

PAUL YULE (HRSG.)

STUDIES IN THE ARCHAEOLOGY OF THE SULTANATE OF OMAN

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PAUL YULE (HRSG.)

# Studies in the Archaeology of the Sultanate of Oman

mit Beiträgen von

C. Bergoffen, G. G. Costa, P. M. Costa, E. Glover, J. Kunkel, M. Kunter, C. Phillips,  
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## Foreword

The following documents the work of the Department of Antiquities of the Sultanate of Oman and its cooperation with the German Archaeological Oman Expedition, the latter which since 1977 has been sponsored in large part by the German Mining Museum, Bochum. The fieldwork which is the basis of the present study took place largely at the beginning of the 1980's. Most of these projects were undertaken by the German Archaeological Mission. A monograph dealing with the archaeology of the Sultanate has been long in preparation and was to appear in the press of the German Mining Museum in Bochum. The text on the fieldwork in Bawshar was to appear as a monograph and is so conceived. Stephan Kroll completed a manuscript on the Lizq fort L1 in 1980, reworked in 1984, and again later. But the final version was still not ready for publication in 1997. This also holds for the reinvestigation of the cemetery at al Akhdar which exists in a lengthy German-language manuscript. However, the documentation of the finds still had to be checked for errors and missing information, as well as be complemented by means of a data bank which contains a general inventory of the archaeological finds from Oman. The final writeup of the collective tomb al Wasiṭ W1 is finished, but was scheduled to appear in the monograph mentioned above. Manfred Kunter contributed texts soon after his yearly visits to Oman.

Texts deriving from the activities of Paolo M. Costa, previous director of the Department of Antiquities of the

Sultanate of Oman, existed for various sites in and around Bawshar, and these were edited and checked in the field. In the early 1980's the photos and drawings already were finished for the finds from the „honeycomb cemetery“. But some of the documentation could not be found. My own research began in Bawshar in 1988, mostly survey and one salvage excavation in 1991.

Our thanks go to HE Sayyid Faisal b. 'Ali Āl Sa'īd (Minister National Heritage and Culture) and Dr Ali b. Ahmad b. Bakhit al Shanfari (Director General, Department of Antiquities). I should like to thank Gerd Weisgerber first for encouraging Paolo Costa and myself to cooperate, and secondly for enabling me by means of a grant (German Research Association [DFG]) to finish a part of the work. My thanks also go to Elke Nieveler who assisted me in studying the stratigraphy of the „honeycomb cemetery“. The dendrogram (below) was constructed by Jochen Haas and I. Hala Attoura translated the abstracts into arabic.

Finally, the printing was supported in a determined way by Ricardo Eichmann, Director of the Orient Department of the German Institute of Archaeology (DAI). A hearty word of thanks goes to Celia Bergoffen, Paul Larsen and especially Jutta Häser who did a final editing of the text.

November 1997

Paul Yule

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## Abbreviations

B.	Breite	P.C.	P.M. Costa
C.P.	C.S. Phillips	Pos.	position
Cu	copper or bronze	pres.	preserved
DA	Department of Antiquities	P.Y.	P. Yule
EIA	Early Iron Age	rest.	restored
FEZ	Früheisenzeit	RWOs	Riegelmauer, Widerlager, Orthostaten, schmal
G.G.C.	G.G. Costa	SEZ	Späteisenzeit
G.W.	G. Weisgerber	SOg	Steinkranz, Orthostaten, gedrungen
L.	Länge	SOs	Steinkranz, Orthostaten, schmal
LIA	Late Iron Age	SWOg	Steinkranz, Widerlager, Orthostaten, gedrungen
M.K.	M. Kunter	SWOs	Steinkranz, Widerlager, Orthostaten, schmal
Ofl.	Oberfläche	T.	Tiefe
orig.	originally	u.	unter
Os	Orthostaten, schmal	W.O.s	Widerlager, Orthostaten, schmal

# Archaeological Research in the Area of Muscat

*P. M. Costa – G.G. Costa – P. Yule –*

*G. Weisgerber – M. Kunter – C. Phillips – 'Ali B. Ahmad b. Bakhit al Shanfari*

## 1 INTRODUCTION

Especially in the first seventies, when infrastructures were limited, or unavailable, fieldwork posed many practical and logistic problems and required a lot of help.

For the work done in the Capital area it is a great pleasure first of all to mention the role played by H.H. Sayyid Faisal b. 'Ali b. Faisal Āl Sa'īd because on the whole we could have achieved very little without his enthusiastic backing. From the excavations at Wādī Bawshar to the dig and conservation of Şedd Ruwi, even the somewhat extravagant studies of the old limestone quarry near Minā' al Fahal and the last century quarantine building at Ḥarāmīl, not to mention the many seasons of excavation at Qurum, all the projects received the Minister's support and unfailing encouragement and personal interest for the study of the many aspects of the long history of Muscat, from prehistory to industrial archaeology.

Local and foreign teams received help from a number of Government officials: H.E. Malallah bin 'Ali bin Ḥabīb, once undersecretary at the Ministry of National Heritage and Culture and later Advisor to H.H. the Minister, H.E. Sālem bin Ismā'īl bin Suweid, once ambassador to Rome and later Undersecretary at the Ministry of National Heritage and Culture, Muḥammed bin Sa'īd al Waheibi, Director General of Heritage and Dr 'Ali bin Ahmed bin Bakhit al Shanfari, Director of the Department of Antiquities.

From several individuals who helped in many ways, I would like to mention here Haii Ali Sulṭān and Kamal Abd al Ridha' Sulṭān, Julian Paxton, the late William Peyton and his wife Diana, David Insall and Brigadier Malcolm Dennison.

The Government team included at various times: Luciano Couvert, Chris George, Germana Graziosi Costa, Sean Heath, Stephen and Marie Kite, Antonio Pereira, Carl Phillips, James Riegle, David Schraer and Nicholas Stanley Price.

Lastly, I am glad to recall the fruitful co-operation with the team of the Deutsches Bergbau Museum of Bochum, especially with Gerd Weisgerber and Paul Yule with whom the agreement was reached to join efforts to publish the results of the field work in the Wādī Bawshar: their experience in the study of the Iron Age sites in Oman, is relevant for a better valuation of contemporary finds from the Capital Area.

A general reconnaissance was conducted during the first season in the month of April in 1979. A topographic and architectural survey was carried out with the main purpose of locating the best preserved parts of the old caravan route. The works of the first season in 1979 were conducted with the participation of ministry staff, including: Sean Heath, James Riegle, David Schraer, architects/surveyors, Germana Graziosi Costa, archaeologist.

A second season took place in December 1979 when the *sur* of Jāl was measured by Sean Heath and David Schraer, architects/surveyors.

A third season took place in January 1980 with the excavation of tomb BI (Germana Graziosi Costa, archaeologist/site supervisor) and tombs BIIa and BIIb (Carl S. Phillips, archaeologist/site supervisor), staff included Stephen Kite and Marie Dalton Kite, architects, and Laxman Suvarna, photographer. The team received help and information from Engineer Mario Abenante, who was in charge of the Wādī Bawshar Development Feasibility Study. During the same season a preliminary survey of Faṭḥ Āl Bū Sa'īd was conducted to prepare a project for the conservation and improvement of the site. The study included road construction and landscaping (Stephen Kite, architect/surveyor). The work was meant to be a pilot project for the correct implementation of modern development within the framework of the new Heritage Law (Royal decree 6/80 of 16/2/1980).

The architectural survey was continued in May 1982 for a fourth season devoted to the study of the castle of Sība (Antonio Pereira, architect/surveyor).

In the same season a few ancient burial cairns were also identified on the western slopes of Medinat Qaboos, and a small scale excavation was conducted at two sites (MQ1-2) with Clara Zawawi, archaeologist, and Laxman Suvarna, photographer.

Excavations were resumed for a fifth season in October/November 1982 at the site of the Burial Complex (Wādī Bawshar site 2), again by a team of the Ministry of National Heritage including Carl S. Phillips, archaeologist/site supervisor, Luciano Couvert, surveyor/draughtsman, Laxman Suvarna, photographer. Consultancy was kindly provided by Manfred Kunter, anthropologist and by the late Kathy Smythe, malacologist (her work was kindly completed and revised by E. Glover).

## 2 THE ECOLOGY AND CULTURE OF WĀDĪ BAWSHAR

The coast of Oman comprised between Bandar Jiṣṣa and the Airport of Seeb, forms, with its immediate hinterland, what is nowadays the area of the capital, or more simply the area of Muscat.

The development of the modern capital of Oman has been going on since 1970, expanding with new residential and commercial quarters amidst formerly isolated settlements, including small fishing hamlets, the ancient port-town of Maṭraḥ and many rural villages. The growth of the built-up area has taken place mostly at the expense of barren ground, but also of vast areas under cultivation. It should never be underestimated that the agricultural hinterland of Muscat represented an unfailing source of fresh food and water. Surplus could be easily traded or bartered with luxury and exotic goods obtained from calling ships. Catering for ocean-going ships has beyond memory been one of the most important roles played by the inhabitants of the coasts of Oman in the long range seafaring, besides, of course, the more direct maritime activity of Omani sailors, pilots and boat-builders.

The extraordinary process of urbanisation that has been going on in modern Oman soon posed great problems for the conservation of archaeological and historical sites, especially within the perimeters of rapidly expanding cities. The establishment of a Ministry of National Heritage in 1976, and the issuing of an Antiquity law in 1980, provided the legal and administrative means for a programme of conservation.

On the principle that only what is known can be preserved, the Department of Antiquities planned regional inventories with the purpose of preparing priority lists of sites and monuments to be submitted to the authorities concerned with development plans. In order also to speed up this effort, the Ministry continued the policy adopted earlier by the new Omani government, of encouraging, sponsoring and, when necessary also funding foreign research schemes, including long-term excavation projects.

The very fact that a state - like modern Oman also included together with obviously more vital and urgent tasks the preservation of the national cultural heritage, is in itself exemplary. As early as 1973 the Department of Antiquities was established within the Ministry of Information and Culture, as it was called at that time. One year later H.M. Sultan Qaboos opened the Oman Museum, the first permanent presentation of the various aspects of local culture to exist in Oman, and among the first modern museums to be established on the Arabian Peninsula.

With the establishment of the Ministry of National Heritage (a year later to become the Ministry of National Heritage and Culture), and the publication of the Journal of Oman Studies, the Government of Oman had completed the basic steps to implement the program announced by H.M. Sultan Qaboos on the very day of his accession, when he declared that the modern development of his country had to combine with the preservation of the genuine values of the local tradition.

The present study appears twenty-two years after the establishment of the Department of Antiquities in Muscat. The research of these two decades has produced many and frequently unexpected results for the various phases of the Middle Eastern civilisation which enabled scholars to rewrite entire chapters of the history of the region. In the light of the new discoveries, Oman and the Arabian Peninsula appear to be part of the ancient world in a wide perspective view which extends from the Mediterranean to the Indus Valley and beyond.

Also on account of their late arrival to Eastern Arabia, archaeologists began work according to new concepts of investigation: unlike the earlier research in other areas like, for example, Iraq and Egypt, where the focus was on the finds, in Eastern Arabia and the Gulf the interest was centred on man, his adaptation to the environment and his use of natural resources. Necessarily therefore, the research was largely interdisciplinary and involved the efforts of a number of specialists, each adopting the most appropriate method for his own field, but all united in combined efforts which covered the various phases of civilisation, from prehistory to the Islamic period.

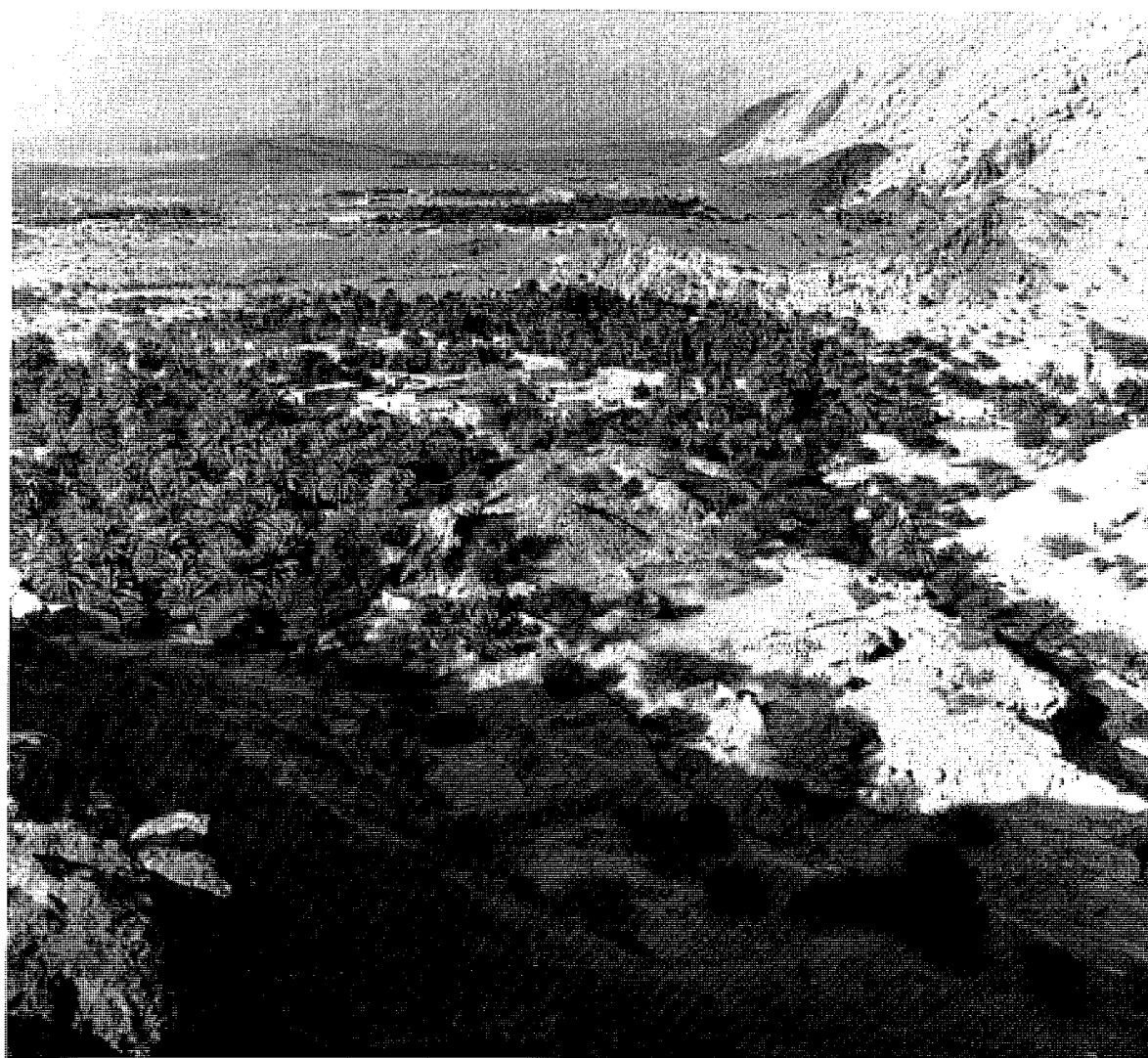
Wādī Bawshar is a small valley (*Pl. 1* and oversize map) to the west of Muscat, about 8 km from the coast. It stretches for a few kilometres north-easterly along a range of high mountains, then turns north, reaching the sea at al Khuwair. In its upper part Wādī Bawshar is closed in, towards the sea, by a line of low hills, which may be better described as fossilised sand dunes. The area is very green for the presence of abundant water which gushes out from the mountains in the form of several hot springs. The hottest and largest of these springs has made Bawshar, with Ghāllah and Ḥammām 'Ali further to the south-west, the most famous among the traditional hydropathic places of Eastern Arabia<sup>1</sup>. An early English traveller, Lt. John Porter, who visited Bawshar (called „Bushire“) in 1781, wrote that there the water is

<sup>1</sup> The main hot springs are located in Ghāllah (ed.).

„as hot as could be borne“ and „reckoned sovereign for all disorders of the skin“.

Located at the foot of a barren and inhospitable range of mountains and concealed by the northern hills, Wādī Bawshar looks like an isolated and forgotten enclave with

no links to Muscat and the other coastal settlements of the area. As a matter of fact, for many years Wādī Bawshar was excluded from development assistance to the capital and remained almost totally, and miraculously untouched by modern building.



Pl. 1 A general view of the valley of Bawshar taken from the hills that separate it from Ghallah on the west, 1980 (P.C.).

لوحة ١. منظر عام لوادي بوشر مصور من الهضاب التي تفصله عن جال من الغرب، ١٩٨٠ (P.C.).

Wādī Bawshar is inhabited by a few hundred families of different tribes (mostly Āl Bū Sa'īd and Banī Ḥaṣan) settled in six different villages: Faṭḥ, Jāl, Sād, Falaj, Bawshar b. 'Amrān and Sība. The houses are well built with stone foundations and stone and mud-brick walls. It is interesting to note that the palm-frond dwelling, ubiquitous along the coast and once present also at the peripheries of large cities, like Muscat and Maṭraḥ is totally absent here.

High quality architecture and intensive agriculture involving the use of sophisticated irrigation systems, highlight Bawshar as a very interesting example of a site where traditional building and land use methods are still in operation, marking today probably the only virtually intact traditional landscape left within the capital area. The ideal environmental setting suggests that the settlement must be very old, going back to the beginning of sedentary life in Eastern Arabia. To an early date points also the presence of numerous stone tombs, possibly ranging from the third to the first mill. B.C., which dot the top and slopes of the hills. In all its aspects the complex ecosystem of Wādī Bawshar seems to epitomise the whole of Northern Oman and represents a living example of traditional life preserved within the districts of the capital.

The impression of detachment and seclusion of Wādī Bawshar, mentioned above, can only be referred to the modern urban context. From the traditional, historic and logistic points of view, Wādī Bawshar has undoubtedly been an important place. Firstly, on account of its position along the track leading from Muscat to the Samā'il valley, it was the main thoroughfare between the coast and the interior of the country.

The old caravan route, which survives in many places, started from the oasis of Wuṭayah and cut short along the mountains, avoiding the long and waterless plain, to head straight towards Bidbid and a string of villages along the foot of the Jebel al Akḥḍar. Beside being a very convenient water place on this route, Wādī Bawshar also formed the administrative centre of a sparsely populated, but relatively vast area, expanding between the coast and the Wilayat of Bidbid. The fact that until the recent establishment of the „Governorate of the Capital Area“ Bawshar was the seat of a *wālī* (for two generations, members of the important Khalili family held the post), proves its importance in the traditional administration of the country.

Apart from a large hilltop fort, discussed further below, the settlements of Wādī Bawshar are unwalled and



Pl. 2 Castle at Faṭḥ (P.Y.)  
لوحة ٢. قلعة في فتح (P.Y.)





Pl. 3 North/south helicopter view of the small valley to the south of the village of Falaj, where fresh water springs are located, 1979 (P.C.)  
 لوحة ٣. منظر شمالي-جنوبي من طائرة مروحية للوادي الصغير باتجاه جنوب قرية فلج حيث ينابيع المياه العذبة، ١٩٧٩ (P.C.).

are devoid of external defences and watch towers. Only three buildings display some defensive character: the castles of Faḥ (Pl. 2) and Siba (Pls. 5, 7) and the *sur* of Jāl. The last building belongs to a very special type of construction identified and studied in the course of a regional survey of the Bāṭinah<sup>2</sup>.

The Omani *sur* is a fortified compound usually built by members of a tribe forming a small community in a settled rural area which is also inhabited by other tribal groups. The original function of the building was to provide shelter in case of tribal strife or some other threat, although today it normally serves as a centre for the community, and hence as well as a symbol of tribal identity. In Wādī Bawshar the *sur* of Jāl may be explained by the fact that the village is inhabited by members of the Bani Ḥaṣan tribe, while the neighbouring villages of Faḥ and Sād belong to the Āl Bū Sa'īd.

Within the corpus of about a hundred *sur* listed in the area of the Bāṭinah, the *sur* of Jāl is unique for some aspects of its architecture. First, there is the location of the only gateway right next to the tower of the southern corner of the building. As a result, gate, tower and guard-room form conceptually, if not geometrically, the central and strongest part of the *sur*; in a layout with a marked lack of symmetry, which is quite unusual for this kind of building. Secondly, the eastern wall of the guard-room had a second inner wall, leaving an intentional gap between the two, which being connected to

wall niches, ensured ventilation from the roof to ground level. It is noteworthy that the guard-room had no windows and no direct opening into the courtyard, and very often the main gate had to be kept locked. The upper storey of the building is unfortunately lost and one can only postulate the presence of a wind-catching structure similar to the *badcash* of the Gulf houses where at roof level the parapet is built with slots at its base to ensure forced entrance of the prevailing breeze into a vertical duct blowing down into ground level rooms.

