-60)
This phase was represented by a new building in the northern half of [D]; [C] was too disturbed for any clear remains to have been preserved. Even in [D] it had suffered badly from erosion. In the southern half of the trench it had been completely destroyed, and even in the north it was often preserved to less than the height of one brick, which made its interpretation difficult. There was a series of walls, probably delineating four small rooms. Only two had any preserved dimensions, being 1.4m and 1m wide respectively. As far as the poorly preserved bricks could be articulated, they were about 35 x 10-15 cm with an uncertain thickness.

The most notable feature was found beneath the short stretch of wall running south near the west baulk. A flat stone had been built into the wall, apparently deliberately, and beneath it were the badly damaged fragments of an immature pig mandible (identified by Keith Dobney) on a surface level with the one on which the wall was built. From its position, and from the way the mudbricks were shaped around it, there can be little doubt that this was some sort of foundation deposit built into the base of

the wall. It was numbered unit (149).

Owing to the extensive damage caused by erosion only one room of this building could be excavated separately as (109). The walls, (127), and other room fills, which consisted of brick rubble from the walls over an indistinct floor, were excavated together as (136).

Phase 6.10 interspersed activity and erosion (Fig 58)
An extended period of erosion appears to have followed, the first in this part of the tell. In reality there were probably intermittent phases of human activity interspersed with phases of erosion which have destroyed most of the evidence. The hints of activity were disconnected. There was an oven base (140), level with the tops of the Phase 6.9 walls but badly damaged and with no associated features. To the east of this a pit was cut through the Phase 6.9 walls and had a bowl at the bottom (148). As the pit seems to have been dug for the bowl, the surface from which it was cut cannot have been much above the level of the top of the Phase 6.9 walls, possibly the same level as the oven base. The bowl was interesting as it had interior 'lugs', probably ledges for a lid to balance on.

Phase 6.11 build up of deposits of unknown origin (Fig 58)
After these nebulous traces of structures there was a considerable depth of relatively undistinguished deposits containing predominately Ninevite 5 material, (98), (92), (75) and (81), together with another small scrap of an oven base (171). There was no clear evidence of the origin of these deposits.

Phase 6.12 fragmentary building (Figs 58-59)
In this phase there were again traces of structures. Another oven base with no associated features, (77), was found and two successive walls were built at the same level. The first, either of *tauf* or very poor mudbrick (83), lay directly beneath a line of stone wall foundations (76) which had been visible on the surface prior to excavation. These walls make up sub-phases 6.12-1 and 6.12-2. Although neither of these walls appears in the section drawing another group of stones at about the same level, but not extending into the trench, was visible. A pit (108) was dug from about this level as well to the north of the oven base (77).

PERIOD 8 KHABUR
Phase 8.1 cut and building (Fig 56-57)
8.1-1 After a gap of unknown duration during which this side of the tell was probably extensively eroded an extensive cut was made, part of which was within [C]. As far as could be determined, it was a flat-bottomed hollow, cut into the slope of the tell to provide a level area for building. Possibly after a short time, in which there was a little silting visible along the east baulk, a hard packed surface (42) was established. In one place this was stabilised or levelled by tightly packing a hollow (40) with potsherds; some 729 very small sherds were found in an area only 80 x 30 cm and about 10 cm thick. These sherds date the surface firmly to the Khabur period. It was not clear whether this surface was established for some time before the subsequent phase of building or whether it was part of the same operation; certainly the pottery packing was immediately below the later wall and may have been intended as a foundation for it.

8.1-2 In this phase a short length of mudbrick wall (33)

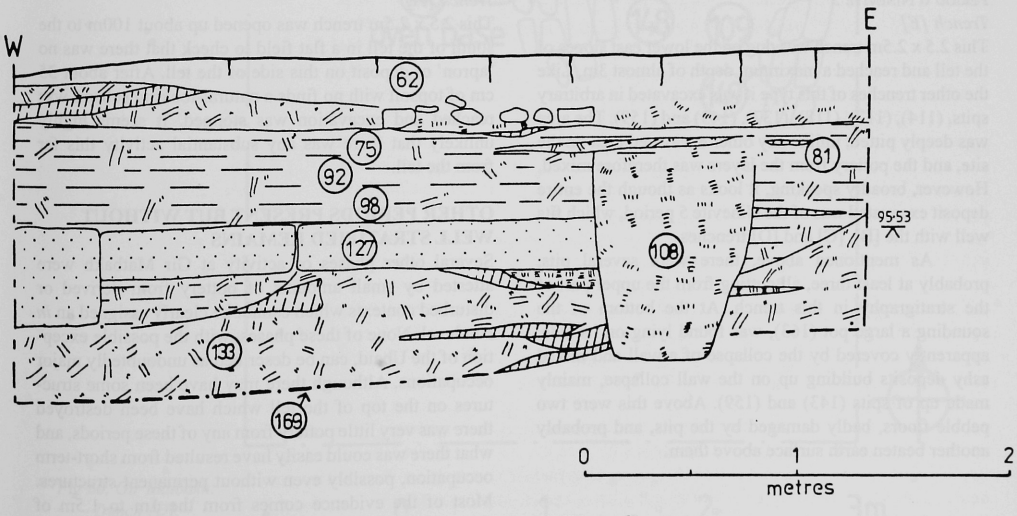


Fig 59. Gir Matbakh: Trench [D], north section

protruded into the trench. This wall was two, perhaps three, rows of bricks wide but was poorly preserved within the trench. The brick size was roughly 25 x 25 x 15 cm. There was also a short line of stones (32), which may have been a foundation course, running at an angle to the mudbrick wall but slightly underlying it. However, too small an area was excavated for further interpretation to be possible. The deposits around these features were (34), (35) and (39). (39) probably preceded the wall and the other two were slightly later.

Phase 8.2 fragmentary and mixed deposits (Fig 56)
No clear units were isolated above this, and the constituent units of this phase (26), (25), (9) and (10), were mixed and poorly stratified, though containing mainly Khabur sherds. At the base of (9), which was made up of the layers disturbed by the cut for the water pump, was a skeleton. It was in a fragmentary condition with no visible grave cut. The jaw had been moved about 15 cm after burial, and several ribs and the lower legs were missing. It seemed adult in size, buried crouched facing north with the head to the east; the arms were bent with the hands up to the mouth.

OTHER TRENCHES [E] TO [H] (Fig 40)
Four other trenches, [E]-[H], were laid out in the latter stages of the excavation when a number of extra workmen were available. The general aim of these trenches was to gain more information on the extent of the tell, and potentially its extent in different periods, with relatively unsupervised excavation. Within these aims the trenches achieved their purpose, albeit largely by demonstrating what was already expected.

Period 6 Ninevite 5
Trench [E]
This 2.5 x 2.5m trench was dug on the lower east slopes of the tell and reached a maximum depth of almost 3m. Like the other trenches of this type it was excavated in arbitrary spits, (114), (117), (118), (137), (143) and (159). The area was deeply pitted, unlike any other excavated area on the site, and the pottery from the layers was therefore mixed. However, broadly speaking, it looks as though the entire deposit excavated was of the Ninevite 5 period, which fits well with the [B], [C] and [D] trenches.

As mentioned above, there were several pits, probably at least three, all cutting from the upper part of the stratigraphy in this trench. At the bottom of the sounding a large pot (163), was found lying on its side, apparently covered by the collapse of a wall and mixed ashy deposits building up on the wall collapse, mainly made up of spits (143) and (159). Above this were two pebble floors, badly damaged by the pits, and probably another beaten earth surface above them.

Period 8 Khabur
Trench [F]
This 1.5 x 1.5m trench was excavated to the south-west of [B], [C] and [D] to establish the depth and nature of the stratigraphy where the tell merged with the surrounding fields, above the point where modern ploughing has disturbed the deposits. It was 1.5m deep at its maximum where hard natural was found, very similar to that found at the north side of the tell. Until it started to merge into this natural from about 1m down, the fill of this trench, (131) and (135), was almost entirely soft dark brown loam with occasional potsherds. Below this depth, the fill (145) became gradually harder until it merged entirely into the natural. Occasional potsherds were found down to the top of natural. There were no clear indications of structures although there were a number of large stones which could have been the remains of wall foundations and in one place there was a large lump of clay on one of the stones.

The deposits here seemed largely, though not necessarily entirely, derived from further up the slope, and confirm the suspicion that the occupation of the tell never extended substantially into the fields surrounding it. Although mixed, the pottery was mainly Khabur.

Undiagnostic
Trench [G]
This 2.5 x 2.5m trench was positioned north-west of the tell to test whether there was any surviving stratigraphy there. After only 0.5m of dark brown silty topsoil with a few rolled potsherds from thoroughly mixed contexts (144), natural was reached. There was no indication that there had ever been any *in situ* deposits here.

Trench [H]
This 2.5 x 2.5m trench was opened up about 100m to the south of the tell in a flat field to check that there was no 'apron' of deposit on this side of the tell. After about 35 cm of topsoil with no finds a natural-looking subsoil was reached and excavation was stopped. It seems highly unlikely that there was any substantial activity this far from the tell.

OTHER PERIODS PRESENT BUT WITHOUT WELL STRATIFIED REMAINS
Several other phases of activity at Gir Matbakh were attested by small amounts of pottery from derived or disturbed contexts which cannot be clearly assigned an *in situ* level. None of these phases, with the possible exception of the Ubaid, can be described as undoubtedly major occupations. Although there may have been some structures on the top of the tell which have been destroyed there was very little pottery from any of these periods, and what there was could easily have resulted from short-term occupation, possibly even without permanent structures. Most of the evidence comes from the 1m to 1.5m of deposit on the top of the tell where any structural evi-

dence has been destroyed by erosion, soil formation processes and especially by the large number of late graves. These indistinct periods of occupation will be dealt with in chronological order.

It must also be pointed out that at the time of writing the final pottery analysis was incomplete, so precise figures for quantities of pottery will not be given, and it is quite possible that some minor occurrences of pottery types have been omitted.

Period 3: Ubaid

A number of residual Ubaid sherds were found in derived contexts. Most came from the Later Uruk contexts in [B] and there were a few from the earliest slope wash from [A2]. These contexts would fit well with the presence of an initial Ubaid settlement on the site which was not reached during excavation. It was probably situated on the south slope of the original mound, since there were very few Ubaid sherds from the layers just above natural in [A3].

Period 13: Hellenistic

Several sherds of Hellenistic pottery came from the same disturbed deposits on top of the tell, (86) and (123), and from the latest slope wash at the top of the north slope of the tell, (6).

Period 14 Partho-Roman

At least one good sherd of Terra Sigillata came from the disturbed layers on top of the tell (86) and (123). This and other Roman material from the area has been discussed elsewhere (B Campbell 1989).

Period 14 Sasano-Byzantine

Several Sasano-Byzantine sherds came from the same contexts (86), (123), (6), (11), as the Roman and Hellenistic material.

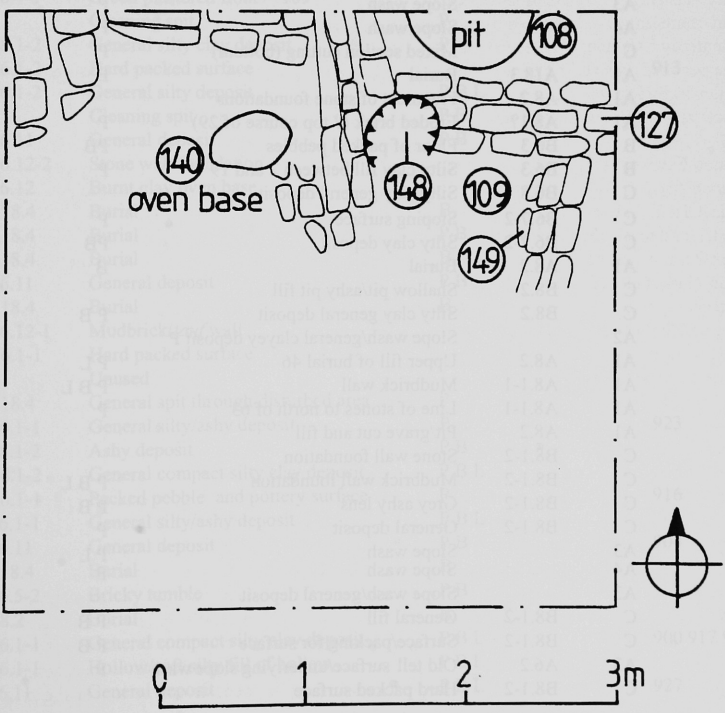


Fig 60. Gir Matbakh: Trench [D], Phase 6.9 plan

SECTION 4
CONCORDANCES

This section is intended to provide a quick reference to the contexts excavated to facilitate use of the different parts of this report and the corresponding pottery report and illustrations. The concordances take the form of three lists: units, phases and small finds. In the list of units, each entry consists of the context and trench numbers followed by the phase, a brief context description, a summary of the types of bulk finds (Samples) and the numbers of any small finds from the context. The phase concordance gives the number of all the units in each phase. The small finds concordance lists the registration number, description, Iraq Museum number, unit and phase of each small find.

Phases are indicated by the system used in Section 2, prefaced by A for the [A] trenches and B for the [B], [C] and [D] trenches.

Abbreviations

P = pottery, B = bone, L = lithics, S = shell, IM = Iraq Museum

Units

Context	*Trench*	*Phase*	*Description*	*Samples*	*Small finds*
1	A1	A18.5	Topsoil/slope wash	P	
2	B	B6.3	Floor	P	
3	A2		Topsoil/ slope wash	P	
4	A1	A8.2	Old tell surface		
5	A1	A18.3	Ephemeral wall	P	
6	A1		Slope wash/ bricky wash	P	
7	A2		Slope wash	P	924
8	B		Mixed section cutting	P	
9	C	B8.2	Mixed section cutting (top)	P L	914
10	C	B8.2	Burial	PB	
11	A1	A8.2	General silty deposit	P	
12	A1	A18.3	Burial	B	
13	A3		Slope wash	P	
14	A4		Slope wash	P	
15	C		Mixed section cutting (bottom)	P	
16	A1	A18.3	Burial	B	
17	A1	A8.2	Fragment of stone foundations		
18	A1	A8.1?	Eroded brick (? top course of 29)	P	907
19	B	B6.3	Floor of packed pebbles	PB	
20	B	B6.3	Silty clay fill between 2 and 19	P	
21	C	B6.8	Silty clay general deposit		
22	C	B6.7-2	Sloping surface	P	
23	C	B6.7-2	Silty clay deposit	PB	
24	A1	A8.2	Burial	B	
25	C	B8.2	Shallow pit/ashy pit fill		
26	C	B8.2	Silty clay general deposit	P B	
27	A2		Slope wash/general clayey deposit P		
28	A1	A8.2	Upper fill of burial 46	P L	
29	A1	A8.1-1	Mudbrick wall	P B L	
30	A1	A8.1-1	Line of stones to north of 63	P	915
31	A1	A8.2	Pit/grave cut and fill		
32	C	B8.1-2	Stone wall foundation		
33	C	B8.1-2	Mudbrick wall foundation	P B L	
34	C	B8.1-2	Grey ashy lens	P B	
35	C	B8.1-2	General deposit	P	
36	A3		Slope wash	P L	
37	A4		Slope wash	P	919
38	A3		Slope wash/general deposit		
39	C	B8.1-2	General fill	P B	
40	C	B8.1-2	Surface/packing for surface	P B	902 903 921
41	A3	A6.2	Old tell surface/underlying slope wash	P	
42	C	B8.1-2	Hard packed surface		

Context	*Trench*	*Phase*	*Description*	*Samples*	*Small finds*
43	A2	A5.2	Rough stone wall		
44	C	B6.7	Clayey silt deposit	P	918
45	A3	A6.2	Double line of stone		
46	A1	A6.7	Burial B		
47	A2		Natural		
48	C	B6.6-1	Ashy deposit		
49	B	B6.2	Arbitrary cleaning spit	P B	
50	C	B6.6-2	Silty clay deposit	P B L	
51	C	B6.6-1	Soft, silty deposit	P B	
52	B	B6.2	Hollow/soft, silty fill of hollow	P B S	926
53	A1	A8.1-1	Levelling deposit on top of 63	P B S	
54	B	B6.2	General deposit	P B L	
55	C	B6.6-2	General silty clay deposit	P B	
56	C	B6.6-2	General silty clay deposit		
56	A4		Natural		
58	B	B6.2	Hard packed surface		
59	C	B6.6-2	Stone wall foundation		
60	C	B6.7-2	Bricky rubble	P	
61	B	B6.1-2	General silty clay deposit	P B	
62	D		Topsoil	P L	
63	A1	A8.1-1	Stone wall foundation	P	
64	A1	A8.1-2	Exterior silty deposit north of 63	P B	
65	A3	A6.1-2	General silty clay deposit	P	
66	A3	A6.1-2	General silty clay deposit	P B	
67	C	B6.7-1	Mudbrick wall	P B L	
68	C	B6.7-1	Mudbrick wall	P B L	
69	C	B6.7-1	Green plastered floor = 169		
70	C		Cleaning spit	P	
71	C	B8.1-2	General silty clay deposit	P	
72	B	B6.1-2	Hard packed surface		913
73	B	B6.1-2	General silty deposit	P B L	
74	B		Cleaning spit	P B	
75	D	B6.11	General deposit	P B	
76	D	B6.12-2	Stone wall foundation		
77	D	B6.12	Burnt clay oven base		
78	A5	A18.4	Burial	B	
79	A5	A18.4	Burial	P B	
80	A5	A18.4	Burial	B	
81	D	B6.11	General deposit	P B	
82	A5	A18.4	Burial	B	
83	D	B6.12-1	Mudbrick/*tauf* wall		
84	A3	A6.1-1	Hard packed surface		
85			Unused		
86	A5	A18.4	General spit through disturbed area	P	
87	B	B6.1-1	General silty/ashy deposit	P	923
88	C	B8.1-2	Ashy deposit	P B	
89	A3	A6.1-2	General compact silty clay deposit	P B L	
90	A3	A6.1-1	Packed pebble and pottery surface	P	916
91	B	B6.1-1	General silty/ashy deposit	P B L	
92	D	B6.11	General deposit	P B	904
93	A5	A18.4	Burial	B	
94	C	B6.5-2	Bricky tumble	P B	
95	A1	A8.2	Burial	B	
96	A3	A6.1-1	General compact silty clay deposit	P B L	900 917 922
97	A3	A6.1-1	Hollow/soft silty fill of hollow	P B L	
98	D	B6.11	General deposit	P B L	927

Context	*Trench*	*Phase*	*Description*	*Samples*	*Small finds*
99	B	B6.1-1	General deposit	P B	
100	C	B6.6-2	General deposit	P B S	
101	C	B6.6-2	General deposit second spit of 100	P B	
102	B	B6.1-1	General deposit	P B L	
103	A1	A7.4/6.8.1	Cleaning spit	P	
104	B	B6.1-1	General deposit/possible pit and fill	P	
105	B	B5.1-3	Stone wall foundation		
106	B	B5.1-1	Mudbrick wall		
107	B	B5.1-1	Mudbrick wall	P B L	
108	D	B6.12	Pit/pit fill	P B	
109	D	B6.9	Silty clay room fill	P	
110	C	B6.5-2	Bricky tumble	P B L	910
111	C	B6.6-1	General silty clay deposit	P B L	
112	A3	A5.1-4	General silty clay deposit with ash	P L	
113	B	B6.1-1	Bricky tumble/General deposit	P B L	
114	E		Spit 1 to -0.50m	P L	
115	A3	A5.1-4	General compact silty clay deposit	P B L	
116	B	B6.1-1	Ashy lens within 113		
117	E		Spit 2 to -1.00m	P L	931
118	E		Spit 3 to -1.50m	P L	911
119	A1	A7.4	Room fill	P L	
120	A1	A7.4	Exterior fill with brick tumble	P B L	932
121	A3	A5.1-3	Compact silty clay general deposit	P B L	
122	C	B6.6-1	General deposit in hollow	P B LS	
123	A5	A18	General deposit around burials	P B	
124	A5	A18.2	Burial	B	
125	A5	A18.2	Burial	P B	
126	A1	A7.4	Stone wall foundation		
127	D	B6.9	Mudbrick walls		
128	A3	A5.1-2	Hollow/ashy fill of hollow	P B LS	
129	A3	A5.1-2	General silty clay deposit	P B L	
130	A3	A5.1-1	? remains of fire installation	P	905 920 936
131	F		Spit 1 to -0.50m	P L	
132	B	B5.1-3	Exterior fill	P B L	
133	D	B6.8	General deposit/mixed deposits	P B L	909 929
134	A3	A5.1-1	General silty clay deposit	P L	930
135	F		Spit 2 to -0.50m	P L	933 934
136	D	B6.9	Mudbrick of 127	P B L	908 928
137	E		Spit 4 to -2.00m	P L	
138	A5	A18.2	Burial	B	
139	A5	A18.4	Burial	B	
140	D	B6.10	Burnt clay oven base		
141			Unused		
142	C		Topsoil	P L	
143	E		Spit 5 to -2.45m	P L	
144	G		Spit	P	
145	F		Spit 3 to -1.50m	P	
146	B	B5.1-1	Exterior fill	P B L	901 906 912 938
147	A1	A7.3	General soft silty clay deposit	P B LS	
148	D	B6.10	Pit with pot in it	P	
149	D	B6.9	Foundation deposit of pig jaw	B	
150	C	B6.5-1	General deposit	P B	
151	B	B5.1-1	*In situ* pot base	P	
152	A5	A18.2	Linear burial trench		
153	A5	A18.2	Burial	B	
154	A1	A7.3	Mudbrick tumble/wash	P B L S	935

Context	*Trench*	*Phase*	*Description*	*Samples*	*Small finds*
155	A5	A18.2	Burial	B	
156	A5	A18.2	Burial	B	
157	A1	A7.2	Soft room fill?	P B	
158	A1	A7.2	Soft exterior fill?		
159	E		Spit 6 to -2.9m	P L	
160	A1	A7.1	Ashy/clayey room fill	P B L	937
161	A5	A18.2	Linear burial trench and fill	P	
162	A1	A7.2	Stone wall foundation		
163	E		Pot and contents within 159		
164	A5	A8.1	General deposit/top of 170	P L	
165	A1	A7.1	Hard packed floor of clay		
166	A1	A7.1	Burial of infant in pot	P	938
167	A1	A7.1	*Tannur*	P B	
168	A1	A7.1	Concentration of sherds	P L	
169	D	B6.7-1	Green plastered floor = 69		925
170	A5	A8.1	Soft room fill	P L	
171	D	B6.11	Burnt clay oven base		
172	B	B5.1-2	Mudbrick wall		
173	B	B5.1-1	Laid clay surface		
174	B	B5.1-1	Pit with door socket		
175	D	B6.7-1	Wall?		
176	C	B6.5-1	Mudbrick wall with doorway		
177	A5	A6.6-1	Stone wall foundation		
178	A5	A6.6-1	Stone wall foundation		

Phases

Phase	*Units*
A5.1-1	130 134
A5.1-2	128 129
A5.1-3	121
A5.1-4	112 115
A5.2	43
B5.1-1	104 107 146 151 173 174
B5.1-2	172
B5.1-3	105 132
A6.1-1	84 90 96 97
A6.1-2	65 66 89
A6.2	41 45
A6.6-1	122 177 178
A6.7	46
A6.8	103
B6.6-1	87 91 99 102 104 113 116
B6-1-2	61 72 73
B6.2	49 52 54 58
B6.3	2 19 20
B6.5-1	150 176
B6.5-2	94 110
B6.6-1	48 51 111
B6.6-2	50 55 56 59 100 101
B6.7	44
B6.7-1	67 68 69 169 175
B6.7-2	22 23 60
B6.8	21 133
B6.9	109 127 136 149
B6.10	140 148

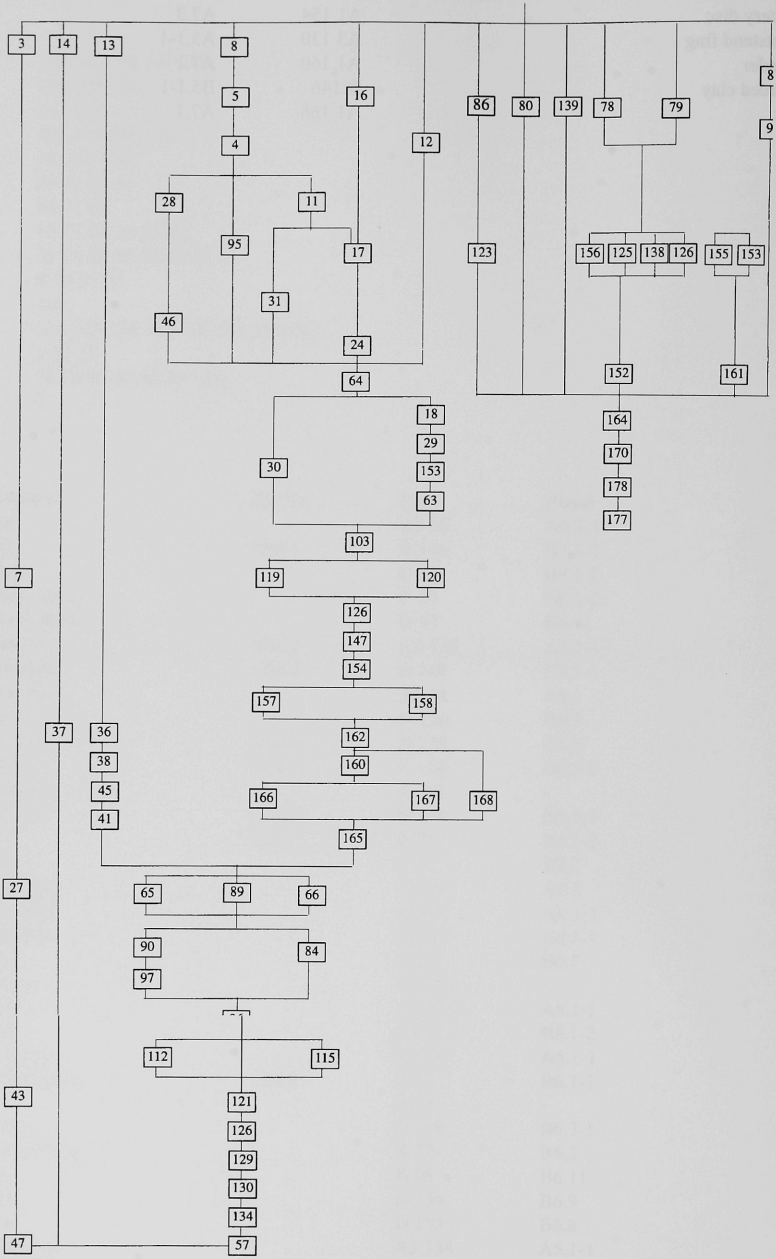
B6.11	75 81 92 98 171
B6.12	77 108
B6.12-1	83
B6.12-2	76
A7.1	160 165 166 167 168
A7.2	156 158 162
A7.3	147 154
A7.4	103 119 120 126
A8.1	18 164 170
A8.1-1	29 30 53 63
A8.1-2	64 71 88
A8.2	4 11 17 24 28 31 95
B8.1-2	32 33 34 35 39 40 42
B8.2	9 10 25 26
A18	123
A18.2	124 125 138 152 153 155 156 161
A18.3	5 12 16
A18.4	78 79 80 82 86 93 139
A18.5	1

Small finds

Reg	*Description*	*IM No.*	*Unit*	*Phase*
900	mortar		A3 96	A6.1-1
901	stamp	GM 1	B 146	B5.1-1
902	clay ball		C 40	B8.1-2
903	3 pottery discs		C 40	B8.1-2
904	2 pottery discs		D 92	B6.11
905	figurine	GM 2	A3 130	A5.1-1
906	loomweight	GM 3	B 146	B5.1-1
907	pottery disc		A1 18	A8.1
908	?tripod		D 136	B6.9
909	stone ?tool	GM 4	D 133	B6.8
910	pendant	GM 5	C 110	B6.5-2
911	clay objects		E 118	-
912	shell bead	GM 6	B 146	B5.1-1
913	pot	GM 7	B 72	B6.1-2
914	grinder		C 9	B8.2
915	iron ?staple		A1 31	A8.2
916	door socket		A3 90	A6.1-1
917	door socket		A3 96	A6.1-1
918	grinder		C 44	B6.7
919	?millstone		A4 37	-
920	?mortar		A3 130	A5.1-1
921	grinder		C 40	B8.1-2
922	door socket		A3 96	A6.1-1
923	seal impression	GM 8	B 87	B6.1-1
924	cup		A2 7	-
925	pot stand		D 169	B6.7-1
926	?pot stand frag		B 52	B6.2
927	sealing		D 98	B6.11
928	sealing		D 136	B6.9
929	sealing		D 133	B6.8
930	figurine frag		A3 134	A5.1-1
931	pottery disc		E 117	-
932	pottery disc		A1 120	A7.4

933	pottery disc	F 135	-
934	pierced stone	F 135	-
935	pottery disc	A1 154	A7.3
936	?potstand frag	A3 130	A5.1-1
937	grinder	A1 160	A7.1
938	pierced clay	B 146	B5.1-1
939	pot	A1 166	A7.1