From what can be understood from the dilapidated remains of the fortifications still visible south-east of the village of Falaj, these seem to consist of a stone wall enframing a flat hilltop and extending over its more gentle northern slope (Pl. 4). This large enclosure contains a secondary walled area at its south-western corner, which corresponds to the highest point of the hill. Higher and stronger walls apparently formed some sort of citadel at this site, where along the north-western side, the remains of six or seven rooms are visible. The remains of many other walls suggest that the enclosure was divided into several more sections. No traces of a gate are preserved and without excavations, for what can be documented in the rocky ground, little else if anything at all is left to be said about the ruin and its history. A thorough survey of

<sup>2</sup> P. Costa 1985c, passim, and p. 121-194 especially 127, Pl. 7. (n. 3 in the list).



Pl. 4 Hill fortifications south of Falaj (P.C.)

لوحة ٤. تحصينات هضبة جنوبي فلج (P.C.)

the area (hopefully to be carried out in the near future), could perhaps lead to a surface collection of potsherds, possibly of large water storage jars which must be expected on this hill which apparently had no natural access to water and no cisterns. Very close however, there was the northern well of a *falaj* which brings water to the village from a small side valley running into Wādī Bawshar from the south (Pl. 4; top right corner).

The village of Siba lies at the foot of the hill which separates Wādī Bawshar from Ghāllah. Siba's restored four-storey castle, known as Bait al Maqham (Pls. 5-8), towers above a group of smaller houses and some palm groves which stretch along the western bank of the wādī. Even prior to restoration in 1992, the building was very impressive for the scale and quality of its construction. The building material is mudbrick which explains its rapid decay as soon as maintenance and repairs had ceased. One cannot exclude the possibility that the roof beams were made of date palm trunks, which form an easy target for termite attacks and hardly show any resistance to humidity which penetrates the building when the flat mud roof starts leaking. The circumstances of the damage to the building and the reasons for the neglect unfortunately are not known.

The building rises very close to the edge of the wādī bed, just upstream of a very sharp bend where the main

wādī is met by a tributary one. A *falaj* which taps the water of the hot spring above, runs along the boundary wall of the castle garden which has the shape of a triangle formed by the confluence of the wādīs. It then runs on a small embankment across the main wādī bed, which it crosses a second time a little downstream on an arched aqueduct (today replaced by a concrete structure).

The main part of the castle is rectangular in plan with a huge round tower at its north-west corner. The building has no inner courtyard, but on its north side overlooks a vast open area closed in along the wādī by the estate boundary wall. All around the courtyard were long and narrow rooms, stores and stables. Against the garden wall and overlooking a village street, rises the main gate into the castle. It consists of an arched opening with access to a square vestibule flanked on the western side by a staircase. The main courtyard of the castle was entered via a long and narrow yard overlooked on the west side by a three-arch loggia with a slightly raised floor and a series of five high windows opening onto a garden. This type of loggia is common in the architecture of Oman. Known as *sablah*, it is a kind of formal room which can be erected on public ground for tribal meetings by an affluent member of the community or next to an important residence for the reception or hospitality to visitors and guests who are not admitted into the house.





Pl. 5 Aerial view of the Bait al Maqham in Siba (P.C.)

لوحة ٥. منظر جوي لبيت المقهم في سيبا (P.C.).



Pl. 6 The Bait al Maqham in Siba (P.C.)

لوحة ٦. بيت المقهم في سيبا (P.C.).

Judging from the presence of the staircase and the size of the walls, gate house, and *sablah* must have had a second storey, perhaps unroofed. On the side of the wādī a central part of the castle was flanked by two long and narrow service rooms connected with the *falaj* by a flight of steps. There was no direct access from the service rooms into the central area of the building.

As part of the estate, although intentionally built on the opposite side of a narrow public lane, is a small mosque (recently renovated). A common practice in Oman, the mosque was built for public use as a pious gesture on the occasion of the construction of the *falaj* to seek God's protection.

The castle of Siba is undoubtedly a high quality mud-brick construction in which ingenuity and originality of the local building tradition found their expressions through appropriate architectural solutions of various kinds of problems. As for the general setting, the builders had to work at a difficult site where water drainage and the need of making optimal use of land for cultivation were relevant conditioning factors. A compromise was reached according to which gardens and buildings could concentrate in a kind of peninsular area surrounded by deep gullies, which during the rainy seasons are sometimes swept by flash floods. The buildings were located on rocky ground, unsuitable for agriculture, but in a commanding position overlooking the valley, while the gardens spread westward where they could be watered by a higher *falaj* channel. Typically, the mosque was disposed in such a way that, although open to the public, it was unmistakably part of the estate.

The plan of the house is in itself very interesting. The entrance is opposite the mosque, stressing the relationship between family life and religion, a very important aspect of Omani society. From the entrance the view into the courtyard is obstructed by the sheer bulk of the round tower which, with its 8 m diameter, is the largest, and the most impressive structure of the building. Visitors were almost naturally encouraged to proceed from the entrance into the arched *sablah*, to sit down and sip a welcome coffee. It is worth mentioning that, despite the presence of the round tower and the fortified character of the main entrance, it would be incorrect to describe this building as being „military“ in nature or even just „fortified“. Within Omani vernacular architecture the adoption of certain „defensive“ features does not necessarily mean that the building's function is related to military activity or designed to withstand actual warfare. These features belong to the conventional architectural vocabulary adopted by the craftsmen builders to give to the building a grand and impressive appearance. In the present case the „residential“ rather than military character is suggested, among other things, by the presence

of the secondary and unguarded access from the wādī mentioned above.

The entrance into the central building, which regrettably has been completely lost its southern facade, was through an arched doorway in the middle of the northern side. This represents a shift in the circulation through the building which enhances the privacy of the house.

Although most of the upper storeys are lost and all wooden fittings are missing, the design of the windows, the surviving mouldings and some preserved architectural details suffice to evidence the quality and original splendour of the building. A noteworthy feature is the small external staircase which gives access to the uppermost floor of the tower, ascending in two flights of steps and supported by a small two-arch loggia.

The *wālī* of Wādī Bawshar had his residence in a large house in the village of Falaj. U-shaped in plan, the building rises at the northern end of a vast walled courtyard with a gate *en chicane* on its eastern side. A large cistern occupies part of the southern side of the courtyard, while the wall opposite the entrance is lined with stores and stables.

The northern side of the house which overlooks the family garden, has proper windows only on the upper floor, while at the ground floor it has only few embrasures for ventilation. The scarcity of windows gives the building an extremely austere appearance slightly mitigated on the southern side, where the facade - to use a western and rather inappropriate term - deeply recessed between two extended wings is enlivened on the upper floor by a three-arch loggia and downstairs by a splendid wooden door, the real central piece of the building.

The door leaves are constructed with plain vertical planks studded with large nails closely spaced in five rows, each corresponding to an inner cross-bar. The door is fastened by an iron clamp and chain. Only the central cover strip is boldly raised and decorated with rich carving: geometric and stylised floral motives are either separated by plain cartouche-like sections (in the lower area) or linked on either side by strings of pearls or beads.

Most of the carved decoration is concentrated on the uprights and the lintel. The latter is formed by three parallel rows. First there is a panel with a long inscription in raised calligraphy and a moulded row of eight stylised flowers running along its top. The doorway is then topped by a complex raised moulding, forming at either end a linear capital and supporting a final cornice decorated with seven „rosettes“. The most striking and in a way unexpected, decoration however is to be found on the uprights: each of them, carved out of a single piece of wood, represents a column rising from a high plinth, and formed by eight globular pots (*Pl. 9*), placed one on top of the other, and separate by parallel mouldings. From





Pl. 7 Helicopter view of Bait al Maqham (Siba) adjacent buildings and gardens, from east, 1980 (P.C.)  
 لوحة ٧. منظر من طائرة مروحية لببيت المقهم (سيبا) من الشرق مع الأبنية المجاورة والحدائق، ١٩٨٠ (P.C.).



Pl. 8 Oblique air view of Bait al Maqham (Siba) showing the castle, its courtyard and water supply. On the left is the small mosque which is part of the estate. The main wadi runs in the foreground, 1980 (P.C.)

وحة ٨. منظر جوي مائل لببيت المقهم (سيبا) يُبين القلعة بفنائها والإمداد المائي. يظهر المسجد الصغير الذي هو جزء من الأملاك على الطرف الأيسر، في حين يبدو مجرى الوادي الرئيسي في مقدمة الصورة، ١٩٨٠ (P.C.).

each pot grow two bunches of acanthus leaves which specularly fill the space between the pots and extend around the bodies in a „wrapping“ fashion. Cleverly, the spherical shape of the pots is suggested more by design than obtained in the round by the sculpture, which is in a very low relief.

The bottom pot appears set in a kind of ring (perhaps a reference to the device used in reality to carry pots on the head) richly decorated by a pattern of diamonds and pearls. A minute and intricate melange of stylised geometric and fruit-like motives covers entirely the bodies of the pots, possibly reminiscent of the painted decoration on actual pottery. On the whole the uprights give a strange impression of goldsmith work, even more striking by the contrast with the functional and crude manufacture of the door leaves and sill.

At first glance this refined and monumental door, which as we will see later on in detail, bears the date to the year 1115 H./1703 A.D., looks somewhat out of place. This impression is confirmed by the information I obtained from members of the last *wālī's* retinue: according to this source the door was transferred from Wādī Samā'il at an unknown date to its present place, the ancestral region of the Khalili family. One can assume that the door was re-used around a century ago, when a sheikh of the Khalili family was appointed *wālī* of Bawshar.

It was probably when it was removed from its original place or during the transport from Samā'il, 100 km away from Bawshar, that the door suffered various noticeable damages, like the splitting and loss of a large part of the upright on the right hand side, various chippings of the architrave and the total loss of two elements, most likely brackets, evidence of which are the empty mortises visible at the top of each upright. The possibility that the door panels and central cover-strip were replaced and consequently only the uprights and the architrave belong to the original door is an hypothesis that must be taken into serious consideration. It would in fact be relevant, also with reference to the use of plain door panels, in sharp contrast with the exuberantly decorated door frame (a contrast which could be intentional), but especially to explain the marked difference in style and type of carving which can be observed on the central cover-strip.

The presence of the brackets, a typical feature of the traditional Hindu doors, beside the unmistakable character of the carving, the style of the decoration and the taste and concept itself that appears to have guided the general design, depicting the columns more like sculptural, than structural, elements, all point to Indian craftsmanship.

Good quality and large size timber for house and boat building has always been imported from East Africa and India to Arabia. In the latter, especially in Gujarat, there

were also first class craftsmen capable of producing top quality furniture, chests, cabinets and doors. An outstanding example of Gujarati work in Oman is a beautifully carved door from 'Ibrā Alayah, now in the Oman Museum, with richly carved, intricate, and minute floral motives, especially vine, spread on frames, leaves and the central cover-piece. It also depicts a representation of two animals, a unicorn and a lion, repeated specularly on each leaf. On top of the animals, which display a strange heraldic character (as if actually directly inspired by the „supporters“ of the English royal coat of arms), are two small framed fields with an inscription in raised *naskhy* letters mentioning, beside the name of the Omani committant, the place where the door was made (the town of Surat) and the date (the year 1136 H./1725 A.D.). The two-line inscription on the lintel of Bawshar door reads as follows (*Pl. 10*):

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ (إِنَّا فَتَحْنَا لَكَ فَتْحًا مُبِينًا لِيُغْفِرَ لَكَ  
اللَّهُ مَا تَقَدَّمَ مِنْ ذَنْبِكَ وَمَا تَأَخَّرَ وَيَتِمَّ نِعْمَتَهُ عَلَيْكَ وَيَهْدِيكَ  
صِرَاطًا مُسْتَقِيمًا وَيَنْصُرَكَ اللَّهُ نَصْرًا عَزِيمًا) كَتَبَ سَنَةَ ١١١٥  
هِرَجَمَادَى ثَانِي

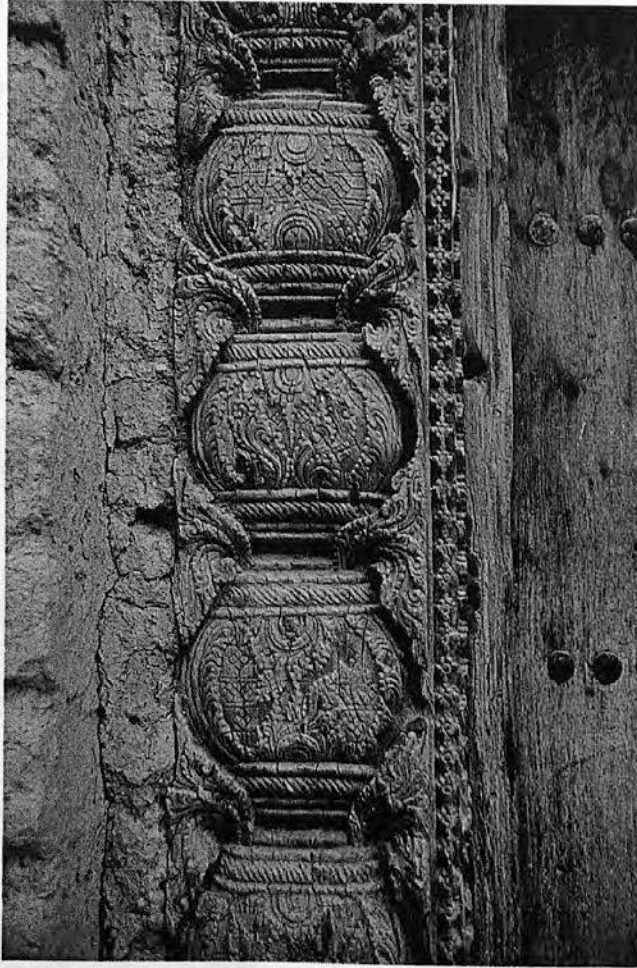
„In the name of Allah, the Beneficent, the Merciful. Truly we have given to you a clear conquest, that Allah may forgive you your past and future faults, and that He may complete His favour upon you and guide you on the right path, and grant you a mighty victory (Qur'ān, The Conquest, XXXXVIII, 1-3). Written in the year 1115 h and the month Jumādā Tānī,, (October 1703 A.D.).

The door was therefore manufactured around the year 1703 A.D. when Oman was ruled by Imam Belarab bin Sultan, the builder of the famous fortified residence of Jabrin, third in line of the Ya'riba imams (1624-1741).

After the fall in 1650 of Muscat, the last foothold of the Portuguese in Oman, the country enjoyed a period of stability and prosperity, and started looking outwards, entering a phase of military and commercial expansion overseas. At home, the imamate encouraged a great development of the agriculture and promoted all sorts of crafts such as pottery making, weaving, agriculture, sugar production and metalwork. All this also meant great building activity. New estates, often including beautiful residences (*Pls. 11a-b*), were built with extensive *falaj* systems and water mills. Disused *'aflāj* were restored, and where they were not feasible, water for irrigation was supplied by large multiple wells. Sometimes the two systems went into operation together in an effort to make the best use of meagre or unreliable water resources.

The castle of Faṭḥ was built by a clan of the important Āl Bū Sa'id tribe, originally from the town of Ādam in the southern Sharqiyah, to which the present royal family of Oman belongs.





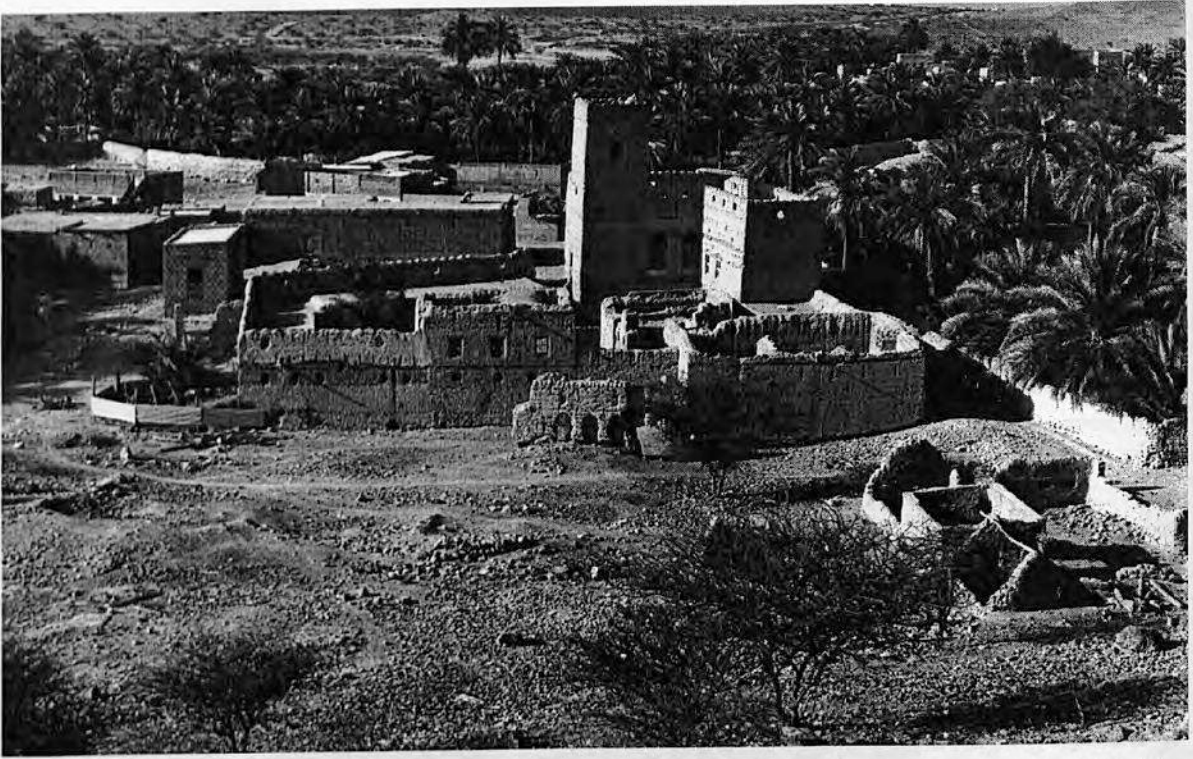
Pl. 9 Detail of the frame around the front door of the house of the *wālī* of Bawshar (G.W.)

لوحة ٩. تفاصيل الإطار المحيط بالباب الأمامي لبيت والي بوشر (G.W.).



Pl. 10 Lintel of the front door of the house of the *wālī* of Bawshar (P.Y.)

لوحة ١٠. ساكف الباب الأمامي لبيت والي بوشر (P.Y.).



Pl. 11a A general south/north view of the valley of Bawshar showing the setting of a large house at the southern end of the village of Falaj, 1978 (P.C.)

لوحة ١١ ا. منظر عام جنوبي-شمالي لوادي بوشر يُظهر موقع بيت كبير على النهاية الجنوبية لقرية فلج ١٩٧٨ (P.C.).



Pl. 11b The façade, facing north (P.C.)

لوحة ١١ ب. الواجهة الشمالية (P.C.).



The village of Faḥ, also known as Faḥ Āl Bū Sa'īd, consists of a small group of dwellings, a mosque and some gardens built around the castle precinct for the use of relatives, servants, workers, dependants and clients of the family.

The castle is a two-storey stone and mud-brick building, square in plan, measuring about 18 m on the side, with round towers at two diagonally opposite corners (Pl. 2). The building stands in the centre of a walled area lined on two sides by servant quarters, stores and stables. A small mosque was also built by the family for public use not far from the main gate of the castle enclosure. Although physically separated from the main group of buildings, the mosque was part of the estate. This handsome cubic building, standing on a slight artificial prominence and terrace, preceded by a forecourt was entered through a flight of steps. The whole estate is in disrepair and most of the rooms are unroofed. Despite their present ruinous condition, the buildings still preserve some interesting features and the castle retains most of its original grandeur. The mosque was replaced by a modern building in 1985.

The castle is entered through a gate, slightly off the centre of the northern side. Two rows of rooms of varying length surround a very small central courtyard. This tiny unroofed space, which can be better described as a light well, is a typical feature of traditional buildings, both in northern and southern Oman, where it is called *shamsiyah*, literally: solarium.

As we have seen, Faḥ Āl Bū Sa'īd, more than a village, as it appears on maps, is in fact the residence of an extended family surrounding a princely house. This definition matches the strong difference in quality between the castle and the lesser buildings. In the other villages of Wādī Bawshar more architectonic uniformity can be noticed and many good quality buildings stand beside the largest houses. In the village of Falaj, for instance, beside the *wālī's* residence some handsome and well-built houses do exist. At the southern end of the village, near the mountain slope, a house rises three-storeys above ground, witnessing past splendour and building skill (Pls. 11 a-b). Not far from it, and nearer to the *wālī's* residence, a beautiful pavilion with a three-arched loggia overlooks a vast expanse of greenery.