Gir Matbakh Step Trench Sequence Diagram



GIR MATBAKH TRENCHES B, C, D SEQUENCE DIAGRAM

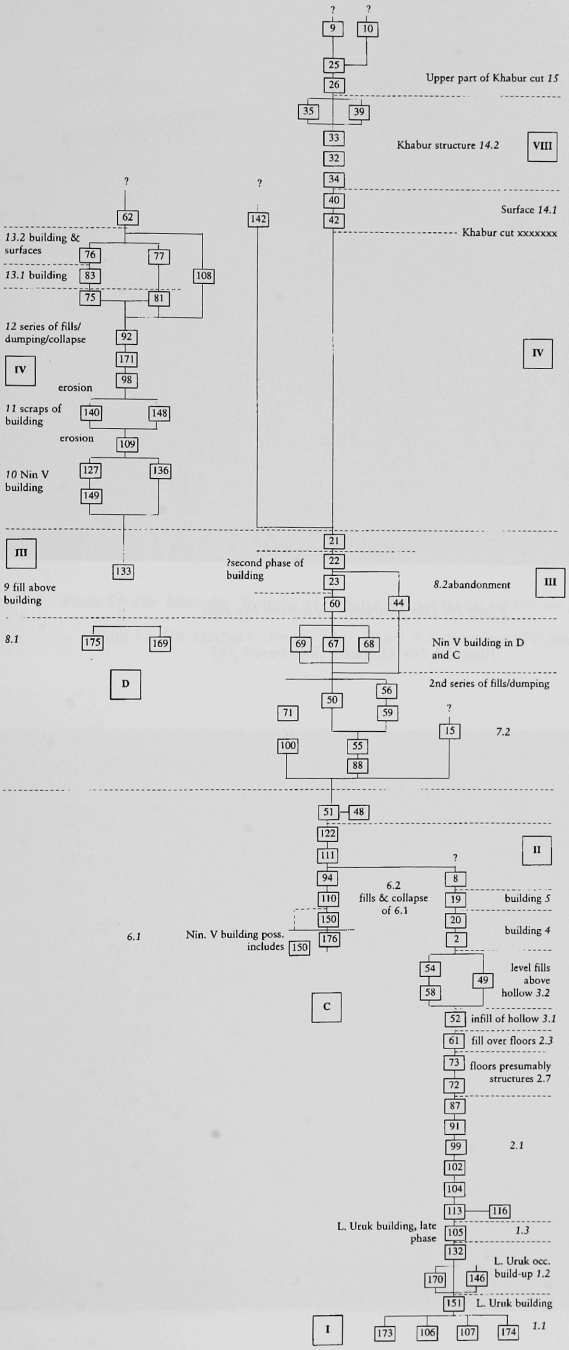


Plate 49. Gir Matbakh: view from the east

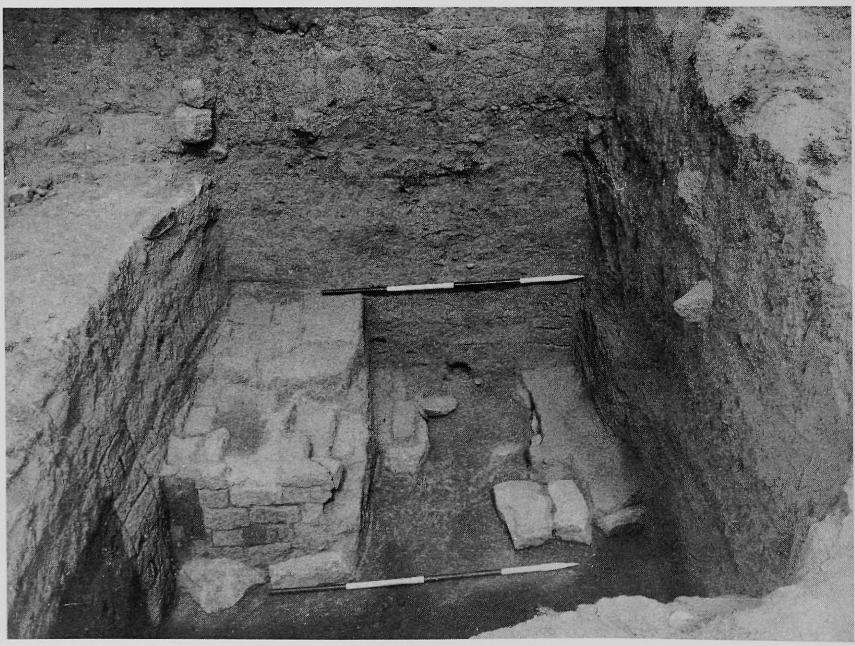
Plate 50. Gir Matbakh: Step-trench [A]

Plate 51. Gir Matbakh: Trench [A1], Phase 7.1 pot burial <938> on floor (165)

Plate 52. Gir Matbakh: Trench [A1], Phase 8.1 structures (29) and (63)

Plate 53. Gir Matbakh: Trench [A5], Phase 8.1 foundations (61)

Plate 54. Gir Matbakh: Trench [B], Phase 5.1 structures (106), (107), (174)



CHAPTER 8

TELL SHELGIYYA

Warwick Ball and Marion Pagan

INTRODUCTION

Location

Tell Shelgiyya is at the very top of the Saddam Dam, about 5 km below where the Tigris enters Iraq from Turkey and only several hundred metres from the Syrian border. As such, it represents the northernmost site ever excavated in Iraq. It is situated about a kilometre from the banks of the river, on the edge of the conglomerate river terrace overlooking the flood plain immediately to the south of a small but deep lateral wadi. This position makes it unlikely that it will in fact be flooded by the Dam. The high massifs of both the Zagros Mountains and the Anatolian plateau can be clearly seen from the site — indeed, the mountains of Kurdistan, the 'knot' where both massifs meet, lie just to the northeast, with its foothills approaching to within a few kilometres of the river bank. On the west bank, low undulating hills immediately adjacent to river give way to the flat Jazira Plain. Tell Shelgiyya is thus very strategically located at the meeting place of several geographical zones.

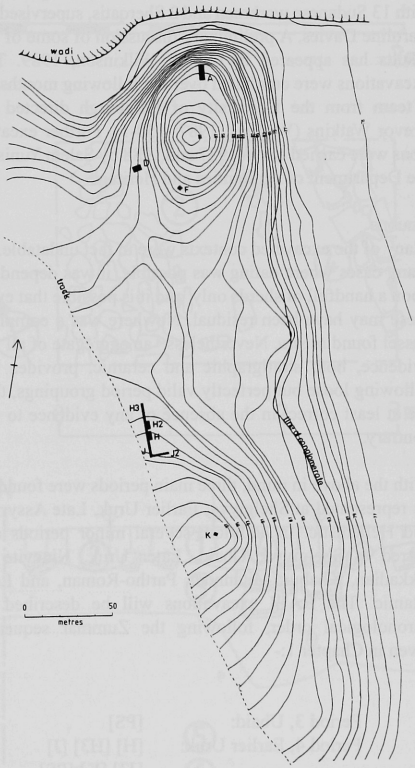


Fig 61. Tell Shelgiyya: contour plan of the site

DESCRIPTION (Fig 61, Pls. 54-55)

The site consists of a fairly small main mound, Mound A, fairly typical in size and shape for this part of Iraq (e.g., Tell Gir Matbakh): a steep sided, oval shaped mound 22 m in height and some 80 x 120 m in area, on the edge of the wadi bed and river terrace (Figs 116-118). On the other side of the wadi to the north of the mound are the remains of a deserted village, comparatively modern in date. A cemetary, probably belonging to this village, occupies much of the top and southern sides of the mound (Fig. 117). Ancient occupation belonging to the mound continues for about 220 m in the fields to the south along the edge of the river terrace, rising to a second (but mainly natural) mound, Mound B, only 2 m lower than the main mound. The occupation then continues for another 200 m

or so in the fields further to the south, Area C. In terms of surface area therefore, the site is a comaparatively large one: about 4-5 hectares.

SITE RECORD

The site was first recorded as Site 139, 'Shelkiya Cemetery', by the (then) State Organization for Antiquities and Heritage survey of the Saddam Dam area. Uruk, 'Jamdat Nasr', and Old and Middle Assyrian material was recorded as present. It was subsequently visited in May 1983 by Charles Burney of the University of Manchester and Geoffrey Summers of the BAEI, in the company of Mohammed Zaki Abdul Karim (representative to the BAEI excavations at Tell Mohammed Arab then in progress), who collected Earlier Uruk, Ninevite 5, Akkadian, Khabur, Late Assyrian and Hellenistic pottery from the site. Subsequent visits in 1985 led to the present excavations, which ran from 8th March to 13th April 1986 with 13 Sudanese workmen and 2 Sherqatis, supervised by Caroline Davies. A preliminary discussion of some of the results has appeared in Ball & Wilkinson, 1989. The excavations were continued over the following months by a team from the University of Edinburgh directed by Trevor Watkins (Watkins, 1987: 150-1). Further excavations were carried out in 1987 and 1988 by Salem Yunis of the Department of Antiquities and Heritage.

PERIODS

Many of the excavated contexts were in fact undatable. In many cases where dating was possible, it was dependant upon a handfull of sherds only, and it is possible that even these may have been residual. Nowhere was a complete vessel found *in situ*. Nevertheless, an aggregate of all the evidence, both stratigraphic and ceramic, provides the following loose but perfectly valid period groupings, that are at least correct in the absence of any evidence to the contrary.

With the above in mind, three main periods were found to be represented at Shelgiyya: Earlier Uruk, Late Assyrian and Hellenistic. In addition, several minor periods occurred at Shelgiyya: Ubaid, Later Uruk, Ninevite 5, Akkadian, Khabur, Mitannian, Partho-Roman, and Late Islamic. The BAEI excavations will be described in chronological order, following the Zummar sequence given in Chapter 1:-

Period 3, Ubaid:	[PS]
Period 4, Earlier Uruk:	[H] [H3] [J] [J2] [K] [PS]
Period 5: Later Uruk:	[F]
Period 6: Ninevite 5:	[F]
Period 7, Akkadian:	Surface
Period 8, Khabur:	[A]
Period 9, Mitannian:	Surface
Period 11, Late Assyrian:	[A] [D] [F] [J]
Period 12, Hellenistic:	[A] [F]
Period 13, Partho/Roman:	Surface [D] [F]
Period 17, Late Islamic:	Deserted village

TRENCH STRATEGY AND LAYOUT

The aim was to document the history and extent of the sequence of settlements at the site. This was carried out by means of three sondages in the deeper parts of the main mound to determine the sequence, and seven more in the outlying areas to determine spatial extent. In particular, it was hoped to find stratified remains associated with the large quantities of 'sprig ware' found on the surface. Accordingly, the following trenches were laid out (Fig. 118):-

Trenches [A] and [AA] (Figs 119 & 120): the largest trench opened by the BAEI at Shelgiyya. It was placed near the top of the main mound overlooking the wadi to the north, to test whether the distinctive angular shape of the mound (see Pl. 00) was due to any single, large structure. Originally measuring 3 x 5 m, it was extended by Trench [AA] to measure 3 x 8 m. Various structures were found, though none of them substantial enough to determine the shape of the mound as originally expected; this was due rather to the steep, straight erosion along the north side caused by the wadi. Natural was not reached in [A].

Trench [D] (Fig. 121): a 3 x 5 m trench on the steep southwestern slope of the main mound, Area A, just to the east of a bulldozer cut which had exposed some Late Assyrian material. Natural subsoil was reached at a depth of *ca* 2.40 m.

Trench [F]: a 2 x 2 m sounding on the southern slopes of Mound [A], the main mound, further up the slopes than Trench [D]. By investigating the sides of the mound in this way, it was hoped to obtain stratified information on the earlier periods, avoiding the later overburden of Trench [A] and the problems of slopewash in Trench [D]. It was also hoped to test the depth of the natural mound. This area was fairly densely covered in graves, but the slopes elsewhere were too steep for practical excavation. An area was selected therefore, where the graves were least dense. Because of the high probablity of encountering disturbance from the graves, Trench [F] was dug in spits. Natural was reached at a depth of 2 m.

The following five trenches, [H]-[J], were aimed specifically at investigating sprig ware scatters on the northern slopes of Mound B (Fig. 122).

Trench [H]: a 3 x 4 m trench oriented NE-SW on the northern slopes of Mound [B] to investigate a surface scatter of sprig ware.

Trench [H2]: a 3 x 5 m trench 1 m to the north of [H]. Natural was reached at a depth of 70 cm.

Trench [H3]: a 1 x 10 m northward extension of [H2]. It was excavated in five arbitrary spits, reaching natural soil at a depth of *ca* 1.15 m.

Trench [J] (Fig. 123): a 1 x 10 m southwards extension of [H], laid out to discover what was associated with a large stone slab that was visible on the surface about halfway along the length of the trench. Natural was reached at a depth of 1 m.

Trench [J2]: another 1 x 10 m slit trench, laid out at a right angle to [J], again to search for structures. it was excavated in two spits down to natural a depth of 70 cm, and produced no structures and very little pottery.

Trench [K] (Figs 124 & 125): a 2 x 2 m trench at the summit of the second mound, Mound B. Its purpose was (1), to determine how much of this mound was natural, and (2) to discover the source of the sprig ware scatters in Trenches [H] and [J] below to the north. The surface of the natural mound was reached after only *ca* 1.10 m.

Trench [PS] (Fig. 126): a 2 x 2 m sounding to examine what was represented by a considerable surface scatter of sprig ware (location outside area of Fig. 118). The trench was excavated in four spits, reaching natural soil at a depth of 1.30 m.

THE EXCAVATIONS

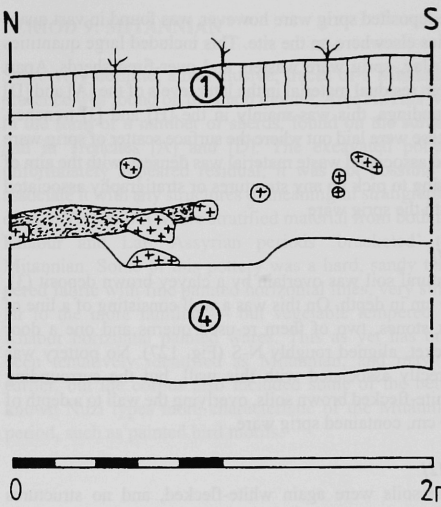
PERIOD 3: UBAID

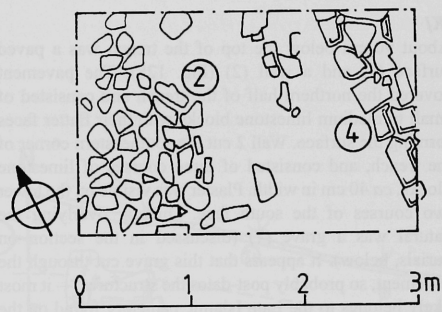
A few sherds found in the lowest levels, (3) and (4), of Trench [PS] only (Fig. 126), some distance from the main mound. Probably residual or 'drifted' from elsewhere, as Earlier Uruk sprig ware was also found in the same strata. These levels rested directly on natural.

PERIOD 4: EARLIER URUK

[PS]

Properly stratified material from this period — characterised by the highly distinctive 'sprig ware' — was found only in Trench [PS], Area C. No structures or definite occupation were found in the loose soil. The pottery, apart from the few Ubaid sherds mentioned above, was entirely Earlier Uruk, and included many wasters.





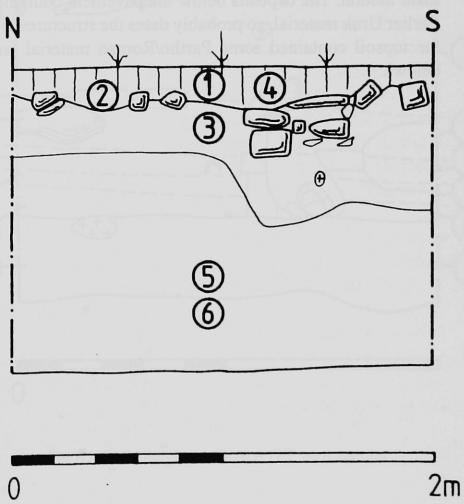


Fig 62. Tell Shelgiyya: Trench [PS], east section
Fig 63. Tell Shelgiyya: Trench [K], Phase 4 plan
Fig 64. Tell Shelgiyya: Trench [K], east section

Redeposited sprig ware however, was found in vast quantities elsewhere on the site. This included large quantities of slag, sprig ware wasters and over-fired sherds. Apart from residual material in the later levels of the [A] and [D] soundings, this was mainly in the [H] and [J] trenches. These were laid out where the surface scatter of sprig ware and associated waste material was densest, with the aim of trying to pick up any structures or stratigraphy associated with the sprig ware.

[H]

Natural soil was overlain by a clayey brown deposit (3), 40 cm in depth. On this was a wall consisting of a line of six stones, two of them re-used querns and one a door socket, aligned roughly N-S (Fig. 127). No pottery was directly associated with this wall, but the surrounding white-flecked brown soils, overlying the wall to a depth of 40 cm, contained sprig ware.

[H2]

The soils were again white-flecked, and no structures wwere found. The pottery was mainly sprig ware, and was accompanied by a great deal of slag.

[K]

About 90 cm below the top of the trench was a paved surface (4) and a wall (2) (Fig. 128). The pavement covered the northern half of the trench and consisted of small to medium limestone blocks with their flatter faces forming the surface. Wall 2 cut the southeastern corner of the trench, and consisted of three courses of limestone blocks, *ca* 40 cm in width. Plaster was visible on the lower two courses of the south face. Directly overlying the natural was a grave (7) (discussed in the section on burials, below). It appears that this grave cut through the pavement, so probably post-dates the structures — it most likely belongs to the Late Islamic cemetery found on the main mound. The deposits below the pavement contained Earlier Uruk material, so probably dates the structures, but the topsoil contained some Partho/Roman material (see below).

DISCUSSION OF SPRIG WARE DEPOSITS

The deposits found with the vast amounts of sprig ware in Trenches [H] and [J] on the northern slopes of Mound B below Trench [F] (Fig. 122) do not bear any resemblance to conventional occupation deposits. It seems most likely therefore, that this sprig ware concentration represents a redeposition. The origin of this redepostion however, is still obscure: the rather flimsy — and inadequately dated — nature of the structures found in Trench [F] above would not be consistent the massive quantities found below. Any original structures and occupation associated with the sprig ware therefore, must be located elsewhere on the site or be completely destroyed.

The nature of the redeposited sprig ware concentrations themselves in Trenches [H] and [J] provide further clues as to their origin. Despite being redeposited, they were very homogeneous, with little or no contamination. There were also no complete vessels found — indeed, it was not possible to make a single join between any of the thousands of sprig ware sherds found in this area. Furthermore, the deposits included quantities of slag, wasters and over-fired examples. This evidence suggests that Trenches [H] and [J] and the northern slopes of Mound B generally was a dumping ground from a kiln or kilns that have either disappeared altogether or remain unexcavated elsewhere on the site (it is unlikely that the kiln found in [D] is of this date; see below).

Whilst considerable quantities of sprig ware were found in residual contexts elsewhere in the excavations, by far the greatest quantities come from the [H] and [J] 'dump'; no evidence was found of large scale Earlier Uruk occupation consistent with producing such prodigious amounts of waste sprig ware. This suggests therefore, that the Earlier Uruk settlement at Shelgiyya was a manufacturing centre for sprig ware, producing mainly for export rather than domestic consumption. The strategic location of Shelgiyya, pointed out in the Introduction to this report, would make it ideally placed as such a centre (see Ball 1997).'dump'; no evidence was found of large scale Earlier Uruk occupation consistent with producing such prodigious amounts of waste sprig ware. This suggests therefore, that the Earlier Uruk settlement at Shelgiyya was a manufacturing centre for sprig ware, producing mainly for export rather than domestic consumption. The strategic location of Shelgiyya, pointed out in the Introduction to this report, would make it ideally placed as such a centre (see Ball 1997).

PERIOD 5: LATER URUK

Trench [F], the only area where stratified Later Uruk material was excavated, was greatly disturbed by rodent burrows and the later cemetery, so all levels contained a great deal of contamination throughout. The lower two spits excavated however, (4) and (5), contained predominantly Later Uruk pottery. Some mudbrick from

spit (4) was visible in the east section; otherwise, no other structures were associated with the Later Uruk. The spit above this, (3), also contained a great deal of Earlier Uruk material, but with a greater admixture of Ninevite 5 (see below), so this material is probably residual. There was, in addition, some residual material found in the [A] and [D] soundings, as well as in surface collections, but none was found away from the main mound. The Later Uruk settlement at Tell Shelgiyya therefore, appears much smaller than the Earlier Uruk. The Later Uruk layers in [F] rested directly on the natural mound.

PERIOD 6: NINEVITE 5

Spits (2) and (3) in Trench [F] contained mainly Ninevite 5 pottery, though with considerable residual material from Later Uruk levels below and contamination from Hellenistic and Late Assyrian levels washed down from the slopes above. There was also a considerable amount of Ninevite 5 residual material in Trench [D], and to a lesser extent in Trench [A] and on the surface. It included both painted and incised types, though with a preponderance of incised. No significant architecture was associated with this material. The Ninevite 5 material did not extend beyond the main mound, Area A, so the settlement was a small one.

Perhaps the main significance of the Ninevite 5 material at Shelgiyya is to 'peg out' the distribution of the ware. Until the results from the new Cizre Dam rescue project, immediately upstream from Shelgiyya, begin to become available, Shelgiyya remains one of the northern and easternmost limits of Ninevite 5 settlement, and useful for postulating possible contacts with Anatolia.

PERIOD 7: AKKADIAN

No stratified Akkadian material was found in the excavations. A considerable amount of residual material — particularly in Trench [A] — and on the surface of Mound A however, does indicate that a settlement of this period was present, albeit of unknown nature. This material included both fine 'Taya ware' types as well as course incised types.

PERIOD 8: KHABUR

The lowest deposits in Trench [A], (56), (57), (58), (61), (AA5), (AA6) and (AA7), were wholly Khabur. These were extremely hard, compacted brown deposits that lay directly under the Late Assyrian structures above. No structures were associated with these deposits. It seems probable therefore, that these deposits represent an older mound surface and period of long abandonment between the Khabur and Late Assyrian settlements. Natural was not reached in [A], so it was not possible to estimate how much further down the Khabur occupation went.

PERIOD 9: MITANNIAN

Some very definite, albeit elusive, traces of a Mitannian presence was found on the main mound, Area A. This was in the form of a number of sherds, found on the surface and in Trenches [A] and [D]. The excavated pottery unfortunately appeared residual; it was not possible to associate it with any structures or meaningful stratigraphy, even in Trench [A] where stratified material from both the Khabur and Late Assyrian periods 'bracketed' the Mitannian. Some of this pottery was a hard, sandy tempered fabric with fine painted horizontal lines, very similar to the more familiar — but vegetable tempered — Khabur horizontal painted wares. This as yet has only been tentatively identified as Mitannian, and may be earlier, but the corpus also included some of the better known Nuzi types more characteristic of the Mitannian period, such as painted bird motifs.

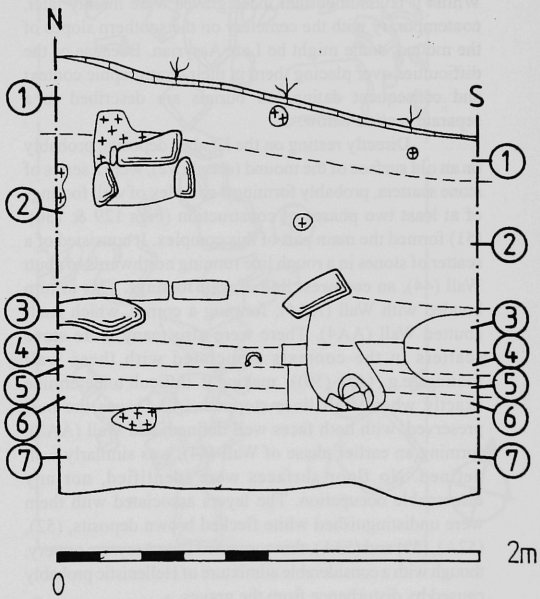


Fig 65. Tell Shelgiyya: Trench [F], east section

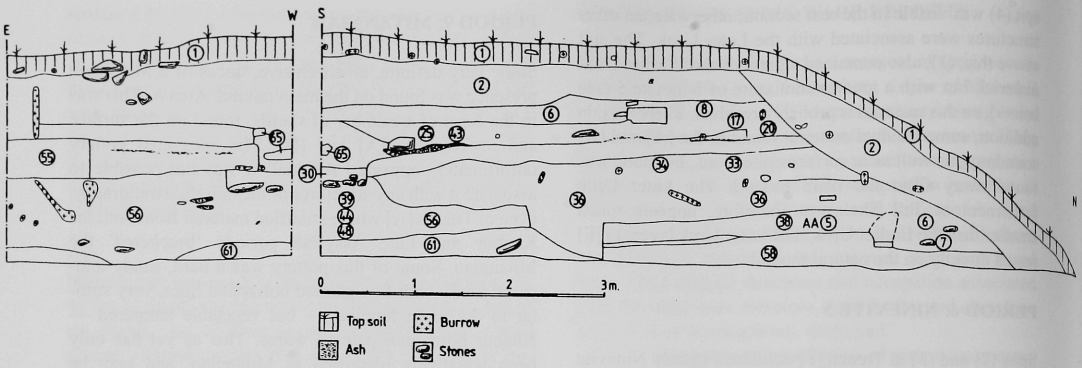


Fig 66. Tell Shelgiyya: Trenches [A] & [AA], south and west sections

PERIOD 11: LATE ASSYRIAN (Figs 67, 69)

[A] and [AA]

This trench was heavily distrurbed by a number of graves. Whilst it is assumed that these graves were mainly later, contemporary with the cemetery on the southern slopes of the mound, some might be Late Assyrian. Because of the difficulties over placing them in their stratigraphic context and consequent dating, all burials are described in a separate section below.

Directly resting on the Khabur deposits, probably on an old surface of the mound (see above), were a series of stone scatters, probably forming a complex of wall footings of at least two phases of construction (Figs 129 & 130). (51) formed the main part of this complex. It consisted of a scatter of stones in a rough line running northwards to abutt Wall (44), an east-west line of wall footings. This in turn bonded with Wall (AA4), forming a corner, which itself abutted Wall (AA4). There were also many more stone scatters in the contexts associated with these wall footings(e.g., (46), (50)), making it difficult to determine exactly where wall lines stopped. (AA4) was the best preserved, with both faces well defined, and Wall (AA8), forming an earlier phase of Wall (44), was similarly well defined. No floor surfaces were identified, nor any discernable occupation. The layers associated with them were undistinguished white flecked brown deposits, (52), (52A), (53) and (53A), that contained Late Assyrian pottery, though with a considerable admixture of Hellenistic probably caused by disturbance from the graves.

These structures were overlain by some 50-80 cm of loose brown deposits, excavated in several spits, (33)-(38),(40), (41), (43), (47) and (48). Amongst them was another wall footing, (45)/(49). Above was another series of stone wall footings, (30) and (31) associated with a possible surface, but their relationship with the lower wall footing, (45)/(49) as well as the strata above and below is difficult to determine. The pottery from these strata are very mixed Late Assyrian and Hellenistic, caused by the number of graves cutting these contexts. This second phase of structures may therefore belong to the Hellenistic contexts above rather than the Late Assyrian ones below.

[D]

The deposits in this trench appeared to be largely slope wash from the mound above, with all levels containing a great mixture of material from all periods represented at Shelgiyya in no apparent order. Nonetheless, the predominence of Late Assyrian material amongst this, together with the presence of Late Assyrian levels revealed by the adjacent bulldozer cut, probably dates the structures in [D].

The natural was cut by a later grave, (45), in the northeastern half of the trench (see section on burials, below). Grave (45) was cut by a roughly circular pit, (48), some 40 cm deep cut also into natural (Fig. 121). It contained several large limestones and a brownish deposit. The deposits to the southwest of this pit — (42) and (43) — were generally deeper than those to the northeast, being further downslope. No secure dating evidence came from these two deposits, which together with spits (30), (31), (32), (37), (38) and (40), constitute the clayey deposit that overlay the natural, Grave (45), and Pit (48). Several sherds from these spits are from the

late 3rd and 2nd millennia, although these may be intrusive. Otherwise, the pottery was generally Late Assyrian.

Overlying these deposits was a complex of structures which seemed to start with two wall footings, (24) and (25) (Fig. 131). The former was a short length of mud and pebble wall oriented northeast-southwest, located directly to the northeast of Wall (15) (see below). Parallel to this was Wall (25), consisting of *tauf* over stone footings. These two walls (from which no pottery was recovered) were overlain by a compact, brown clayey deposit, excavated in three spits. These contained Late Assyrian sherds, and were located in the middle part of the trench between the south baulk and Feature (10) (see below).

To the southeast of this clayey deposit were three flimsy parallel walls, (15), (16) and (20), the latter two being joined by a fourth, unnumbered, wall to form a part of a room (Figs 132 & 133). Wall (15) was poorly constructed of *tauf*, while Walls (16) and (20) were mudbrick. The south face of (16) appears to have been burnt, and both (16) and (20) show traces of rebuilding. Fragments of a burnt skeleton, (17), were found between the earlier phases of Walls (15) and (16) (see section on burials, below). Both (15) and (16) contained Late Assyrian sherds.

Surrounding these walls was a brown deposit, excavated as Contexts (21), (22) and (27). To the north were Features (9) and (10), which contained Late Assyrian pottery. (10) was a flimsy, northeast-southwest mud brick wall and joining an oven, (9), at its northeastern end (Fig. 00, Pl. 00). There was evidence of burning on both sides of the wall, and between the wall and the north baulk were several fired bricks, two of them apparently forming a channel 25 cm deep. There was burnt bone among the bricks.

(9) appeared to be a mudbrick oven, with the fired bricks and other collapse inside it probably forming its roof. There was an opening in the eastern side, and another into the channel described above. In the green ashy deposit, (28), inside this oven were many bones, including a human jaw. The oven probably represents a kiln, though the burnt bone may be secondary, not necessarily associated with the original use of the kiln. Between the kiln and the mudbrick structures were several large limestones, probably fallen from elsewhere. All of these structures and associated features were covered by a layer of loose green-brown sandy soil excavated in two spits, (14) and (18), which contained Late Assyrian pottery.

Above these deposits were layers of loose brown soil, (6)-(8) and (12), which were probably slope wash, though they contained Late Assyrian sherds. On top of these deposits, in the northeast corner of the trench, was a canine skull, (5), and an equid skeleton, (4), oriented east-west. Overlying these bones was slope wash, containing mainly Hellenistic sherds.

[F]

Although no meaningful stratigraphy was found in the upper two spits, (2) contained an almost complete Late Assyrian 'dimple ware' vessel < >. Otherwise, the pottery was mainly Hellenistic.

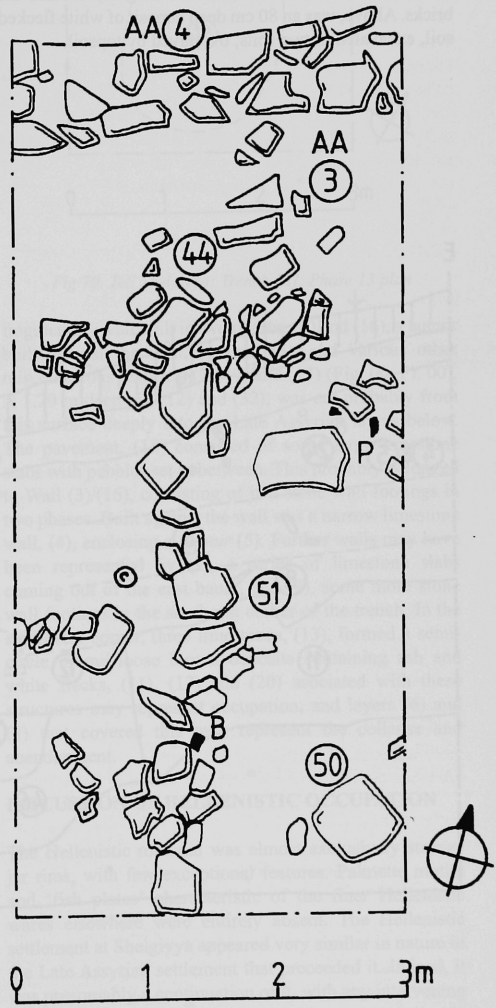


Fig 67. Tell Shelgiyya: Trenches [A] & [AA].

[J]

To the south of the stone slab which bisected the trench, the dateable pottery appeared mainly Late Assyrian, suggesting that the slab may mark the limits of a later cutting into the Earlier Uruk, though the differences in the soil deposits on either side of the slab were negligible.

Above natural was an orange-brown clayey deposit with white flecks. On top of this, at a depth of 1.02 m, was a fire installation, (5), just south of the slab (Fig. 00). This consisted of three mudbricks, each 30 cm square, with a burnt crust, oriented east-west. The area was much disturbed by rodent burrows, and in the narrow confines of the trench it was not possible to ascertain the exact nature of the fire installation. Sherds and slag lay around the bricks. Above, was an 80 cm deep deposit of white flecked soil, excavated in two spits, overlayed by topsoil.

DISCUSSION OF LATE ASSYRIAN OCCUPATION

The Late Assyrian pottery found was unremarkable, exhibiting typical fabrics and shapes. The only exception was the fine dimple ware vessel found in a mainly Hellenistic context in [F]. How such a luxury vessel came to be at Shelgiyya remains a matter for conjecture; very few other examples of this ware were found in other sites excavated by the BAEI in the Zummar region.

Considerable amounts of Late Assyrian pottery were also recognized on the surface. As well as the bulldozer cut below [D] next to the wadi already mentioned, this included material from further bulldozer disturbance in the 'saddle' between mounds A and B. The Late Assyrian settlement at Shelgiyya was therefore relatively extensive, the first settlement in fact to approach its Earlier Uruk size.

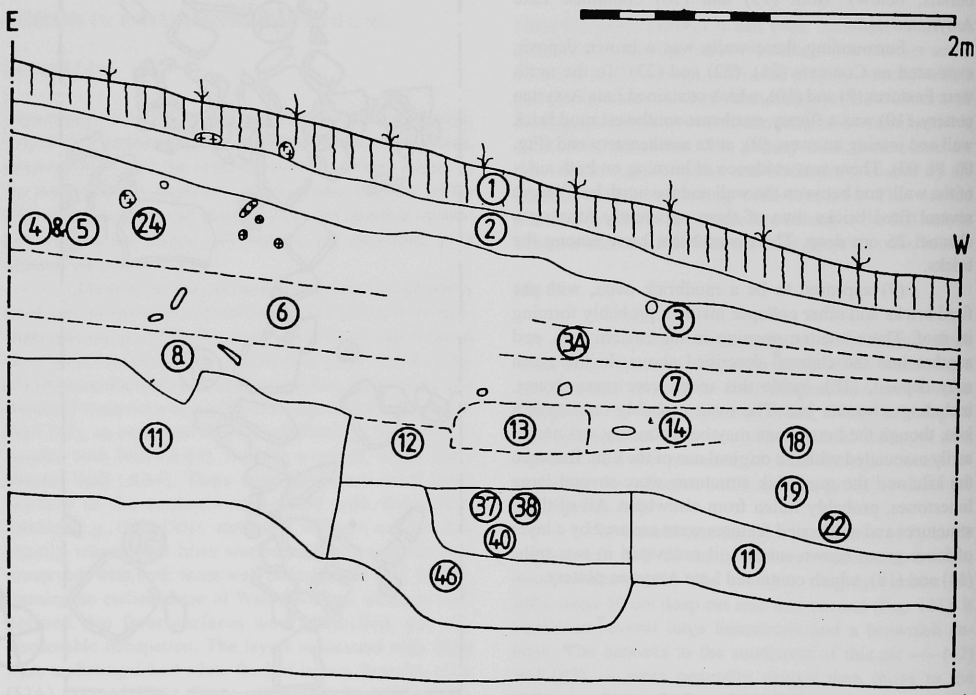


Fig 68. Tell Shelgiyya: Trench [D], south section

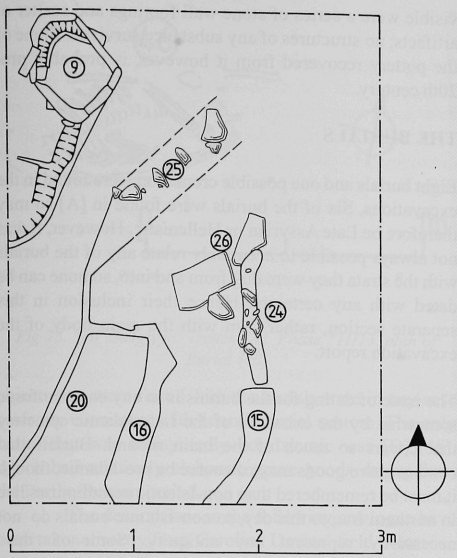


Fig 69. Tell Shelgiyya: Trench [D], Phase 11 plan

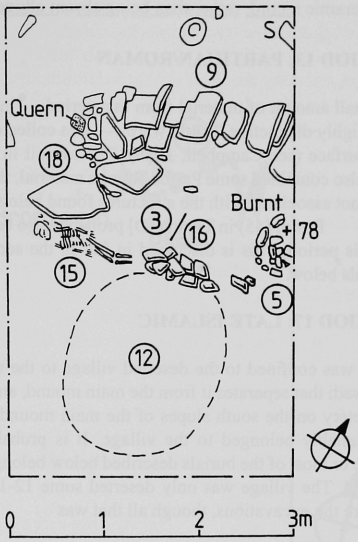


Fig 70. Tell Shelgiyya: Trench [A], Phase 13 plan

The only meaningful architecture for this period was the fire installation and nearby series of walls in Trench [D]. The installation has been tentatively identified as a kiln, though its purpose is not known. The series of walls nearby were too flimsy to be a part of any substantial building. It has a superficial resemblance to the 'granary racks' that appear typical of so many Later Uruk/Ninevite 5 remains (e.g., at Siyana — see Chapter 3). Such a resemblance however, based solely on the occurrence of three flimsy parallel walls, may be illusory. It was more likely associated with the kiln and used for some unknown industrial purpose.

PERIOD 12: HELLENISTIC (Fig. 70)

Hellenistic material was found in all trenches on the main mound, [A], [D] and [F], as well as on the surface, but mainly in very mixed, disturbed contexts. The only excavations which produced meaningful structures was Trench [A].

A layer of compact, dark brown soil, spits (25)-(27), covered the later phase of the Late Assyrian remains desribed above. Like the similar compacted deposits that separated the Khabur from the Late Assyrian remains in the same trench, this may represent an earlier mound surface and period of abandonment. As such it should belong more correctly to the Late Assyrian, but it contained mainly Hellenistic pottery. Loose brown soil, (19) and (22), covered this compacted deposit, and on it was a complex consisting of a fragmentary paved surface, (18), a fragmentary wall built in two phases, (3) and (16), a tannur built against the wall, (4) and (5), and various other miscellaneous features, (7), (9) and (13) (Fig. 00, Pl. 00). A 1.20 m deep pit, (12) and (32), was cut probably from this surface deeply into the Late Assyrian layers below. The pavement, (18) consisted of some large limestone slabs with pebbles set in between. This probably belonged to Wall (3)/(16), consisting of just stone wall footings in two phases. Built against the wall was a narrow limestone wall, (4), enclosing a *tannur* (5). Further walls may have been represented by (9), a series of limestone slabs coming out of the east baulk, and (7), some more stone wall footings in the southeast corner of the trench. In the southwest corner, three limestones, (13), formed a semi-circle. Some loose brown deposits containing ash and white flecks, (11), (17) and (20) asociated with these structures may represent occupation, and layers (6) and (8) that covered this may represent the collapse and abandonment.

DISCUSSION OF HELLENISTIC OCCUPATION

The Hellenistic material was almost exclusively storage jar rims, with few exceptional features. Palmette motifs and 'fish plates' characteristic of the finer Hellenistic wares elsewhere were entirely absent. The Hellenistic settlement at Shelgiyya appeared very similar in nature to the Late Assyrian settlement that preceeded it. Indeed, it was presumably a continuation of it, with any intervening Median or Achaemenid period probably not recognized in

the ceramic record, rather than being absent altogether.

PERIOD 13: PARTHIAN/ROMAN

A small amount of material from this period — including the highly distinctive 'brittle ware' — was collected from the surface (see Campbell, 1989). The topsoil in Trench [K] also contained some Partho/Roman material, though it was not associated with the structures found below.

Burial (45) in Trench [D] probably also belonged to this period. This is discussed in full in the section on burials below.

PERIOD 17: LATE ISLAMIC

This was confined to the deserted village to the north of the wadi that separates it from the main mound, and to the cemetery on the south slopes of the main mound, which presumably belonged to the village. It is probable that some or most of the burials described below belong to this period. The village was only deserted some 12-15 years before the excavations, though all that was visible were a series of stone wall footings and scatter of artifacts; no structures of any substance survived. Some of the pottery recovered from it however, is probably pre-20th century.

THE BURIALS

Eight burials and one possible cremation were found in the excavations. Six of the burials were found in [A] so may therefore be Late Assyrian or Hellenistic. However, it was not always possible to accurately relate any of the burials with the strata they were dug from and into, so none can be dated with any certainty. Hence their inclusion in this separate section, rather than with the main body of the excavation report.

The issue of dating for the burials is in any case confused somewhat by the existence of the Late Islamic cemetery that covers so much of the main mound. Burials that contain grave goods may of course be pre-Islamic, though it must be remembered than non-Islamic communities live in northern Iraq to this day, so non-Islamic burials do not necessarily represent any antiquity. Some of the

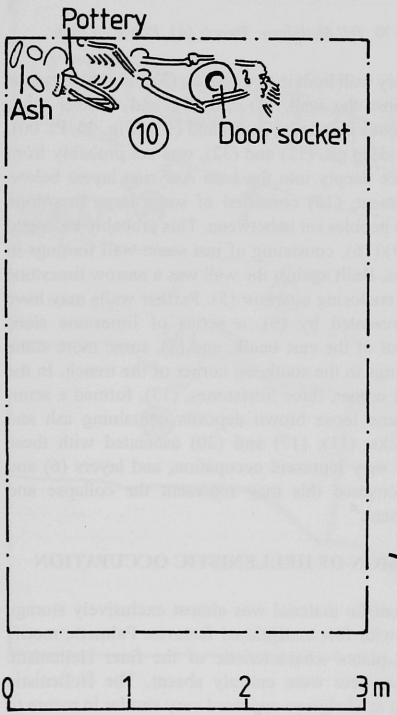


Fig 71. Tell Shelgiyya: Trench [A], Phase 13, plan of Burial

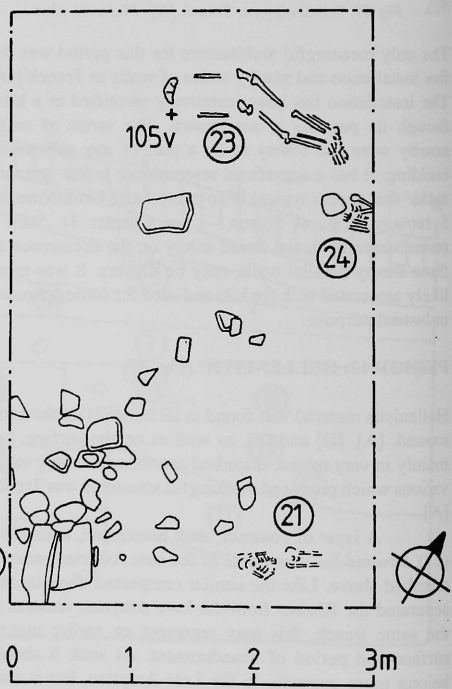


Fig 72. Tell Shelgiyya: Trench [A], Phase ?13, plan of Buri-

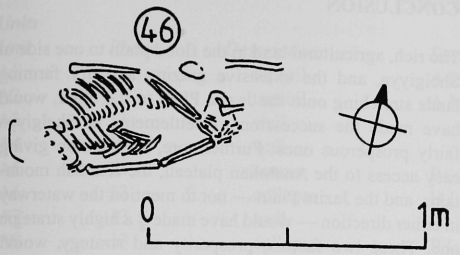


Fig 73. Tell Shelgiyya: Trench [A], Phase ?11/13, plan of Burial (46)

objects that were found with the burials were in any case perfectly consistent with Islamic burial custom. The only burial that was indisputedly non-Islamic was [D] (45), which had relatively elaborate grave goods dating from the Partho/Roman period.

The descriptions in the following catalogue have been taken directly from Caroline Davies' field notes:-

[A] (10) (Fig. 71)
A complete, fully extended adult skeleton. It is oriented east-west, lying on its right side facing south. The head, pelvis and knees are smashed, the legs rest directly on a door socket (which may be from the layers below and unrelated to the burial). The left arm is across the body, hand on pelvis, the right arm is bent, hand under jaw. The grave fill was a loose, ashy brown deposit containing many river pebbles, with ashy red-brown stains directly under the skeleton. The grave was covered with a line of limestone capping slabs, (9). Between 89 and 95 cm below the surface.

[A] (15)
A very crushed fully extended small child, 1.05 m in length, missing the feet, which was cut by Pit (12) (see Hellenistic levels in excavation report). Oriented east-west, lying on the right side facing south. The left arm is along the left side, hand behind pelvis, the right arm is along the right side slightly in front of the body. No grave goods. The soil was stained black along the length of the spine, and there were red-brown stains throughout the fill. The grave was covered with three limestone capping stones, (14). 68 cm below the surface.

[A] (21) (Fig. 72)
A very crushed, fully extended skeleton of an infant, 72 cm long, cut below the knees. Oriented east-west, lying on the back. The right arm was across the body, hand on stomach, the left arm was bent, hand under left side of the head, though it was difficult to articulate due to extensive crushing. No grave goods. No capping stones. Between 78 and 86 cm below surface.

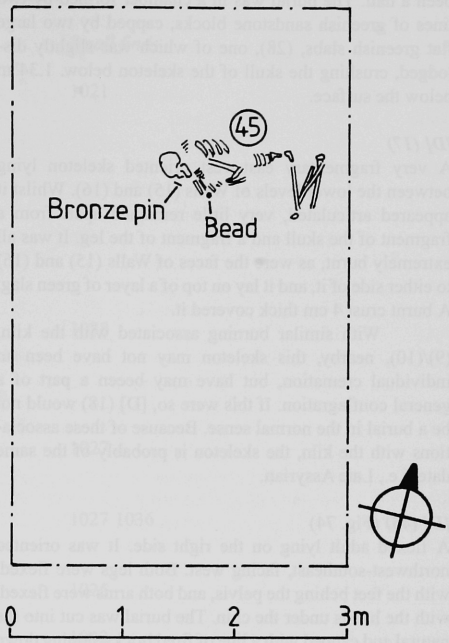


Fig 74. Tell Shelgiyya: Trench [D], Phase 11/13, plan of Burial (45)

[A] (23) (Fig. 72)
An incomplete skeleton of an extended adult, legs slightly flexed at the hips. Oriented east-west, lying on the back with hips twisted slightly to the right. The chest area had been disturbed by rodent burrows. Both arms crossed over the body, possibly with the hands together at the chest. Feet together. One bronze earring, <1025>, was at the right side of the head. No capping stones. Between 98 and 113 cm from the surface.

[A] (24) (Fig. 72)
An adult, cut at the chest by the east baulk, oriented east-west lying on the back. The head was slumped on the right side, chin on chest, facing southeast. Both arms were flexed, left arm across the chest, with both hands under the chin. No grave goods. 90 cm from surface.

[A] (46) (Fig. 73)
An adult, cut at the ankles by the east baulk, oriented east-west lying on the back. The head was resting on the chin, turned to the south. The right arm was at the side, the left arm was crossed over the pelvis. A metal object, <1026>, was found between the bottom two ribs, lodged at an angle from the right side under the sternum. This object, bent at the tip, was initially thought to be an arrow; it may have

been a nail. The burial was in a chamber formed by two lines of greenish sandstone blocks, capped by two large flat greenish slabs, (28), one of which was slightly dislodged, crushing the skull of the skeleton below. 1.34 m below the surface.

[D] (17)
A very fragmentary east-west oriented skeleton lying between the lower levels of Walls (15) and (16). Whilst it appeared articulated, very little remained apart from a fragment of the skull and a fragment of the leg. It was all extremely burnt, as were the faces of Walls (15) and (16) to either side of it, and it lay on top of a layer of green slag. A burnt crust 4 cm thick covered it.

With similar burning associated with the kiln, (9)/(10), nearby, this skeleton may not have been an individual cremation, but have may beeen a part of a general conflagration. If this were so, [D] (18) would not be a burial in the normal sense. Because of these associations with the kiln, the skeleton is probably of the same date, i.e., Late Assyrian.

[D] (45) (Fig. 74)
A flexed adult lying on the right side. It was oriented northwest-southeast, facing west. Both legs were flexed, with the feet behing the pelvis, and both arms were flexed, with the hands under the chin. The burial was cut into the natural and capped with a line of fired bricks sloping down towards the west. A small, hooked bronze pin, <1022>, was found in front of the skull, pointing towards the eyes. A carnelian bead, <1020>, was found amongst the metacarpals. A very crushed glass bottle, <1023>, was found between the forearms and hands, with a bronze rod, <1024>, protruding from it. Some very small conical shells were in the fill surrounding the skeleton. This burial was found and excavated in the last hour on the last day of excavation at Shelgiyya.

The bottle, probably a perfume bottle (see below in section on small finds) firmly dates the burial to the Partho/Roman period.

[K] (7)
An incomplete skeleton oriented east-west. Only the legs and pelvis protruded from the west baulk, though no feet were found. It was lying face down, with the pelvis twisted slightly onto the right hip. There were no grave goods.The grave was covered by three capping stones, and it was cut into the natural. Between 1.06 and 1.10 m from the surface.

CONCLUSION

The rich, agricultural land in the flood plain to one side of Shelgiyya, and the extensive grazing and dry farming lands stretching onto the Jazira Plain to the other, would have made the succession of settlements at Shelgiyya fairly prosperous ones. Furthermore, its location giving easy access to the Anatolian plateau, the Kurdish mountains, and the Jazira Plain — not to mention the waterway in either direction — would have made it a highly strategic one. These two factors, prosperity and strategy, would have presumably determined the foundation and subsequent nature of the settlements.

It was founded in the Ubaid period, probably part of an apparent expansion of settlement in the region in the late Neolithic and early Chalcolithic period (see Chapter 9, below, and Ball, Tucker & Wilkinson, 1989: 16). By the Earlier Uruk period the settlement had probably assumed some importance as a manufacturing centre of sprig ware, though only a comparison trace elements in samples of this intriguing ware from different sites will confirm this. By the later Uruk period however, the settlement appears to have diminished in size, and the scanty evidence — mainly from surface pottery -— seems to indicate only very minor settlement until the Late Assyrian period. Whilst material from all of the intervening periods was found (apart from Middle Assyrian), it seems unlikely that this represents continuity of occupation over such a long period. The comaparitively substantial Late Assyrian remains therefore, probably represent a refoundation of the settlement, that continued through the Hellenistic period and tailed off in the Partho/Roman. After this, it was finally deserted, probably being replaced by the Sasano/Byzantine settlement at Goz Giran, a little downstream (see Chapter 9, below), until the village across the wadi was founded probably in the Ottoman period.

Tell Shelgiyya is thus typical of so many of the smaller multi-period mounds that dot the northern Iraqi landscape. The soundings served as a useful introduction to and documentation of just one such mound, enabling the Edinburgh University excavations that came afterwards to amplify the picture by concentrating on a particular aspect. It also served to extend our knowledge of the Saddam Dam area to its northernmost limits. Indeed, as such it will provide a vital link with the 'twin' dam salvage project just across the border at Cizre.

CONCORDANCES

Units

Unit	*Phase*	*Description*	*Samples*	*Small finds*
A1	-	topsoil	A L P	
A2	-	topsoil	A M S Sl	1021
A3	13	wall		
A4	13	wall		
A5	13	*tannur*	P	
A6	13	collapse	B L P	
A7	13	wall		
A8	13	collapse	P L S	
A9	?13	grave capping		
A10	?13	grave	H G	
A11	13	occupation	P	
A12	13	pit	B P	1038
A13	13	structure		
A14	?13	grave capping		
A15	?13	grave	H	
A16	13	wall	B P S	
A17	13	occupation	B M P S	1027
A18	13	pavement		
A19	11/13	collapse	B L P S	
A20	11/13	collapse	B L P S	1027 1036
A21	?11/13	grave	H	
A22	11/13	collapse		
A23	?11/13	grave	H M P	1025
A24	?11/13	grave	H P	
A25	11/13	collapse	G L P	1042
A26	11/13	collapse	B L P S	
A27	11/13	collapse	P	
A28	?11/13	grave capping		
A29	11/13	collapse	B L P	1012
A30	11/13	wall		
A31	11/13	wall	P	
A32	13	pit	B G L P S	1019
A33	11/13	collapse	B P	
A34	11/13	collapse	L G P	1040
A35	11/13	collapse	B P	
A36	11/13	collapse	P Sl	
A37	11/13	collapse	L P	
A38	11/13	collapse	G P	1015 1047
A39	11/13	collapse	B	1004
A40	11/13	collapse	P	
A41	11/13	collapse	G P S	1033
A42			B L P S	
A43	11/13	collapse	B M P	
A44	11	wall	G L P	1029 1030 1031 1034 1035 1036 1037 1039 1048
A45	11/13	wall		
A46	?11/13	grave	B M	1026
A47	11/13	collapse	B P S	
A48	11/13	collapse	B L P Sl	
A49	11/13	wall		
A50	11	stone scatter		
A51	11	stone scatter	G	1032 1041
A52	11	collapse	B L P	
A52A	11	collapse	B L P S	
A53	11	collapse	B L P Sl	
A53A	11	collapse	B L P	

A55	11	wall	B P	
A56	8	collapse	B F L P S Sl	1005 1006 1007
A57	8	collapse	Bt	1016
A58	8	collapse	B L P	
A59	8	collapse		
A60	11	wall		
A61	8	collapse	B L P	
AA1	-	topsoil	B G L P S Sl	1001
AA2	-	slope wash		
AA3	11	wall		
AA4	11	wall		
AA5	8	collapse	B L P Sl	
AA6	8	collapse	P	
AA7	8	collapse	B L P	1056
AA8	11	wall		
D1	-	topsoil	B L P	
D2	-	slope wash	B L P S Sl	
D2A	-	slope wash	B L P Sl	
D3	-	slope wash	B G L P S	1052
D3A	-	slope wash	B L P S	
D4	-	equid	A	
D5	-	canine	A	
D6	-	slope wash	B G L P S	1051
D7	-	slope wash	P S	
D8	-	slope wash	B L P S	
D9	11	oven	C14 B L P Sl	
D10	11	wall	B P	
D11	-	natural		
D12	-	slope wash	B G L P Sl 1045	
D13	-	slope wash	B P	
D14	-	slope wash	B F L P	1014
D15	11	wall	P	
D16	11	wall	B P S	
D17	-	grave	A L P	
D18	-	slope wash	B L P S	
D19	11	collapse	G P S	1044
D20	11	wall	L P	
D21	11	collapse	B L P	
D22	11	collapse	P	
D23	11	collapse	L P	
D24	11	wall		
D25	11	wall	S	
D26				
D27	11	collapse	L P S	
D28	11	oven fill	H L	
D29	11	compacted clay	B L P	1008
D30	-	natural		
D31	11	compacted clay	B L P	
D32	11	compacted clay	P	
D33	11	compacted clay	P	
D35	11	compacted clay	B L P S	
D36	11	pit	P	
D37	11	compacted clay	B L P	
D38	11	compacted clay	P	
D39	11	stones		
D41	11	compacted clay	L P	
D42	-	natural		

D44	-	natural		
D45	14	grave	H M S	1020 1022 1023 1024
D46	11	compacted clay	B L P S	
D47	-	pit		
D48	-	pit	A P	
F1	-	topsoil	P	
F2	6	spit	L P	1000
F3	5/6	spit	G H L P	1050
F4	5	spit	A G L P Sl	1043
F5	5	spit	Gl L P S	1057
F6	5	spit	L P S	1010
H1	4	topsoil	L P	
H2	4	spit	B L P Sl	
H3	4	spit	G P	1053 1055 1056
H4	4	spit	L P S	
H5	-	natural		
H2-1	4	topsoil	P	
H2-2	4	spit	B F L P Sl	1003 1011
H2-3	4	spit	B G L P S Sl	1049
H2-4	4	spit	B L P S	
H3-1	4	topsoil	L P	
H3-2	4	spit	B L P Sl	
H3-3	4	spit	L P Sl	
H3-4	4	spit	L M P Sl	1017
H3-5	4	spit	L P Sl	
J1	4	topsoil	L P	
J2	4	spit	P	
J2A	4	spit	B P	
J3	4	spit	B L P	
J3A	4	spit	B L P Sl	
J4	4	spit	L P Sl	
4A	4	spit	B L P	
J5	4		C14 B L P Sl	
J6	4	spit	B F L P	1009
J6A	4	spit	P	
J7	-	stone slab		
J2-1	4	topsoil	B L P	
J2-2	4	spit	P	
K1	-	topsoil	L P	
K2	4	surface		
K3	4	deposit	P	
K4	4	wall		
K5	4	deposit	L P	
K6	4	deposit	P	
K7	-	grave	H	
PS1	-	topsoil	B L P	
PS2	3	spit	B L P	
PS3	3	spit	L P	
PS4	3	spit	B C14 G L P	1002 1013

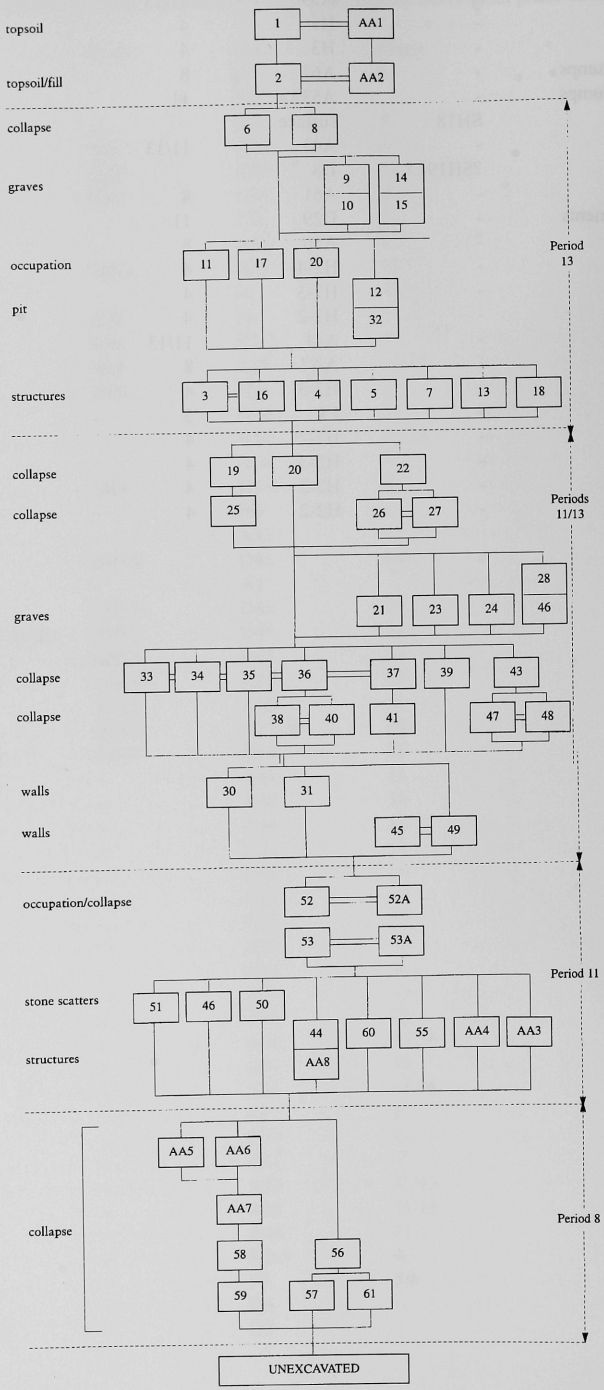
Small finds

Note: 'phase' denotes the phase the object was found in, and not necessarily the original phase of the object.