At Bawshar, as in all oasis settlements, the intensive agriculture involves cultivation on three levels and a minimal use of ground, but requires continuous and unfailing irrigation. The water is tapped and transported by channels which may be partly underground, according to the water and terrain levels. The construction of this type of channels, called in Oman *falaj*, requires great skill beginning with the survey necessary to plan the most

efficient and shortest route. The channel which transports and distributes water by gravity, may extend indirectly for some distance from the tapping point to its destination because it needs to flow in a gentle and continuous gradient over its entire length. The main problems faced by *falaj* builders are the location of a suitable source of water, and the tunnelling of the underground sections. They also have to know how to work around wādīs and other physical obstacles. The tasks require considerable skill because the builders must balance the gradient of the channel and the average flow-rate while also taking into account seasonal variations. Great experience is also required in the assessment of the ground where the channel is to be constructed as well as in the preparation of hydraulic mortars and other special building materials.

According to hydro-geological factors and other physical qualities of the environment, a *falaj* can channel surface flow, tap a spring or drain aquifers. The first type of exploitation on which the simplest and oldest method of irrigation is based, is only possible with an abundant surface flow over level ground, a typical situation of the great world basins like the Indus Valley, Mesopotamia, and Egypt but rare in the Arabian Peninsula.

In Oman springs can often be tapped only at a considerable depth and this implies a long underground run (cases of 10 to 20 km are known) before the channel can emerge to surface.

In a relatively small and constricted area like Wādī Bawshar one obviously cannot expect to find a *falaj* of great length. The rugged terrain however, has created such a variety of problems that practically all the most typical features of the Omani water systems can be found there.

Interesting in this respect, is to examine the development of the village of Faḥ Āl Bū Sa'īd, perhaps the most recent of the six settlements in Wādī Bawshar and a typical man-made oasis created by means of a great technical effort and capital investment.

The village is not as close to the mountains and rich water sources as the other settlements. Water supply is obtained by a combination of two major hydraulic systems. One originates from a fan-wise drainage formed by two water bearing underground channels, of which the eastern extends further south to tap extra water from a small side valley.

The second, and much longer channel, starts from the side valley to the south of the village of Falaj. After a short, straight run along the eastern fringe of the village, the channel flows into a large water reservoir which builds up enough water to ensure a steady flow along a 2000 m straight run across almost level ground (Pl. 12).



Pl. 12 The *falaj* supplying Fath (P.C.)

لوحة ١٢. فلج يروي فتح (P.C.).

The channel runs underground up to about the village of Jāl, but so close to the surface that tunnelling was unsafe. Thus the channel was constructed with the cut-and-fill method. Consequently, the *falaj* course is detectable (from the ground and in the aerial photos) from the presence of a linear depression all along its route. At about 300 m west of the village of Fath the channel, here measuring in section 50 x 25 cm, starts running above ground on an embankment which gradually becomes higher on the increasing slope of the terrain, descending to the level of a deep intervening wādī, at this point about 25 m wide. This relatively large wādī close to high mountains must have concerned the *falaj* builders who feared possible flash-floods during the rainy season. To avoid this kind of danger they decided not to cross the wādī with an aqueduct, but instead with an inverted siphon, or a U-shaped pipe, its lower side tunnelling below the wādī bottom. This method of undercrossing a wādī is commonly used in Oman where it is called *gharraq fallah*, after the names of the two vertical shafts. The horizontal part of the siphon is called *jisir* or „bridge“ because, though underground, it spans the river. The pipe is normally cylindrical, with an inner diameter of 1 to 1.5 m.

The *gharraq fallah* of Fath measures 3 m above ground and has an inner diameter of 1 m. The rather large size of the *gharraq fallah*, obviously much larger than required by the small water flow, is needed to allow easy access during construction and maintenance of the pipe which, to avoid loss of velocity through friction or dangerous seepage, must be carefully finished with hydraulic plaster, along the inner surface.

We can assume that the builders of the *falaj* of Fath were worried that flash-floods might damage the embankment which stood like a dam across the sloping plain. As a precaution they made some openings to allow water to flow through the embankment barrier. Further up, near the village of Jāl a track was driven over the channel in the form of a shallow bridge. All these features show how careful the planning of the water system was, and how strong the concern for its good maintenance.

The preceding notes on the settlement patterns, water supply and land use are based exclusively on the pre-modern occupation of Wādī Bawshar during a period which may have begun a couple of hundred years ago. For various reasons, there is no archaeological evidence for earlier habitation and the existence of settlements related chronologically and culturally to the numerous funerary structures preserved in the area.

The lack of archaeological data on the history of Wādī Bawshar is principally the consequence of continuous habitation within an area where the extent of residential and agricultural land parcels has invariably been conditioned by land morphology and water supply. In other words, any evidence of chronological perspective has been obscured by the rigidly vertical progression of development phases. As in many other oasis settlements in Eastern Arabia, the remains of an earlier phase of habitation are progressively buried by new building and traces of ancient cultivation, and are seasonally obliterated by new work. As in other cases in Oman, early life in Wādī Bawshar is indirectly but dramatically proven by the numerous monuments built for the dead.

For all these reasons and also fearing that modern development may in the near future endanger the preservation of some of the ancient structures scattered over the territory, the present writer decided to excavate some of the tombs. Three cairns near the village of Jāl were chosen for their location dangerously close to a road junction under construction.

A group of burial structures visible on a low alluvial terrace to the north of the village of Falaj was chosen as a second site. Here there was no immediate danger of modern encroachment, but the low ground was clearly exposed to occasional flash-floods. Besides, the choice was due to the unusual structure of some remains which looked like an exceptionally large and dense cluster of tombs.





Pl. 13 Hafit tomb near Faḥ (P.Y.)

لوحة ١٣. قبر حفيت بالقرب من فتح (P.Y.).

### 3 CATALOGUE OF GRAVES AND FINDS

Pre-Islamic tombs lie scattered in the areas unsuitable for cultivation and not acutely endangered by wādī flooding. The earliest preserved of these are Hafit tombs and concentrate particularly in the area of Faḥ (Pl. 13).

Tombs of the Umm an Nar Period destroyed to their bottom courses lie between Faḥ and Sād east of the tarmac road. These and the tombs in the main areas are not mapped here, owing to their large numbers, as well as a lack of time to survey them. Pre-Islamic graves which the Department excavated were numbered during the excavations to which subsequently the prefix „B“ (Bawshar) was added in 1991 for a database of the archaeology of the entire Sultanate. The isolated graves which were excavated in 1981 were originally numbered with Roman numerals „BI“ and „BII“<sup>3</sup>. The B-numbers with Arabic numerals designate graves which were excavated in the so-called „honeycomb cemetery“. Graves numbered B66 and higher were added to the original numbering in 1991 in order to include all graves of the „honeycomb cemetery“.

The cataloguing of the finds follows the same organisation as that of the Samad-Project<sup>4</sup>. Thus the names of the pottery forms reflect a classification of the pottery known from the Sultanate. This also holds true for the other find categories.

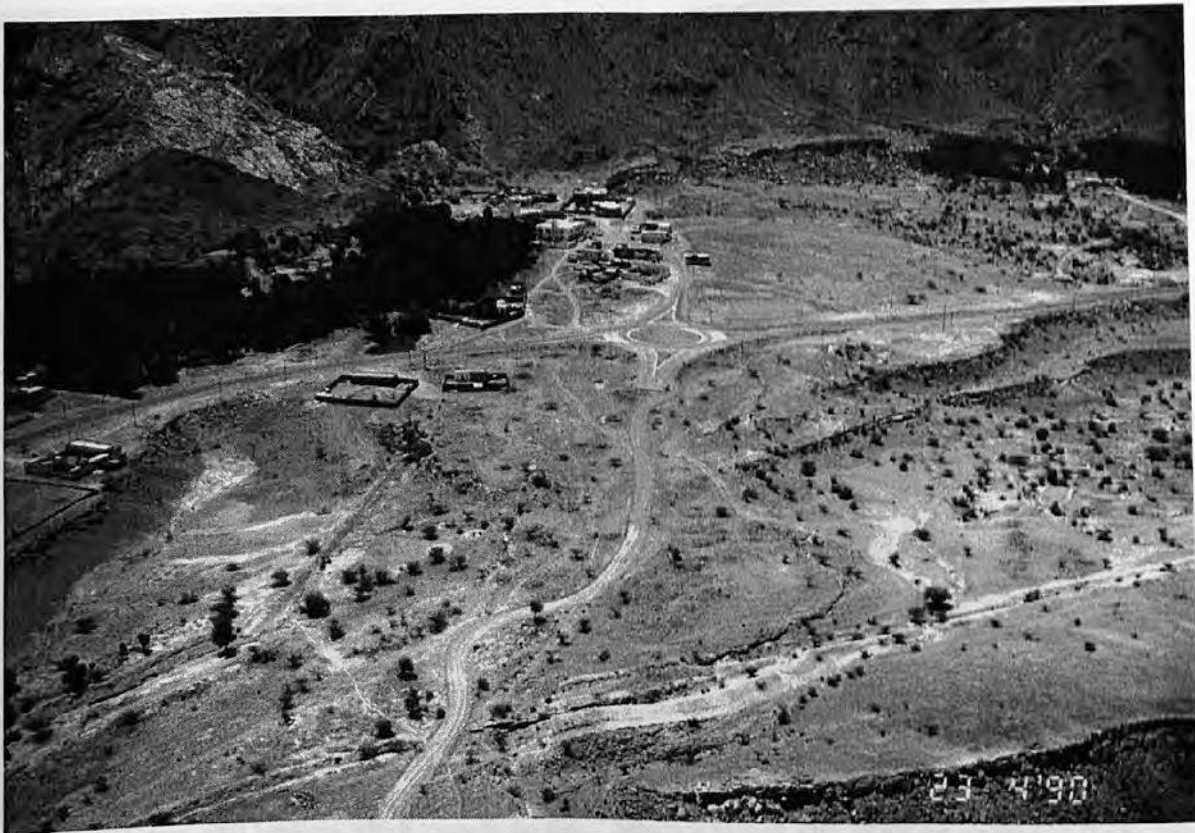
The archaeological Areas 1, 2, and 3 at Bawshar are large and irregular in form (see oversize map). They are defined by the presence of Pre-Islamic graves as well as later disturbances of these remains. Based on survey conducted by P. Yule in 1989, the graves comprised in Area 1 extend over some 200 m from east to west and 500 m from north to south (Pls. 14, 15). At the time of the investigation it contained 118 Pre-Islamic graves. Area 2, as defined by P. Costa and C. Phillips, has two main grave clusters. The main one is centred at <sup>6</sup>42300E; <sup>26</sup>04130N. A second cluster is located 200 m to the south-west. Here C. Phillips excavated among others graves BIIa and BIIb. Area 3 designates the area of the „honeycomb cemetery“. Area 4 is a large ridge to the north-west of Jāl with Pre-Islamic graves. Area 5 is located some hundred metres south of the western extension of the ridge. North-east of Faḥ lie numerous Pre-Islamic graves from various periods, some of which being in a surprisingly good state of preservation.

<sup>3</sup> These dates derive from the inventory book of the Department of Antiquities. Later they were cited as Arabic numerals (P. Costa 1989, 109, 115).

<sup>4</sup> P. Yule in press.



Pl. 14 Aerial view of Area 1 at Jāl (P.Y.)  
لوحة ١٤. منظر جوي للمنطقة ١ في جال (P.Y.).



Pl. 15 Aerial view of Area 1 and 2 at Jāl, and Sād (P.Y.)  
لوحة ١٥. منظر جوي للمناطق ١ و ٢ في جال وساد (P.Y.).

## 3.1 Area I

## GRAVE B0

Azimuth of the long axis: 170/370 gon (= ENE/WSW)

Floor length: 1.68 m

Floor width: 0.90 m

Depth of floor b. surf.: 0.18 m

Finds: non-Samad LIA? reoccupation not probable

Architecture: non-Samad LIA? grave type: Jāl Bawshar<sup>5</sup>

As a result of the building of an enclosure for live-stock in 1991, a burial cairn beside house no. 867 on Way 5910 in Sād Bawshar was badly damaged by the owner. The north-west corner of the house cut the south-west sector of the cairn. Owing to the destruction of the grave and its potential for shedding light on grave architecture, date, as well as that of the cemetery in this area, the Department of Antiquities authorised and supported the salvage excavation of this grave. This structure (*Fig. 1*) is about 100 m away from another grave excavated by the Department in 1981 or 1982 (*Fig. 2*).

Work began on 31st August and continued for three days. Local supervision took place under 'Ali b. Rashid al Medeilwy. Two part-time, light labourers from the Ministry of National Heritage and Culture provided assist-

ance. For the raising of the heavy roof stones a crane was sent by the Ministry of Housing (*Pls. 16, 17*).

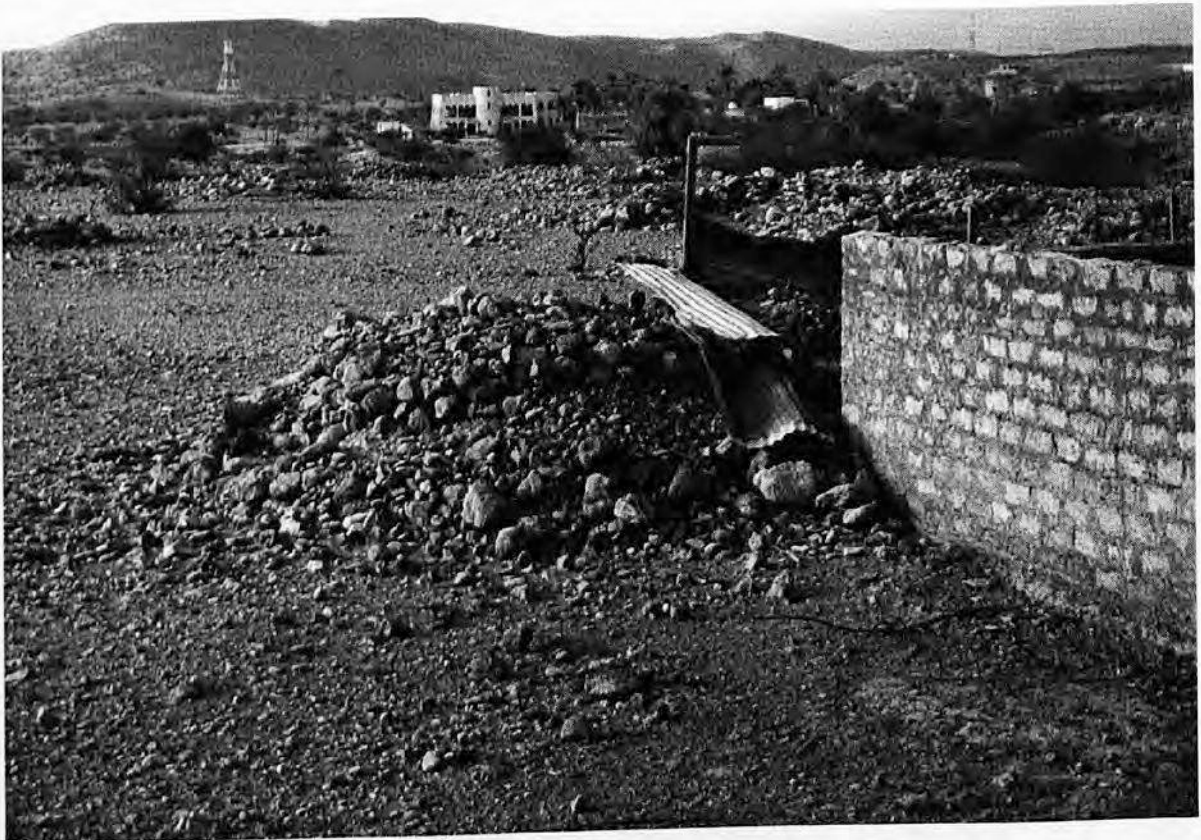
State of Preservation:

Although some of the outer stone casing of the grave was removed in recent years, the lowest course of stones and the original appearance of the grave were still roughly determinable. On the east side the original form was no longer preserved. At the northern, visible end of the cairn's chamber, a depression in the stone mantle was observed. The grave was robbed from the uppermost corner of this end, probably in antiquity, to judge by the dense sedimentation of the damaged area.

The Structure:

The cairn consists of vertical alternating shells of fist to head-sized stones as well as gravel and clay. Immediately on top of the roof stones the filling consisted of gravel and clay. The grave chamber was capped by three large flat stones, the joins of which were sealed by smaller stones and clay mortar. A stone burial chamber was built first before the outer casings were added around it. Then, the deceased was placed into the chamber. But no entrance was originally visible from the exterior. At some

<sup>5</sup> P. Yule 1994, 549, 551 Fig. 10, Pl. 21.



Pl. 16 Grave B0 before excavation 1990 (P.Y.)

لوحة ١٦. القبر B0 قبل تنقيبات عام ١٩٩٠ (P.Y.)





Pl. 17 Grave B0 during excavation 1990 (P.Y.)

لوحة ١٧ . القبر B0 خلال تنقيبات عام ١٩٩٠ (P.Y.)

points the tripartition of the stone mantle into separate layers can be discerned. Rough stone slabs (not the common wādī stones) were used as the main material. The floor is rectangular and sunk below the level of the surface. Since this is the first grave of its kind to be described, it may be referred to as the Jāl Bawshar (JB) type.

#### Finds:

Over the centuries the grave silted up with aeolic sand which solidified with gypsum. Only a few bone fragments and a rim sherd, evidently of a bellied pot, were preserved.

- 1 Neck and rim of a bellied pot (non-Samad LIA?), some sand temper, colour inside and outside reddish not determinable, red core (Munsell 2.5YR 4/8), rim diameter 10 cm, preserved height 2.5 cm, thickness 0.2 cm, DA 12024.

(Ali b. Rashid al Medeilwy and P.Y. September 1991)

### GRAVE BI

The grave consisted of a roughly oblong structure erected with large wādī boulders which towards the top slightly taper inwards. The gaps between the boulders were filled with chippings and pebbles (Fig. 2, Pls. 18, 19).

This structure was overlying the burial chamber itself. The burial chamber, rectangular in plan, with one end curved and the other straight, was covered with three large slabs (measuring at the most 0.57 x 1.10; 0.70 x 1.45; 0.80 x 1.10 m) and sealed with small stones tightly packed into the interstices and then mortared with mud. The chamber was partly lowered below the surface and partly built up through the stone structures lining the sides. The floor was paved with slabs and cemented with clay and pebbles.

Very few fragments of human bones were found at the northern end of the chamber, and apparently the body was covered with a layer of soil and stones which originally left an empty space of 20 to 30 cm. This gradually silted up.

At the south end of the chamber the layer overlying the skeletal fragments was deeply cut, causing a deeper layer of silt to accumulate in this area. This could mean that robbers once tried to enter the grave from this side.