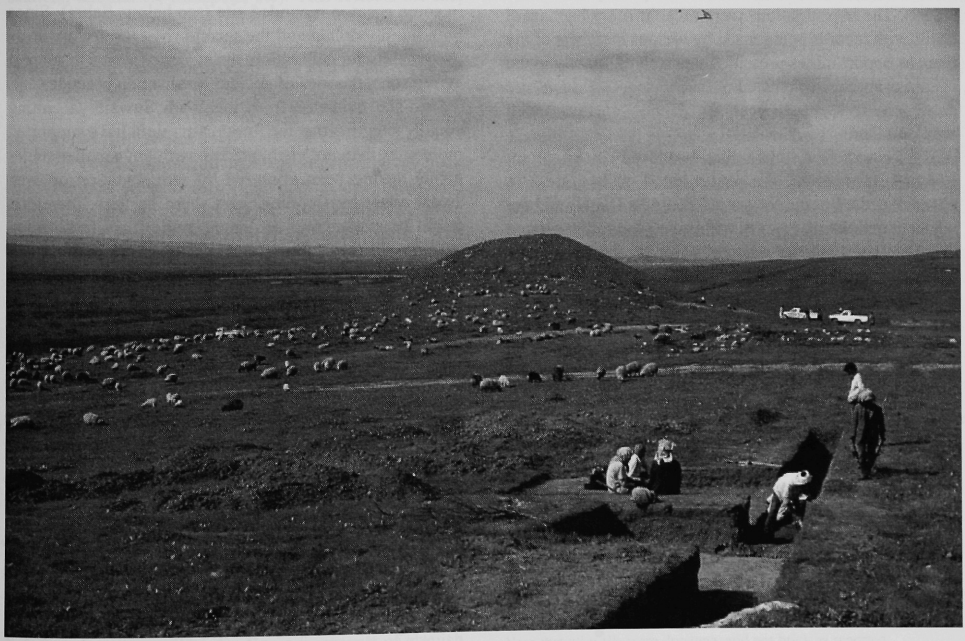
Reg	*Description*	*IM no.*	*Unit*	*Phase*
1000	pot	-	F2	6
1001	pestle	-	AA1	
1002	grinder	-	PS4	3
1003	figurine	SH1	H2-2	4
1004	bone awl	SH2	A39	11/13
1005	figurine	SH3	A56	8
1006	clay cone	-	A56	8
1007	pottery vessel	-	A56	8
1008	pottery vessel	SH4	D29	11
1009	figurine	-	J6	4
1010	pottery wheel	SH5	F6	5
1011	figurine	SH6	H2-2	4
1012	bone awl	SH7	A29	11/13
1013	?loom weight	SH8	PS4	3
1014	figurine	-	D14	
1015	sealing	-	A38	11/13
1016	sealing	-	A56	8
1017	iron rod	SH9	H3-4	4
1018	figurine	-	H0	
1019	whetstone	-	A32	13
1020	bead	SH10	D45	14
1021	?knife blade	-	A2	
1022	bronze pin	SH11	D45	14
1023	glass or faience bottle	SH12	D45	14
1024	bronze pin	SH13	D45	14
1025	bronze earring	SH14	A23	11/13
1026	iron nail	SH15	A46	11
1027	metal bowl	SH16	A17/20	13
1028	bronze bracelet	SH17	D34	11
1029	door socket	-	A44	11
1030	grinder	-	A44	11
1031	grinder	-	A44	11
032	grinder	-	A51	11
1033	door socket	-	A44	11
1034	grinder	-	A44	11
1035	pestle	-	A44	11
1036	pestle	-	A44	11
1037	pestle	-	A44	11
1038	pestle	-	A12	13
1039	?pounder	-	A44	11
1040	grinder	-	A34	11/13
1041	stone weight	-	A51	11
1042	grinder	-	A25	11/13
1043	grinder	-	F4	5
1044	stone weight	-	D19	11
1045	grinder	-	D12	
1046	pierced stone	-	A20	11/13
1047	grinder	-	A38	11/13
1048	pounder	-	A44	11
1049	pierced stone	-	H2-3	4
1050	door socket	-	F3	5/6
1051	pierced stone	-	D6	
1052	pierced grinder	-	D3	

1053	grinder	-	H3	4
1054	grinder	-	A39	11/13
1055	grinder	-	H3	4
1056	mortar	-	H3	4
058	baked clay lumps	-	A61	8
1059	baked clay lumps	-	A53A	11
1060	clay cone	SH18	surface	
1061	iron nail	-	A43	11/13
1062	stamped lid	?SH19	D8	
1063	?sealing	-	A61	8
1064	bronze fragments	-	D29	11
1065	clay lumps	-	A56	8
1066	?sealing	-	H2-4	4
1067	pottery disc	-	H2-3	4
1068	pottery disc	-	H2-2	4
1069	pottery disc	-	A41	11/13
1070	pottery disc	-	AA7	8
1071	pottery disc	-	H2-3	4
1072	pottery disc	-	F4	5
1073	pottery disc	-	H2-2	4
1074	pottery disc	-	H2-3	4
1075	pottery disc	-	H2-2	4
1076	pottery disc	-	H2-2	4

SHELGIYA TRENCH [A]/[AA] SEQUENCE DIAGRAM



55. Tell Shelgiyya: general view
56. Tell Shelgiyya: general view with recent cemetery



CHAPTER 9

OTHER RECORDED SITES

Warwick Ball, St John Simpson and David Tucker

INTRODUCTION

During the course of the excavations, the right bank of the Tigris within the flood area upstream as far as the limits of the dam catchment and downstream as far as Tell Shaikh Humsi Cemetery was surveyed and all archaeological sites found were recorded. In addition, sites within a radius of several kilometres around our field headquarters of Bardiya were examined, as well as various other miscellaneous sites, particularly along the route of the construction of the irrigation pipeline between Karhasan and the North Jazira Irrigation Project (see Fig 2). Due to work priorities at the excavations, it was not possible to undertake the type of systematic, intensive surveys later carried out on the North Jazira Plain by Tony Wilkinson (1989). The investigations were on a far more haphazard basis, with records being made by various members of the team as opportunities presented themselves, mainly in the evenings and at weekends. For this reason, individual site entries in this report bear the initials of those who recorded them.

Nonetheless, these sites produced an important body of information. We concentrated on two areas in particular: the floodplain around Tell Abu Dhahir and the adjacent undulating country within a *c* 3 km radius around Bardiya. They present a useful contrast: the intensively cultivated market-gardening country of the floodplain contrasting with the more pastoral, grazing countryside giving way to steppe around Bardiya. Both of these areas were extensively (although not systematically) covered on foot, and it can be fairly certain that all major remains visible on the surface were recorded.

SHERD SCATTERS

Some limited observations were also made on the density of sherd scatter in these two areas covered in detail. Around Bardiya, sherds were extremely scarce on the surface, particularly on the more undulating country towards the escarpment bordering the river valley, where sherds were almost non-existent. Since this land was more suitable for pasturage than cultivation, the scarcity of pottery would appear to support Wilkinson's (1989) hypothesis that such sherd scatters are evidence for fertilisation around Tell al-Hawa and elsewhere. On the floodplain around Tell Abu Dhahir, however, sherds were also surprisingly scarce (although not as scarce as around Bardiya). On examining the sides of the Wadi Suwaidiya, however, which cut through the sedimentation of the flood plain to a depth of some 10m or so, considerably more sherds were found, suggesting that flooding and sedimentation had obscured sherd scatter densities here. In addition, in areas where flooding was not a factor (such as on the second river terrace, where most of the excavated sites were located, just outside the immediate floodplain), the sherd scatter was found to be as dense as, in some cases, a mounded site (see below, Sahm). Since both the floodplain and the second river terrace are areas used mainly for cultivation, the evidence seems to support Wilkinson's theories of ancient fertilisation practices.

The evidence from the Wadi Suwaidiya cutting equally suggests that the floodplain might have supported more sites than are visible today, with any smaller settlements having been obscured by sedimentation or even swept away by flooding. The sherd scatters, therefore, might be evidence of settlement rather than fertilisation practice. In this context it is worth noting that a small settlement like Siyana was totally erased after only one season of flooding from the dam (see Chapter 3). Although flooding to this extent was highly unusual or even unique (ie caused directly by the dam), it must be noted that a small village adjacent to Tell Gir Matbakh (also generally not subject to flooding) was abandoned as recently as 1974 (see Chapter 7), leaving today very little evidence of settlement: few traces of wall lines, virtually no mounding and a thin sherd scatter. If evidence for minor single period settlement can be obscured to this extent after only twelve years' abandonment, several thousand—or even hundred—years would erase all traces apart from a thin sherd scatter. Again, the particularly dense sherd scatter around Sahm, without any associated mounding or architectural remains, is significant here.

Furthermore, there is a possibility that, to some extent, permanent occupation may have periodically alternated in local areas between the floodplain and the second river terrace, with probable effects on land use patterns. However, the development and/or preservation of multi-period sites were limited to the second river terrace, where archaeological investigations were consequently concentrated. This hypothesis might explain the frequently punctuated occupation sequences in these excavations, or apparent breaks and gaps in the stratigraphic (as opposed to ceramic) record, and the apparent lack of—for instance—Halaf and Earlier Uruk occupation in this stretch of the river valley. Further fluctuation in local settlement density may have been caused by changing patterns of land use and security in the nearby North Jazira plain. It must be emphasised, however, that these conclusion are based on relatively limited observations: we do not have the amount of detailed, quantified evidence on sherd scatters that Wilkinson has gathered around Tell al-Hawa and elsewhere.

SITE CATALOGUE

The following are descriptions of each site thus recorded, in alphabetical order. Discussion is incorporated into the general overview in Chapter 1; all of these sites are marked on Figs 1-2. The straightforward narrative style of this catalogue is favoured over a more formal, structured approach. In addition, the sites are arranged in alphabetical rather than in any hierarchical order (tells, surface scatters, anomalies, findspots, etc). This reflects the fact that the sites are not the result of a systematic survey, but are merely miscellaneous pieces of information which are nevertheless at least worth publishing in the context of the excavated sites.

AIN SATTAM (Fig 2, Site 8)

Site no. 144 on the Saddam Dam archaeological map, with Periods XI and XII (Old and Middle Assyrian) marked as present, 3 km north of Zammar between Thuwaij and Shaikh Humsi. *Ain* is Arabic for 'spring', but there were no signs of one at the site. It is a very low circular mound about 50m in diameter and 1.5m high. Probably about 1 m of that height represents a natural mound. Only four sherds were found on the surface, none of them diagnostic.

W B

TELL AMRAN (BARDIYA 15) (Fig 2, Site 9)

Located on high ground on the east side of the wadi leading down from Bardiya to the river valley, at the southern end between two small subsiduary wadis, which join together below the site.

The site consists of a pottery scatter concentrating mainly on the north and south sides of a low rise in ground, measuring approximately 65 x 30m in area, between the two small wadis. Some fragments of greyish sandstone (20-30 cm across) were laid on the summit forming an approximate circle *c* 1.7m across. The site was probably limited to the low rise, with a maximum depth of deposit of 1m, although a scatter of pottery extended for a further distance of some 10m, especially towards the east and west.

The site was sounded by Salem Yunis of the Department of Antiquities in 1987 as part of the continuing salvage project. The pottery, which was relatively scarce, was entirely of Late Islamic date, and essentially consisted of wheel-thrown medium plain unglazed wares decorated on the exterior with shallow notch rouletting, single wavy incised lines and occasionally with light finger indentations. This pottery was similar to that found at Tell Aswad, Tell Göz Giran, Jazruniya, Khirbet Jem Laklak (*qv*), Seh Qubba and around Tell al-Hawa (Ball, Tucker and Wilkinson 1989, 38-39; figs 16, 28-29, 27: Type 81), but has not previously been published from northern Iraq. A single sherd with moulded decoration was also found on the surface. Two coins were recovered, but had not been cleaned and read at the time of writing. The remains of low drystone footings, perhaps for tents or temporary shelters rather than walls, were excavated, and the overall depth of deposit was shown to be between 20 cm and 1m.[1] It is interesting, and perhaps relevant to the interpretation of the site, that transient bedu 'black tent' occupation was noted on level ground not far from this site, closer to the Wadi Bardiya, in spring 1987 (see also Wadi Bardiya, below).

Date: Late Islamic

St J S

TELL ASWAD (Fig 2, Site 10)

Tell Aswad lies on a small wadi (downstream from Jazruniya) which probably reached the Tigris somewhere between Seh Qubba and Khirbet Shireena. The tell stands some 11m high, though it does not stand out particularly from the surrounding undulating country and might easily be taken for a natural mound.

The tell is situated at the junction of two wadis, to the west and south-west of the tell. Both drain towards the south; the wadi to the west still had pools of water in it in May 1986. The most prominent part of the site is a mound measuring approximately 19m east/west by 27m north/south. The summit is roughly circular, with precipitous slopes to the north and west. On the south-south-west area of the summit many walls are visible: some have buttresses and others are also plaster-lined.

The walls are roughly oriented north-west/south-east. There are Islamic sherds on the surface, with rouletting impressions and finger-marks (similar to Jazruniya and Seh Qubba). Graves are also visible on the surface (orientation not r ecorded). The south-western slope is less severe; in the wadi at its base is a geological 'dike'

1 A brief note on this excavation has appeared in *Sumer* 45 (1987-8), 87. Note that all walls were drystone, and not brick as reported.

exposure of limestone. From its height in the wadi sections, it would seem reasonable to suggest that at least two metres of the mound were natural, thus giving the man-made height (maximum) of 8m.

The site extended under gentle slopes from the main mound to the east and north-east. To the east the site was very overgrown and not farmed, though at least two clearance cairns over 1m high were recognised. The approximate extent of the site was 150m east/west by 160m north/south. In the lower area only Late Islamic pottery was recognised; the ground was thick with river pebbles and rubble.

Some 500m to the north-west along the major track which bypasses Tell Aswad to the north was a deep hollow in the base of a wadi alongside the road. In the section of this deep wadi were a single layer of stones (limestone) which formed a street surface at least 5m wide. This occured on both sides of the wadi and followed the same course as the modern track. These limestone cobbles had pottery in their interstices and in the vicinity was a more widespread scatter of probably Late Islamic pottery. The cobbled surface appeared to be of unusually fine construction, with tightly set cobbles. The presence of sherds may be evidence of another site in the vicinity. There was a deep waterhole within 100m of this cobbled surface.

To the north-east of Tell Aswad, at the junction of the south wadi and the main north-west/south-east track, is a bridge of more recent construction (1940s?) which serves as a good landmark for the position of the site.

Dates: ?2nd millennium, ?Middle Islamic, Late Islamic.

D T

BARDIYA 3 (Fig 2, Site 11)

Located on the northern outskirts of the village of Bardiya, some 300m from the nearest house, along the east side of a wadi that leads down to the river plain. A low mound, *c* 65 x 30m in area. The west side seems to have suffered erosion, slumping in a series of shallow steps down to the wadi. Depth of deposit uncertain, but probably *c* 1.5m, implying a permanently occupied mounded settlement rather than a temporary camp. The surface was ploughed.

The surface was completely stripped of visible artefacts, and abundant flint (and some obsidian) lithic and a number of pottery diagnostics (all Ubaid) were recovered. Also some groundstone (specifically basalt, eg <1222>) from the summit of the mound. All the pottery visible was covered with encrustation, but fresher-looking, larger pieces were collected from the wadi side of the site. The fine quality of the obsidian was particularly noteworthy.

The opposite (west) side of the wadi was also visited, but no artefacts were noted, despite ploughing.

Dates: ?Halaf, Ubaid

St J S

BARDIYA 4 (Fig 2, Site 12)

A mound, situated 1-1.5 km. south of Bardiya village, on the east side of a shallow wadi draining towards Bardiya. It was estimated to have up to 6m deposit and was approximately 200m in diameter. The mound was more prominent on the west side, where the top was *c* 6m above the track, and more gradual on other sides, where it is *c* 2-4m above plain level. The surface was covered in ploughed stubble on the single visit here. Abundant potsherds, with painted (Halaf-type) examples commonest on the west and north. A large amount of very coarse, and often very weathered, handmade vegetable-tempered wares (some with coarse incision), and a fired clay fragment <1210>, possibly a clay nail, were also recorded. Abundant flint and obsidian varying from large blades to debitage and retouched pieces. A concentration of lithics appeared on the north-east side. Two pieces of pottery slag, a stone bead and some groundstone fragments were collected from the east side, and some more ground basalt fragments were noted elsewhere on the slopes.

Dates: Hassuna, Halaf, Ubaid, Earlier Uruk, Later Uruk, Akkadian, Khabur

St J S

BARDIYA 5 (Fig 2, Site 13)

A mound on the west side of the wadi leading south from Bardiya Village, due west of and adjacent to Bardiya 4. It is possible that Bardiya 4 and 5 might originally have been a single mound, subsequently cut by the wadi. It is most prominent on the east side, where it rises 6-7m above the wadi, and slopes down more gradually on the north and west sides, merging into natural low hills on the south side. Fairly flat-topped. Occupation of unknown depth, as it is certainly on a natural hill, but may be up to 5m. Dimensions of occupied area uncertain, but up to 130m north/south and 125m east/west.

The (ploughed) surface is covered in abundant potsherds, largely of Hellenistic/Parthian date. Also a certain amount of flint (including well produced blades) and obsidian (including small fragments of debitage). Artefacts were concentrated on the north and west sides; many of the potsherds looked very weathered. A decorated clay spindle-whorl fragment <1211> was found at the northern end of the mound, and an incised stone pendant <1200> on the west side of the mound.

The lithics, some painted sherds, and the pendant might point to Halaf occupation on the side of the wadi, opposite the main occupation at Bardiya 4. The main occupation, however, seems to have been late 1st millennium BC.

Dates: Halaf, ?Akkadian, Khabur, Hellenistic, ?Parthian

St J S

Bardiya 6 (Fig 2, Site 14)
A mound in undulating ploughed country several hundred metres to the south of the road between Bardiya and Tell Hamad Agha as-Saghir. It is just to the east of Bardiya 7, from which it is separated by a shallow watercourse. Indeed, Bardiya 6 and 7 too might originally have been a single mound subsequently divided by the wadi. Pottery was predominantly Khabur. One sherd may be Halaf. A very fine, green stone (probably serpentine) celt <1201>, and several Khabur-style animal figurines <1202-1204> were found on the surface.

Dates: ?Halaf, Akkadian, Khabur

W B

Bardiya 7 (Fig 2, Site 15)
A mound located on the south side of road from Bardiya to Hamad Agha as-Saghir, about 1-1.5 km from Bardiya. A dirt track from the road runs to the top of mound.

The slope is gently undulating on the south side, steeper to the east and west. On the south side is a second, lower mound. Both mounds are fairly flat-topped. Pot-sherds were abundant on the east slope and on the smaller mound. There are fewer on the west slope, except for the area by the dirt track. There is a small quantity of flint debitage and some obsidian spread over the whole area, perhaps more on the western slope than elsewhere, and a groundstone fragment <1212> was found on the east slope.

Dates: Hassuna, ?Halaf, Later Uruk, Akkadian, ?Khabur, Late Islamic

W B

Bardiya 8 (Fig 2, Site 16)
A mound 1 km north-east of Bardiya, on the south side of the wadi that leads down to the river valley. It is c 6m in height on the north (steepest) side. The top is roughly oval, measuring approximately 17m east/west by 14m north/south. The slope (and the density of sherds and lithics) tails off gently towards the south. A glass bracelet fragment <1220> was found on the surface.

The site was subsequently excavated in 1987 by Salem Yunis of the Department of Antiquities, as part of the Salvage Project. Apart from a late grave cut from the surface (left unexcavated), the archaeological deposits proved to be shallow, but contained the stumps of mud brick walls. With the exception of three possible Ubaid painted sherds and some 3rd- to 4th-century AD diamond-stamped sherds, all of the excavated ceramics were Later Uruk in date. Thus, isolated sherds found on the surface survey that represented other periods may represent strays from field scatters. The excavated sherds include abundant Later Uruk coarse handmade and cooking wares, and a variety of wheel-thrown medium ware jars and straight-sided, carinated, and incurving rim bowls. One droopy spout, a single fragment of an over-fired bevelled-rim bowl, and a sherd with incised hatched triangles were also found; no painted Uruk wares were represented in the assemblage. A small quantity of flint (and a little obsidian) debitage, two figurines figurines, a cylindrical baked clay bead and two hemispherical baked clay spindle whorls were also found.[2]

Dates: Ubaid, Later Uruk, ?Khabur, Late Assyrian, Partho-Roman or Early Sasanian, Middle Islamic, Late Islamic

St J S

Bardiya 9 (Fig 2, Site 17)
Situated between the branches of a small wadi, draining to the north-north-east, some 200m south of the Bardiya to Barzan road and some 300-400m east of the main North Jazira pipeline construction.

The site consists of a low, approximately square, mound *c* 40m square, up to 2m high above the surrounding slopes and relatively steep-sided on the north and west. The surface is covered in Islamic coarse glazed wares and fragments of limestone and reddish coloured sandstone deriving from a rectilinear building with exterior walls partly visible on the surface. A Late Islamic glass bracelet fragment <1213> was found, and there is also a thin scatter of Ubaid pottery.

The slopes surrounding this mound were ploughed, and were covered with flint and obsidian, the former in an unusually wide range of colours and qualities. There were also many Ubaid sherds. The maximum extent of this area is *c* 200 x 100m; slightly undulating, but probably no more than 1-1.5m deposit in any one place. Some groundstone was collected in the north half of site, and some Islamic pottery collected along the south half. A pierced limestone fragment <1205>, possibly a loomweight, and an animal figurine <1206>, were also found.

Given the location of this site, it is possible that it corresponds with the so-called Roman *castellum*—identified as such on the basis of its square plan when seen from the air—recorded in the area by Stein (1940, 429; Gregory and Kennedy 1985, Part I, 111-12). Similar mistaken identifications by Stein have been noted elsewhere in this volume.

Dates: ?Halaf, Ubaid, Later Uruk, Khabur, Late Islamic

St J S

2 I am very grateful to Salem Yunis for showing me his excavations here and at Bardiya 15 and the material from these sites. A brief note on the excavations at Bardiya 8 has appeared in print (*Sumer* 1987-88, 87), but no evidence for the suggested Hassuna and Akkadian dates was seen by this writer.

Bardiya Cemetery (Bardiya 1 and 2) (Fig 2, Site 18)
Two small, adjacent mounds (originally numbered Bardiya 1 and 2) divided by the shallow watercourse of the Wadi Bardiya and lying immediately to the south of the road, just to the south of the old village of Bardiya. The country is undulating, so it is uncertain how much of the mounds is natural. Both mounds are covered by a modern cemetery. The slopes were still ploughed in 1986.

A wide range of pottery was recovered, including some unusual types. A Middle Assyrian presence might be represented by a pie-crust pot-stand and some lug bases (unique to the Zammar region) that show affinities to Kassite pottery of southern Mesopotamia. There was also some Early Islamic glazed pottery, which seemed to be limited to Bardiya 1, the mound on the east side of the Wadi Bardiya.

Dates: Later Uruk, ?Ninevite 5, Akkadian, Khabur, ?Middle Assyrian, Late Assyrian, ?Partho-Roman, ?Sasano-Byzantine, Early Islamic

W B and St J S

Gir Bil (Fig 2, Site 19)
Gir Bil is a prominent tell alongside a small modern mud brick settlement. A minor wadi defines the mound's limits to the west; 300m south along the wadi is a junction with a larger wadi running broadly east/west, and a hundred metres to the south of this wadi are low hills with craggy cliff-like outcrops. This ridge of hills marks the southern limit of the valley in which Gir Bil lies. From the tell to this main wadi the mound slowly peters out. The land to the north is generally higher and gently undulating. There is much agriculture in the area, although a large part of the low tell at Gir Bil remains unploughed.

The site can be divided into two broad areas. First, the most prominent mound on the site, measuring some 200m east/west by 120m north/south, rising to a height of approximately 10m. This is broadly oval in shape, its oval summit (approximately 25 x 11m) densely covered in graves of presumably Islamic date. On this mound a quantity of stripe-painted pottery (Khabur) was recognised. A masonry wall was exposed half-way down the west slope of the mound (the north slope was not investigated). Both the west and south slopes were memorably steep, while the east slope was gentle.

The second area of interest was the extensive low mound all around the main tell. Its extent was less clearly defined: it continued at least as far as the main wadi, which is 290m south-west of the main tell, and it was probably present (though not so clearly defined) to the north-east of the tell where the tell peters out after 100m. Together, this makes approximately 400-500m north/south and 250m east/west, continuing some 50m beyond the track to the east of the site.

From the water level of the minor wadi to the top of the low mound was 10m; to the top of the prominent mound it was 20m (30m in all). Much of the low mound seemed to have Late Islamic or possibly modern sherds and rubble on it. Ninety metres south-west of the summit was a gypsum mortar built structure, probably a courtyard house. It formed a rectangular shape and stood approximately 1m high.

Fourteen sherds, mainly Khabur, were collected from the main mound, and one small piece of obsidian (not obviously worked) was found on the lower tell.

Dates: Khabur, Late Islamic

D T

Tell Göz Giran (Fig 2, Site 20)
Located immediately adjacent to the river, several kilometres downstream from Shelgiyya (Fig 1). The Saddam Dam archaeological map shows some confusion here. Site 139, 'Shelkiya Cemetery', is marked adjacent to the village marked (in Arabic) as Göz Giran. The village of Shelgiyya is marked (in Arabic) several kilometres upstream from this, in the approximate position of the site of Shelgiyya, though no archaeological site is marked. It is therefore possible that Site 139 is in fact Tell Göz Giran. It consists of several low mounds only a few metres high and perhaps 200m in extent, marking the site of a deserted village. A modern village is immediately to the south. Several diagnostic Late Sasanian sherds were found (eg 'smeared ware') as well as Late Islamic combed and rouletted sherds.

Dates: Sasano-Byzantine, Late Islamic

W B

Tell Hamad Agha as-Saghir (Fig 2, Site 21)
Site 26 on Map 126 in the *Atlas of the archaeological sites in Iraq*. Subsequently excavated by Dr Peter Spanos of the University of Munich (Spanos, 1988, 1990).

Consisted of a large, oval main mound, about 15m high and 180 x 110m in area, surrounded with some slight lower mounding and sherd scatters. The eastern half of the main mound was covered by a modern cemetery, and the modern village encroached upon the southern edge. This left only a comparatively limited area to the west exposed. On the southern side of the mound, erosion had exposed a 17m long wall before excavation, constructed of squared red sandstone blocks up to 30 cm high. Other stone wall lines were visible on the south and west.

In a field to the south-west was a scatter of many small sherds (most not greater than 5 cm) and some glass. Some 40-50m to the south of the main mound, within the village to the south-east, was a prominent long mound, *c* 6m in height and 150m long. Another scatter of rolled sherds was some 50m or so further to the south-east.

Throughout, the spread of Khabur stripe-painted pottery appeared most prevalent, but pottery from other periods was also collected, as well as many lithics.

Dates: Later Uruk, Ninevite 5, Akkadian, Khabur, Hellenistic, Late Islamic

W B and D T

Khirbet Jassa (Fig 2, Site 22)
Also possibly called Buwaidha. Marked as Site 92 on the Saddam Dam archaeological map. A thin surface scatter of sherds, mainly undiagnostic, on the edge of the first river terrace, about half-way between Siyana Ulya and Shaikh Humsi. About three low mounds, *c* 30 cm high and a few metres across, mark the only artificial build-up apparent.

Date: Late Islamic

W B

Jazruniya (Fig 2, Site 23; Figs 133-35))
Site no. 14 on Map 126 in the *Atlas of the archaeological sites of Iraq* (Directorate General of Antiquities, Baghdad, 1989); see also al-Hasani 1987, 181. An extensive area of stone and mortar ruins, covering an area of approximately 50 hectares (*c* 600m east/west by 800m north/south), representing the remains of a medium-sized town (Figs 133-4).

It was divided roughly into two areas. The northern half was dominated by a high mound, on which were the remains of a large stone and mortar building with a vaulted room still partly intact (Fig 133). Many other wall lines were visible on and around this mound; it is possible that these may represent the remains of a citadel. An ancient east/west street line was visible to the north-east, and there were extensive ruin-fields all around, particularly to the east and west, covered in general building and occupation debris: rubble, lumps of gypsum mortar, sherds, etc.

To the south of the main mound were the remains of a regularly laid out 'lower town', with street lines in a regular grid still visible. A main east/west street divides the 'lower town' from the 'citadel' area. Many low mounds of rubble mark the remains of houses. To the east, fields covered in rubble extend for several hundred metres as far as a modern track. To the south and west are open fields.

A watercourse cut part of the site along the western side. In one part, this wadi had exposed a 2m section of occupation strata. Walls stood as high as 4m. Construction was of uncut or roughly shaped stone rubble throughout, bonded with gypsum mortar. This construction is prevalent throughout north-western Iraq in the Middle and Late Islamic periods (see Reitlinger 1938) and was still practised until relatively recently. This construction is identical to Periods 17 and 18 at Seh Qubba.

Pottery was not collected, but Middle and Late Islamic combed, green-glazed and rouletted wares were recorded (Fig 135). Thirty-two Islamic coins, probably Atabeg or early Ilkhanid, and one Byzantine coin were collected, and handed directly to Mosul Museum.

This site is tentatively identified in Chapter 2 as Bashazza.

Dates: Sasano-Byzantine, Middle Islamic, Late Islamic

W B and D T

Khirbet Jem Laklak (Fig 2, Site 24)
Site no. 107 on the Saddam Dam archaeological map. On a narrow strip of land between the banks of the river and the hills, just below where the Tigris emerges from a gorge. The cliffs (mainly on the right bank) limit access to the river from the steppe north of this point. There are good views from the top of these hills, with Tell Abu Dhahir and Seh Qubba clearly visible to the south. On the opposite bank is a deserted mudbrick village and a number of what appeared to be large, partly artificial caves in the low south-facing cliffs forming the river bank. It is marked on the Saddam Dam map as Site 33, Ishkafta Cemetery. Apart from this record, these caves seem to have eluded archaeological attention (eg by Field 1951; Field 1955), despite their size, possible relevance to the prehistory of the area and adjacent village name. A number of sites listed by Field were identified from maps on the basis of the Kurdish prefix *shkaft* or *ishkaft*, meaning 'cave'.

Khirbet Jem Laklak consisted of a concentration of cultural material (sherds, many stones and other debris, disturbance) in a flat area with very little mounding, *c* 60m in diameter. The area is unploughed and the surrounding areas are all ploughed. Across the centre of the site were the remains of a raised water channel which ended in an abrupt drop, presumably to power a mill that has since disappeared. On the western edge of the site was a modern 90 cm deep bulldozer cut which exposed quantities of pottery and bitumen. There is an Islamic cemetery up the hill *c* 200m to the west. The graves were focused around the remains of a tomb, visible in ground plan. The cemetery was notable for having an unusually high number of grave stones. A small number of ruined rectangular two-room buildings with stone footings and sunken floors were also noted next to a wadi draining into the Tigris.

The pottery was mainly Late Islamic and modern, with considerable quantities of hard greenish hubb fragments and rouletted ware, and some Late Islamic coarse handmade incised sherds. Late Sasanian sherds, belonging to unglazed jars and bowls, were also found.

Date: Late Sasanian, Late Islamic

W B, St J S and D T

Khirbet Jem Laklak al-Qadim (Fig 2, Site 25)
Site no. 105 on the Saddam Dam archaeological map. It is on the banks of the river, several hundred metres downstream from Khirbet Jem Laklak. The site is a low mound,

approximately 1.5m high.

The pottery appeared to be modern or very late, similar to that found at Khirbet Jem Laklak. No decorated pieces were seen. Those collected were very battered. One grey/green fine ware sherd had possible Ninevite 5/ Taya ware affinities. There were also many flint flakes of uncertain date in the surrounding ploughed field, although some at least of these might be the result of plough damage.

Dates: ?3rd millennium; Late Islamic; modern

W B and D T

KHARAB AL-ASHEQ (Fig 2, Site 26)

A village on the main North Jazira pipeline approximately 7 km south-west of Karhasan. On the southern outskirts of the village is the main mound, *c* 30 x 80m in area and 2m high, with a subsidiary mound to the north. There were no buildings on the top and it appeared to be fairly undisturbed. It had a thin sherd scatter on the surface.

Within and just outside the village, particularly to the north and east, were a number of further low, irregular mounds, no more than about 2m high, stretching for some 200m. A slightly higher but smaller rounded mound to the east, 3 to 4m high, had a cemetery on top. The sherd scatter was fairly thin throughout; Halaf sherds were the most noticeable. Surface finds included a pierced sherd fragment <1217>, and a glass bracelet fragment <1218>.

Dates: Halaf, Hellenistic, Late Islamic

W B

MOHAMMED AGHA CAVE (Figs 1-2, Site 27)

Site no. 115 on the Saddam Dam archaeological map, where it is described as a rock shelter with 'Period XII', Middle Assyrian, material present.

It is located at the very northern end of the dam catchment area, not far from the Syrian border. The cave is a simple, low artificial chamber, approximately 2m deep and wide by 1.5m high, cut out of the soft sandstone of the cliff that forms the right bank of the river at this point. It is approached by a narrow path at the foot of the cliff. The interior is completely clean, with no dating evidence or occupation present. No dating evidence or other remains were found below or anywhere near the cave. Its original function was probably a lookout post.

A number of apparently similar caves in the Finik area further upstream, and described as living quarters, chapels or tombs, have attracted the attention of numerous travellers to the area. These lie within the projected area of the Cizre Dam, part of the Southeast Anatolia Project (Algaze 1989b, 250, fig 9). Similar features have also been reported from elsewhere in northern Iraq (Boehmer 1976).

W B and St J S

SAHM (Fig 2, Site 28)

A modern village on the edge of the second river terrace between Tell Abu Dhahir and Karhasan. There was no cemetery or no apparent artificial mounding, but the sherd scatter in and around the village was about the same density as at Siyana or Karhasan. On the edge of the terrace, which is very wide here, several hundred metres upstream from the village, there was an even denser surface scatter of pottery, though again no artificial buildup is evident. The sherds are very rolled and abraded, most of them barely identifiable. The scatter covers a wide area of several hundred metres. The ground is completely flat and ploughed.

Sahm appears puzzling as a site. There is no evidence of occupational build-up, but the sherd scatter is as dense as on many of the tells in the vicinity, and far more dense than on other fields in the river valley, even when such fields are immediately adjacent to densely settled sites such as Tell Abu Dhahir. It may be that the sherds were taken here from another settlement as part of a fertilising process (see Wilkinson 1989), but there is no obvious settlement adjacent, and as already pointed out, fields immediately adjacent to sites, where one might expect dense sherd scatters resulting from fertilisation, are not as dense as at Sahm. St J S notes that it is possible that the site may represent the remains of transient encampments. One of the sites near Tell Mohammed Arab was recorded before being seasonally reoccupied by nomads the following year.

Dates: ?Uruk (1 possible sherd), ?Khabur (1 possible sherd), ?Hellenistic, Late Islamic

W B

TELL ES-SAWWAN (Fig 2, Site 29)

A prominent mound located south of Bardiya 9. No lithics were visible, despite the name (*sawwan* is Arabic for 'flint'), so the name is probably transposed from Bardiya 9, where lithics are abundant. Only four sherds and some slag were recovered, the former undistinguished apart from some wavy line incised decoration on one sherd, which may be Islamic.

Date: ?Islamic

St J S

SHAIKH HUMSI CEMETERY (Fig 2, Site 30)

Site no. 138 on the official Saddam Dam archaeological map. A long mound approximately 10m high, to the north of the village, upstream from Tell Shaikh Humsi which was excavated by the Soviet Archaeological Mission (Bader 1989a and b). Only a very brief visit was made, during which it was not possible to record details of the mound or collect sherds from the surface. Several periods, however, were noted as being present, including Later

Uruk, possibly Akkadian and Late Assyrian. It is covered in a modern cemetery. In a subsequent visit by an engineer working on the dam project, one decorated Earlier Uruk 'sprig ware' sherd, identical in all respects to those excavated at Tell Shelgiyya, was brought to our attention. This is one of the few definite occurrences of this ware on the entire dam project known to the present authors, apart from Shelgiyya.

Dates: Earlier Uruk, Later Uruk, ?Akkadian, Late Assyrian

W B

KHIRBET SHERLI (Fig 2, Site 31; Fig 75)
Located 2 km south-west of Tell Abu Dhahir, on the stony edge of the floodplain, at the foot of the hills. A small ruined structure, measuring *c* 5.5m square (outside measurements), and standing to a maximum height of *c* 1.4m on the interior (Fig 80). Construction is of rubble and mortar. It consists of two rooms, measuring 2.5 x 3.25m and 0.6 x 3.5m in area respectively. The larger is entered by a single doorway, *c* 1.35m wide, flanked by double pilasters on each side (although fully visible only on one side). There is some evidence that these pilasters were replastered. There is a threshold of stone and mortar at least 30 cm high, but no floors are now visible inside this structure. The original back (east) wall of the main room has been rebuilt (as have all the walls) after evident collapse, but the original line is largely visible.

There is a side room entered through a doorway in the north corner of the main room, 50 cm wide (no threshold evident). No floors were visible. North and east walls rebuilt. Other walls still plastered. A hard, greyish white coarse gypsum plaster was used for all visible wall faces of original structure. Maximum height of 90 cm above ground level on interior of main room.

The structure evidently collapsed, explaining the low, now grass-covered slopes, to a height of *c* 1.3m above surrounding ground level for a distance of up to 3-4m around. It was then at least partially re-excavated, probably relatively recently, with stones being strewn around for a distance of 2-3m, and all of the original visible wall rebuilt (dry-stone technique only), along with low flanking walls in front of the main entrance. The placement of three east/west graves approximately 4m east of this structure was probably associated with this activity. One headstone was dated 1978.

The date of construction of the original building is unknown, but was clearly Islamic. Only one potsherd collected from here (inside main room); probably Late Islamic. The building was probably a tomb.

Date: Late Islamic

St J S

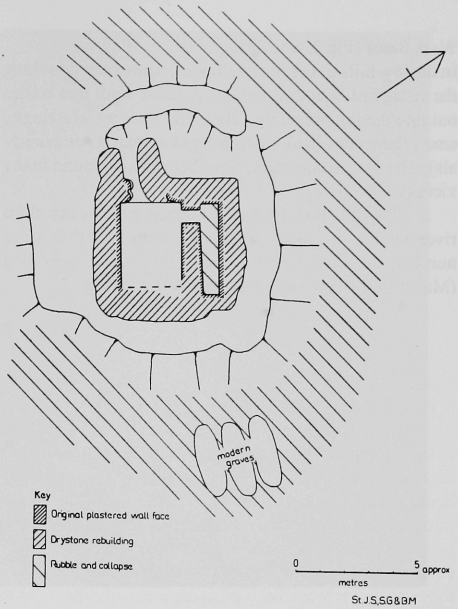


Fig 75. Khirbet Sherli: plan

KHIRBET USAILA (Fig 2, Site 32)
A low mound in undulating country by a watercourse between Hamad Agha Saghir and the river valley. Because of the undulating nature of the country, the site is marked more by changes in the vegetation and soil colours than the actual mound. It was originally numbered Bardiya 10, before the true name was discovered.

Some graves marked by upright stones were visible on the summit, belonging to a cemetery which according to local information was associated with an old village (now vanished) further along and opposite the watercourse. Surface finds included several glass bracelet fragments <1214> and <1215>, and a Khabur style figurine fragment <1223>. Late Sasanian sherds, including stamped sherds, combed sherds and brittle wares, were collected from the mound.

Dates: Khabur, Late Sasanian, Late Islamic

W B and St J S

WADI BARDIYA (Fig 2, Site 33)
Located about halfway down the Wadi Bardiya between the village of Bardiya and the river valley, on a flat area just to the west of the track. Findspot of a scatter of lithics and a basalt grinder fragment <1216>. No apparent permanent associated occupation. It might be the site of a seasonal encampment, such as were seen in this area in the spring of 1987.

St J S

WADI SAHM (Fig 2, Site 34)
In the low hills of the river valley escarpment overlooking the village of Sahm, just above a minor wadi that comes out into the floodplain by Sahm. The findspot of a single, small flake core (with platform and at least three removals). The date is uncertain. No other remains found in the vicinity.

The position probably corresponds to the third river terrace downstream above Raffan, where a large number of Palaeolithic findspots were recorded (Mazurowski 1987; cf also Inizan 1984, 1985).

W B and St J S

KHIRBET WADI SUWAIDIYA (Fig 2, Site 35)
On the left bank of Wadi Suwaidiya at the point where it opens out onto the plain, just below the high bluff overlooking the plain. This could be the site marked 'Ain Uwais', Site no. 99 on the Saddam Dam archaeological map, though this is more likely to refer to Khirbet Shireena. A few very eroded rubble and mortar walls, of similar construction to those at Seh Qubba, surrounded by building debris in two distinct areas adjacent to each other, extending for about 30m in total alongside the wadi. Probably the remains of a relatively modern mill. A few unidentifiable sherds, but these may be the result of field scatter.

Date: ?Late Islamic

W B

SMALL FINDS

Reg	*Description*	*IM No.*	*Site*
1200	seal-pendant	BD 5/1	Bardiya 5
1201	celt	BD 6/1	Bardiya 6
1202	figurine	BD 6/2	Bardiya 6
1203	figurine	BD 6/3	Bardiya 6
1204	figurine	BD 6/4	Bardiya 6
1205	stone bead	BD 9/1	Bardiya 9
1206	figurine	BD 9/2	Bardiya 9
1210	clay nail frag	-	Bardiya 4
1211	spindle whorl	-	Bardiya 5
1212	ground stone	-	Bardiya 7
1213	glass bracelet	-	Bardiya 9
1214	glass bracelet	-	Usaila
1215	ground stone	-	Usaila
1216	ground stone	-	Wadi Bardiya
1217	pierced sherd	-	Kh Ashuq
1218	glass bracelet	-	Kh Ashuq
1220	glass bracelet	-	Bardiya 8
1221	jar	-	Bardiya Cemetery
1222	ground stone	-	Bardiya 3
1223	figurine	-	Usaila

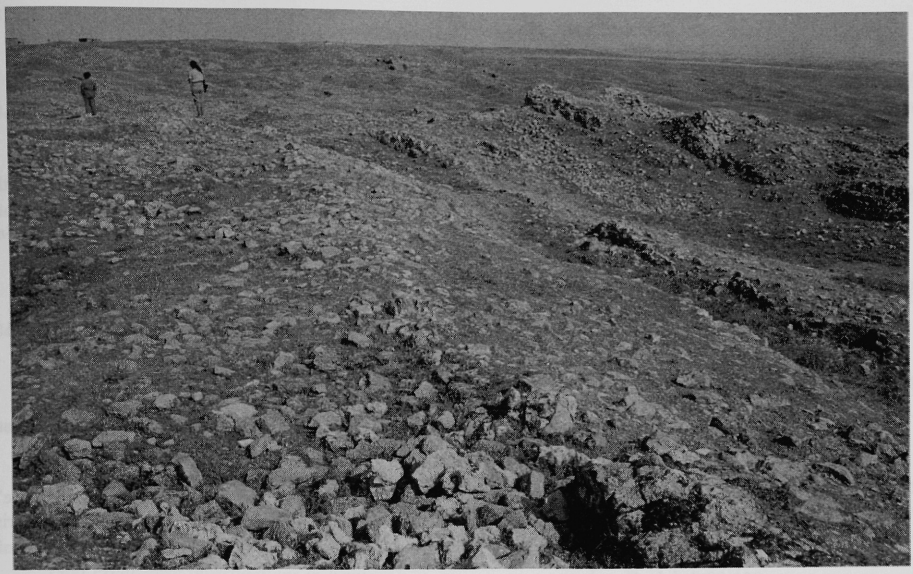
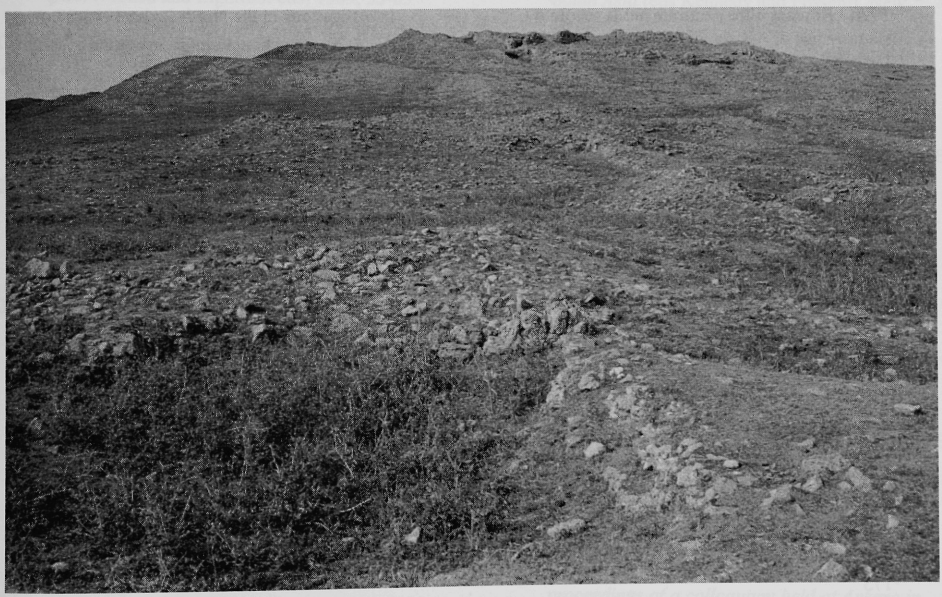


Plate 57. Jazruniya: view towards the main mound

Plate 58. Jazruniya: general view



BIBLIOGRAPHY

Abdul-Malik Yunis
1981 The excavations of the University of Mosul at Tell Abu Dhahir (II), *Sumer* 37, 101-111

Adel N Abboud
1981 The excavations of the University of Mosul at Tell Abu Dhahir (II), *Sumer* 37, 81-100

Algaze, Guillermo
1989a The Uruk expansion cross-cultural exchange in Early Mesopotamian civilization, *Current Anthropology* 30, 5, 571-608

1989b A new frontier, first results of the Tigris-Euphrates Archaeological Reconnaissance Project, 1988, *JNES* 48, 241-81

Al-Soof, B Abu
1968 Distribution of Uruk, Jemdet Nasr and Ninevite pottery as revealed by field survey work in Iraq, *Iraq* 30, 74-86

Angeli Bertinelli, M G
1976 I Romani oltre l'Eufrate nel II secolo d C (le province di Assiria, di Mesopotamia e di Osroene), in *Aufstieg und Niedergang der römischen Welt* (ed Temporine), 2 9 1, 3-45, Berlin

Bader, N O
1989a *Earliest cultivators in Northern Mesopotamia: the investigations of Soviet Archaeological Expedition in Iraq at settlements Tell Maghzaliya, Tell Sotto, Kul Tepe,* Moscow

1989b The brief preliminary report about the works of Soviet Archaeological Expedition in Iraq, 1985, in *Researchs [sic] on the Antiquities of Saddam Dam Basin Salvage and Other Researches,* 132-133, Baghdad

Ball, Warwick
1987a British excavations in the Abu Dhahir Area, in *Researchs [sic] on the Antiquities of Saddam Dam Basin Salvage and Other Researches,* 78-81, Baghdad
1987b Abu Zahir, *Archiv für Orientforschung* 34, 175

1989 Seh Qubba, A Roman frontier post in northern Iraq, in *The eastern frontier of the Roman Empire: proceedings of a colloquium held at Ankara in September 1988* (D. French and C. Lightfoot, eds.), 7-18 Oxford

1990 The Tell al-Hawa Project: the second and third seasons of excavations at Tell al-Hawa, 1987-88, *Mediterranean Archaeology* 3, 75-92

1991 Tell al-Hawa and the development of urbanization in the Jazira, *Al-Rafidan* 11, 1-28

1997 Tell Shelgiyya: An Early Uruk 'sprig ware' manufacturing and exporting centre on the Tigris, *Al-Rafidan 18*, 93-101.

Ball, W and Black,
1987 Excavations in Iraq 1985-86, *Iraq* 49, 231-251

Ball, W, Tucker, D J and Wilkinson, T J
1989 The Tell al-Hawa Project: archaeological investigations in the North Jazira 1986-87, *Iraq* 51, 1-66

Ball, W and Wilkinson, T J
forthcoming Ninevite 5: town and country in Northwestern Iraq, *The origins of North Mesopotamian civilization, Ninevite 5 chronology, economy, society,* (ed H Weiss) Yale

Barnett, R D
1976 *Sculptures from the North Palace of Ashurbanipal at Nineveh (688-672 BC)*, London

Behm-Blancke, M R
1989 Mosaicstilte am obern Euphrat-Wandschmuck aus der Uruk-Zeit, *Istanbuler Mitteilungen*, 39, 93-83

Bielinsky, P
1987 Preliminary report on the third season of Polish Excavations on Tell Rijim Omar Dalle, in *Researchs [sic] on the Antiquities of Saddam Dam Basin Salvage and Other Researches*, 24-32, Baghdad

Black, J A and Killick, R G
1985 Excavations in Iraq, 1983-84, *Iraq* 47, 215-39

Boehmer, R M
1976 Arcosolgräber im Nord-Irak, *Archäologischer Anzeiger,* 416-421

Bolt, D and Green, A
forthcoming The burial of the dead, *The origins of North Mesopotamian civilization: Ninevite 5 chronology, economy, society* (ed H Weiss), Yale

Bosworth, C E 1967
The Islamic dynasties: a chronological and genealogical handbook, Edinburgh

Bowen, H C and Wood, P D
1967 Experimental storage of corn underground and its implications for Iron Age settlements, *Bulletin of the Institute of Archaeology* 7, 1-14

Braidwood, R J and Howe, B
1960 *Prehistoric Investigations in Iraqi Kurdistan,* Chicago

Campbell, B
1989 The Roman pottery from Seh Qubba, North Iraq, in *The Eastern Frontier of the Roman Empire,* (French and Lightfoot eds) 1989, 53-65

Campbell Thompson, R and Hutchinson, R W
1931 The site of the palace of Ashurnasirpal at Nineveh, excavated in 1929-30 on behalf of the British Museum, Annals of Archaeology and Anthropology 18, 79-112

Clark, V A and Faulkner, R
1986 The Jerash North Theatre: the pottery, in *Jerash Archaeological Project 1981-1983* (ed F. Zayadine), 247-51, Amman

Curtis, J
1982 (ed), *Fifty years of Mesopotamian discovery, London*

1984 *Nush-i Jan III: the small finds,* London

1987 Qasrig Cliff, H Qasrig, H Hatuniiya, T Dair Situn, Grai Darki, *Archiv für Orientforschung* 34, 201-206

1989a *Excavations at Qasrij Cliff and Khirbet Qasrij,* London

1989b Case of the Missing Column, *British Museum Society Bulletin,* 60 (Spring), 7-9

Curtis, J and Green, A
1987 Preliminary report on excavations at Khirbet Khatuniyeh, 1985, in *Researchs [sic] on the Antiquities of Saddam Dam Basin Salvage and Other Researches,* 73-77, Baghdad

Curtis, J, Green, A, and Matthews, W
forthcoming *Excavations at Tell Deir Situn and Grai Darki,* London

Curtis, J. and Green, A. et al.
1997 *Excavations at Khirbet Khatuniyah,* London

Curtis, J, Green, A, and Knight, W
1987/88 Preliminary Report on Excavations at Tell Deir Situn and Grai Darki, *Sumer* 45, 49-53.

Fales, F M, *et al*
1987 Preliminary Report on the first Campaign of the German-Italian Expedition at Saddam Reservoir (1984), in *Researchs [sic] on the Antiquities of Saddam Dam Basin Salvage and Other Researches,* Baghdad, 99-128

Fentress, M A
1984 The Indus 'granaries', illusion, imagination and archaeological reconstruction, in *Studies in the archaeology and palaeoanthropology of South Asia* (eds Kennedy and Possehl), New Delhi

Field, H
1951 Caves and rockshelters in Southwestern Asia, *National Speleogical Society Bulletin* 13, 14-18

1955 Caves and rockshelters in Northern Iraq [A list of 500 caves and rockshelters in Mosul *Liwa,* compiled in 1928 by Major W C F Wilson typescript fasc]

Fiey, J M
1964 The Iraqi section of the Abbasid road, *Iraq* 26, 106-17

Fortin, M
forthcoming Tell Atij and the expansion of Mesopotamian civilization, *The origins of North Mesopotamian civilization: Ninevite 5 chronology, economy, society* (ed H Weiss), Yale

French, D, and Lightfoot, C (eds)
1989 *The eastern frontier of the Roman Empire: proceedings of a colloquium held at Ankara in September 1988,* Oxford

Fukai, S, et al,
1974 *Telul eth-Thalathat,* Volume ? Tokyo

Fuji, H et al
1987 Working report of Japanese archaeological excavations in Saddam Dam Salvage Project, in *Researchs [sic] on the Antiquities of Saddam Dam Basin Salvage and Other Researches*, Baghdad, 33-72

Gabriel, A
1929 *Im Weltfernen Orient, Ein Reisebericht,* Munich

Gast, M and Sigaut, F
1979 *Les techniques de conservation des grain à long tirme, à leur rôle dans la dynamique des systèmes cultures et des sociétés,* Paris

Gast, M, Sigaut, F and Beutler, C (eds)
1985 *Les techniques de conservation des grain à long tirme, à leur rôle dans la dynamique des systèmes cultures et des sociétés,* Paris

George, A,
1990 Royal Tombs at Nimrud, *Minerva* 1/1 (Jan 1990), 29, 31 London

Goffer, Z , Molcho and Beit Arieh, I
1983

Gregory, Shelagh, and Kennedy, David (eds) 1985
Sir Aurel Stein's Limes report, 2 Vols, Oxford

Green, A
1985 A note on the 'Scorpion-man' and 'Pazuzu', *Iraq* 46, 75-82

1987 Khirbet Shireena (Wadi Suwaidiya 1), in *Excavations in Iraq, 1985-86* (eds W Ball and J Black), Iraq 49, 247-248

Hall, D W, Haswell, G A and Oxley, T A 1956
Underground storage of grains, London

Hamlin, Carol
1974 The early second millennium ceramic assemblage of Dinkha Tepe, *Iran* 12, 125-53

al-Hasani, S F A (trans)
1987 The achievements of the State Organization of Antiquities and heritage, 1985, in *Researchs [sic] on the Antiquities of Saddam Dam Basin Salvage and Other Researches*, 176-186, Baghdad

Hudud al-'Alam
1970 Hudud al-'Alam 'The regions of the world' a *Persian Geography 372 A H -982 AD* Trans V Minorsky, London

Ibrahim, Jabir Khalil
1986 *Pre-Islamic settlement in Jazirah,* Baghdad

Ii, H and Kawamata, M
1984/85 The excavations at Tell Jigan by the Japanese Archaeological Expedition: a preliminary report on the first season of work, *Al-Rafidan* 5-6, 151-214

Inizan, M L
1984 Acheulean on the left bank of the Tigris in northern Iraq, *Sumer* 43, 244-45

1985 Des indices acheuléens sur les bords du Tigre dans le nord de l'Iraq, *Paléorient* 11/1, 101-102

Killick, R G (ed)
1988 *Excavations at Tell Rubeidheh: an Uruk village in the Jebel Hamrin,* Warminster

Killick, R G and Roaf, M D
1983 Excavations in Iraq, 1981-82, *Iraq* 45, 199-224

Kirkbride, Diana
1982 Umm Dabaghiyah, in F*ifty years of Mesopotamian Discovery,* (ed J Curtis), 11-21, London

Kozlowski, S K and Szymczak
1987 Preneolithic site Nemrik 9, *Researchs [sic] on the Antiquities of Saddam Dam Basin Salvage and Other Researches*, 8-12, Baghdad