The grave which was built for a single burial and dug below the surface, whilst lined and covered with large stones, is similar to the tombs excavated in Wādī Sūq and Samad S10, which are marked on the surface by a stone circle or a low cairn. The Wādī Bawshar grave has a more prominent stone structure which may be in-

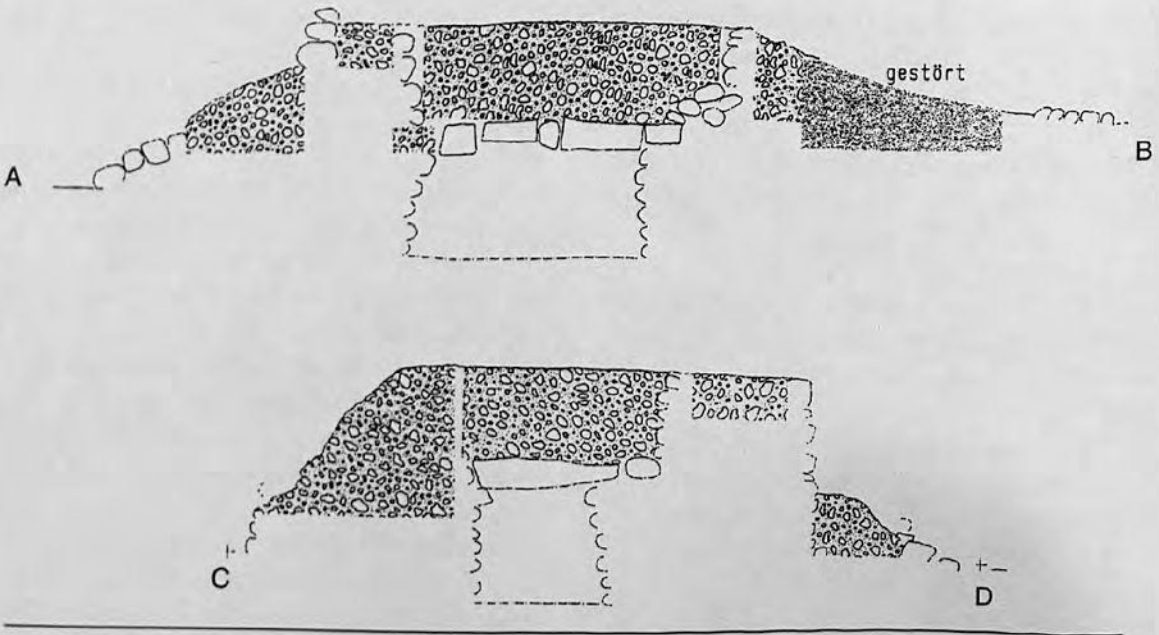
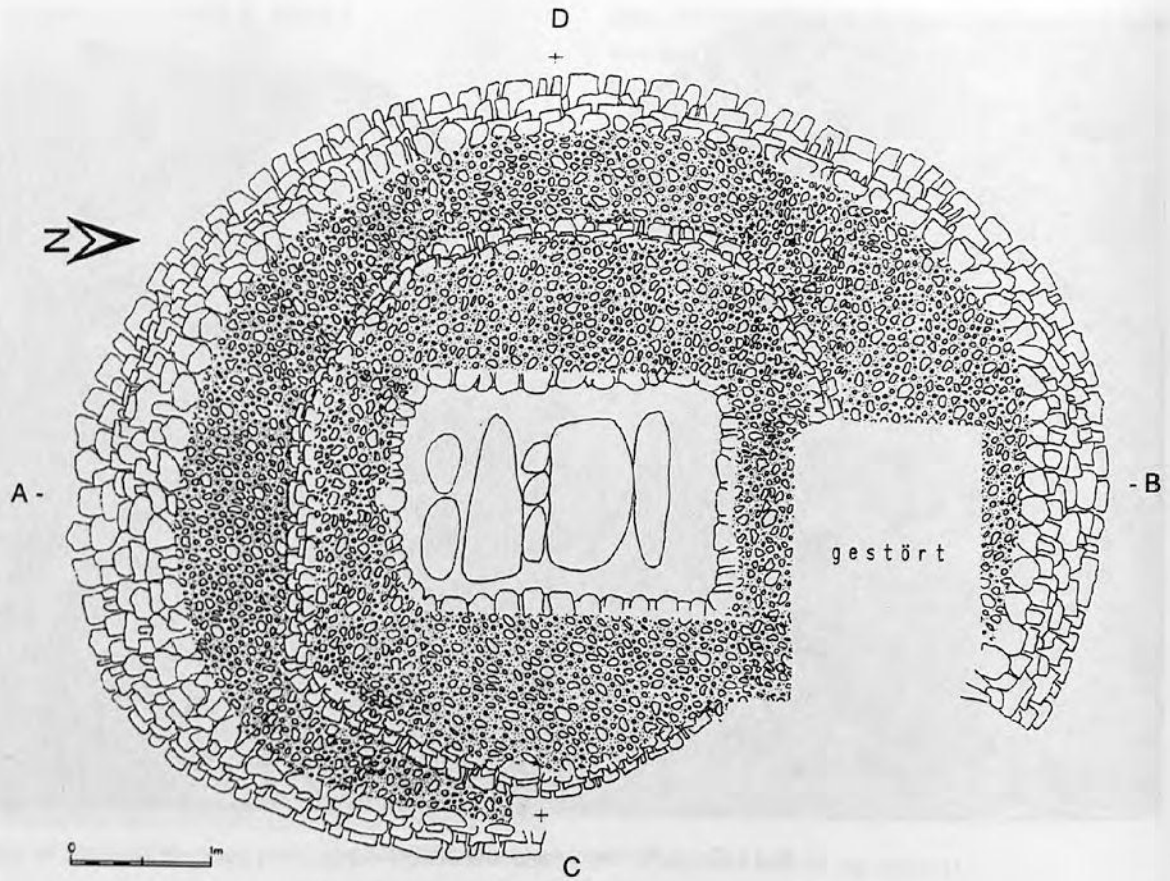


Fig. 1 Grave B0, grave structure and find, scale 1:3.

شكل ١. بناء القبر B0، لقيّة.





Pl. 18 Grave BI after initial cleaning 1981 (P.C.)  
لوحة ١٨. القبر BI بعد التنظيفات الأولية عام ١٩٨١ (P.C.)



Pl. 19 Grave BI with its roof stones *in situ* 1981 (P.C.)  
لوحة ١٩. القبر BI مع أحجار السقف في موضعها الأصلي عام ١٩٨١ (P.C.)

dicative of the social rank of the dead, or otherwise form a regional variation.

Finds (Fig. 3):

- 1 Bronze plaque (DA 7642)
- 2 Stone suspension vessel with lid (DA 7621)
- 3 Pottery jar, with rounded body and narrow neck, buff-pink, no decoration visible. The pot was badly fired and has almost completely disintegrated. Although its preservation is too bad to afford a comparison, the shape recalls some jars from site Sh1 at Shimal (Ra's al Khaimah).
- 4 Two carnelian beads, no DA no.

(G.G.C.)

### 3.2 Area 2

To the north and north-east of Falaj, a group of tombs lay scattered over a broad wādī terrace. This area was bisected by the construction of a new road in 1981 and several tombs were destroyed. However, it was possible to map all tombs before construction work began, and two tombs located next to each other were also excavated.

Before excavation, both tombs appeared to be roughly circular in shape and to be built of large wādī boulders. After excavation however, they revealed themselves to be sub-circular with large boulders forming respectively an inner and outer wall while the space in between was packed with smaller stones and gravel. The cores of both tombs contained gravel and silt. The first tomb (BIIa) produced a few fragmented bones and two irregularly shaped carnelian beads. The second one (BIIb) yielded more information, and was found to contain a single burial. The corpse had been placed in a stretched position in a west-east orientation. By the left-hand side of the burial lay an iron sword, and approximately at waist level there was a group of at least nine leaf shaped arrowheads and five smaller, bolt-like arrowheads. The tomb also contained a copper/bronze dress ring with a bezel. The setting for a stone was still visible, but the stone itself was not found.

Unfortunately, none of the artefacts allow for a conclusive dating of the tomb. It appears that the introduction of iron working to Oman was a late development, which took place sometime in the latter part of the first millennium B.C. However, the iron arrowheads from Bawshar are different to the ones that are known to date to the latter part of the first millennium (e.g. Samad S10) in that they lack a middle rib. Also, whilst the arrowheads from Samad cemetery S10 stem from tombs, these tombs belong to a totally different type than those at Bawshar.

The sword is discussed hereafter. (C.P.)

#### GRAVE BIIa

This is a low-standing grave 2 km north-west of the village Falaj. Since the documentation has not survived, the grave cannot be associated with any known type (Fig. 4).

#### GRAVE BIIb

This grave (Pls. 20, 21), which was recorded right next to Gr. BIIa, also contained a single burial (Fig. 4). An iron sword was placed on the left of the skeleton. Approximately at waist height there was a group of several leaf-arrowheads and some piercers (Fig. 5.1). The excavator also reported a copper/bronze ring, a possible belt fitting, and a silver finger-ring with a bezel, though its stone was not in place (Fig. 5.4).

Skeletal analysis:

Age: indeterminable

Sex: indeterminable

Pos.: dorsal position, extended, head toward east<sup>6</sup>

Finds:

- 1 14 iron arrowheads, badly corroded, **1.1** 8.3 (pres.) cm, 5 g, DA 7625; **1.2** 12.0 (pres.) cm, 5 g, DA 7626; **1.3** 10.5 (pres.) cm, DA 7627; **1.4** 6.8 (pres.) cm, 4 g, DA 7628; **1.5** 6.5 (pres.) cm, 3 g, DA 7629; **1.6** 6.0 (pres.) cm, 2 g, DA 7630; **1.7** 5.0 (pres.) cm, 2 g, DA 7631; **1.8** 7.6 (pres.) cm, 4 g, DA 7632; **1.9** 3.6 (pres.) cm, 1 g, DA 7633; **1.10** 7.0 cm, 5 g, DA 7634; **1.11** 6.1 (pres.) cm, 8 g, DA 7635; **1.12** 5.9 cm, 5 g, DA 7636; **1.13** 5.4 cm, 3 g, no DA no.; **1.14** 3.1 (pres.), no DA no.; **1.15** 2.3 (pres.) cm, DA 7637; **1.16** 2.6 (pres.) cm, DA 7638; **1.17** 4.0 (pres.) cm, DA 7639; **1.18** 11.6 (pres.) cm, no DA no.
- 2 Double edged sword, iron, 74.5 x 8.7 (hilt) x 2.9 cm, rest., DA 7622, Publ.: P. Costa 1989, 115 no. 33; D. Nicolle 1991, 312 no. 2d, 318 fig. 2d
- 3 Ring of copper, diam. 2.5 cm, 5 g, DA 7624
- 4 Finger-ring of silver with glass inlay, 2.0 x 2.1 cm, 3 g, DA 7623
- 5 Small fragments of sheet metal, no DA no.

<sup>6</sup> P. Costa 1989, 109, 115 no. 33.

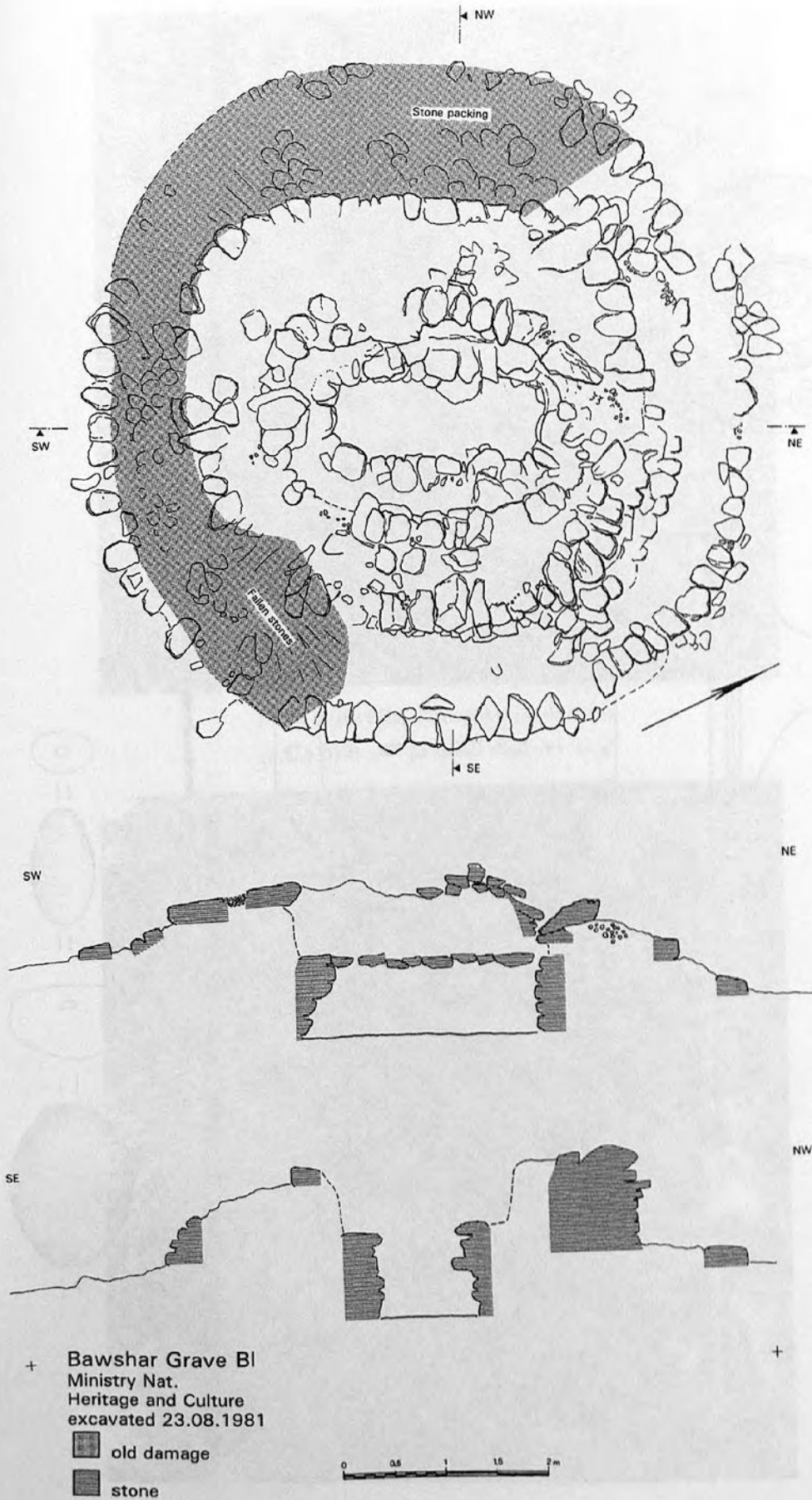


Fig. 2 Grave BI, grave structure

شكل ٢. بناء القبر BI.



GRAVE B25

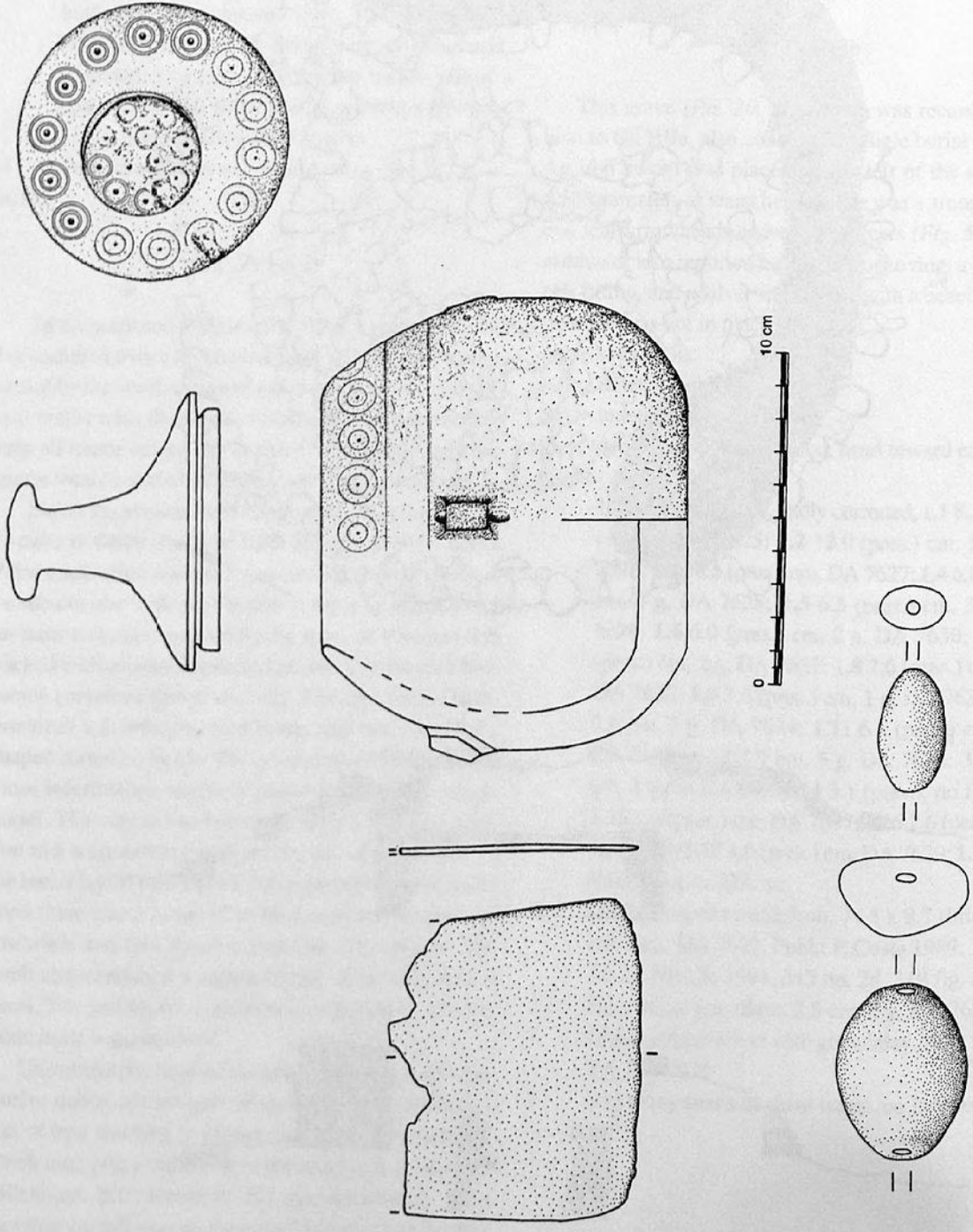


Fig. 3 Grave B1, finds. Beads 1:1.

شكل ٣. لقي القبر B1.



Pl. 20 Grave BIIb, excavated structure (P.C.)  
لوحة ٢٠. البناء المنقب من القبر BIIb (P.C.).



Pl. 21 Grave BIIb, finds *in situ* (P.C.)  
لوحة ٢١. القبر BIIb، لقي في موضعها الأصلي (P.C.).

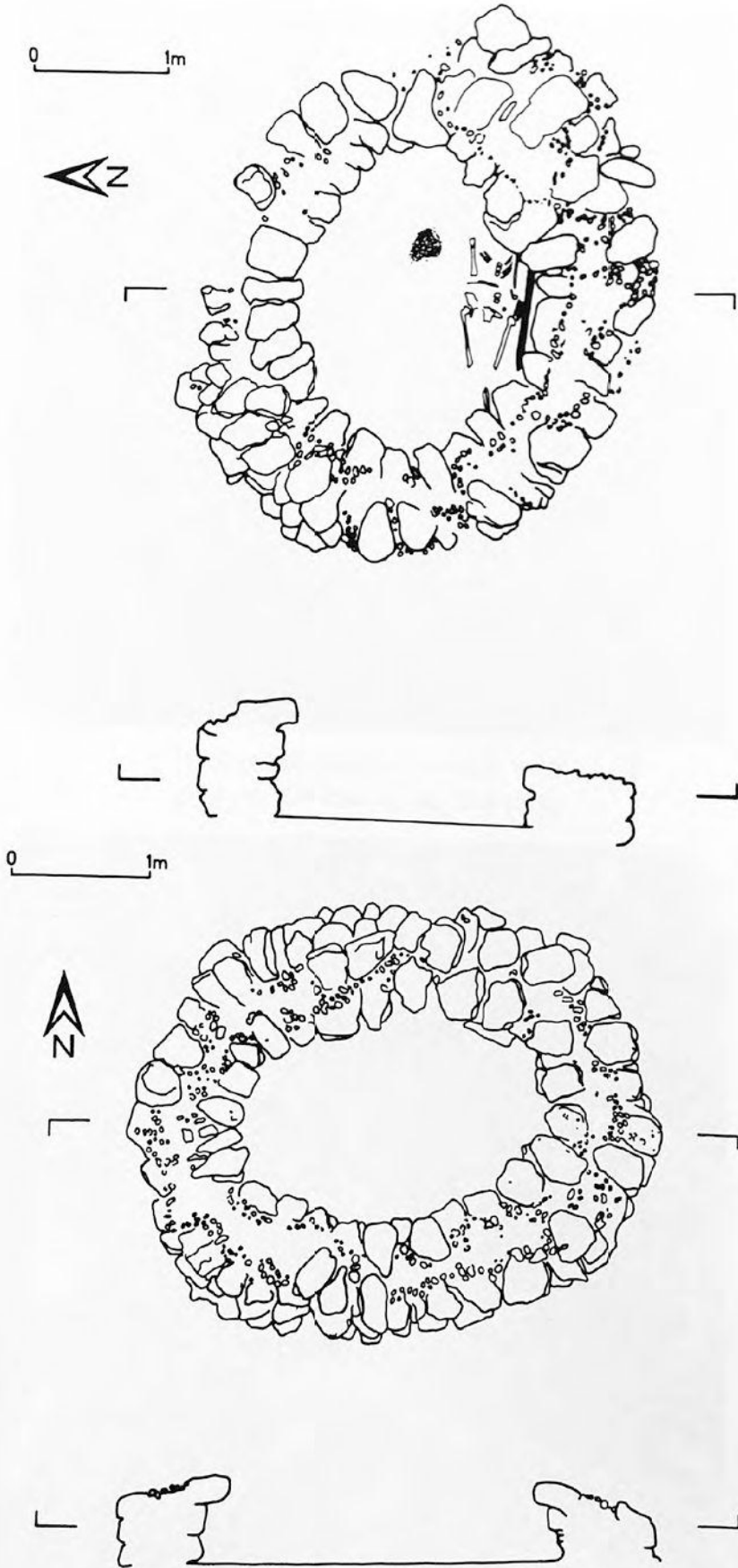


Fig. 4 Grave BIIa (below) and BIIb (above)

شكل ٤. القبر BIIa و BIIb.

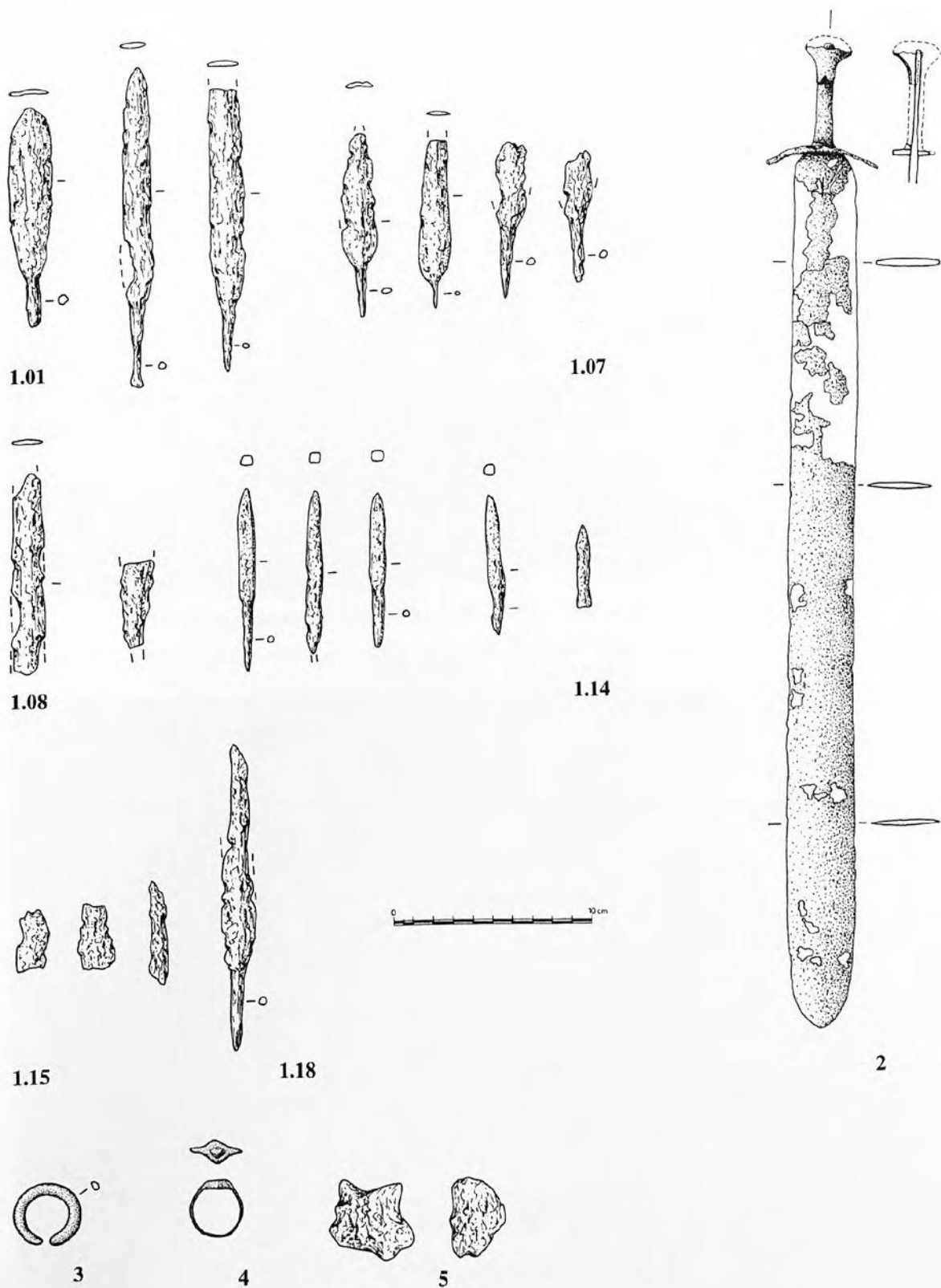


Fig. 5 Grave BIIb, finds, Sword 1:5  
شكل ٥. لقي القبر BIIb.



### 3.3 Area 3

In relation to Area 2, Area 3 is located 100 m further north of Falaj, behind a wādī. Here, a group of tombs lay scattered over a wide wādī terrace. Here again, the area was bisected by the construction of the east-west road in 1981, thus destroying several graves. Here as well, it was nevertheless possible to map the graves. Area 3 consists of a low-lying gravel terrace with several clusters of graves dispersed over its surface.

Prior to excavation, the tombs appeared to be circular in plan. They were built of wādī boulders which formed the inner and outer walls, sandwiching a core of smaller stones and gravel. (C.P.)

#### The „Honeycomb Cemetery“

In 1982 attention was drawn to what appeared to be an unusually large tomb, or rather a dense cluster of tombs (Fig. 6, Pls. 22, 23)<sup>7</sup>. Excavation resulted in the plotting of a densely amalgamated group of sixty-five cist-like burials of a totally different type compared to those from Areas 1 and 2. Also, there was abundant cultural evidence consisting of marine shells, beads, pottery, chlorite vessels and copper/bronze objects.

The tomb structure is formed of large wādī boulders, but unlike the tombs of Area 2, the walls are not packed with small stones or gravel. It is tempting to see a pattern according to which the cists are gathered around a single cist/tomb (Gr. B46) in the centre which would seem larger than average and oriented in a north-south direction. However, this can be purely incidental.

Fragmentary bones collected from this central cist/tomb suggest that the body was originally buried along the axis in a crouched position. However, the only excavated (Gr. B65) intact burial excavated at the eastern periphery of the cluster, was orientated in a west-east axis, again in a crouched position. The significance of this difference is difficult to comprehend, and although no complete skeleton is known from any other cist, the variability in orientation of the cists at least seems to reflect a great tolerance toward that of the buried. The only stringency observed was that the dead had to be buried in a crouched position for want of sufficient space inside the chambers.

As to its size, the entire structure cleared in Area 3 would appear to be atypical. With the excavated structure as a basis for inference the plan of the surrounding tombs however, indicates that they formed small groups of four or five, each group consisting of as many as four cists. The excavated structure may thus be viewed as atypical in so far as the various units had amalgamated.

Most of the excavated cists contained cultural remains, which at the very least consist of marine shells. A number of graves also yielded beads which, though of little use for comparison or dating purposes, display some similarity with a number of minerals including carnelian, chlorite and agate. One bead was made of blue frit and another revealed a simple etched decoration. (C.P.)

#### B01<sup>8</sup>

Floor level 74.03 m north wall 74.22 m

Skeletal analysis:<sup>9</sup>

Age: adult (20-40 years)

Sex: probably male

Pos.: unknown

Finds:

- 1 Bowl, soft grey stone with horizontal incision below rim and above flat, rounded base, short slashes under upper incision line, 8.1 x 4.2 cm, DA 7510

#### B02

Floor 74.22 m, wall south 74.62 m

Finds:

- 1 Bowl, slip red (2.5YR 4/8), two dark red/black lines, light red fabric (2.5YR 6/6), light and fine serpentinite temper, 16.0 x 5.0 cm, DA 7489
- 2 Bivalve, *Callista erycina*, no DA no.

#### next to B02

- 1 Bowl, light grey soft stone, double horizontal line above and single line at base frame incised verticals joined at top by arches, 7.9 x 3.0 cm, DA 7518

#### B03

Floor 74.20 m, north wall 74.30 m

Skeletal analysis:

Age: probably adult

Sex: indeterminate

Pos.: unknown

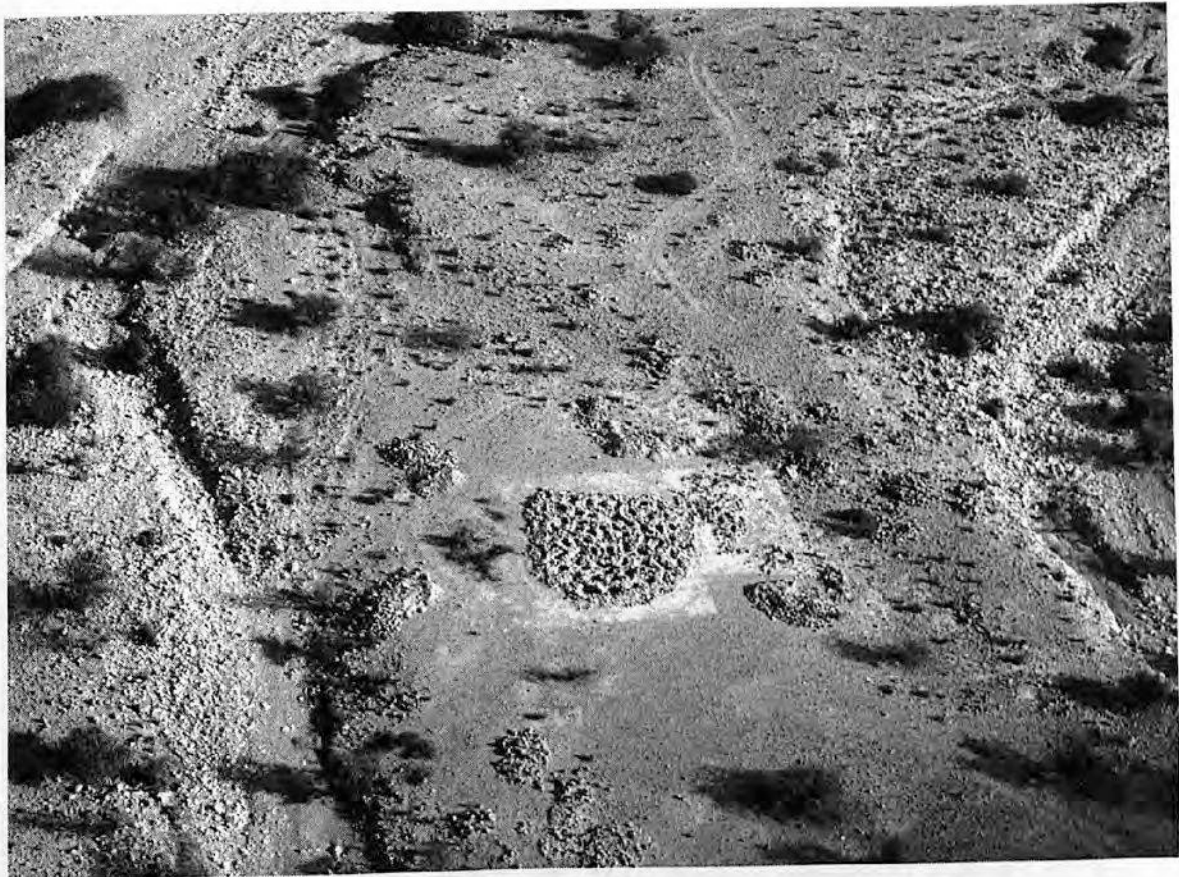
no finds

<sup>7</sup> Originally the excavators designated the „honeycomb cemetery“ as being located in Area 2, which lies 350 m to the south. In light of subsequent survey, Area 3 has been redefined in order to bring it into harmony with the distribution of the graves prior to development (ed.).

<sup>8</sup> The heights of the grave floor and atop one of the walls appear at the beginning of each grave description. Beside the point of measurement (e.g. „north wall“) the height is given.

<sup>9</sup> These identifications were made by M. Kunter, below with additional data.





Pl. 22 Aerial view of the „honeycomb cemetery“ after excavation 1982 (P.C.)  
لوحة ٢٢. منظر جوي "لمقبرة قرص العسل" بعد تنقيبات عام ١٩٨٢ (P.C.)



Pl. 23 „Honeycomb cemetery“ after excavation (G.W.)  
لوحة ٢٣. مقبرة قرص العسل بعد التنقيبات (G.W.)



**Bawshar**  
Honeycomb Cemetery

Sultanate of Oman  
Ministry of National Heritage and Culture  
Department of Antiquities  
Excavator: P. Costa, 1981-82

**B04**

Floor 74.10 m, north wall 74.55 m

Skeletal analysis:

Age: mature (40-60 years)

Sex: most probably male

Pos.: unknown

Finds:

- 1 Small bowl, red fabric, fine organic temper, slip badly weathered, 12.0 x 7.6 cm, DA 7478
- 2 Bowl, soft light grey stone, at the rim between two incision lines left an angular band, on body vertical lines above and below row of horizontal chevrons at rim, 10.0 x 5.7 cm, DA 7513

**B05**

Floor 74.10 m, south wall 74.55 m

Skeletal analysis:

Age: early adult (20-30 years)

Sex: probably female

Pos.: unknown

Finds:

- 1 Arrowhead, Cu, 3.7 x 1.2 cm, 3 g, DA 7593
- 2 Arrowhead, Cu, 3.9 x 2.4 cm, 3 g, DA 7594
- 3 Bivalve, *Veneridae* ?*paphia*, no DA no.

**B06**

Floor 74.14 m, east wall 74.59 m

Skeletal analysis:

Age: adult or older

Sex: indeterminable

Pos.: unknown

Finds:

- 1 Open bowl, foot sherd, yellowish red fabric (5YR 5/6), 10.0 x 3.5 (pres.) cm, DA 7480
- 2 Rim sherd, bowl, vertical dark stripes, reddish yellow fabric (5YR 4/6), medium amount of medium serpentinite temper, 2.5 x 2.3 (pres.) cm, DA 7481
- 3 Small bowl, funnel-shaped rim, small base, exterior slip reddish yellow (5YR 6/6), light red fabric (2.5YR 6/6), slight amount of fine serpentinite temper, 15.5 x 4.0 (pres.) cm, DA 7479
- 4 Bowl, pointed foot (Samad), wheel-turned, slight amount of straw temper, interior slip light yellowish brown (10YR 6/4), very dark grey balsarium fabric (2.5YR 3/N3), 16.5 x 8.2 cm, DA 7562
- 5 Bivalve, *Polinices tumidus*, no DA no.
- 6 Bivalve, *Veneridae* ?*paphia*, no DA no.

**B07**

Floor 74.16 m, west wall 74.48 m

Skeletal analysis:

Age: adult or older

Sex: probably female

Pos.: indeterminable

Find:

- 1 body sherd, 7.6 x 3.8 x 0.75 cm, yellowish red fabric (5YR 5/6), no DA no.

**B08**

Floor 74.20 m, wall -

Skeletal analysis:

Age: adult or older

Sex: probably female

Pos.: unknown

Finds:

- 1 Bowl base, reddish yellow fabric (5YR 6/6), slight amount of fine serpentinite temper, base 7.8 x 3.8 (pres.) cm, DA 7488
- 2 Bead, disc, convex rim, biconcave string hole, large<sup>10</sup> 08 very large 20.1+ mm, soft stone, brownish black, DA 7582
- 3 Gastropod, *Terebralia palustris*, no DA no.

**B09**

Floor 74.16 m, wall -

Skeletal analysis:

Age: probably adult

Sex: indeterminable

Pos.: unknown

Finds:

- 1 Small bowl, base to shoulder preserved, constricted rim, reddish yellow fabric (5YR 6/6), no temper, 4.3 x 4.8 (pres.) cm, DA 7490
- 2 Rim sherd (bowl), strong brown fabric (7.5YR 5/6), sand temper, 2.2 x 3.5 cm, DA 7491
- 3 Bivalve, *Ostraeidae* fam. ?, no DA no.

**B10**

Floor 74.26 m, south wall 74.64 m

Skeletal analysis:

Age: adult or older

Sex: indeterminable

Pos.: unknown

Finds:

- 1 Small bowl, convex walls, red fabric (2.5YR 5/6), 12.2 x 7.4 (pres.) cm, rim eroded, DA 7420

<sup>10</sup>	01 tiny	<0.5 mm
	02 very small	0.5-1 mm
	03 small	1.1-2 mm
	04 fine	2.1-3 mm
	05 fine-middle	3.1-5 mm
	06 middle-large	5.1-10 mm
	07 large	10.1-20 mm

- 2 Bowl, painted pendant diagonals from rim, red fabric (2.5YR 5/6), grit temper, 13.0 x 5.7 (orig.) cm, DA 7422
- 3 Bottle, vertically bored lugs, reddish yellow fabric (5YR 7/6), slight amount of sand temper, 7.8 x 5.0 (pres.) cm, DA 7423
- 4 Bowl, foot, light red fabric (2.5YR 6/6), 9.5 x 3.0 (pres.) cm, DA 7421
- 5 Bowl, small fragment, soft light grey stone, zigzag between two horizontal lines near base, DA 7535

**B11**

Floor 74.27 m, east wall 74.70 m

Skeletal analysis:

Age: probably adult or older

Sex: indeterminable

Pos.: unknown

Finds:

- 1 Bowl, fragmentary, soft medium grey stone, 3 horizontal lines at rim, zigzag vertical lines leading to foot, 10.0 x 6.2 (orig.) cm, DA 7514
- 2 Bead, irregular sphere, large, calcite, white with white bands, x2, DA 7575 and 7576
- 3 Bivalve, *Trachycardium* sp, other bivalve, fragment of *Terebralia palustris*, no DA no.

**B12** (position not recorded)

Floor - m, wall - m

Skeletal analysis:

Age: mature

Sex: probably male

Pos.: unknown

**B13**

Floor 74.17 m, east wall 74.64 m

Finds:

- 1 Bowl, conical wall, 12.0 x 7.0 cm, DA 7436
- 2 Bowl, undecorated, shape that of a stone vessel, surface eroded, greyish brown clay, organic temper, 13.0 x 8.8 cm, DA 7502.1
- 3 Lid, soft stone, undecorated, 7.9 x 2.7 cm, DA 7502.2
- 4 Bead, irregular sphere, large, calcite, white x1, DA 7577

**B14**

Floor 74.32 m, west wall 74.72 m

Skeletal analysis:

Age: mature to senile (50-70 years)

Sex: probably male

Pos.: unknown

Finds:

- 1 Small bowl, foot and body, below rim slightly constricted, yellowish brown fabric (10YR 5/4), surface badly weathered, 12.5 x 5.5 (pres.) cm, DA 7425
- 2 Bowl, soft stone, truncated cone, above foot horizontal, 3.5 x 4.0 cm, incision line, on wall hatching lines, surface slightly weathered, 12.0 x 6.1 (pres.) cm, DA 7542
- 3 Bivalve, *Callista erycina*, x2, no DA no.
- 4 Bowl, small fragment, exterior brown on light red (2.5YR 6/8), weak red fabric (2.5YR 4/2), medium amount of medium-grained serpentinite temper, 3.5 x 4.0 cm, DA 7424
- 5 Vessel foot, 73.0 x 60.0 x 1.2 cm (pres.), strong brown fabric (7.5YR 4/6), DA 7426

**B15**

Floor 74.35 m, east wall 74.78 m

Skeletal analysis:

Age: adult or older

Sex: indeterminable

Pos.: unknown

Finds:

- 1 Small low bowl, thick wall, reddish yellow fabric (5YR 6/6), slight amount of fine sand temper, 13.0 x 5.8 cm, DA 7459
- 2 Bowl, fragment of wall, traces of interior painting, weak red fabric (10R 5/4), slight amount of fine mineral temper, 6.0 x 6.7 (pres.) cm, DA 7461

**B16**

Floor 74.35 m, south wall 74.79 m

**B17**

Floor 74.06 m, south wall 74.48 m

Finds:

- 1 Compartment vessel, soft stone, circular, light grey, central and 4 surrounding compartments, rows of zigzag motifs between horizontal lines and arrow of dotted single circles, below hatching, 8.9 x 9.6 x 5.0 cm, DA 7508
- 2 Bowl sherd with spout, soft medium grey stone, horizontal large lines at rim, fluted shaped lines on wall, 12.4 x 5.0 (pres.) cm, DA 7530
- 3 Bowl sherd, soft stone, belongs probably to DA 7530 1.8 x 2.4 (pres.) cm, DA 7531
- 4 Bowl sherd, soft grey stone, small incisions, 4.1 (pres.) x 2.4 cm, DA 7528
- 5 Bowl sherd, soft grey stone, triangular small incisions 5.0 x 4.6 (pres.) DA 7529
- 6 Bivalve, *Callista erycina*, no DA no.



**B18**

Floor 74.09 m, south wall 74.55 m

Skeletal analysis:

Age: mature

Sex: probably male

Pos.: unknown

Finds:

- 1 Rim sherd of a bowl (Samad?), constricted rim, slip inside and outside dark orange, grey fabric (2.5YR N4/0), DA 7601
- 2 Foot sherd, flat base, outside badly weathered, red slip inside (2.5YR 6/8), dark grey fabric (2.5YR N4/0), 4.0 x 2.2 cm, DA 7600
- 3 Bivalve, *?Hyotis* sp, no DA no.

**B19**

Floor 74.35 m, east wall 74.64

Find:

- 1 Bead<sup>11</sup>, black chlorite, band shaped, radial cut, string boring oblong, middle-large category, x1, DA 7583

**B20**

Floor 74.31 m, north wall 74.61 m

Skeletal analysis:

Age: mature

Sex: probably male

Pos.: unknown

Finds:

- 1 Bowl, rim sherd, rim slightly constricted, remains of four painted vertical stripes, red fabric (2.5YR 5/6), slight amount of fine non-distinguishable temper, 12.3 x 4.0 (pres.) cm, DA 7597
- 2 Double compartment vessel, light grey stone, between two lines of zigzag decoration, profiled base, 14.0 x 6.1 x 3.2 cm, DA 7504
- 3 Lid, light, grey soft stone, handle surface with deep rather radial slashes, thin radial incisions on the knob, bordered with a zigzag, tool marks, DA 7545
- 4 Spindle whorl, dark grey soft stone, three bundles of radially ordered three incisions each 2.8 x 0.9 cm, 10 g, DA 7546
- 5 Bivalve, *Rudicardium pseudolima*, no DA no.
- 6 Bivalve, *Callista erycina*, no DA no.