Le Strange, Guy
1905 *Lands of the Eastern Caliphate,* London

Lines, J
1954 Late Assyrian pottery from Nimrud, *Iraq* 16, 164-67

Mazurowski, R
1987 Preliminary report on two seasons of survey investigations in Raffan microregion, *Researchs [sic] on the Antiquities of Saddam Dam Basin Salvage and Other Researches,* 20-23, Baghdad

Miller, R
1984 Flaked stone industries of Arabia and the Gulf from Late Iron Age to early Islamic times, *Arabie orientale, Mesopotamie et Iran meridi-*

onal de l'âge du fer au début de la période islamique (eds R Boucharlat and J-F Salles), 145-50, Paris

Moorey, P R S
1978 *Kish excavations 1923-1933,* Oxford

Nemet-Nejat, K R
1982 *Late Babylonian field plans in the British Museum,* Rome

Northedge, A
1985 Planning Samarra, a report for 1983-84, *Iraq* 47, 109-28

Northedge, A and Faulkner, R
1987 The 1986 survey season at Samarra, *Iraq* 49, 143-74

Northedge, A et al
1988 *Excavations at 'Ana Qal'a Island* Warminster

Numoto, H
1988 Excavations at Tell Fisna, *Al-Rafidan* 9, 1-72

Oates, D
1968 *Studies in the ancient history of Northern Iraq,* London

Oates, D and J
1959 Ain Sinu, a Roman frontier post in Northern Iraq, *Iraq* 21, 207-42

Postgate, J N and Roaf, M D
1981 Excavations in Iraq, 1979-80, *Iraq* 43, 167-98

Reade, J
1968 Tell Taya 1967, a summary report, *Iraq* 30, 234-64, Pls. LXXVIII-LXXXVII

1971 Tell Taya 1968-9, a summary report, *Iraq* 33, 87-100

1982 Tell Taya, in *Fifty Years of Mesopotamian Discovery* (ed J Curtis), 72-78, London

Reitlinger, G
1938 Medieval antiquities west of Mosul, *Iraq* 5, 143-56

Reynolds, P J
1974 Experimental Iron Age storage pits, an interim report, *Proc Prehist Soc* 40, 118-31

1979a *Iron Age farm: the Butser experiment,* London

1979b A general report of underground grain storage experiments at the Butser ancient farm research project, in *Gast and Sigaut* (eds) 1979, 70-76

Rickman, G
1971 *Roman Granaries and Store Buildings,* Cambridge

Roaf, M D
1983 A report on the British Archaeological Expedition in the Eski Mosul Dam Salvage Project from November 1982 to June 1983, *Sumer* 39, 68-82

1984 Excavations at Tell Mohammed Arab in the Eski Mosul Dam Salvage Project, *Iraq* 46, 141-56

Roaf, M D and Killick, R
1987 A mysterious affair of styles, The Ninevite 5 pottery of Northern Mesopotamia, *Iraq* 49, 199-230

Rosen
1986 *Cities of clay: the geoarchaeology of tells,* Chicago

Rova, E
forthcoming Tell Karrana 3, ceramic evidence for the Late Uruk/Ninevite transition, in *The origins of North Mesopotamian civilization, Ninevite 5 chronology, economy, society* (ed H Weiss), Yale

Saggs, H W F
1984 *The Might that was Assyria*, London

Sevin, V and Derin, Z
1989 A fortified site to the east of Malatya, in D French and C Lightfoot (eds), *The eastern frontier of the Roman Empire: proceedings of a colloquium held at Ankara in September 1988,* 437-60, Oxford

Simpson, St J
1990a Ottoman clay pipes from Jerusalem and the Levant: a critical review of the published evidence, *Society for Clay Pipe Research Newsletter* 28, 6-16

1990b Iron Age Crop Storage and Ceramic Manufacture in Rural Mesopotamia, A Review of the British Museum Excavations at Qasrij Cliff and Khirbet Qasrij in Northern Iraq. *Bulletin of*

the Institute of Archaeology, London 27, 119-40
1996 From Tekrit to the Jaghjagh: Sasanian Sites, Settlement Patterns and Material Culture in Northern Mesopotamia, Continuity and Change in *Northern Mesopotamia from the Hellenistic to the Early Islamic Period* (K Bartl and S Hauser, eds), 87-126, Berlin

Spanos, P Z
1988 Ausgrabungen in Tall Durdara (Eski-Mosul-Project) und Tall Hamad Aga as-Sagir (Gazira Project), Nordirak, 1986, *MDOG* 120, 59-92

1990 Hamad Aga as-Sagir, *AJA* 94, 2, 268-71

Stager, L E
1971 Climatic conditions and grain storage in the Persian period, *The Biblical Archaeologist* 34, 86-88

Stein, A
1940 Surveys on the Roman frontier in Iraq and Trans-jordan, *The Geographical Journal* 95-96, 428-38

Sumer 1987-88 Directorate of Antiquities and Heritage 1987, projects and achievements, *Sumer* 45, 81-93

Tucker, D J
1992 A Middle Assyrian Hoard from Khirbet Karhasan, Iraq, *Iraq* 54, 157-82

Watkins, T F (ed)
1987 *From the pieces of the past, an introduction to archaeology*, Edinburgh

1990 The origins of house and home, *World Archaeology* 21

Watkins, T, and Campbell, S
undated *Excavations at Kharabeh Shattani, Volume 1,* University of Edinburgh Department of Archaeology Occasional Paper No. 14

Watson, P
1986 Area B, the Cardo-Decumanus corner: a report on seven centuries of occupation, in *Jerash Archaeological Project 1981-1983* (ed F Zayadine), 359-67, Amman

Weiss, H
1983 Excavations at Tell Leilan and the origins of Northern Mesopotamian cities in the third millennium BC, *Paléorient* 9, 39-52

Weiss, H and Calderone, L
forthcoming The end of the Ninevite 5 Period at Tell Leilan, in *The origins of North Mesopotamian civilization: Ninevite 5 chronology, economy, society* (ed H Weiss), Yale

Wheeler, R E M
1955 *Rome beyond the imperial frontiers,* London

Wilkinson, T J
1989 Extensive sherd scatters and land-use intensity, some recent results, *Journal of Field Archaeology* 16, 31-46

Wilkinson, T J and Matthews, R
1989 Excavations in Iraq, 1987-88, *Iraq* 51, 249-65

Wilson, C T
1906 *Peasant life in the Holy Land,* London

Winter, E
1989 On the regulation of the eastern frontier of the Roman Empire in 298, in *The eastern frontier of the Roman Empire: proceedings of a colloquium held at Ankara in September 1988* (eds D French and C Lightfoot), 555-71, Oxford

Wulff, H E
1966 *The traditional crafts of Persia,* London

لقد حكمت المنطقة في هذا العصر من قبل الأتابكة في الموصل. ولا شك في أنه كان زمنا مزدهرا بالنسبة للمنطقة. إن إهمال الطريق العباسي الممتد إلى الغرب منها عنى أن الخط الخارج من الموصل باتجاه شمالي غربي قد انتقل جنوبا نحو النهر. وقد عاد ذلك إلى عدم الإستقرار في سهل الجزيرة بسبب غزوات الرحل مما أدى إلى انخفاض هائل في عدد السكان المقيمين وتحولهم من السهل إلى وادي النهر. وقد كانت جزرونية محطة رئيسية على هذا الخط. ومما لا شك فيه هو أن الخط وخصوبة وادي النهر والإمكانيات الزراعية لتزويد أسواق الموصل قد أضافت إلى ازدهار المنطقة.

العصر 18: الإسلامي المتأخر (من منتصف الألف الثاني إلى القرن التاسع عشر ب.م.)

يبدو أن زيادة مفاجئة وهائلة في الإستيطان قد وقعت في منطقة الزمار خلال العصر الإسلامي المتأخر، حيث تم استيطان ستة عشر إلى سبعة عشر موقعا، إلا أن ذلك قد يكون يعكس الحفظ الجيد لبقايا هذا العصر المتأخر أكثر من كونه دليلا على زيادة عدد المستوطنات، وبالإضافة إلى ذلك فقد تكون بعض تلك المواقع قد سكنت لفترة لا تزيد عن جيل واحد فقط، وقد لا يكون الكثير منها معاصرا لتلك الفترة. ولذا فإن التقدير الواقعي لعدد المستوطنات يجب أن يكون أقل من ذلك.

تم اكتشاف خزف إسلامي متأخر في تل أبو ظاهر وسه قبة وخربة گرهسن فقط. وقد تم تسجيل بقايا سطحية في كل من بردية 7، 8 و9، تل عمران، تل حمد آغا الصغير، أصيلة، تل أسود، جزرونية، گربيل، خراب العاشق، گوز گيران، خربة جصة، خربة وادي سويدية وخربة شرلي. وقد كانت بعض هذه المواقع صغيرة جدا ومن الصعب اعتبارها مستوطنات، مثل خربة وادي سويدية التي كانت مطحنة، وخربة شرلي التي كانت مدفنا.

لقد كان الدبش الحجري المثبت بالملاط الجيري مادة البناء عادة، وهي طريقة ظلت تستخدم في شمال العراق حتى دخول الإسمنت. كان النموذج الشائع للفخار عبارة عن آنية رفيعة صلبة متميزة معالجة بالرمل وبزخرفة دحروجية.

تواصل التواجد السكاني بدون انقطاع في سه قبة وجزرونية، اللتان يحتمل أنهما توسعتا خلال العصر الإسلامي المتأخر. ويمكن القول، حاليا، بأن سه قبة هي الزمار القديمة المركز الإداري الإسلامي للناحية خلال ذلك العصر.

خلاصة

لقد كشفت التنقيبات عن استمرارية شبه دائمة تقريبا للتواجد السكاني منذ أواخر العصر الحجري الحديث. يظهر الدليل الواضح على وجود إنسان العصر الحجري الحديث بتأسيس موقع في عصر حسونة في تل أبو ظاهر. وتبزر صورة للمنطقة تنم عن الإزدهار ووفرة الطاقات الزراعية، مما اجتذب إليها أول العاملين في الزراعة في تل أبو ظاهر خلال عصر حسونة. لقد رسخ هذا الموقع مكانة أبو ظاهر كمركز زراعي للمنطقة مع ظهور عدد من المستوطنات الأصغر الدائرة في فلكه على السهل الزراعي على مدى العصور اللاحقة. إحتفظ موقع تل أبو ظاهر بمكانته هذه إلى أن انتقل مركز المنطقة إلى سه قبة في أواخر الألف الأول بعد الميلاد، وظل المركز في سه قبة حتى العصر الإسلامي المتأخر عندما انتقل إلى الزمار التي غمرت بالمياه في عام 1986، حيث انتقل المركز إلى الزمار الجديدة. وهكذا، فإننا نرى، حتى يومنا هذا، أن السجل الأثري ما زال مفتوحا.

درجة أكبر من السيطرة من قبل هذه أو تلك القوة على المنطقة: وقد استمر الإستيطان في سه قبة، بينما أسست مستوطنات جديدة (أو أعيد تأسيسها) في أصيلة، خربة چم لگلگ، جزرونية، گوز گيران، مقبرة شيخ حمصي، خربة گرهسن، وربما مقبرة البردية. كان عدد المستوطنات قليلا، ولذلك لم تسترجع المنطقة الإزدهار الذي تمتعت به طوال العصور السابقة.

إستمر كون «الآنية الهشة» الفخار الرئيسي المميز لهذا العصر، مع أنها كانت أكثر خشونة وصلابة من النماذج الپارثية- الرومانية. وكان يتم معالجة سطح بعض الأنواع الأكثر خشونة بعملية خاصة تعرف بإسم «الآنية الملطخة» أو «آنية أقراص العسل». مصدر كل المواد هو السياقات السطحية، ومرة أخرى، باستثناء سه قبة، التي ظلت المستوطنة الرئيسية في المنطقة. ويجدر، قبل مناقشة سه قبة، لفت الإنتباه إلى الموقع الجديد تماما الذي أسس في هذا العصر: گوز گيران، الذي يقع على النهر تماما على مسافة قصيرة باتجاه مجري النهر من تل شيلگية، ومن المعتقد أنه حل محل المستوطنة الپارثية الرومانية في الموقع الأخير. المنطقة المرتفعة في گوز گيران واسعة نسبيا، ولكن الكسر السطحية لم تكن مفصلة إلى درجة كافية تسمح بالحكم بما إذا كانت كلها تنتمي إلى العصر الساساني-البيزنطي، أي گوز گيران.

واصلت سه قبة مكانتها كمركز رئيسي للمنطقة. ويكاد يتساوى توزيع الفخار الساساني-البيزنطي عبر المنطقة المحصورة بالمتاريس (الشكل 18). وقد تم اكتشاف بقايا مبان نتيجة لسبر العمق (الشكل 19) ولكنها لم تعاين بما يكفي لتحديد طبيعتها على وجه الدقة. ويعتقد أنه قد استمر استعمال المتاريس، ولذا فقد ظلت سه قبه مركزا إداريا للمنطقة. ونظرا لأن الوثائق التاريخية أكثر ندرة بالمقارنة مع العصر السابق، فمن غير الممكن معرفة التسمية الساسانية-البيزنطية لسه قبة، أو معرفة إلى أي من الأمبراطوريتين كانت تنتمي. وعلى الرغم من ذلك فإن اكتشاف قطعتين نقديتين بيزنطينيتين على السطح يوحي بأنها كانت بيزنطية أكثر منها ساسانية، ولكن دليلا كهذا ليس حاسما بأي شكل من الأشكال.

العصر 16: الإسلامي المبكر (من القرن السابع إلى الثاني عشر ب.م.)

إحتوت ثلاثة مواقع فقط هي مقبرة بردية وسه قبة وگرهسن على فخار إسلامي مبكر (قبل منغولي) جمع كله من على منطقة السطح. وربما تشير قلة السكان إلى فترة أخرى من عدم الإستقرار وانهيار السلطة المركزية، ولكن ذلك يبدو بعيد الإحتمال نظرا لما نعرفه عن قوة الحكم العباس في العراق بمركزيه المحليين في الموصل ونصيبين. وربما كان نقص السكان مؤشرا إلى تحول التركيز السكاني بعيدا عن النهر إلى الطريق العباسي إلى الغرب من سهل الجزيرة. ومن الثابت عدم تأكيد أي من المصادر التاريخية لتلك الفترة لأهمية النهر.

استمر التواجد السكاني على ما يبدو في گرهسن وسه قبة ولكن العدد القليل للقطع التي عثر عليها في الموقع الأخير يوحي بأن مكانته كمركزي إقليمي قد انحطت. إن إعادة تنظيم إدارة المناطق من قبل الأمويين وخاصة العباسيين جعل وجود مركز إداري هنا أمرا غير ضروري، وهكذا أصبحت المنطقة موقعا خلفيا منعزلا.

العصر 17: الإسلامي المتوسط (من القرن الثاني عشر إلى منتصف الألف الثاني ب.م.)

كانت جزرونية وسه قبة أهم المواقع في هذا العصر. إن بقايا جزرونية (اللوحتان 57 و 58) تدل على بلدة صغيرة لا تزال صفوف المباني وتخطيط الشوارع باديين فيها حتى يومنا هذا. أحد هذه المباني كبير نوعا ما، وهو يقع على تل عال، ويحتمل أنه كان ذا وظيفة إدارية. ولم تعد المتاريس تستخدم في سه قبة، حيث تظهر بعض صفوف الجدران على السطح بينما يبرز بعضها الآخر فوق المتاريس. وقد تم اكتشاف بقايا من مبنى مجلس في أعلى جزء من التل (الشكل 27)، يحتمل أنه كان خانا أو مركزا إداريا للمنطقة.

يكمن في طبيعة المواقع ذاتها أكثر منه في طبيعة الإستيطان. إن مادة هذا العصر تظهر إما على السطح أو على مقربة منه ولذا فهي أكثر عرضة للتبعثر والتفتت من مواد العصور الأبكر. ولذلك فإن توزيع المواقع الهيلينية في المنطقة، من ناحية وجودها أو عدمه فقط، يعطينا صورة ما عن ذلك العصر، ولكن الصورة الأكثر تفصيلا لا يمكن الحصول عليها إلا بعد تنقيب مواقع تمثل عصرا واحدا تحتوي على مواد محفوظة في حالة أحسن مما عثرنا عليه هنا.

العصر 14: البارثي-الروماني (من القرن الأول إلى الخامس ب.م.)

أصبحت المنطقة مرة أخرى منطقة حدودية فاصلة بين أمبراطوريتين قويتين ومتنازعتين كما كان عليه الحال في العصرين الميتاني والأشوري المتوسط، ومن غير الممكن دائما، في ظروف سلسلة أحداث تاريخية مشوشة ونقل دائم للحدود، إرجاع البقايا المادية إلى هذا «الحلف» أو ذلك.

نشاهد هنا في الريف وضعا مشابها للوضع الذي كان سائدا خلال العصرين الميتاني والأشوري المتوسط: إن النزوح المفاجئ للسكان قلص عدد المستوطنات التي كانت موجودة خلال العصر الهيليني من ثمان أو تسع إلى مجرد ثلاث أو أربع مستوطنات، هي: تل أبو ظاهر، وسه قبة، وتل گر مطبخ وتل شيلگية. وباستثناء سه قبة، يستحيل معرفة طبيعة المستوطنات أثناء هذا العصر، وذلك لنفس الأسباب التي اتسم بها العصر الهيليني: مصدر المواد سياقات سطحية مقلوبة، مع عدم بقاء مبان أو ترسبات سكانية. ولكن يمكن الحكم انطلاقا من الكميات القليلة لهذه المواد بأن المستوطنات كانت صغيرة جدا.

على الرغم من ذلك، فإننا نجد أن سه قبة كانت المستوطنة الأولى المحصنة على نطاق واسع في المنطقة، ليس فقط بسبب موقعها الطبيعي على جرف مرتفع يسيطر على النهر، بل أيضا بالمتاريس الترابية الإصطناعية (الشكل 18). إن الحاجة إلى اتخاذ إجراءات دفاعية يدعم الإنطباع بعدم توفر الإستقرار في الأرياف. ويوحي موقعها المشرف على النهر بأنها كانت تحرس حدا ممثلا بالنهر ذاته، والإستنتاج المرتبط بذلك هو أن الضفة الأخرى - الشرقية -كانت تشكل موقع العدو. وبتعبير آخر، أنها كانت رومانية بدلا من كونها پارثية. يدفعنا هذا، بالإضافة إلى أدلة أخرى (تاريخية عموما)، إلى ربط سه قبة بموقع الحدود الروماني كاسترا ماورورووم.

بالإضافة إلى ذلك، يوجد لدينا مجموعة متكاملة كبيرة من المواد الطبقاتية من هذا العصر مرتبطة ببقايا عمرانية وترسبات سكانية نتيجة لقياسات سبر العمق في الجزء الأعلى من الجرف. ويتكون الفخار من «الآنية الهشة» المتميزة جدا التي ترتبط عادة بالبقايا البارثية والرومانية في هذه المنطقة. وهناك مستويان متميزان للمباني من قياسات سبر العمق مرتبطان بالآنية الهشة، يتضمن الأخير منهما خطا من أنابيب التيراكوتا وأجزاء متقطعة جدا من أرضية فسيفسائية (الشكلان 20 و 21). إن طبيعة هذه البقايا، علاوة على موقعها في أعلى جزء من الموقع، توحي بأنها تمثل أطلال القائد الروماني في كاسترا ماورورووم.

من غير المحتمل أن هذه المنطقة ظلت رومانية طوال هذا العصر، ولكن السيطرة عليها تعاقبت بين الرومان والپارثيين. وحيث أن النهر كان يشكل الحد الفاصل بينهما فليس غريبا قلة الإستيطان في وادي النهر بسبب التعرض الدائم للسكان للهجمات عبر النهر. ويعتقد أن المستوطنات التي وجدت كانت محلية بكل معنى الكلمة وليس «رومانية»، مع عدم تجاوز التأثير الحضاري الروماني لحدود الحامية في أعالي سه قبة ذاتها.

العصر 15: الساساني-البيزنطي (من القرن الثالث إلى السابع ب.م.)

تم استبدال القوتين الأمبراطوريتين المتنافستين، الرومانية والپارثية، ببيزنطة وإيران الساسانية. ومرة أخرى، وقعت منطقة الزمار على الأرجح ضمن منطقة الحدود بينهما، وربما تشير الزيادة في عدد المستوطنات إلى

السطوح بأول معلوماتنا حول سكان ذلك العصر، كما أن وجود نظام واسع للحقول يحيط بالموقع أعطانا منظرا طبيعيا كاملا للمنطقة.

تكونت المباني المنقبة من مستويات متعاقبة من التربة والحصى والحجر اللوحي، وهذا يرتبط بوجود جدران كبيرة من الطوب الطيني يحتمل أنها كانت تشكل مجمعا عمرانيا مفردا: بمساحة أقصاها 75 x 150 مترا، مما يرجح كونه مبنى تابعا لمزرعة. وبالإضافة إلى ذلك فإن وجود بعض التجهيزات الفخمة المتصلة بهذا المبنى يرجح القول بأنه كان بيتا رئيسيا في مزرعة أو منزلا لصاحبها على كونه مبنى تابعا لمستوطنة متواضعة.

يتكون نظام الحقول من جدران منخفضة جدا (لا يتجاوز ارتفاعها 10 سم) مبنية من فتات الحجارة والتراب تفصل الحقول إلى شرائط تمتد إلى مسافة بضع مئات من الإمتار حول الموقع. ومن الواضح أن هذه ترتبط بخربة شرينة، ولكن ليس واضحا ما هو العصر الذي تنتمي إليه، ولا يمكن القول أكثر من أنها تتقاطع مع الصفوف الحالية للحقول وأنها ليست حديثة، ولذا فإنها تنتمي إلى أحد عصور خربة شرينة الغابرة: إما الخابور أو الأشوري المتأخر، وربما الهيليني، ويبدو أن الأخير بعيد الإحتمال إذا ما أخذنا في الإعتبار الوجود الهيليني المحدود جدا في خربة شرينة. وعلاوة على ذلك فإن التقسيم إلى شرائط مفردة يوحي بوجود مرحلة من الإدارة المنظمة للأرياف، مما يتفق مع القليل الذي نعرفه حول النظام الزراعي الأشوري المتأخر، ولكنه لا يعتبر في حد ذاته دليلا على تاريخ محدد لظهور نظام الحقول.

العصر 12: بعد الأشوري (منتصف الألف الأول ق.م.)

في الوقت الذي يكتب فيه هذا، من الصعب تحديد البقايا المادية التي ترجع إلى السلسلة المشوشة للأحداث في أعقاب سقوط الأمبراطورية الأشورية والسيطرة المتزايدة من قبل البابليين والميديين والأخمينيين على منطقة شمال العراق. ولكن إلى أن يصبح ممكنا تمييز مجموعة متكاملة أكيدة من الدلائل بعد الأشورية، فإن النقص الواضح للمواقع التي تعود إلى ذلك العصر في المنطقة لا يتعدى كونه دليلا على الوضع الحالي لمعرفتنا بدلا من كونه دليلا على عدم الإستيطان. ولذلك يجب حاليا تجاوز هذا العصر.

العصر 13: الهيليني (أواخر الألف الأول ق.م.)

الإستيطان الهيليني لا يختلف كثيرا على ما يبدو عن العصر الأشوري الذي سبقه: فهو مجرد عدد من الجاليات التي يعتقد بأنها كانت ريفية ولا يهيمن أي منها على الجاليات الأخرى. ومن المؤكد على ما يبدو عدم حدوث انهيار ريفي أو جلاء سكاني كما هو متوقع بعد حدث مفاجئ كهذا، مثل الإطاحة بالأشوريين. على العكس من ذلك، فقد بلغ عدد المستوطنات في السهل المحيط بتل الهوى أقصاه أثناء العصر الهيليني، كما تم تسجيل حوالي سبع أو ثمان مستوطنات بمحاذاة النهر وفوق الجرف. لم يتم تجاوز هذا الرقم إلا أثناء عصر الخابور والعصر الإسلامي المتأخر. ولم تكن هناك أية مواقع محصنة بوضوح (مثل سه قبة) مستوطنة، ولذلك فمن الواضح أنه كان عصر رخاء واستقرار ريفي كبير.

تم اكتشاف مواد هيلينية في تل أبو ظاهر وتل گر مطبخ وتل الشيلگية، وربما في سيانة وخربة شرينة. وبالإضافة إلى ذلك فقد تم جمع مواد من على السطح في بردية 5، وتل محمد آغا الصغير، وخراب العاشق ومقبرة شيخ حمصي. وباستثناء تل أبو ظاهر، كان مصدر المواد إما من المجموعات السطحية أو من سياقات مقلوبة قريبة من السطح، ولكن بدون المباني والترسبات السكانية المرتبطة بها. وحتى في تل أبو ظاهر لم تتضمن البقايا إلا حفرا مصفحة للتخزين في الخندق M (المجلد 2). ويبدو أن هذه الحفر ميزة للمواقع الهيلينية في سد صدام (مثلا، تل جيساري وتل گري داركي)، وهي كثيرا ما تفسر بأنها كانت صوامع للحبوب.

إن سبب الحالة غير المرضية للبقايا الهيلينية

المتوسط داخل المنطقة الأوسع: حيث تم العثور على بقايا أشورية هائلة وعلى كمية كبيرة من المواد المرتبطة بها. إن الإنعدام شبه التام للمواد الأثرية الأشورية المتوسطة في منطقة الزمار، كما هو الحال بالنسبة للعصر الميتاني السابق، إنما يعكس النقص الإستيطاني.

ومن الأمور ذات المغزى، تزامن هذه الفترة الطويلة الواضحة المتميزة بالنقص الإستيطاني خلال أواسط وأواخر الألف الثاني ق.م. مع مرحلة التنافس والنزاع بين الدولتين الميتانية والأشورية الوسطى. يجب القول أن منطقة الزمار كانت بمثابة «منطقة عازلة» بين هاتين الأمبراطوريتين طوال معظم هذه الفترة. كان تأثير ذلك على المنطقة، التي كانت رهينة للتوسع والتقلص المتعاقبين بين هاتين الأمبراطوريتين، درجة عالية من عدم الإستقرار والدمار. ولذلك فإن الدليل الأثري للخلو السكاني يتفق بوضوح مع الصورة التاريخية. وبالإضافة إلى ذلك، فإن موقع منطقة الزمار جعلها عرضة للهجوم عليها من قبل جماعات الرحل في سهب الجزيرة من ناحية الغرب ومن قبل الشعوب الجبلية من ناحية الشرق، خاصة في فترات عدم الإستقرار والغياب الطويل المدى للسلطة المركزية.

قبالة هذه الخلفية فإن وجود مجموعة من كسوة الخيل المتقنة الصنع في گرهسن لهو من الأمور الأكثر إثارة للفضول. من الصعب جدا القول بأن مصدر كسوة كهذه هو النموذج المتواضع من المستوطنات الريفية المقامة بمحاذاة ذلك الجزء من النهر، خاصة خلال تلك الفترة من تدهور عدد السكان وعدم الإستقرار الواضحين جدا. وهكذا فإن تفسير وجود هذه الكسوة في الوقت الحاضر يظل أمرا غامضا.

العصر 11: الأشوري المتأخر (مطلع الالف الأول ق.م.)

شهد العصر الأشوري المتأخر عودة إقامة المستوطنات في منطقة وادي الزمار، وقد استمر التواجد السكاني في خربة گرهسن، وأعيد بناء تل أبو ظاهر، وسه قبة، وخربة شرينة، وتل الشيلگية، وبردية 8، ومقبرة بردية، ومقبرة شيخ حمصي كمستوطنات وصل مجموعها إلى ثمان مستوطنات. ومن الممتع ملاحظة أنه مع احتمال استثناء سه قبة، لم تؤسس مستوطنات جديدة تماما. كانت كل المستوطنات الأشورية المتأخرة تقع على التلال الموجودة.

وليس واضحا على ما يبدو ما إذا كان أي من هذه المستوطنات مهيمنا على المستوطنات الأخرى، حتى أبو ظاهر المركز التقليدي للمنطقة. كانت المستوطنة الواقعة في الشيلگية أول مستوطنة قارب حجمها ما كان عليه سابقا خلال عصر الوركاء، ولكن حتى هذه المستوطنة لم تمتد كثيرا خارج نطاق التل الرئيسي. ويبدو أن جميع تلك المستوطنات كانت مواقع ريفية صغيرة، أو على الأرجح، قرى أو بيوتا في مزارع. ولا بد أن أية سوق وجدت إنما كانت تقع خارج حدود المنطقة. لم يتمخض أي من هذه المواقع (باستثناء شرينة) عن أية بقايا ذات أهمية تذكر: تم فقط تنقيب أجزاء من مبان وما يرتبط بها من ترسبات سكنية، إلا أن شيلگية تضمنت تنورا لخبز الفخار وما يرتبط بذلك من تجهيزات.

إن إعادة تأسيس جاليات مستقرة، بعد فترة طويلة من عدم الإستقرار واضمحلال عدد السكان والإعتماد المحتمل على قوى خارجية، يوحي بوجود سلطة مركزية قوية امتدت سيطرتها إلى المنطقة. بالإضافة إلى ذلك فإن تأسيس مستوطنة صغيرة في موقع حصين مثل سه قبة يفترض وجود درجة من الضبط للأرياف. يتفق هذا الدليل مع عودة بروز الأشوريين أثناء الأمبراطورية الأشورية الحديثة.