**B21**

Floor 74.24 m, south wall 74.46 m

Skeletal analysis:

Age: mature

Sex: probably male

Pos.: unknown

Find:

- 1 Bowl, convex wall, constricted rim, profiled foot, 13.0 x 7.5 (pres.) cm, DA 7437

next to this grave

- 1 Rim sherd (bowl), thin lip, constricted rim, reddish brown fabric (2.5YR 4/4), slight amount of organic temper, 4.5 x 4.1 cm, DA 7497
- 2 Rim sherd (bowl), thin lip, constricted rim, 4.0 x 4.2 cm, DA 7496
- 3 Bivalve, *Anadara cf antiquata*, no DA no.
- 4 Bivalve, *Arcidae* fam. (Smythe), no DA no.

**B22**

Floor 74.19 m, south wall 74.59 m

Skeletal analysis: two individuals

Age: both probably adult or older

Sex: both probably male

Pos.: unknown

Find:

- 1 Body sherd, reddish brown fabric (2.5YR 4/4), slight amount of organic temper, 4.3 x 3.0 cm, DA 7536

**B23**

Floor 74.04 m, south wall-east 74.49 m

Skeletal analysis:

Age: adult or older

Sex: probably male

Pos.: unknown

Finds:

- 1 Bowl, light grey soft stone, remains of a spout, incised vertical lines on wall, two horizontal lines below rim, one above the flat base, 9.0 (pres.) x 6.0 cm, DA 7520
- 2 Bowl, truncated cone, dark grey soft stone, horizontal incision below rim, hatching between lines, below zigzag and angular shaped decoration with mid line, 15.2 x 5.8 (pres.) cm, DA 7527

**B24**

Floor 74.13 m, south wall 74.64 m

Finds:

- 1 Double compartment vessel, dark grey, soft stone, triple zigzags between double incised line below rim and single line near base, T-shaped and simple vertical zigzag motifs in spandrel, 12.7 x 8.2 x 4.1 cm, DA 7507
- 2 Lid, soft stone, 6.1 x 3.4 cm, feather-shaped decoration on knob, radial lines on body, DA 7543
- 3 Bivalve, *Callista erycina*, no DA no.
- 4 Bivalve, *Trachycardium lacunosum*, no DA no.

<sup>11</sup> P. Costa 1989, 115.

**B25**

Floor 74.22 m, west wall 74.55 m

Skeletal analysis:

Age: adult or older

Sex: indeterminable

Pos.: unknown

Finds:

- 1 Beaker, soft stone, lower part, cylindrical, zigzag diagonals in two zones separated by three horizontal lines, 9.6 x 9.8 cm, DA 7509
- 2 Bivalve, *Veneridae* family, no DA no.

**B26**

Floor 74.07 m, south wall 74.47 m

Skeletal analysis:

Age: adult or older

Sex: male

Pos.: unknown

**B27**

Floor 74.14 m, north wall 74.35 m

Finds:

- 1 Rim sherd (bowl), thin lip, red fabric (2.5YR 5/6), slight amount of fine sand temper, 9.5 x 2.6 (pres.) cm, DA 7498
- 2 Bivalve, ?*Callista erycina*, no DA no.

**B28**

Floor 74.16 m, north wall 74.47 m

Skeletal analysis:

Age: adult or older

Sex: probably female

Pos.: unknown

Finds:

- 1 Small bowl, rim with painted diagonal stripe, dark greyish brown fabric (2.5Y 4/2), dense with no temper, 12.3 x 4.0 (pres.) cm, DA 7495
- 2 Bivalve, *Callista erycina*, no DA no.

**B29**

Floor 73.59 m, north-east wall 73.74 m

Find:

- 1 Bivalve, *Callista erycina*, 1 fragment *Veneridae* family, no DA no.

**B30**

Floor 74.23 m, south wall 74.67 m

Skeletal analysis:

Age: adult

Sex: most probably male

Pos.: unknown

Find:

- 1 Body sherd, dark brown fabric (7.5YR 4/2), fine serpentinite temper, 6.0 x 6.7 x 0.85 cm, no DA no.

**B31**

Floor 74.21 m, south wall 74.55 m

Skeletal analysis:

Age: mature

Sex: probably male

Pos.: unknown

**B32**

Floor 74.22 m, south wall 74.64 m

Skeletal analysis:

Age: mature

Sex: probably male

Pos.: unknown

Finds:

- 1.1-1.4 Beads, vertical trapezoid, middle-large, carnelian, red orange, x4, DA 7585-7588

**B33**

Floor 74.25 m, east wall 74.66 m

Skeletal analysis:

Age: mature

Sex: probably male

Pos.: unknown

Finds:

- 1 Bowl, rim sherd, rim constricted, grey fabric (2.5YR N6/0), 10.0 x 3.8 cm, DA 7557
- 2 Bowl, rim sherd, orange - dark red, pointed wave band on wall near rim, pointed double row below, reddish yellow fabric (5YR 7/8), 12.0 (orig.) x 3.8 (pres.) cm, DA 7559
- 3 Bowl, concave base, reddish yellow slip outside and in (5YR 6/6), red fabric (2.5YR 5/6), straw temper, 14.5 x 8.0 (pres.) cm, DA 7553
- 4 Bowl, trimmed foot, flat base, light red slip outside and in (2.5YR 6/8), yellowish red fabric (5YR 4/6), 12.8 x 4.7 cm, DA 7554
- 5 Rim sherd, constricted rim, 14.0 (orig.) x 4.0 (pres.) cm, DA 7556
- 6 Bowl, rim sherds, irregular rim, light red slip (2.5YR 6/8), strong brown fabric (7.5YR 4/6), 11.8 (orig.) x 5.1 (pres.) cm, DA 7558
- 7 Rim sherd, for the shape see DA 7556 (above), reddish grey fabric (10R 6/1), slip light red (2.5YR 6/8), DA 7555
- 8 Bowl, grey soft stone, two zigzag lines between two horizontal lines each, one under rim, one above base, 12.2 x 4.0 cm, DA 7517
- 9 Cup, light grey soft stone, between horizontal lines (at rim two, above base one) row of zigzag motifs above, vertical lines on wall, 9.0 x 5.0 cm, DA 7522

- 10 Cup, dark grey soft stone, profiled rim, very smooth cuts of zigzag left on the interior and points at the corners, oblique slashes between three horizontal incised lines, unique decoration: the lines are grouped fan-like fashion, headed by a line bows, the space between is filled with zigzag lines. 8.6 x 5.0 cm, DA 7516
- 11 Bivalve, *Spondylus* sp, no DA no.
- 12 Bowl sherd, flat base, reddish yellow slip outside (5YR 7/8), reddish yellow fabric (5YR 7/6), 13.6 x 2.7 (pres.) cm, DA 7561
- 13 Bowl sherd, slightly curved base, dark grey inside, dark cream outside, dark grey fabric (2.5YR N4/0), DA 7560

outside the grave:

- 14 Bowl, soft stone, rounded base with part of wall, hatch between two lines below vertical lines and zigzag motifs, 4.9 x 4.6 (pres.) cm, DA 7515

### B34

Floor 74.35 m, west wall 74.68 m

Skeletal analysis:

Age: adult or older

Sex: indeterminable

Pos.: unknown

Finds:

- 1 Bowl, flat base, constricted rim, slip and fabric are reddish yellow (5YR 6/6), slight amount of fine red sand temper, 11.0 x 5.2 cm, DA 7439
- 2 Small bottle, flat base (Samad), whitish blue glaze, darker wavy line at the base of the neck, reddish yellow fabric (5YR 7/8), slight amount of medium-grained sand temper, 7.0 x 9.0 (pres.) cm, DA 7440

### B35

Floor 74.25 m, wall 74.68 m

Skeletal analysis:

Age: juvenile to early adult (14-30 years)

Sex: perhaps male

Pos.: unknown

Finds:

- 1 Lid, dark grey soft stone, knob broken off and repaired, deep slashed star shaped decoration on surface, 4.7 x 2.0 cm, DA 7549
- 2 Bead, irregular sphere, large, calcite, white with white bands, x3, DA 7571
- 3 Bead, melon shaped, large, calcite, white x1, DA 7572

### B36

Floor 74.31 m, south-east wall 74.80 m

Skeletal analysis:

Age: early adult (20-30 years)

Sex: probably female

Pos.: unknown

Finds:

- 1 Foot sherd, shape unclear, flat base, reddish yellow fabric (5YR 7/8), medium amount of sand temper of medium-grained coarseness, 4.2 x 2.1 (pres.) cm, orig. diam. of foot 18.0 cm, DA 7501 next to the grave
- 2 Bead, irregular sphere, middle size category, translucent glass, violet ultramarine, undecorated, DA 7584
- 3 Bowl, flat base, conical wall, 28.0 x 5.5 (pres.) cm, DA 7449, surface find

### B37

Floor 74.29 m, south-east wall 74.74 m

Skeletal analysis:

Age: early adult

Sex: indeterminable

Pos.: unknown

Finds:

- 1 Double compartment vessel, dark and light grey soft stone, triple horizontal line filled with two zigzag rows which borders vertical lines, large oblique zigzag rows at the sides, V-shaped slashes at the corners, 11.9 x 7.5 x 4.9 cm, DA 7506
- 2 Bead, biconical, middle-large, carnelian, red orange, x1, DA 7590
- 3 Bivalve, *Callista erycina*, no DA no.
- 4 Bivalve, dog whelk (*Thais tissoti*) (Petit), no DA no.

### B38

Floor 74.29 m, south-east wall 74.80 m

Skeletal analysis:

Age: adult or older

Sex: probably male

Pos.: unknown

Find:

- 1 Bowl, light grey soft stone, three fragments, biconical, horizontal lines, above and below carination are zones of horizontal chevrons, 12.0 (orig.) x 4.6 (pres.) cm, DA 7532

### B39

Floor 74.40 m, east wall 74.80 m

### B40

Floor 74.26 m, north-east wall 74.68 m

Skeletal analysis:

Age: adult or older

Sex: indeterminable

Pos.: unknown

## Finds:

- 1 Bowl foot, base slightly convex, 6.0 x 5.5 (pres.) cm, DA 7470, surface find
- 2 Bowl, foot sherd, flat base, stretched wall, light red fabric (2.5YR 6/6), no temper, old encrusted fractures, 5.5 x 4.0 (pres.) cm, DA 7469

**B41**

Floor 74.22 m, south-east wall 74.55 m

Skeletal analysis:

Age: adult or older

Sex: probably female

Pos.: unknown

**B42**

Floor 74.30 m, south wall 74.73 m (Pl. 24)

Skeletal analysis:

Age: adult or older

Sex: probably male

Pos.: unknown

## Finds:

- 1 Bowl, convex wall, rim with dark painted wave band, reddish yellow fabric (5YR 7/6 and 6/6), 15.5 x 3.0 cm, DA 7500
- 2 Double compartment vessel, dark grey soft stone, at rim and base zigzag lines, zigzags form triangles on exterior side, 13.0 (pres.) x 8.9 x 4.5 cm, DA 7505
- 3 Bowl, light grey soft stone, flat rim, diagonal incised triple slashes, four horizontal lines below rim, vertical incisions further below, horizontal slash above base, 10.8 x 4.0 cm, DA 7512
- 4 Cup, grey soft stone, herringbone slashes between two double lines, lower part with vertical slashes bordered by single horizontal line near the base, tool marks at spout, 10.5 x 5.0 cm, DA 7519
- 5 Bowl, grey soft stone, band of horizontal herringbone band between two horizontal lines, standing triangles with midline and oblique slashes, the space between is filled with zigzag motifs, 14.0 x 9.1 cm, DA 7540
- 6 Lid, bluish dark soft stone, radial incisions on knob, incised star shaped zigzags on body, 7.0 x 4.0 cm, DA 7541
- 7 Bead, cylinder, middle-large category, agate, colour unknown, x1, DA 7579
- 8 Bead, long biconical, middle-large category, agate, colour unknown, x1, DA 7580
- 9 Bead, long biconical, large, agate, colour unknown, DA 7581
- 10 Bowl, copper, long channel spout, two relief bands beneath rim, convex repoussé, omphalos base, 23.9 x 15.7 x 8.1 cm, 390 g, DA 7591

- 11 Bowl, copper, thickened oblique lip, constricted rim, omphalos at base, 12.2 x 6.4 cm, rim 0.5 cm, 307 g, DA 7592

- 12 Snail, *Terebralia palustris*, no DA no.

**B43**

Floor 74.32 m, south-west wall 74.79 m

Skeletal analysis:

Age: adult

Sex: probably male

Pos.: unknown

## Finds:

- 1 Vessel foot, flat base, red fabric (2.5YR 5/8), encrusted surface, 12.3 x 4.0 (pres.) cm, DA 7568
- 2 Bowl, rim sherd, pendant oblique painted diagonal stripes 3.4 x 2.8 cm, DA 7494
- 3 Bowl, rim sherd, rim with flat edge, yellowish red interior slip (5YR 7/6), reddish yellow fabric (5YR 6/6), medium amount of medium-grained serpentinite temper, diam. 17.0 (orig.) x 3.2 (pres.) cm, DA 7492
- 4 Bivalve, ?*Callista erycina*, no DA no.

next to the grave:

- 5 Bivalve, large pearl oyster probably *Pinctada margaritifera*, no DA no.

**B44**

Floor 74.46 m, wall 74.85 m

Skeletal analysis:

Age: early adult

Sex: not certain, perhaps male

Pos.: unknown

## Find:

- 1 Bivalve, *Callista erycina*, no DA no.

**B45**

Floor 74.35 m, south wall 74.66 m

Skeletal analysis:

Age: adult or older

Sex: indeterminable

Pos.: unknown

## Finds:

- 1 Small bowl, black and dark red decorations on orange background, semi-globular shape with flat base, thin lip, oblique dark red/black painted stripes below the rim, grey fabric (5YR 5/1), light serpentinite temper, 12.0 x 4.6 cm, DA 7472
- 2 Small bowl, oblique dark red stripes below the rim, dark grey fabric (7.5YR N4/0), 14.0 x 3.8 (pres.) cm, DA 7475
- 3 Bowl sherds, base, radial painted decoration inside, weak red fabric (7.5R 5/2), 6.0 x 4.0 x 0.5 cm, DA 7473
- 4 Bowl foot sherd, convex wall, traces of dark paint, grey fabric (7.5R N5/0), 3.8 x 1.8 cm, DA 7474



- 5 Lid, light grey soft stone, double herringbone pattern on handle, radial slashes on body, 6.0 (pres.) x 3.8 cm, DA 7544
- 6 Bivalve, *Callista erycina*, no DA no.

**B46**

Floor 74.25 m, north wall 74.71 m

Skeletal analysis: two individuals

Age: both probably late adult (30-40 years)

Sex: one individual probably male, the other indeterminate

Pos.: unknown

Finds:

- 1 Bowl, rim and body, convex, oblique painted stripes below rim, red fabric (2.5YR 5/6), light and fine serpentinite temper, 16.0 x 5.5 (pres.) cm, DA 7463
- 2 Bowl, rounded body, concave base, surface badly weathered, reddish yellow fabric (5YR 7/8), no temper, 11.4 x 6.9 cm, DA 7462
- 3 Bowl, fragment, soft stone, tool marks inside, DA 7534
- 4 Bivalve fragment, not identifiable, no DA no.
- 5 Shoulder sherd, red fabric (2.5YR 5/6), slight amount of fine serpentinite temper, 9.0 x 6.2 x 0.8 cm, DA 7464
- 6 Shoulder sherd, red fabric (2.5YR 5/6), medium amount of fine-grained serpentinite temper, 6.5 x 3.4 x 0.8 cm, DA 7465

**B47**

Floor 74.34 m, south-west wall 74.73 m

Finds:

- 1 Bivalve, *Callista erycina*, no DA no.
- 2 Body sherd, 3.5 x 3.0 x 0.4 cm, light red fabric (2.5YR 6/8), medium amount of sand temper, no DA no.

**B48**

Floor 74.37 m, south wall 74.89 m

Finds:

- 1 Bowl, rim tips pointing inwards, oblique parallel black hatching on the outside between the rim and a horizontal line, yellowish red fabric (5YR 6/8), 12.8 (orig.) x 5.5 cm, DA 7551
- 2 Bowl, rim and body, yellowish red fabric (5YR 6/6), slight amount of serpentinite temper, 13.0 x 6.9 (pres.) cm, DA 7552
- 3 Bowl, soft stone, extremely fine rows of zigzag motifs below rim as well as above and below shoulder carination, 14.0 cm diam. (orig.) x 4.3 (pres.) cm, DA 7523, surface
- 4 Rectangular bowl, grey soft stone, two incisions below rim, one incision above base, between them vertical slashes, 9.8 x 4.5 cm, DA 7503
- 5 Bivalve, *Callista erycina*, no DA no.

**B49**

Floor 74.51 m, south wall 74.89 m

Skeletal analysis:

Age: late mature (50-60 years)

Sex: probably female

Pos.: unknown

Finds:

- 1 Pot sherds, spout, black painted pendant dashes, red fabric (10R 5/8), DA 7484
- 2 Bowl, soft stone, triple zigzag line below rim, framed by double incised lines, lower zone filled with vertical lines, 11.0 x 4.5 cm, DA 7511
- 3 Bivalve, ?*Callista erycina*, no DA no.
- 4 Bivalve, *Paphia sulcaria*, no DA no.

**B50**

Floor 74.36 m, west wall 74.66 m

Skeletal analysis:

Age: late mature to senile (50-70 years)

Sex: probably male

Pos.: unknown

Finds:

- 1 Bowl, light grey soft stone, large zigzag bands between triangles filled with oblique incisions between upper and lower horizontal double lines, 6.5 x 3.8 cm, DA 7537.1
- 2 Lid, soft stone, knob with dotted circle and radial incisions, dotted circles on upper surface, 4.0 x 1.8 cm, DA 7537.2

**B51**

Floor 74.42 m, wall -

Skeletal analysis:

Age: mature

Sex: indeterminate

Pos.: unknown

Finds:

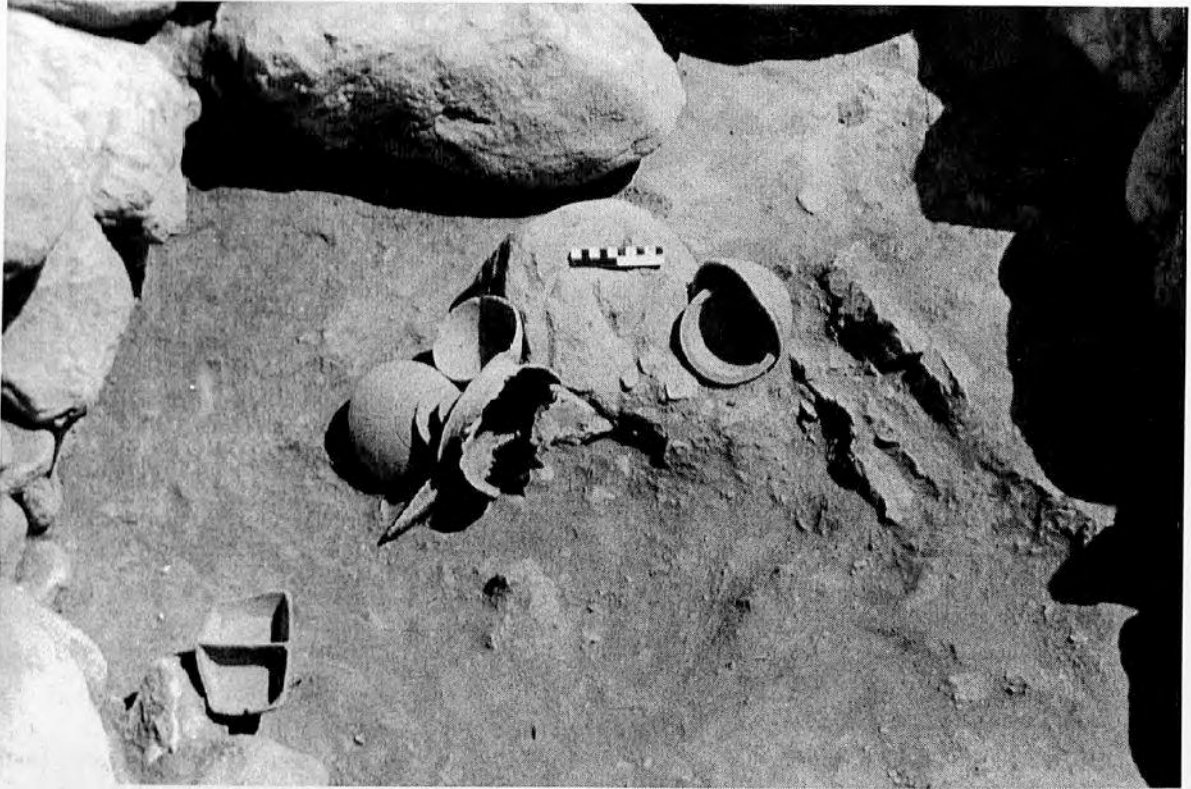
- 1 Bowl, rim sherd, light red fabric (2.5YR 5/6), 14.0 (orig.) x 3.0 (pres.) cm, DA 7565
- 2 Foot sherd, shape unidentifiable, flat base, orange, 12.0 (pres.) x 3.5 (pres.) cm, DA 7566
- 3 *Saḥalla*, inwardly curved rim, convex body, flat base, spout, red slip outside and inside, red fabric (2.5YR 5/6), slight amount of fine serpentinite temper, 22.7 (pres.) x 18.1 x 9.6 cm, DA 7567
- 4 Suspension lug handle, slip plum red, light red fabric (2.5YR 6/8), 4.4 x 6.7 cm, DA 7564
- 5 Rectangular lid, light grey soft stone, zigzag lines on all four sides, knob worn, 9.7 x 6.7 x 5.0 cm, DA 7548

**B52**

Floor 74.47 m, south wall 74.84 m

Skeletal analysis:

Age: adult or older



Pl. 24 Grave B42 during excavation (P.C.)  
 لوحة ٢٤. القبر B42 خلال التنقيبات (P.C.).



Pl. 25 Grave B55 during excavation (P.C.)  
 لوحة ٢٥. القبر B55 خلال التنقيبات (P.C.).

Sex: indeterminable

Pos.: unknown

Find:

- 1 Bivalve, *Callista erycina*, 3 fragments, no DA no.

### B53

Floor 74.46 m, south wall 74.85 m

Skeletal analysis:

Age: adult or older

Sex: indeterminable

Pos.: unknown

Finds:

- 1 Bowl, flat horizontal and constricted rim, painted rim, yellowish red fabric (5YR 4/6), slight amount of fine chaff temper, 22.0 x 4.5 cm, DA 7486
- 2 Bivalve, eroded fragment, ?*Veneridae* family, probably venus, no DA no.

### B54

Floor 74.54 m, south wall 74.91 m

Finds:

- 1 Bowl, rim sherd, painted pendant oblique stripes, red fabric (10R 5/8), 14.0 x 3.0 (pres.) cm, DA 7487
- 2 Bivalve, *Veneridae* fam., 2 fragments, no DA no.

### B55

Floor 74.43 m, north-west wall 74.88 m (Pl. 25)

Skeletal analysis:

Age: mature

Sex: indeterminable

Pos.: contracted, lying on the right side, head pointing south-west<sup>12</sup>

Finds:

- 1 Spouted bowl, reddish yellow fabric (5YR 5/6), great amount of coarse stone and grog temper, 12.0 x 6.0 cm, DA 7418
- 2 *Sahalla*, painted pendant stripes inside, large wavy band on outside rim, black painted band just below rim, reddish yellow fabric (5YR 6/6), fine chaff temper, 14.9 x 12.0 x 6.6 cm, DA 7419
- 3 Bivalve, *Callista erycina*, no DA no.

### B56

Floor 74.02 m, north-east wall 74.25 m

Finds:

- 1 Wide bowl?, base and lower wall, weak red fabric (10R 4/2), slight amount of medium-grained serpentinite temper, 21.0 (pres.) x 8.5 (pres.) cm, DA 7442<sup>13</sup>
- 2 Rim sherd of a wide bowl?, 4.9 x 3.7 cm, DA 7441
- 3 Bivalve, *Callista erycina*, no DA no.

### B57

Floor 74.00 m, north wall 74.34 m

Finds:

- 1 Foot sherd, 4.6 x 4.0 x 1.3 cm, yellowish red fabric (5YR 4/6), medium amount of grit temper, DA 7433
- 2 Body sherd, 3.0 x 2.3 x 0.85 cm, yellowish red fabric (5YR 4/6), DA 7444

### B58

Floor 74.39 m, south-west wall 74.89 m

Find:

- 1 Small bowl with pouring lip, pendant diagonals from rim, yellowish red fabric (5YR 5/6), small pebbles as temper, 12.5 x 10.7 cm, DA 7458

### B59

Floor 74.45 m, west wall 74.89 m

Skeletal analysis:

Age: juvenile

Sex: indeterminable

Pos.: unknown

Finds:

- 1 Bowl, rim and body, slip yellowish red (5YR 4/6), very dark grey fabric (7.5YR N3/0), slight amount of fine vegetable temper, 9.0 x 4.3 (pres.) cm, DA 7450
- 2 Small bowl, rim and body, painted pendant diagonals, 10.0 (orig.) x 4.5 (pres.) cm, DA 7455
- 3 Rim sherds, spouted vessel, painted pendant diagonals inside and outside, reddish yellow fabric (5YR 5/6), slight amount of fine-grained sand temper, 9.0 x 2.7 cm, DA 7452
- 4 Bowl, foot and lower body, dark reddish brown fabric, surface colour variegated, 7.0 x 2.0 (pres.) cm, DA 7451
- 5 Foot sherd, yellowish red fabric (5YR 5/6), 8.5 x 5.2 (pres.), DA 7454

### B60

Floor 74.22 m, south-east wall 74.54 m

Skeletal analysis:

Age: adult or older

Sex: indeterminable

Pos.: unknown

Find:

- 1 Bivalve, *Callista erycina*, no DA no.

<sup>12</sup> Reconstructed from photo.

<sup>13</sup> Fragment thereof found 1993 in the Department of Antiquities. On its tag is noted „B57“. To judge by their shape, these are the sherds of the same vessel.

**B61**

Floor 73.99 m, south-east wall 74.44 m

Skeletal analysis:

Age: probably older than 20 years

Sex: indeterminable

Pos.: unknown

Find:

- 1 Wide bowl?, brown fabric (7.5YR 4/4), dense organic and serpentinite temper, 23.5 (pres.) x 6.5 (pres.) cm, DA 7446

**B62**

Floor 74.00 m, north wall 74.33 m

Skeletal analysis:

Age: adult or older

Sex: perhaps male

Pos.: unknown

Finds:

- 1 Broad open bowl, dark yellowish brown fabric (10YR 4/4), great amount of coarse serpentinite and grog temper, 33.4 x 12.2 cm, DA 7445
- 2 Bivalve, *Callista erycina*, no DA no.

**B63**

Floor 73.92 m, north wall 74.11 m

Finds:

- 1 Bivalve, *Callista erycina*, no DA no.
- 2 Body sherd, 3.3 x 3.1 x 0.9 cm, reddish yellow fabric (7.5YR 7/6), light serpentinite temper, no DA no.

**B64**

Floor 73.76 m, east wall 74.01 m

Finds:

- 1 Bowl, soft stone, zigzag band framed by two lines above and one below, 15.0 (orig.) x 3.9 (pres.) cm, DA 7525
- 2 Bowl, light grey soft stone, triple horizontal line below rim, horizontal line at base, triple triangles in main zone, 6.5 x 4.9 cm, DA 7539
- 3 Bivalve, ?*Veneridae* family, no DA no.

**B65**

Floor 74.00 m, wall 74.14 m

Skeletal analysis:

Age: adult or older

Sex: probably female

Sex: unknown

Finds:

- 1 Bowl with pouring lip, outside rim painted black and pendant diagonals, grey fabric (7.5R N5/6), no temper, 12.2 x 11.8 x 4.8 cm, DA 7428

- 2 Bowl (Samad), balsamarium ware, small foot, profile bend near the rim, wheel-thrown, surface grey/cream, colour variable, fine organic temper, 15.4 x 6.7 cm, DA 7563

- 3 Bowl (Samad), balsamarium ware, wheel-turned, small foot, profile bend near the rim, black fabric (7.5YR n2.5/0), no temper, 13.0 (orig.) x 8.0 cm, DA 7429

- 4 Bowl, rim sherd, dark painted pendant diagonals, grey fabric (7.5R 5/0), no temper, 3.9 x 1.6 cm, DA 7433

- 5 Bowl, rim sherd, pendant painted diagonals, 2.4 x 1.4 cm, DA 7435

- 6 Bowl, rim sherd, pendant painted diagonals, 2.3 x 1.0 cm, DA 7434

- 7 Bowl, body sherd, 3.3 x 2.2 cm, DA 7431

- 8 Arrowhead, Cu, 4.6 x 1.8 cm, 3 g, DA 7596

**B66**

Floor 74.08 m, north wall 74.51 m

**B67**

Floor 73.98 m, south wall 74.57 m

**B68**

Floor 74.07 m, east wall 74.43 m

**B69**

Floor 74.26 m, south wall 74.58 m

**B70**

Floor 74.27 m, north-east wall 74.70 m

**B71**

Floor 74.24 m, east wall 74.66 m

**B72**

Floor 74.58 m, wall -

**B73**

Floor 74.17 m, east wall 74.62 m

**B74**

Floor 74.18 m, west wall 74.74 m

**B75**

Floor 74.17 m, south-east wall 74.55 m

**B76**

Floor 74.20 m, south-east wall 74.55 m

**B77**

Floor 74.02 m, east wall 74.24 m



**B78**

Floor 74.19 m, wall -

**B79**

Floor 74.49 m, north-west wall 74.91 m

**B80**

Floor 74.30 m, east wall 74.72 m

**B81**

Floor 74.49 m, south-east wall 74.91 m

- 10 Bead, cylinder, very large. carnelian, orange - red, undecorated, DA 7589, between B37 and B38
- 11 Arrowhead, Cu, 5.4 x 1.5 cm, 5 g, DA 7595, between B08 and B10
- 12 Pot sherd, suspension lug, surface encrusted, reddish yellow fabric (2.5YR 6/8), light grit temper, 1.8 x 2.8 cm, DA 7598, surface find
- 14 Pot sherd, suspension lug, 3.6 x 5.7 cm, DA 7599, surface find
- 15 Bowl 8.0 x 5.0 (pres.) cm, DA 7476, surface find
- 16 Bowl 11.0 x 5.0 (pres.) cm, DA 7477, surface find

**Not attributed finds and surface finds**

- 1 Bowl, soft stone, 8.5 (orig.) x 4.6 (pres.) cm, DA 7515, B6 outside, surface find
- 2 stone bowl, zigzag band framed by lines at rim and at base. 13.2 (orig.) x 5.0 cm, DA 7521, between B14 and B15
- 3 Rim sherd of a soft stone bowl, zigzag band framed above and below by double and single incised lines, 14.0 (orig.) x 4.3 (pres.) cm, between B62 and B57, DA 7524
- 4 Bowl, rim sherd, soft stone, hastily cross hatched band parallel to rim, broad zigzags below, 10.2 (orig.) x 7.3 (pres.) cm, DA 7526, outside B02
- 5 Lid, dark grey soft stone, knob: radial lines, upper surface zigzags, 7.5 x 4.2 cm, DA 7547, between B06 and B07
- 6 Bowl, yellow fabric (5Y 8/6), colour of surface slip indeterminable, heavy and coarse stone temper, 14.8 x 5.6 cm, DA 7550, surface find
- 7 Rim sherd of a pouring spout, traces of black strokes on the inside near rim, yellowish brown fabric (10YR 5/4), slight amount of grit temper, DA 7569, no provenance information
- 8 Bowl, constricted rim, rim and body, painted pendant diagonals inside, wavy line at rim outside, comb motive at carination, light red fabric (2.5YR 6/8), 10.0 (orig.) x 4.7 (pres.) cm, DA 7570, surface find
- 9 Bead, roller, middle-large category, calcite, white, x1, DA 7578, south-east of B10

**3.4 Area 4**

Area 4, an approximately 500 m long ridge to the north-east of Bawshar bridge, is one of the most prominent geological features on the west side of the mountains. Area 5 is located about 100 m further to the south. Both areas are separated by a valley with a *falaj*. At its highest point Area 4 rises 86.4 m above sea level. The ridge drops off sharply on its northern side. Some 12 grave cairns of various ages and in different states of preservation can be made out on the ridge itself. Three were almost completely destroyed. The two best preserved ones are described as follows:

A grave (no. 1) preserved to a height of four stone courses built in a double wall technique rises on the north-easternmost crest. On the leeward side the stones compensate for the sloping surface. The lowest stones measure approximately 50 x 80 cm. Further up the stones are flat, measuring c. 15 x 40 cm. The space between the stones is filled with gravel. Remains of a roof are not preserved. The oval form of the plan is oriented ENE/WSW (= 80 /260), which gives a possible indication of the entrance to the grave. On the outside the grave measures 3.5 x 2.6 m. The wall is approximately 80 cm thick and corbels inwards. The grave is preserved to a height of 60 cm. On the whole it is poorly preserved and its type is not clear. The double stone wall gives some reason to believe that it was built during the EIA.

Grave no. 2 is located on the westernmost part of the ridge. It is preserved to a height of 1 m in the south and 20 cm in the north. No remains of its original roofing has been recorded. The grave measures 4.70 x 3.20 m on the outside and the long axis is aligned in a ENE/WSW (70 /250) direction. There appears to have been an entrance at its ENE end. The oval chamber measures 2.30 x 1.20 m and reveals the same method of construc-

tion (double chamber wall etc.) as grave 1, thus probably dating it as well to the EIA.

A wall measuring between 0.70 and 1.0 m extends down the hill in a roughly northerly direction (*Pl. 26*). It continues to the north in Area 5 (*Pl. 27*). It is believed once to have divided the territories of two different tribes. Its shape and size is similar to the walls observed to the south-east of Falaj and may be therefore be contemporary with them.



Pl. 26 Wall in Area 4 viewed from the south (P.C.)

لوحة ٢٦. جدار في المنطقة ٤ منظر من الجنوب (P.C.).



Pl. 27 Wall in Area 5 viewed from the north (P.C.)

لوحة ٢٧. جدار في المنطقة ه منظر من الشمال (P.C.).

### 3.5 Area 5

Area 5 is defined as a small hill rising 78 m above sea level between Area 4 and the plain surrounding the oasis. The most prominent feature here is located at its west end and is identified as a grave of the Jāl type (Pl. 28). It is preserved to a height of 2.0 m and measures 8.0 x 5.5 m. Though some of its stones are *in situ*, thus

giving an impression of its original appearance, much of the structure has been devastated. The stones are about the size of a human head. It has not been possible to determine the long axis of the chamber although it may be oriented in an SW/NE direction. It is one of the best preserved representatives of its category. Additional graves of various categories are found to the east, south, and south-east of this structure.



Pl. 28 Tomb in Area 5 (P.Y.)

لوحة ٢٨. قبر في المنطقة ه (P.Y.).

## 4 CHRONOLOGY

### 4.1 General Observations

Of the Pre-Islamic sites at Bawshar, the „honeycomb cemetery” is the most readily datable find complex. Its dating from the Rumaylah 2 Phase to the Samad Period (see below) is primarily based on the evidence of pottery and stone vessels. In principal, only rarely can a single vessel be distinguished as belonging to the Rumaylah 1 or Rumaylah 2 Phase. For the EIA and LIA a fine relative chronology is still lacking, for want of sealed find-contexts containing diagnostic pottery or other artefact groups. The discovery of a small number of vessels belonging to the Samad assemblage indicates the presence of late graves within the main complex. The graves are robbed, their contents have been disturbed, and are incomplete. In cases of possible typological/chronological contradictions or other pitfalls we thus are unable of identifying convincingly graves which had been reused for secondary burials. In the case of grave Gr. B46 evidence points inconclusively to a possible dating to the Wādī Sūq Period. It is oriented in a north-south direction, and its southern end possibly represents an „end wall”, which is a common feature of the funerary architecture of this period<sup>14</sup>. Given the circumstance that it is overlapped by other grave structures, Gr. B46 seems to be among the earliest constructions of the cemetery.

The overlapping of the grave walls in the „honeycomb cemetery” provides a means for arriving at a relative ordering of the graves. Through confronting the recorded finds from the cemeteries, different „structures”, a relative sequence can be for the graves (*Fig. 7*). All in all, 241 finds were attributed to 53 find-classes. But owing to the severity of the looting, a seriation of these finds would have little chance of contributing to any significant chronological order.

### 4.2 The Finds (*Figs. 8-23*)

With regard to dating, the pottery is particularly similar to that from the second EIA phase at Rumaylah (= Rumaylah 2 Phase). Maysar M42 and M43 also yielded stratified material presumably from the Late Lizq/Rumaylah Period<sup>15</sup>, although the absolute and relative chronologies are still in a number of ways uncertain. At present there is no indication of a strictly parallel development in the pottery between Bawshar and Rumaylah 2. Though differences remain, a linkage between the pottery of Rumaylah and that of the „honeycomb cemetery” is valid even if the former is a settlement site and

the latter a necropolis. Distinguishing early and late pottery of the Lizq/Rumaylah Period on the basis of shape, temper and fabric colour is generally difficult owing to a lack of well stratified sites where changes are observable. This is the reason why we have not attempted to distinguish between early and late EIA pottery in the catalogue. S. Kroll has summarised the attributes of the Lizq/Rumaylah pottery through comparing it with datable Iranian pottery<sup>16</sup>. Diagnostic forms such as bridge spouted vessels may well be early (Kroll 1991, fig. 1.2). But other forms such as small bowls with constricted rims (Kroll 1991, fig. 1.18-20) occur in both Rumaylah 1 and in Rumaylah 2 contexts, as well as in Maysar Gr. M803, which dates to both periods. Further excavation and publication will no doubt shed more light on the matter. The author’s own excavation at graves of the Lizq/Rumaylah Period in Samad al Shān and al Maysar produced some comparable material. The dating of the „honeycomb cemetery” relies on pottery and stone vessels. Beads and arrowheads are less significant in terms of chronology as they are relatively scarce, let alone that such artefact classes are anything else but firmly dated in other contexts.

The excavators characterised contemporary pottery in Rumaylah in the following fashion:

„The main types in use are inherited from Period I (slipped-ware, common-ware, coarse-ware): the bowls with plain or rounded sides are still numerous, the bowls with an undulating upper part tend to disappear after Phase II. Large bowls with horizontally or obliquely flattened rim are still in use but the rim no longer projects towards the outside. Basins with straight flaring rims, are numerous, but grooved rims are replaced by flattened ones (Pl. 53.1). High necked, lugged jars become scarcer and their rims are rarely grooved. Medium-sized, necklace jars are in use whereas the same large-sized vessels have practically disappeared. The lids (Pl. 48.11) remain identical in shape and decoration to the ones from Period I and are very numerous, with the exception of quadrangular lids. The slipped ware is mainly the same as

<sup>14</sup> P. Yule 1994, 541-542.

<sup>15</sup> Maysar M42: A. Tillmann and S. Kroll in G. Weisgerber et al. 1981, 223. In February of 1996 it was possible to excavate one of the hills of M43 and also M42 in order to study the development. I have presented the arguments for both datings in another place P. Yule in press). Cf. also Lizq L1: S. Kroll in G. Weisgerber et al. 1981, 226-231.

<sup>16</sup> S. Kroll 1991, 315-320. More recently, P. Magee 1996, 240-252.