على الرغم من أن زمام الهيمنة لم يكن محتكرا من قبل أي من هذه المواقع إلا أن خربة شرينة كانت «الموقع النموذجي» بالنسبة إلى العصر الأشوري المتأخر (الشكل 9). ويرجح أن هذه المستوطنة لم تكن تتعدى كونها مجرد مزرعة بمبانيها، أو مجرد قرية صغيرة، وعلى الرغم من ذلك فإنها أنتجت أحسن مجموعة من الفخار بالنسبة إلى تلك الفترة، وهو محفوظ طبقاتيا في مستويات متعاقبة. لقد زودتنا سلسلة من المدافن التي كانت مغلقة تحت أحد

العصر 9: الميتاني (منتصف الألف الثاني ق.م.)

هذا العصر هو أكثر العصور إثارة للإهتمام في تاريخ الشمال، وهو يتميز بآنية «نوزي» الرفيعة ذات الطابع المتميز. تم العثور على قطعتين من آنية «نوزي» في تل أبو ظاهر وعلى عدد أكبر في تل الشيلكية. وقد جمعت كلها من على السطح أو من سياقات ترسبية مما لا يسمح بالقول بوجود استيطان ذي حجم يذكر، حتى في تل أبو ظاهر الذي كان المركز التقليدي للمنطقة. ويثير الإنعدام الواضح لوجود المواقع أثناء العصر الميتاني العديد من الأسئلة، خاصة إذا أخذنا في الإعتبار العدد الكبير للمواقع أثناء عصر الخابور السابق والعدد الكبير خلال العصر الأشوري المتأخر، وقد أمكن الإجابة على بعض هذه الأسئلة نتيجة للتنقيبات التي تمت في گرهسن.

تعتبر خربة گرهسن الموقع الوحيد في منطقة الزمار التي تحتوي على كمية من المواد الميتانية - وحتى هذه قليلة جدا. البناء الوحيد المرتبط بهذه المواد عبارة عن مبنى في العمق المسبور (الخندق A1) يتكون من حائط كبير من الطوب الطيني وسلسلة من الحشوات يصل سمكها إلى 75 سم من الترسبات (الشكل 41)، أما الفخار فميتاني بشكل واضح، مع قليل من المواد المقارنة التي تم العثور عليها في المواقع الأخرى. ومع أن هذه الترسبات تمثل عينة صغيرة نسبيا إلا أنها كانت مسدودة بإحكام ومتميزة خزفيا وطبقاتيا عن عصري الخابور السابق والأشوري المتوسط اللاحق. وهكذا فهي تمثل البقايا الطبقاتية الميتانية الوحيدة التي عثرنا عليها أثناء تنقيبنا في المنطقة.

لذلك فقد كان هناك ثلاث مواقع صغيرة جدا، على الأكثر، في المنطقة أثناء العصر الميتاني -- وهذا بالتأكيد تغير عكسي مفاجئ بالمقارنة مع العدد الكبير الذي وجد أثناء عصر الخابور. ومن الضروري قبل محاولة تكهن أسباب هذا الضمور إيجاز دلائل العصر الأشوري المتوسط بعد العصر الميتاني مباشرة.

العصر 10: الأشوري المتوسط (أواخر الألف الثاني ق.م.)

العصر الأشوري المتوسط في منطقة الزمار قليل الآثار مثله في ذلك مثل العصر الميتاني. لم يتم العثور على مواد أشورية متوسطة في أي من المواقع باستثناء موقعين اثنين. وكان من المعتقد أنه يمكن تفسير هذا الإنعدام الواضح للمواد بسبب عدم تغلغل الأمبراطورية الأشورية المتوسطة في منطقة الزمار، مما يفترض أن البقايا المادية لأي من المستوطنات أثناء هذا العصر تتمثل في نماذج خزفية سابقة استمرت في الوجود، أو في نماذج خزفية لاحقة بدأت في الظهور المبكر من بقية الناطق. الإفتراض الأول غير وارد تماما حيث أشرنا فعلا إلى نزرة النماذج الخزفية الميتانية، ولذا فمن المعتقد أن تكون مستوطنات العصر الأشوري المتوسط ممثلة بفخار «أشوري متأخر» بدأ صنعه في مرحلة أبكر مما كان يعتقد.

ومرة أخرى، فإن التنقيبات التي أجريت في خربة گرهسن قدمت الدليل على ذلك، حيث تم العثور هنا على بقايا أشورية متوسطة ذات أهمية عظيمة. تتكون هذه البقايا من خزف جيد التقسيم طبقاتيا -- وهي أيضا متميزة من حيث ترتيب الطبقات عن الترسبات الميتانية السابقة والأشورية المتأخرة واللاحقة -- وينتمي ذلك الخزف إلى نماذج كانت معروفة جدا نتيجة للتنقيبات التي تمت في تل محمد عرب. كانت هذه النماذج عبارة عن آنية بسيطة مجبولة بمواد نباتية، وهي خشنة عموما، ومنها الأوعية الضحلة الجؤجئية الشكل التي يسهل جدا التعرف عليها. ومع ذلك فإن البقايا الأكثر أهمية هي عبارة عن مجموعة من الحلى الخزفية الرفيعة التي تتألف من عدد كبير من الورديات والأسطوانات والحلي المتدلية والخرز الزجاجي وأصداف صغيرة، ويحتمل أن هذه الحلي كانت جزءا من كسوة متقنة للخيل.

وفيما عدا خربة گرهسن فإن الموقع الوحيد الذي تمخض عن فخار أشوري متوسط كان مقبرة البردية. ومن الممتع أن التنقيبات اللاحقة التي تمت في تل الهوى قد ألقت الضوء على وضع الإستيطان أثناء العصر الأشوري

الموقع. ومن المؤكد عدم وجود نفس الشكل من التواصل بين العصرين نينوى 5 والأكادي الذي ميز الإنتقال من الوركاء المتأخر إلى نينوى 5. لقد عثر على المواد الأكادية عند شيلگية، ولكن لا يمكن القول في هذه المرحلة بأنها كانت حصيلة انتقال هادئ من نينوى 5 أو أنها كانت تمثل انقطاعا. كان الدليل الوحيد على الوجود الأكادي في سيانة عبارة عن كمشة واحدة فقط من القطع. ونشاهد فوق الجرف وجود مستوطنات أكادية في بردية 4، 6، و7 ومقبرة بردية، وتل حمد أغا الصغير.

العصر 8: الخابور (مطلع الألف الثاني ق.م.)

يعتبر عصر الخابور امتداد للعصر الأكادي، ولا يمكن التحدث عن الخابور بدون الإشارة إلى العصر الأكادي. ليس هناك، في أي موقع من المواقع، ما يدل على وجود فترة انقطاع طويلة تفصل بين هذين العصرين. تشكل آنية الخابور الرفيعة تطويرا منطقيا للآنية الأكادية الرفيعة، ويبدو عصر الخابور وكأنه ترسيخ وتطوير مطرد للعصر الأكادي.

ومن ناحية حضارية فإنه باستثناء الخزف المميز لعصر الخابور وارتباطه المحتمل بالشمال والغرب، فإن مرحلته تتسم بزيادة مفاجئة في استخدام صور الحيوانات، غالبا الخيل. ويصعب القول اعتمادا على أدلة وادي الزمار فقط بما إذا كان هذا يعني وصول غزاة جدد يركبون الخيل (مثل الحوريين؟). ويتسم عصر الخابور عموما في المناطق الشمالية الأخرى بوصول القراءة والكتابة على الرغم من عدم اكتشاف نصوص نتيجة لهذه التنقيبات.

ومع أن خربة گرهسن لا تعتبر أكبر موقع بالنسبة لعصر الخابور إلا أنها أنتجت أكبر وأوسع مجموعة من الخزف، ولذا فإنها تمثل «الموقع النموذجي» لعصر الخابور (صفحة 100). تم العثور هنا على كل أنماط آنية الخابور الرفيعة. وقد أنتج موقع گرهسن أكبر عدد من التماثيل الصغيرة للخيل التي عثر على معظمها في جزء مسطح من الموقع حيث تظهر فيه بقايا الخابور على السطح. وقد وضع سجل واف لهذه المنطقة لغرض البرهنة على الإستخدام الواسع للحجر في البناء خلال هذا العصر: كانت الجدران تقام على أسس حجرية كبيرة (كما كان الحال في العصر الأكادي السابق)، وغالبا ما كانت الأماكن المفتوحة ترصف بالحجارة، وتتناسب هذه الممارسة مع الأساليب المعمارية الفنية التي وجدت في المنطقة.

ومرة أخرى، يعود تل أبو ظاهر على ما يبدو لكي يمثل الموقع الأكبر في المنطقة بدون أي تقلص يذكر في حجمه في العصر الأكادي، ويعتقد أنه استمر في كونه مركزا للمنطقة. وقد تم تدعيم هذا الدور بتأسيس عدد من المستوطنات الصغيرة المحيطة به مثل شرينة وگرهسن ومواقع بردية وربما سه قبة. وقد كانت هذه المستوطنات الصغيرة تعتمد عليه (أي تل أبو ظاهر)، وربما كان ذلك ينطبق أيضا على المستوطنات الأصغر مثل گر مطبخ وتل الشيلگية وحمد آغا الصغير. هذا النمط من المستوطنات يفترض وجود اقتصاد زراعي في الريف ولم يتم العثور في أي من التنقيبات على ما يوحي بوجود نشاطات إضافية.

وفي كل الحالات تقريبا، فإن المواقع التي كانت مسكونة في العصر الأكادي إستمرت على هذا الوضع حتى عصر الخابور. وهكذا فإن تل أبو ظاهر وتل گر مطبخ وتل الشيلگية، من المواقع المنقبة، و بردية 4، 5، 6 و 7، ومقبرة بردية وتل حمد أغا الصغير، من المواقع التي تم مسحها، تشتمل كلها على مواد من عصر الخابور تغطي البقايا الأكادية. وبالإضافة إلى ذلك، فقد تم تأسيس مستوطنات جديدة تماما مثل خربة شرينة وخربة گرهسن وبردية 9، وأصيلة وگربيل وربما بردية 8. وقد تم العثور كذلك ضمن السياقات الترسبية في سه قبة على عدد قليل من قطع صعب تحديدها يمكن إرجاعها بشكل عام إلى الألف الثاني فقط ق.م.، ولذلك يحتمل أن تأسيس هذه المستوطنة قد تم في عصر الخابور. وبناء على ذلك يمكن القول بحصول زيادة كبيرة في عدد المستوطنات الريفية مما يتفق مع الدلائل التي عثر عليها في منطقة تل الهوى الواقعة غربا.

تثير الدهشة إذا أخذنا في الإعتبار الحجم الصغير للموقع خاصة إذا ما قورن بسيانة التي كانت موازية له من حيث الحجم في عصر نينوى 5 ، ولكنه أنتج الكثير من الآنية الفخارية الخشنة البسيطة غير الملونة. هذا يشير إلى درجة أعلى من الإزدهار على الرغم من النوعية الفقيرة للتربة المحيطة بكر مطبخ.

إن مستوطنة شيلكية التي ترجع إلى نينوى 5 تمثل أيضا انتقالا تدريجيا من الوركاء المتأخر، وليس هناك أية مبان ذات أهمية تذكر مرتبطة بالبقايا المادية لنينوى 5. ولا تمتد مستوطنة نينوى 5 إلى ما وراء التل الرئيسي ولذا فإنها كانت مستوطنة صغيرة - أصغر جدا من سابقتها أثناء عصر الوركاء المبكر، مع أنها كانت على الأرجح بذات حجم المستوطنة التي تعود إلى عصر الوركاء المتأخر.

لم يتم العثور على مواقع أخرى من نينوى 5 في السهل الفيضي، ما عدا تلك التي تم تنقيبها (ربما لم تنج بعض المواقع من الفيضانات الدورية). لقد تم العثور على موقعين يضمان بقايا من نينوى 5 فوق الجرف المشرف على السهل الفيضي: بردية 7 وتل حمد آغا الصغير، وربما مقبرة بردية. ربما كان هذان الموقعان مستوطنتين صغيرتين خلفتا كميات قليلة فقط من مواد نينوى 5 على السطح. وقد عثر فقط على نماذج رفيعة، وبسيطة ومنقوشة. وقد يكون انعدام النماذج الملونة عائدا إلى ضعف حفظها في ظروف مكشوفة.

لم يكن هناك عموما تنوع كبير في النماذج الفخارية الملونة في هذه المنطقة (حتى في مستوطنة گر مطبخ التي كانت أكثر إنتاجا من غيرها) كما هو الحال في تل محمد عرب. وتضم النماذج الملونة كل أنماط الزخرفة.

يوحي وجود عدد كبير من المواقع في الريف بعدم وجود أخطار خارجية كثيرة وبدرجة أعظم من الرخاء الريفي والإستقرار أثناء عصر نينوى 5. ويرجح أن الزراعة كانت أساسا لهذا الرخاء حيث أن العدد الكبير للمواقع الصغيرة يشير بشكل رئيسي إلى وجود جاليات ريفية. ولكن الثراء المدهش في صناعة الخزف في مستوطنات تقوم على زراعة محدودة نسبيا كتل گر مطبخ يوحي بأن الزراعة لم تكن العامل الرئيسي في مجمتع نينوى 5 .

العصر 7: الأكادي (النصف الثاني من الألف الثالث ق.م.)

يختلف خزف العصر الأكادي في هذه المنطقة تماما عن الخزف الأكادي في الجنوب. وهو يتكون من أوان خشنة كبيرة ضاربة إلى الخضرة، عادة بزخرفة منقوشة، وآنية رفيعة أصغر حجما وقوية «معدنية» ذات نطاق من الألوان كالرمادي والأخضر الفاتح والبرتقالي والأسود. الآنية الخشنة غالبا ما تكون على «شكل دلو»، أما الآنية الأرفع فذات قاعدة مستوية، وفي الغالب كان الشكل المميز على هيئة قاعدة مسطحة أو كأس كبيرة بجوانب مضلعة. ولم يتم العثور على الآنية السوداء ذات الميزة «المعدنية» التي تميزت بها هذه الفترة نحو الجهة الغربية. ويبدو أنه تم تطوير الأواني الأرفع من آنية نينوى 5 الرمادية وهي ترتبط بفخار «طية» الذي تم تنقيبه أولا في تل طية.

شهد العصر الأكادي مرة أخرى التطور المفاجئ لمكانة أبو ظاهر من قرية صغيرة أثناء عصر نينوى 5 إلى الحجم الذي كان يتمتع به في عصر الوركاء المتأخر والعبيد. تم العثور على المواد الأكادية في كل الخنادق تقريبا. وتم تنقيب ترسبات ضخمة في الخندق M (المجلد 2). وترتبط هذه الترسبات على ما يبدو بنشاط عمراني كبير مرتبط بعمليات ضخمة لتمهيد المدرجات أدت على الأرجح إلى اقتطاع وتمهيد الكثير من ترسبات نينوى 5 والوركاء السابقين لهذا العصر. تتميز الطرز العمرانية هنا، كما هو الحال في كل مواقع العمران الأكادي التي تم تنقيبها، بالإستخدام الواسع النطاق للأسس المبنية بحجارة ضخمة. وهناك أيضا كميات كبيرة من الكسر الأكادية التي وجدت في معظم منطقة السطح. ويبدو أن ابو ظاهر عاد إلى التوسع إلى أن أصبح مركزا ريفيا صغيرا يغطي مساحة لا تقل عن 7 هكتارات.

عثر على المواد الأكادية عند گر مطبخ ولكن كان من الصعب تحديد علاقتها بنينوى 5 حيث تم العثور عليها في مواضع مختلفة من حيث

المشطوفة في تل أبو ظاهر. ويذكرنا رف تخزين الحبوب بأثر مشابه عثر عليه في تل كرانة 3 وتلول الثلاثة وتل آتيج في صوريا. توحي هذه الميزة بالإضافة إلى مكان الموقع المطل على واد خصب وحجمه الصغير بوجود اقتصاد زراعي، ومن المحتمل أن سيانة كانت مستوطنة زراعية أو بيتا كبيرا تابعا لمزرعة، وربما كانت مجموعة مستوطنات قائمة على الزراعة حول المركز التجاري الأكبر في تل أبو ظاهر. إن وجود مصنع الآنية المشطوفة الحواف في أبو ظاهر يوحي أيضا بوجود نشاطات غير زراعية. وقد أيد وجود موقع صناعي لإنتاج الأواني الفكرة القائلة بأن المستوطنة في عصر الوركاء المتأخر في أبو ظاهر ربما كانت تتمتع بمكانة مركز للمنطقة - أو أنها كانت على الأقل مركزا متخصصا.

العصر 6: نينوى 5 (النصف الأول من الألف الثالث ق.م.)

البقايا الوحيدة التي تم تنقيبها في تل أبو ظاهر عبارة عن جزء من حفرة في الخندق 1 (المجلد 2) تم تنقيبها في ترسبات الوركاء المتأخر أعيد فتحها ضمن أعمال العمارة الأكادية المتأخرة وأعمال تمهيد المدرجات الأشورية المتأخرة، وقد احتوت هذه الحفرة على قطع بسيطة ترجع إلى نينوى 5 وعلى قطع من أغطية آنية خشنة منقوشة. ولكن آنية نينوى 5 المنقوشة منعدمة تماما. إلا أن الترسبات من هذه الحفرة التي عثر عليها في أسفل المدرجات الأشورية المتأخرة تحتوي على قطع منقوشة بالإضافة إلى ختم أسطواني وختم خزفي من نينوى 5. كما أنه تم التقاط قطع منقوشة ترجع إلى نينوى 5 من على سطح التل. ومع أن كمية هذه الكسر قليلة إلا أنها تكفي للبرهنة على وجود نشاط يرجع إلى نينوى 5 في الموقع. ولم يتم تنقيب ترسبات نينوى 5 في أية نقطة أخرى من تل أبو ظاهر. ويبدو مؤكدا أن موقع أبو ظاهر قد اضمحل أثناء عصر نينوى 5 إلى ما لا يزيد عن قرية صغيرة قد لا تزيد حجما عن بقية القرى من نفس الفترة في هذه المنطقة، مثل سيانة أو گر مطبخ (أنظر أدناه).

وبالفعل يبدو أن سيانة كانت الموقع الأكبر حيث أن معظم المواد المنقبة من ذلك الموقع تعود إلى نينوى 5. ولذا فإن سيانة كانت الموقع الأثري الرئيسي الذي يرجع إلى عصر نينوى 5 الذي نقب في هذه المنطقة. إن استمرارية الإستيطان الواضحة في سيانة منذ عصر الوركاء المتأخر قد تم تأكيدها أعلاه، لكن مسألة الفصل بين البقايا تظل قائمة بدون حل. تتكون الفترة الأخيرة من تاريخ سيانة من ركامات رماد وأنقاض عادية تصل إلى عمق 70 سم تقريبا ترتبط عادة بسطوح من الحجارة الخشنة والطوب الطيني (الشكل 5). ترجع كل الفخاريات إلى نينوى 5 وهي بسيطة ومنقوشة معظمها في حالة جيدة جدا. وباستثناء قطع قليلة جدا في حالة رديئة فإن قطع نينوى 5 الملونة كانت شبه منعدمة تماما في كل التنقيبات. إن الغياب شبه التام للقطع الملونة من نينوى 5 والتي كان يمكن أن تشكل مرحلة إنتقالية من أعمال الوركاء المتأخر ونينوى 5 المنقوشة قد يبدو حالة شاذة. إلا أن آنية فخارية فخمة وملونة بهذه الجودة ربما تبدو في غير مكانها في مستوطنة صغيرة مثل سيانة، وقد انقطع التواجد السكاني في نهاية عصر نينوى 5 (باستثناء قبر أكادي دخيل واحد).

تم العثور على أربع أو خمسة نماذج من مراحل عمرانية ترجع إلى نينوى 5 في كل الخنادق التي حفرت في الموقع الكائن عند تل گر مطبخ (الشكلان 44 و58). وتمثل هذه بقايا لعدة مبان بدون انقطاع ملحوظ في تواصلها التدريجي، مع أنه لم يمكن استنباط خطة معمارية كاملة. رلا أنه فمن الواضح أن التواجد السكاني خلال نينوى 5 كان كبيرا نوعا ما. لقد اشتمل الفخار من گر مطبخ على نسبة عالية من النماذج الملونة التي تعود إلى المرحلة المبكرة من نينوى 5 ، إلا إن النماذج الملونة بالإضافة إلى النماذج الجيدة البسيطة والمنقوشة ظهرت عبر تاريخ الفترة المعنية. وهناك بين النماذج المنقوشة فخار كثير ينتمي إلى فئة رمادية داكنة إلى سوداء اللون ، وهي متميزة جدا وذات نقوش في غاية الدقة. إن هذه بالإضافة إلى النسبة العالية من القطع الملونة جعل فخار نينوى 5 من گر مطبخ مجموعة راقية من حيث النوعية العامة تثير الدهشة. أقول بأن جودة هذا الخزف

العصر 5: الوركاء المتأخر (النصف الثاني من الألف الرابع ق.م.)

شهد هذا العصر زيادة كبيرة في الإستيطان في المنطقة، ويبدو هذا الإتجاه شائعا إلى حد ما في حوض صدام، وتشبه خزفياته تلك التي عثر عليها في تل محمد عرب وفي التنقيبات الأخرى في المناطق السفلى من سد صدام. تتكون هذه المواد من أوعية رفيعة ومتوسطة معالجة بالرمل وهي رمادية عموما، وعرى أنفية، وصنابير متنوعة، وأوعية بحواف مشطوفة، وزخارف على شكل تضليعات عمودية ونماذج زخرفية منقوشة (عادة على شكل مثلثات). تختلف هذه البقايا عن تلك التي عثر عليها في تل الهوى حيث أنه بالإضافة إلى وجود أوعية بحواف مشطوفة إلا أن المجموعة التي تعود إلى عصر الوركاء المتأخر كانت تختلف تماما.

من المرجح أن تل أبو ظاهر قد عاد إلى كونه المركز الرئيسي في المنطقة. تتكون دلائل التواجد السكاني في عصر الوركاء المتأخر من 1.3 متر من الترسبات في الخندق M (المجلد 2) وتتألف من ثلاث مراحل استيطانية. وقد تم العثور على بقايا مادية من عصر الوركاء المتأخر خارج الخندق M وذلك في الخندق K1 على مسافة 60 مترا إلى الجنوب الشرقي من التل الرئيسي (ولكن يحتمل أن يكون هذا ترسبا منقولا). وقد تم التقاط كمية كبيرة جدا من البقايا المادية على مستوى السطح من معظم نواحي التل الرئيسي (المجلد 2). ولذا فإن التواجد السكاني أثناء عصر الوركاء المتأخر كان هاما وواسع النطاق، وكان الإكتشاف الرئيسي مصنعا لصناعة الأوعية المشطوفة الحواف يعود إلى أبكر مرحلة من عصر الوركاء المتأخر في الخندق M (المجلد 2): وتتضمن اللقيات أنية بحواف مشطوفة وعدة قوالب كانت تستخدم في صناعتها كلها مرتبطة بتنور لخبز الفخار.

بينما يعتبر تل أبو ظاهر أكبر موقع إلا أن سيانة كانت تمثل «الموقع النموذجي» من وجهة النظر الأثرية، حيث أنها ذات سلسلة لأطوار متميزة تمخضت عن مجموعة شاملة من فخار الوركاء المتأخر. يرجع معظم هذه المواد تقريبا إلى الفترة الممتدة من الوركاء المتأخر إلى نينوى 5 (الفخار المنقوش) على عمق 1.6 متر تقريبا من التواجد السكاني. إن دلائل سجل الطبقات تشير إلى انتقال تدريجي ومتواصل من عصر الوركاء المتأخر إلى نينوى 5 ومن المستحيل وضع خط فاصل بين العصرين (المجلد 2). لقد تم تمييز مرحلتين من عصر الوركاء المتأخر، تتكون الأولى من عدة طبقات من الرماد وأنقاض ترتبط بالتواجد السكاني تقعد مباشرة على التربة البكر، ويرتبط بهذه الأنقاض «رف لتخزين الحبوب» مبني بالطوب الطيني (الشكل 5)، ويرجع الفخار بالكامل إلى عصر الوركاء المتأخر. أما المرحلة الثانية فتتكون من من طبقة كثيفة يحتمل أن تكون من الرماد المركوم، ومن أنقاض عادية يصل عمقها إلى 80 سم مع غياب أية مباني مرتبطة بذلك. وفي هذه الفترة أخذت أنية نينوى 5 العادية والمنقوشة بالظهور بكميات صغيرة. ولذا يمكن القول بأن موقع سيانة كان مستوطنا بشكل متواصل منذ الوركاء المتأخر فصاعدا.

يحتمل أن يكون الإستيطان في تل گر مطبخ قد بدأ خلال عصر العبيد. إلا أن الدليل الواضح الذي يشير إلى الإستيطان قد اكتشف في طبقات الوركاء فقط. وتتكون الدلائل التي عثر عليها في الخندق B (الشكل 53) من سطح خارجي وزاوية لمبنى. يدل هذا الخندق أيضا على انتقال تدريجي من الوركاء المتأخر إلى نينوى 5 ، ولكن لم يعثر على مبان ترتبط بهذا الإنتقال. ويتلو مرحلة التواجد الكبير أثناء عصر الوركاء الأبكر موقع صغير نسبيا في شيلگية يرجع إلى الوركاء المتأخر. وقد عثر على مواقع أخرى من هذا العصر تقع على الجرف المطل على السهل: في بردية 4، 7، 8 و 9 ، ومقبرة بردية وتل حمد آغا الصغير.

ولذا يبدو أنه كان هناك زيادة استيطانية في كل من السهل الفيضي وعلى الجرف بعد انقطاع خلال عصر الوركاء المبكر. ومع أنه تم تنقيب القليل من المباني إلا أن هناك مؤشرين يقدمان تفسيرا هاما لطبيعة الإستيطان في المنطقة خلال عصر الوركاء المتأخر: مثل رف تخزين الحبوب في سيانة والآنية ذات الحواف

ترجع إلى عصر الوركاء، ولم يتم العثور على أية قطعة يمكن إعادتها إلى عصر العبيد في تل الشيلكية على المرتفع الرئيسي. وقد تم التعرف أثناء عملية التصنيف على عدة كسر في تل كر مطبخ من عصر العبيد، ولكن هذه كلها ترسبية، حيث لم نعثر أثناء الحفر على سياقات ترجع إلى عصر العبيد.

لقد وجدت بعض البقايا فقط التي ترجع إلى عصر العبيد في مواقع قليلة حول بردية فوق وادي النهر. ويحتوي أحد هذه المواقع، بردية 3، على الرغم من صغره، على مجموعة من الخزف والأدوات الحجرية (سبجية وصوانية) في حالة جيدة، وحيث أن موقع بردية 3 على التلال الصخرية للجرف جعلها غير ملائمة للإستيطان الزراعي فإن الأدوات الحجرية توحي بأن المستوطنة ربما كانت تعمل في تشذيب الحجارة ، وربما كمحطة خارجية تابعة لمركز التشذيب الرئيسي في تل أبو ظاهر.

ولذلك يبدو أن عصر العبيد كان مرحلة مزدهرة بالنسبة لمنطقة الزمار: هناك مستوطنة كبيرة نسبيا في تل أبو ظاهر، بالإضافة إلى تسهيلات التخزين والخزف المتطور والنشاط «الصناعي» المتخصص والتوسع الإستيطاني إلى الوادي وصعودا نحو الجرف ذاته. يوحي هذا بوجود درجة عالية من الرخاء، ومن المعتقد أن هذا الإزدهار كان قائما على الزراعة. ومن المؤكد أن الإنتقال في الإستيطان من الأراضي المرتفعة في سهل الجزيرة الأكثر ملائمة للرعي إلى الأراضي الفيضية الأكثر خصوبة في وادي النهر يشير إلى درجة كبيرة من تقدم النشاط الزراعي وإلى أساليب زراعية أكثر تطورا.

العصر 4: الوركاء المبكر (النصف الأول من الألف الرابع ق.م.)

يتميز هذا العصر بظهور آنية «عصافية» خشنة نوعا ما، وكذلك «الآنية الغصينية»، وهي على الرغم من طابعها المتميز إلى حد كبير لم تزل تفتقر إلى دراسات موثقة. ومن الأشكال الأكثر نموذجية لهذا العصر القوارير ذات الفتحة الفمية والحافة المجوفة والآنية العالية ذات الحواف المزدوجة.

عثر على الآنية الغصينية بوفرة في تل الشيلكية. وفي الواقع، فإن مجموعة الآنية الغصينية من تل الشيلكية هي أكبر مجموعة تم الحصول عليها حتى الآن. ولذا فإن تل الشيلكية يعتبر الموقع النموذجي للآنية الغصينية. ولسوء الحظ فإن معظم الفخار يرجع إلى سياقات ترسبية غير مصنفة إلى طبقات خالية مما يرتبط بها من طابع عمراني واستيطاني. ولهذا السبب فلا يمكن قول أكثر من ذلك من زاوية نظر التصنيف الطبقاتي. ومع ذلك فإن وجود تلك الكمية الكبيرة من بقايا الآنية الغصينية بالإضافة إلى عدد كبير من الطوب المخبوز والأوعية التي أفرط في خبزها، يشير إلى أن تل الشيلكية كان مركزا لصناعة وتصدير الآنية الغصينية.

يكاد فخار الوركاء المبكر يكون منعدما في منطقة تل أبو ظاهر. وقد عثر في التل على أشكال وطرز قليلة يحتمل أنها ترجع إلى فترة أبكر من عصر الوركاء، بالإضافة إلى أثر أو أثرين (مشكوك فيهما) مزينين برسوم غصينية، ولكن هذه هي مجرد حالات منفصلة ظهرت ضمن السياقات الترسبية، وهي لا ترتبط بأي طور استيطاني. مقبرة شيخ حمصي هي الموقع الآخر الوحيد الذي عثر فيه على بقايا مادية ترجع إلى عصر الوركاء المبكر، حيث تم اكتشاف قطع من الآنية الغصينية على السطح.

وفيما عدا ذلك فإن غياب البقايا المادية من عصر الوركاء المبكر يثير الدهشة إذا ما أخذنا في الإعتبار الكثافة الإستيطانية الأعلى نسبيا أثناء عصر العبيد السابق والزيادة الهائلة في حجم مواقع تل الهوى. ويحتمل أن يكون التوسع في تل الهوى قد اجتذب السكان من منطقة النهر.

وعلى الرغم من هذه الأسئلة المعذبة فإن عصر الوركاء المبكر يظل غامضا. إن غياب بقاياه عموما من منطقة أبو ظاهر يوحي بأن الزيادة السابقة في الإستيطان والإزدهار الذي واكب عصر العبيد لم يكن في الواقع إلا «فجرا كاذبا».

بعض الإستثناءات - عبر آلاف السنين. وقد عثر على مواقع قليلة ترجع إلى عصر حسونة في المنطقة، بردية 4، 7 و 9 فقط، التي لا تضم سوى كميات قليلة من مواد حسونة. ومن المعتقد أن عدد السكان المقيمين خلال عصر حسونة كان قليلا، بالإضافة إلى وجود عدد كبير من الناس الرحل بين هؤلاء السكان. وفي الواقع يحتمل أن مستوطنة حسونة لم تكن دائمة. وعلاوة على ذلك فإن إنتاج الطعام الذي كان لا يزال في طفولته لم يكن قادرا على دعم جاليات كبيرة. وربما كان هناك بالطبع قرى تقع على السهل الفيضي جرفتها المياه منذ زمن بعيد، أو ربما كانت هناك آثار من عصر حسونة مغطاة بالوجه الترابي السطحي في مواقع أخرى.

العصر 2: حلف (الألف السادس ق.م.)

يبدو أن الموقع الذي يرجع إلى عصر حسونة في تل أبو ظاهر قد اضمحل أثناء عصر حلف. ويجدر ملاحظة أن عدم وجود بقايا حسونية لاحقة يوحي بوجود فترة انقطاع للإستيطان بين عصري حسونة وحلف، وقد عثر على كمية قليلة من مواد عصر حلف. هناك مرحلة يمكن إعادتها إلى عصر حلف تم التعرف عليها في الخندق M، ولكن قد تكون هذه البقايا ترسبية. وفي ما عدا ذلك فإن البقايا الوحيدة لعصر حلف وجدت على السطح، مع أنه ورد وجود مرحلة من عصر حلف نتيجة لحفريات قامت بها جامعة الموصل.

ولا توجد أية مواد ترجع إلى عصر حلف في أية بقعة أخرى من وادي النهر: وتمثل التنقيبات السوفيتية في تل شيخ حمصي الدليل الآخر الوحيد على وجود عصر حلف على امتداد هذا الجزء من النهر. وبالمقارنة مع ذلك، فإن المنطقة الواقعة فوق وادي النهر على الحافة الشرقية لسهل الجزيرة الشمالي تضم سجلات كثيرة تدل على وجود مواقع ترجع إلى عصر حلف: تم تسجيل ما لا يقل عن خمسة مواقع في المنطقة ترجع إلى حلف، ويتعنقد ستة من المواقع حول بردية، وهناك مواقع عديدة ترجع إلى عصر حلف في غرب السهل نتيجة لمسح شمال الجزيرة. إن عدم وجود المواقع في وادي النهر يتعارض مع الدلائل المتوفرة في منطقة محمد عرب-بابيرة من السد، حيث كانت مواقع عصر حلف أكثر انتشارا. ولذا فإن هذه «النقطة الفارغة» الواقعة بين شمال الجزيرة من جهة وسد صدام من جهة أخرى تبدو أكثر غرابة.

العصر 3: العبيد (الألف الخامس ق.م.)

استعاد تل أبو ظاهر مرة أخرى مكانته كموقع رئيسي أثناء عصر العبيد. تصل ترسبات عصر العبيد إلى عمق كبير: حوالي 3.5 أمتار في الخندق M (المجلد 2)، مما يجعله العصر الأحسن تمثيلا من غيره في تل أبو ظاهر. إن عمق هذه الترسبات يشمل ثلاثة مراحل رئيسية من النشاط الذي كان يدور أثناء ذلك العصر، بالإضافة إلى عدة مراحل صغيرة. ويستخلص من الكميات الكبيرة من آثار العبيد التي تم جمعها في نقاط أخرى من التل الرئيسي أن المستوطنة غطت على ما يبدو كامل مساحة التل الرئيسي. ولذلك فإن مستوطنة عصر العبيد كانت على ما يبدو كبيرة ودامت زمنا طويلا. وتظهر من المباني المهمة التي تم تنقيبها مرحلتان متميزتان من الغرف الصغيرة الغريبة نوعا ما المبنية من الطوب الطيني. ويرجح أن الغرف الأبكر عهدا كانت تستخدم كمخازن من نوع ما (المجلد 2)، ولكن يبدو أن الغرف في المراحل المتأخرة أصبحت جزءا من منطقة «صناعية» (المجلد 2): حيث كانت كل الغرف تستخدم لتشذيب حجر الصوان، وهناك عدة أمثلة من رقائق الصوان والقطع التي تنطبق تماما على مواقعها الأصلية. وبشكل خاص تم اكتشاف مجموعة ممتازة من الصوان والأدوات الحجرية السبجية. وتمثل أبكر مراحل عصر العبيد جزءا من مقبرة حيث تم تسجيل 8 مدافن (المجلد 2)، وتحتوي بعض هذه المدافن على آنية ملونة بأكملها وفي حالة جيدة كجزء من تجهيزات القبر.

نقبت أيضا بعض البقايا المادية التي ترجع إلى عصر العبيد في تل الشيلكية، وكان ذلك في خندق متطرف تم شقه في أحد الحقول (الخندق PS) على بعد بضع مئات من الأمتار من التل الرئيسي، وهو يقع مباشرة تحت ترسبات أبكر

تل أسود	بردية 15
تل محمد أغا الصغير	بردية 9
جزرونية	تل الصوان
وادي سويدية 4	سهم
مطحنة وادي سويدية	خربة جصة
خربة شرلي	مقبرة شيخ حمصي
خربة أصيلة	عين سطام
بردية 6 و 7	خراب العاشق

المنطقة والعصور التي تغطيها الدراسة

المنطقة التي تم دراستها غير محددة جغرافيا، ولذا فمن الصعب الوصول إلى استنتاجات في السياق الإقليمي، ولكن مجموع التنقيبات والمسح الأثري يشكلان حصيلة مهمة من المعلومات التي يمكن استخدامها لاستكمال الدلائل التي حصل عليها من ميادين أخرى من أجل تكوين صورة إقليمية أوسع نطاقا.

لقد كشفت بحوث بعثة الآثار البريطانية إلى العراق النقاب عن سلسلة متواصلة تقريبا من الإستيطان في المنطقة المعنية منذ عصر حسونة حتى العصر الإسلامي المتأخر. إن وضع نظام للعصور في هذه المنطقة بتقسيمات واضحة أمر صعب. ولذا فقد قررنا في آخر الأمر وصف التسلسل الأثري من زاوية صناعة الفخار الخاصة بشمال العراق، فتم من هذا المنطلق التحقق من وجود 18 عصرا. وفيما يلي مناقشة للتعاقب الإستيطاني في هذه المنطقة وفقا لتطوره.

العصر الحجري، ما قبل حسونة (قبل الألف السابع ق.م.)

لم يعثر على دليل يشير إلى وجود بشري في مرحلة ما قبل صناعة الفخار، أي أثناء العصرين الحجري الحديث والقديم في هذه المنطقة بالذات. عثر على دليل يشير إلى تواجد إنسان العصر الحجري القديم على مسافة قصيرة باتجاه مجرى النهر، في المنطقة المحيطة برفان، بالإضافة إلى موقع نمريك المهم الذي يرجع إلى أوائل العصر الحجري الحديث، وهو يقع على مسافة قصيرة باتجاه مجرى النهر على الضفة المقابلة. كما أن موقع قرمز دره الأبكر بفترة وجيزة لا يبعد كثيرا، فهو في سهل الجزيرة عند تل أعفر. ولذلك فمن الغريب أن لا يؤدي بحثنا الدقيق في المنطقة عن مواقع للعصر الحجري القديم إلى اكتشاف مواد تعود إلى مرحلة ما قبل حسونة. ولذا يستطيع المرء الوصول إلى نتيجة واحدة هي أن عدم وجود آثار كهذه إنما يميز المنطقة الصغيرة المحيطة بتل أبو ظاهر فقط، ولا يمثل نموذجا ينطبق على المنطقة ككل.

العصر 1: حسونة (الألف السابع ق.م.)

هناك دليل واضح على وجود قوي لإنسان العصر الحجري الحديث المتأخر مع تأسيس مستوطنة كبيرة في تل أبو ظاهر تعود إلى عصر حسونة. إلا أن مستويات حسونة لم يتم الوصول إليها إلا في جزء من الخندق M (المجلد 2). تم اكتشاف مواد ترجع إلى عصر حسونة نتيجة للتنقيبات التي قامت بها جامعة الموصل، في نقاط أخرى من التل، تشير إلى انتشار الإستيطان الذي يرجح أنه غطى معظم مساحة التل الحالي، مما يعتبر مستوطنة كبيرة بالنسبة لهذا العصر. تتميز هذه المواد بأوعية خشنة مجبولة بالقش وتضم قطعا من الصوان لنزع القشور واسعة الإنتشار، إضافة إلى آنية أكثر دقة ملمعة باللونين الأحمر والبني. ولا يتوفر النموذج الأجمل المزين إلى درجة كبيرة بعدة ألوان كالآنية السامارئية التي عثر عليها في مواقع لحقتها بمسافة زمنية قصيرة نسبيا في سهل الجزيرة. ولذا فإن مستوطنات تل أبو ظاهر تعود على الأرجح إلى مرحلة أبكر من عصر حسونة.

إن الإمكانيات الزراعية الخصبة في منطقة أبو ظاهر ووفرة الصيد في النهر وفي واديه، ووجود مصدر دائم للماء من النهر، ووجود مخاضة ضحلة لعبوره، كانت كلها من العوامل التي اتحدت لكي تجتذب أول العاملين في الزراعة أثناء عصر حسونة إلى تل أبو ظاهر. وقد أدى هذا الإستيطان إلى ترسيخ مكانة أبو ظاهر كمركز للمنطقة التي حافظ عليها - مع

خطوط من الحجارة والحصي الصغيرة على التلال الواقعة إلى الشمال، وهي تبدو بوضوح وكأنها فواصل بين المحاصيل الزراعية عبر الوادي، وليس هناك ما يدل على العصر الذي ترجع إليه هذه الحدود.

سه قبة (الشكل 18)

هذه بقايا لبلدة صغيرة تسيطر على الوادي فوق جرف طبيعي عال، وهي تشرف على الضفة اليمنى لنهر دجلة على بعد 1 كيلومتر نحو أعالي النهر من تل أبو ظاهر. وقد نقب هذا الموقع من كانون الثاني حتى آذار 1986.

تم اكتشاف بلدة ذات تحصينات من الحصي المصبوبة يعود تاريخها إلى العصور الرومانية والساسانية/البيزنطية، ولكن يرجح أن يكون تأسيس البلدة عائدا إلى نهاية الألف الثاني ق.م. وتوجد في الجزء الأعلى من البلدة بقايا لمبنى إداري إسلامي متأخر. وقد كشفت مقاييس سبر عمق هذه المنطقة مراحل عمرانية متعددة ترجع إلى العصر الساساني/البيزنطي، ويوجد في المستويات الأدنى جزء من مبنى روماني وما يلحق به من أنابيب التيراكوتا وقطع الفسيفساء.

خربة گرهسن (الشكل 31)

يقوم هذا الموقع على الضفة اليمنى لنهر دجلة بالقرب من محطة الضخ الرئيسية لمشروع الجزيرة الشمالية على طرف السهل الفيضي باتجاه مجرى النهر من تل أبو ظاهر. وقد تم التنقيب فيه في شباط وآذار 1986 حيث تم اكتشاف بقايا لبلدة تغطي الجزء المسطح من مصطبة النهر العليا.

كان هذا الموقع مغطى بالفخار بكثافة بما في ذلك نماذج إسلامية وهيلينية وأشورية متأخرة وخابورية. وقد تم شق خندق لمعرفة طبيعة هذه المراحل مما كشف عن سلسلة ترجع إلى عصر الخابور، وتمخض التنقيب في نقطة أخرى عن مستوطنة تقع تحت السطح مباشرة ترجع إلى عصر الخابور المبكر. ومن الظريف اكتشاف مجموعة من الحلي المزججة ومجموعة كبيرة من الخرز الصدفي يعود تاريخها إلى العصر الأشوري المتوسط. وتم العثور على عدد كبير من التماثيل الصغيرة الملونة التي ترجع إلى عصر الخابور وكمية كبيرة من البقايا الميتانية.

تل گر مطبخ (الشكل 40)

يشكل هذا التل مرتفعا صغيرا شديد الإنحدار بجوار الضفة اليمنى لنهر دجلة على مسافة عدة كيلومترات بعكس مجرى النهر من تل أبو ظاهر، وقد تم تنقيبه في شباط وآذار 1986.

وقد تكشف خندق فتح في قمته عن حائط ساساني/بيزنطي كبير مشيد بالحجارة يقع تحت بعض القبور المتأخرة. وتمخضت خنادق حفرت في نقاط أخرى عن سلسلة من آثار رفيعة جدا ترجع إلى عصر الخابور كانت تغطي سلسلة متواصلة من فخاريات نينوى 5 المنقوشة، ونينوى 5 الملونة، وعن مواد من عصر الوركاء المتأخر. ووجدت بعض الكسر المتبقية من عصر عبيد في سياقات لاحقة. وتم استخراج بعض الفخار الهيليني من مجموعات سطحية.

المواقع الممسوحة

بالإضافة إلى المواقع المنقبة المذكورة أعلاه، تم معاينة مواقع أخرى دخل السهل الفيضي المحيط بتل أبو ظاهر، وكل المواقع الداخلة ضمن نطاق عدة كيلومترات من بردية، ولكن هذه المواقع لم تنقب، وإنما تم فقط فحص دقيق لقطع الفخار والبقايا الأخرى التي وجدت على السطح. كان حصيلة ذلك كمية جيدة من المعلومات المكملة للمعلومات التي تم الحصول عليها من المواقع المنقبة.

المواقع التي تم مسحها هي:

چكفة محمد آغا	بردية 4 و 5
تل گوز چيران	مقبرة البردية
خربة چم لگلگ	بردية 3
خربة چم لگلگ القديم	بردية 8

لنهر دجلة على مسافة 100 كيلومتر إلى الشمال الغربي من الموصل في ناحية الزمار، محافظة نينوى. وتمتد إلى مسافة 70 كيلومتر تقريبا بمحاذاة ضفة النهر.

انحصرت المنطقة الرئيسية، من حيث أهميتها الأثرية، في السهل الفيضي الخصب المحيط بتل أبو ظاهر، وتبلغ مساحتها حوالي 1 كيلومتر عرضا x 15 كيلومتر طولا، ويحدها من جهة الغرب والجنوب الغربي جرف شديد الإنحدار وصولا إلى سهل الجزيرة، ويحدها من ناحية الشرق النهر نفسه.

لقد تم تنقيب 7 مواقع ومسح 24 موقعا إضافيا. يرد ذكر هذه المواقع في الجزء الأول باستثناء تل شيلگية الذي يشكل موضوع تقرير منفصل نشر بالإشتراك مع جامعة أدنبره.

تل أبو ظاهر (المجلد 2)

تم تنقيب هذا الموقع من تشرين الأول 1985 حتى نيسان 1986. وهو يتكون من تل عال يبلغ ارتفاعه حوالي 20 مترا فوق مستوى السهل الفيضي، إضافة إلى تل أكثر انخفاضا منه يمتد إلى مسافة عدة مئات من الأمتار بمحاذاة النهر. وقد عثر على بقايا من عصور حسونة، حلف، العبيد، الوركاء، نينوى 5، الأكادي، الخابور، الأشوري المتأخر، الهيليني والپارثي.

وقد كشف خندق مدرج بعرض 4 أمتار حفر في جانب التل تسلسلا لكل العصور التي توالت عليه. وكشفت خنادق إضافية حفرت في حافة التل الرئيسي وفي التلال الأكثر انخفاضا المحيطة به مدى امتداد الإستيطان. من المحتمل أن يكون عصر حسونة قد غطى معظم مساحة التل الرئيسي الحالي. لقد خلف عصر العبيد اللاحق بقايا ذات عمق كبير، يصل أحيانا إلى 3.5 أمتار، مما يشير على الأرجح إلى فترة استيطان أطول، ولكن لا يحتمل أنها تجاوزت عصر حسونة في المنطقة. وقد تم تنقيب منطقة صناعية صغيرة ترجع إلى عصر العبيد تتكون من أعمال تشذيب حجر الصوان على نطاق واسع. لقد توسع الإستيطان خلال عصر الوركاء الذي خلف آثارا من صناعة الفخار. وبلغ الموقع أوسع نطاق له خلال العصرين الأكادي والخابور ويحتمل أنه أصبح مدينة إقليمية صغيرة، ولكن يبدو أن الإستيطان اللاحق كان أقل حجما.

سيانة عليا (الشكل 7)

تم التنقيب في هذا التل الصغير المنخفض الذي يقع على بعد 7 كيلومتر إلى الجنوب الشرقي من تل أبو ظاهر خلال الفترة من تشرين الأول حتى كانون الأول 1985.

تم شق مقطع عرضه 3.5 مترا عبر حافة التل وصولا إلى التربة البكر. وقد أظهر ذلك بشكل رئيسي انتقالا تدريجيا من عصر الوركاء المتأخر حتى عصر نينوى 5 أنتج كمية كبيرة من الآنية الرفيعة المنقوشة. المبنى الوحيد ذو الأهمية عبارة عن مخزن للحبوب أو رف للتجفيف مشيد من الطوب الطيني يرجع إلى عصر الوركاء المتأخر. وقد عثر على بعض الفخاريات الهيلينية على السطح.

خربة شرينة (الشكل 9)

يقوم هذا الموقع على الضفة الشمالية لوادي سويدية قبيل انفتاح الوادي على السهل الفيضي قرب تل أبو ظاهر، وهو عبارة عن تل صغير يقل قطره عن 200 متر، وهو منخفض حيث لا يتجاوز ارتفاعه 6 أمتار فوق منسوب السهل الفيضي المحيط به. وقد نقب هذا الموقع في كانون الأول 1985 وشباط وآذار 1986.

أظهرت التنقيبات أن مساحة الرقعة المستوطنة لم تكن تتعدى 75 x 150 متر على الأكثر. وتم قياس العمق من أعلى التل إلى مسافة 3.1 أمتار بدون الوصول إلى الأرض البكر. العصور الرئيسية الممثلة في هذا الموقع هي: الأشوري المتأخر، الإسلامي والپارثي. وتم كذلك اكتشاف كميات قليلة من المواد العائدة إلى عصر الخابور.

التفسير الأرجح لوجود هذه المستوطنة الأشورية المتأخرة هو أنها كانت مزرعة صغيرة، ويحتمل أنها كانت مرتبطة بالبلدة في تل أبو ظاهر. ومن الجدير بالملاحظة بشكل خاص هو بقاء آثار الحدود السابقة بين الحقول على شكل

الإستيطان القديم في منطقة الزمار

المواقع التي نقبتها بعثة الآثار البريطانية إلى العراق في مشروع سد صدام لإنقاذ الآثار

موجز

الخلفية

يعتبر مشروع سد صدام لإنقاذ الآثار عملية كبيرة بادرت بها المؤسسة العامة للآثار والتراث في العراق لغرض إنقاذ المواقع الأثرية المهددة بالغمر تحت مياه السد الجديد. وقد عملت بعثة الآثار البريطانية إلى العراق في منطقتين، خلال الفترة من تشرين الثاني 1982 حتى أيار 1986. ركزت البعثة البريطانية عملها معظم هذه الفترة – حتى آذار 1985 – في المنطقة المحيطة بمحمد عرب على الضفة الشمالية لنهر دجلة، وقد غمرت هذه الضفة بالمياه في ربيع 1985، ولذا فقد سمح لبعثة الآثار البريطانية إلى العراق في أيلول 1985 بالإنتقال نحو أعالي النهر إلى المنطقة المحيطة بتل أبو ظاهر والتي تقع على الضفة اليمنى لنهر دجلة (الشكل 2)، وقد غمرت هذه المنطقة بالمياه أيضا في ربيع 1986، وبذلك اكتملت مشاركة بعثة الآثار البريطانية إلى العراق في مشروع سد صدام لإنقاذ الآثار.

وما كان من الممكن لنا أن نقوم بعملنا بدون المساعدة الكبيرة التي قدمت إلينا من قبل مؤسسات وأفراد عديدين. أود تقديم الشكر إلى المؤسسة العامة للآثار والتراث في العراق لدعوتها لنا للمشاركة في مشروع سد صدام لإنقاذ الآثار بمثل هذه الشروط السمحة، وخاصة رئيس المؤسسة الدكتور مؤيد سعيد دامرجي، الذي ما كان للمشروع أن ينجح بدون الدعم الذي قدمه لنا. لقد تلقى الجانب البريطاني أيضا دعما سخيا من الأكاديمية البريطانية والمدرسة البريطانية للآثار في العراق، وأود شكر كل من مجلسي هاتين المؤسستين على هذا الدعم.

يرجع نجاح هذا الموسم بدرجة كبيرة للعمل الشاق وحسن نية عدد من الأشخاص. لقد أبدى الدكتور بهنام أبو الصوف، الذي كان في آنه المدير العام للمنطقة الشمالية للمؤسسة العامة للآثار والتراث، اهتماما نشيطا بعملنا، لقد قدم هو ونائبه في الموصل، السيد محمد صبحي عبد الله، كل المساعدة المادية التي كانت تحت تصرفهما وتصرف موظفيهما. ونخص بالشكر ممثلنا، السيد مسلم محمد، الذي أفادنا بخدماته، على الرغم من الضغوط الموضوعة على وقته نظرا لالتزاماته في تل أعفر. ويجب تقديم الشكر أيضا إلى السيد سالم يونس، من مكتب الموصل، على مساعدته لنا في كثير من المسائل الإدارية والترتيبات العملية وإلى العديد من أعضاء وموظفي المؤسسة العامة للآثار والتراث، في كل من الموصل وبغداد، الذين عالجوا كل الجوانب الإدارية.

تألف فريق البعثة من: برونوين كامبل، ستيورات كامبل، تيموثي كلايدن، كارولاين ديفيز، إيزابيل ضومط، سوزان چيل، أنطوني غرين، وندي ماثيوز، تسا ريكاردز، سانت جون سمپسون وديڤيد تكر.

موجز العمل الحقلي

المنطقة (الشكل 1)

تقع المنطقة التي نقبتها بعثة الآثار البريطانية إلى العراق في 1985–1986 على الضفة اليمنى

شكر وعرفان

كان المشروع عملا مشتركا بين بعثة الآثار البريطانية إلى العراق (BAEI) والمؤسسة العامة للآثار والتراث في العراق. أود أولا تقديم الشكر إلى المؤسسة العامة للآثار والتراث في العراق على دعوتها لنا للمشاركة في مشروع سد صدام لإنقاذ الآثار بمثل هذه الشروط السمحة، وخاصة رئيس المؤسسة الدكتور مؤيد سعيد دامرجي، الذي ما كان للمشروع أن ينجح بدون الدعم الذي قدمه لنا. لقد تلقى الجانب البريطاني أيضا دعما سخيا من الأكاديمية البريطانية والمدرسة البريطانية للآثار في العراق، وأود شكر كل من مجلسي هاتين المؤسستين على هذا الدعم.

يرجع نجاح الموسم بدرجة كبيرة للعمل الشاق وحسن نية عدد من الأشخاص. لقد أبدى الدكتور بهنام أبو الصوف، الذي كان في آنه المدير العام للمنطقة الشمالية للمؤسسة العامة للآثار والتراث، اهتماما نشيطا بعملنا، في كل من زياراته للمواقع وفي بغداد. ويعود الفضل في حجم المساحة التي نقبناها فعلا بالكامل إلى حماسه وتشجيعه لنا، لقد قدم هو ونائبه في الموصل، السيد محمد صبحي عبد الله، كل المساعدة المادية التي كانت تحت تصرفهما وتصرف موظفيهما. ونخص بالشكر ممثلنا، السيد مسلم محمد، الذي أفادنا بخدماته على الرغم من الضغوط الموضوعة على وقته نظرا لالتزاماته في تل أعفر. ويجب تقديم الشكر أيضا إلى السيد سالم يونس، من مكتب الموصل، على مساعدته لنا في كثير من المسائل الإدارية والترتيبات العملية وإلى العديد من أعضاء وموظفي المؤسسة العامة للآثار والتراث، في كل من الموصل وبغداد، الذين عالجوا كل الجوانب الإدارية للحصول على تأشيرات الدخول والتصاريح لكل أعضاء البعثة. لقد تلطف السيد مدير الناحية في الزمار الجديدة بالسماح لنا باستعمال السكن الحكومي في البردية. وقد قدم لنا كل من الأستاذ فوجي من بعثة الآثار اليابانية والدكتور جرمي بلاك والدكتور روبرت كيليك في مكتب بغداد مساعدة جوهرية. وبالإضافة إلى ذلك، فإن جهود الدكتور أنطوني غرين في الموصل الذي كان يستكمل عمل بعثة المتحف البريطاني في مركز نينوى للتنقيب، والسيد جو هول من جامعة مكواري في سدني، ساهمت كثيرا في تحسين العلاقات مع المديرية العامة للآثار والتراث وفي خلق جو لطيف عموما.

ولكن كما هو الحال في العمل الحقلي، فإن جل المساعدة أتى من الأعضاء المستخدمين الذين تألف منهم الفريق على مدى عشرة أشهر في الحقل. تشكل الفريق من: برونوين كامبل (ماسحة)، ستيورات كامبل (مشرف موقع، تل گر مطبخ)، تيموثي كلايدن (مساعد موقع، تل أبو ظاهر وخربة شرينة)، كارولاين ديڤيز (محللة حجارة، مسجلة ومشرفة موقع، تل الشيلگية)، إيزابيل ضومط (أخصائية وقاية)، سوزان چيل (مشرفة موقع، سيانة عليا وسه قبة)، أنطوني غرين (مشرف موقع، خربة شرينة)، وندي ماثيوز (أخصائية خزفيات)، تيسا ريكاردز (رسامة). سانت جون سمپسون (مشرف موقع، تل أبو ظاهر) وديڤيد تكر (مشرف موقع، خربة گرهسن).

لقد تمت معالجة ودراسة المواد لاحقا طوال موسم دراسي عقد في قلعة تل أعفر من 8 تشرين الأول 1986 إلى 28 شباط 1987، بالإضافة إلى الفصول الثلاثة اللاحقة من مشروع تل الهوى خلال السنوات التالية. لقد تكون فريق الموسم الدراسي من: هيذر بيكر، ديانا بولت، برونوين كامبل، ستيورات كامبل، سوزان كوليتون، أنطوني غرين، إموجين غروندون، هيلين ماكدونالد، ليا ماكينزي، وندي ماثيوز، ماريان پيغان، آلان پايپ، نايجل سادلر، سانت جون سمپسون وديڤيد تكر. في بريطانيا، أعد غريهام ريد معظم الرسوم للنشر، وجهزت آلين ماكادم وأنا لثبريدج المخطوطة للتنضيد.

وأخيرا، أود اغتنام هذه الفرصة للتعبير عن عظيم الشكر لفضل الأستاذ مايكل روف، سلفي في مشروع سد صدام لإنقاذ الآثار والمدير السابق لبعثة الآثار البريطانية إلى العراق، الذي جمع الأموال اللازمة لموسمي، وقام بكل الأعمال التمهيدية لضمان نجاحه. وعلى الخصوص، فإن العلاقات الودية جدا التي تمتعنا بها مع السلطات في الشمال كانت تعود في معظمها تقريبا إلى جهود الأستاذ روف التي بذلها طوال عدة سنوات من أجل بناء مثل هذه العلاقات الطيبة مع السلطات العراقية.

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