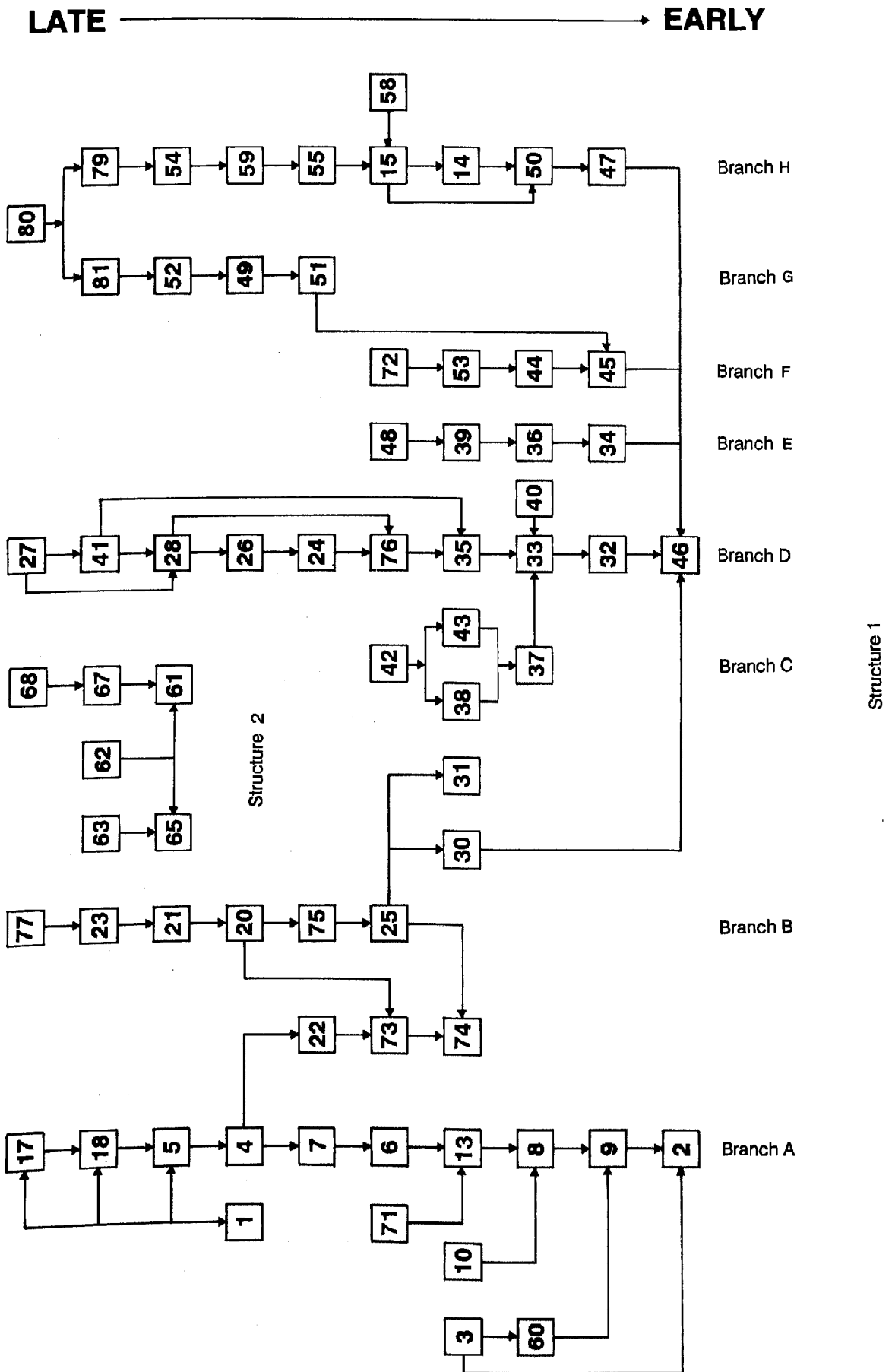


Fig. 7 Stratigraphy of the „honeycomb cemetery”

شكل ٧. طبقات مقبرة قرص العسل.

before, but in 2 to 4% the clay is more coloured than in Period I. This new red-yellowish colour has been labelled „orange“ as opposed to the light-brown or pale-yellow clay of Period I. The clay itself is not denser but its texture has become finer and the frits are not longer visible.

Pl. 53 to 55 illustrate several new types of slipped ware (usual clay or „orange“ clay), and common ware. One notices more particularly the bowls with thickened and angular rim (Pl. 53.5,6), low and concave-necked or necklance jars with flattened projecting or thickened rim (Pl. 54.2-6). The handles which have a round section and no decoration in Period I are now more varied: some have an oval section and an incised decoration (Pl. 55.9-10). Bowl-handles (Pl. 55.6-8) are distinctive of Period II (although no complete specimen has been preserved): the shape of their ends sometimes varies, but in most cases a point of attachment on the rim seems to be the rule.

There are four new wheel-made categories:

- a common ware, quite fine, pink or very light brown in colour, showing some new types (Pl. 57.1-13).

- the „orange“ ware distinctive of Period II. Its surface is either yellowish red, as is the inside, or it has a very thin whitish slip (?). This group appears in quite small quantities: 2 to 4% (Pl. 57.14-18).

- burnished slipped-ware: also distinctive of Period II although scarce (2 to 4%). The clay is again a fine yellowish-red one with a „chamotte“ or other visible temper. Both faces have a red (brown-red, brown) or greyish partly burnished slip. The burnishing traces are generally quite visible: they are circular or sometimes radiate from the base. The shapes are in most cases distinctive of this ware. Some of them are found in other categories, but these belong exclusively to the catalogue of Period II (Pl. 58).

- the glazed ware is only illustrated by two sherds: one base-herd and one rim-herd found near the surface (Pl. 57.19-20). In both cases the green-yellow glaze is very badly preserved. Glazing appears around the 6th century B.C. at the other end of the Gulf, at Failaka for example (Hannestad 1983, 13 and Salles, pers. comm.) and at Susa (Boucharlat and Labrousse 1979, 76).

- There are also some fragments and one complete vessel of cooking ware which curiously was absent from Period I. In Period II this ware is found in very small quantities and its scarcity remains to be explained<sup>17</sup>.

The excavations at Bawshar have produced some 92 reconstructible pottery vessels and fragments. The colour of the exterior treatment of the pottery vessels is rarely determinable as they are covered with thick accretions<sup>18</sup>. Open bowl shapes, mostly of the Lizq/Rumaylah and more specifically the Rumaylah 2 inventories are a distinctive feature of the graves in the „honeycomb

cemetery“. These have a constricted rim and are hand-made. Large pans (Fig. 15) which hitherto have been unknown in funerary contexts, are also well represented. Another typical peculiarity are vertical and diagonal painted stripes on the outside rims of the bowls. The surface treatment of the vessels is usually poorly preserved. Where it has survived, a light red, red, or reddish yellow slip may be observed, with no preference for a specific colour. The pottery temper varies greatly in coarseness and density. Among the small bowls, a small amount of fine sand temper is most common, though serpentinite and organic tempers also occur. Very late vessels made of the so-called „balsarium ware“ have little organic temper, or none at all. Painted designs are held in black, or a faded blackish red. Typical motifs are slightly pendant diagonals.

Turning again to the description of the Rumaylah 2 Phase wares at Bawshar, the pottery classified as „orange“ during fieldwork in 1982 has been re-catalogued as „yellowish red“, „red“, „reddish yellow“, and „light red“ in order to meet with the standards of the Munsell Soil Color Chart.

So-called „orange fine ware“ occurs in Gr. B48 and other graves. Squat open bowls and „yellowish red“ and „reddish yellow“ fabrics are dominant. They resemble vessels from graves in Ra's al Khaimah<sup>19</sup>.

The „slipped ware“ is not readily identifiable at Bawshar. Its shapes do not occur there, probably because it was used exclusively within funerary environments as opposed to ones pertaining to settlement.

Reportedly wheel-made „common ware“ shapes such as those unearthed at Rumaylah 2 occur at Bawshar as hand-made vessels. Boucharlat and Lombard indicate in their report that colour does not play a key role in the distinguishing of fabrics<sup>20</sup>.

No „burnished slipped ware“ is known from Bawshar. Only one glazed vessel was reported from Gr. B34. Given its occurrence in Rumaylah 2 and numerous contexts of the Samad Period, a more accurate dating for such vessels is presently not possible.

<sup>17</sup> R. Boucharlat and P. Lombard 1985, 57-58.

<sup>18</sup> The temper is described according to its amount and coarseness. Large storage vessels have far coarser temper than small vessels. Thus, „middle amount of medium-grained temper“ refers respectively to large and to small vessels (coarse and fine fabric), but not to a single system for all vessels regardless of their size.

<sup>19</sup> B. de Cardi's group 13 from Ghaliyah Gr. G2 (P. Donaldson 1984, 231, 300 fig. 20.21-23; C.S. Phillips 1987, 12-13, fig. 16: „Buff ware with red to black slip“ occurs at Fashgha Fsh1.

<sup>20</sup> R. Boucharlat and P. Lombard 1985, 54.

Two wares at Bawshar do not occur in Rumaylah. The first is coarse and used for large cooking pans (*Fig. 15*) known from the first phase at Rumaylah<sup>21</sup>. This ware occurs in contexts to the north-east, outside the main grave cluster (B56, B61, B62). The second consists of a conspicuous group of vessels belonging to the so-called balsamarium ware<sup>22</sup>. „Balsamarium“ is the name given to small bottles which occur in graves of the Samad Culture. They are distinguished through their form, fabric and their manufacture on the pottery-wheel.

In Bawshar, however, these wheel-turned vessels are open bowls with pointed bases (*Fig. 8.4, 5, Fig. 16.80*). They have no temper or, if they do, it consists of a small amount fine chaff. Vessels of this fabric occur in Gr. B6 and B65, both located in the north-east of the cemetery<sup>23</sup>. Both graves also contain sherds of the Lizq and/or Rumaylah 2 complexes. Unfortunately, they are too small to be of much help for dating. But lacking in the north-east group of graves are stone bowls of EIA date. The difficulties in correlating the pottery of al Maysar, Bawshar and Rumaylah result partly from the classification of EIA wares at Rumaylah, which needs updating.

The pottery shapes from the „honeycomb cemetery“ are similar to those of Lizq/Rumaylah vessels from graves in Samad al Shān<sup>24</sup> and its surrounding area. The ceramic is fired much harder in Central Oman than on the coast or in the north. Otherwise it is difficult to distinguish it from wares at Bawshar. In the Rumaylah 2 Phase site of Maysar M42, no pottery of the „orange“ Rumaylah 2 type has been identified.

The decoration of the stone vessels of the Rumaylah 2 Phase is sketchier, much freer and less disciplined, as evidenced at Rumaylah period 2<sup>25</sup>, Hili H8 phase 4 and<sup>26</sup> Fashgha (see below). Many of the stone bowls from the cemetery show this kind of decoration (*Figs. 17-22*). Bowls with cursorily rendered designs occur in stratigraphically early (B33, B37, B50, B51) and late (B17, B20) graves, giving some indication of a late EIA dating for the entire cemetery. Most are located in the western half of the cemetery.

Certain decorative motives occur repeatedly in both later levels at Rumaylah and at Bawshar. They include broad chevrons, multiple zigzags on the rims, and zigzag cuts. Since single-culture sites containing comparanda with known absolute cutoff dates are not available, the dating remains imprecise.

Some 39 stone bowls from Bawshar derive with a single exception (Grave BI) from the „honeycomb cemetery“. In terms of their style and technique, the earliest display overall vertical, surface filling lines, with a horizontal line above, and sometimes, a band of horizontal chevrons or a multiple zigzag<sup>27</sup>. The decoration and style of the stone bowls in Bawshar seem to reflect a local

style and a dating rather late in the Early Iron Age sequence within the Rumaylah 2 Phase. The characteristics of this phase are:

- 1) vertical lines on the body of open bowls
- 2) vertical lines on the body of open bowls, zigzags above, horizontal chevrons
- 3) triangles of fine lines on the body, zigzags in the interstices
- 4) sketchily executed patterns formed of zigzags on double compartment vessels

Particularly characteristic of the Rumaylah 2 inventory is the last group of bowls<sup>28</sup>. Unfortunately for the chronology, these do not occur in the same graves containing Samad type pottery. But such vessels do occur in Gr. B42, B48, B64, and B17 which in terms of stratigraphy are late. One pottery vessel is rendered in the shape of a stone bowl (from Gr. B13, *Fig. 16.85*).

The chronology for metal vessels is rarely differentiated enough to allow for a distinction between the Early Lizq and Late Rumaylah inventories. It rests largely upon the findings at the Selme hoard since metal vessels otherwise have seldom survived. Metal vessels can also be dated according to those fashioned from other materials. The channel spouted vessel in Gr. B42 (*Fig. 23.148, 149*) compares nicely in shape with a similar one from Hili H8 which perhaps also dates to the Rumaylah 2 Phase<sup>29</sup>. Another parallel came to light in the Selme hoard<sup>30</sup>. Gr. B42 also contained an open bowl with an omphalos at the base, again with parallels from Selme<sup>31</sup>.

<sup>21</sup> R. Boucharlat and P. Lombard 1985, Pl. 46.4, 5, 6, 11.

<sup>22</sup> P. Yule and G. Weisgerber 1988, 21; P. Yule and M. Kervran 1993, 78.

<sup>23</sup> The northeastern graves: B29, B56, B57, B61-B68, B78.

<sup>24</sup> P. Yule and M. Kervran 1993: 134-135.

<sup>25</sup> R. Boucharlat and P. Lombard 1985, 60-61.

<sup>26</sup> S. Cleuziou 1989, Pl. 35A, above left; *ibid.* pl. 35A below.

<sup>27</sup> Gr. B17 cat. 2, 5; B23 cat. 1; B42 cat. 3; B48 cat. 4; B49 cat. 2. In my study of the stone vessels, I designate these Sg18: P. Yule in press.

<sup>28</sup> My group Sg27 of stone bowls (P. Yule in press). Cf. Rumaylah 3: R. Boucharlat and P. Lombard 1985, pl. 60.2, pl. 61.10; Fashgha 1: C. Phillips 1987, fig. 27.5 above and below. These include bowls and compartmented vessels with zigzag ornament which is sketchily rendered.

<sup>29</sup> S. Cleuziou 1989, pl. 34 above.

<sup>30</sup> P. Yule and G. Weisgerber in press, Cat. no. 235 (DA 3760).

<sup>31</sup> P. Yule and G. Weisgerber in press, Cat. no. 269 (DA 3579) and no. 305 (DA 3765).

Four arrowheads (Fig. 23.150-153), all of copper, were recorded at the „honeycomb cemetery“, of which three from reliable contexts. The two specimens from Gr. B5 cannot be dated more accurately than prior to the Samad Period. But Gr. B5 lies at the north edge of the „honeycomb cemetery“ and from a stratigraphical point of view is late. The arrowhead in Gr. B65 is probably a survival and finds its closest parallels among those from Maysar Gr. M803, which date to the Lizq/Rumaylah Period<sup>32</sup>.

Twenty-three beads (Fig. 22.128-147) of diverse materials, shapes, and colours complete the assortment of grave goods found in the „honeycomb cemetery“. In the typology of Pre-Islamic beads, three attribute combinations account for more than half the recovered beads. The others cannot be linked to any other dated specimen. The main kinds of beads are referred to as attribute combinations Pe6, Pe39, and Pe41<sup>33</sup>.

The first kind of bead (6 specimens) has the following attributes: 12 slim, biconical, barrel, or spindle shape, while their size categories range from „middle“, „large“ to „very large“<sup>34</sup>. The materials are chalcedony, jasper, banded or spotted agate, in various colours. Such beads occur universally in Oman from the Umm an Nar Period to the Samad Period, more commonly at the late end of

the spectrum. The second kind of bead is represented by large spheroids of whitish calcite (39 specimens). The only other parallel for this bead was excavated in al Maysar Gr. M2720/2<sup>35</sup> which belongs in the Samad Period. Finally, our last combination (41 examples) occurs in Gr. B32 and also Rumaylah site 3 (Rumaylah 2 Phase), Samad Gr. S10718 (Samad Period), in al Hajjar site 1 (10th - 8th century BC) in Bahrain, and in Fashgha Gr. Fsh1 in the Wādī al Kawr<sup>36</sup>. Characteristics: viewed *en face* the shape is roughly that of an isosceles triangle, in cross section roundish to rectangular, middle-large, carnelian, various shades of red.

<sup>32</sup> P. Yule and G. Weisgerber 1988, Gr. M803 Fig. 54.

<sup>33</sup> P. Yule in press.

<sup>34</sup> For this scale see note 10.

<sup>35</sup> P. Yule in press, cat. no. 8.02.

<sup>36</sup> P. Yule 1997, Gr. M2720/20 cat. no. 8.09; R. Boucharlat and P. Lombard 1985, 53, 62, pl. 66.15; P. Yule 1997 Gr. S10718 cat. no. 2.11; P. Lombard and M. Kervran 1989, 79 fig. 146; C. Phillips 1987, 16, fig. 39.1 (material not mentioned).



## THE „HONEYCOMB CEMETERY“: CONCORDANCE BY DA NO.

DA	Cat.	Grave	Fig.	DA	Cat.	Grave	Fig.
7418	01	B55	09.13	7490	01	B09	11.43
7419	02	B55	09.12	7491	02	B09	11.42
7420	01	B10	09.14	7492	03	B43	11.36
7421	04	B10	09.15	7494	02	B43	11.37
7422	02	B10	09.17	7495	01	B28	11.38
7423	03	B10	10.30	7496	01	B21adj	11.41
7424	04	B14	11.45	7497	02	B21adj	11.40
7425	01	B14	16.83	7498	01	B27	11.39
7426	05	B14	-	7500	01	B42	14.64
7428	01	B65	16.79	7501	01	B36	11.44
7429	03	B65	16.80	7502.1	02	B13	16.85
7431	07	B65	11.35	7502.2	03	B13	-
7433	04	B65	11.32	7503	04	B48	18.95
7434	06	B65	11.34	7504	02	B20	18.96
7435	05	B65	11.33	7505	02	B42	18.97
7436	01	B13	09.16	7506	01	B37	18.98
7437	01	B21	16.82	7507	01	B24	21.119
7439	01	B34	11.47	7508	01	B17	21.120
7440	02	B34	16.86	7509	01	B25	17.87
7441	02	B56	15.75	7510	02	B01	17.88
7442	01	B56	15.76	7511	02	B49	17.89
7443	01	B57	-	7512	03	B42	17.90
7444	02	B57	-	7513	02	B04	17.91
7445	01	B62	15.74	7514	01	B11	17.92
7446	01	B61	15.77	7515	01	B-	17.93
7449	03	B36?	15.78	7516	10	B33	17.94
7450	01	B59	14.69	7517	08	B33	20.107
7451	04	B59	14.71	7518	03	B-	20.117
7452	03	B59	14.73	7519	04	B42	20.111
7454	05	B59	14.72	7520	01	B23	20.113
7455	02	B59	14.70	7521	02	B-	20.108
7458	01	B58	16.81	7522	09	B33	20.112
7459	01	B15	11.48	7523	03	B48	20.115
7461	02	B15	11.46	7524	03	B-	20.109
7462	02	B46	09.18	7525	01	B64	20.110
7463	01	B46	09.19	7526	04	B-	19.104
7464	05	B46	-	7527	02	B23	19.106
7465	06	B46	-	7528	03	B17	-
7469	02	B40	10.23	7529	04	B17	20.118
7470	01	B40	10.24	7530	02	B17	20.114
7472	01	B45	10.22	7531	05	B17	-
7473	03	B45	10.29	7532	01	B38	20.116
7474	04	B45	10.28	7534	03	B46	-
7475	02	B45	10.27	7535	05	B10	-
7476	14	B-	10.25	7536	01	B22	-
7477	15	B-	10.26	7537	01	B50	19.102
7478	01	B04	09.20	7538	02	B50	19.101
7479	03	B06	14.67	7539	02	B64	19.103
7480	01	B06	14.66	7540	05	B42	19.100
7481	02	B06	14.68	7541	06	B42	19.99
7484	01	B49	14.63	7542	02	B14	19.105
7486	01	B53	10.31	7543	02	B24	22.124
7487	01	B54	14.65	7544	05	B45	22.125
7488	01	B08	16.84	7545	03	B20	22.126
7489	01	B02	09.21	7546	04	B20	21.122

DA	Cat.	Grave	Fig.	DA	Cat.	Grave	Fig.
7547	05	B-	22.127	7575	02	B11	22.133
7548	05	B51	21.121	7576	02	B11	22.132
7549	01	B35	21.123	7577	04	B13	22.134
7550	06	B-	08.03	7578	09	B-	22.135
7551	01	B48	08.01	7579	07	B42	22.136
7552	02	B48	08.02	7580	08	B42	22.146
7553	03	B33	08.07	7581	09	B42	22.147
7554	04	B33	08.10	7582	02	B08	22.137
7555	07	B33	12.53	7583	01	B19	22.138
7556	05	B33	12.55	7584	02	B36	22.139
7557	01	B33	12.58	7585	01	B32	22.141
7558	06	B33	08.06	7586	02	B32	22.143
7559	02	B33	12.60	7587	03	B32	22.142
7560	13	B33	-	7588	04	B32	22.140
7561	12	B33	08.09	7589	10	B-	22.144
7562	04	B06	08.04	7590	02	B37	22.145
7563	02	B65	08.05	7591	10	B42	23.148
7564	04	B51	12.54	7592	11	B42	23.149
7565	01	B51	12.51	7593	01	B05	23.151
7566	02	B51	08.08	7594	02	B05	23.150
7567	03	B51	13.61	7595	11	B-	23.152
7568	03	B43	08.11	7596	08	B65	23.153
7569	07	B-	13.62	7597	01	B20	12.59
7570	08	B-	12.49	7598	12	B-	12.56
7571	02	B35	22.128	7599	13	B-	12.57
7572	03	B35	22.129	7600	02	B18	12.50
7573	04	B35	22.130	7601	01	B18	12.52
7574	05	B35	22.131				

## THE „HONEYCOMB CEMETERY“: CONCORDANCE BY FIGURE NO.

Fig.	Grave	Cat.	DA	Fig.	Grave	Cat.	DA
8.01	B48	1	7551	10.25	B-	14	7476
8.02	B48	2	7552	10.26	B-	15	7477
8.03	B-	6	7550	10.27	B45	2	7475
8.04	B06	4	7562	10.28	B45	4	7474
8.05	B65	2	7563	10.29	B45	3	7473
8.06	B33	6	7558	10.30	B10	3	7423
8.07	B33	3	7553	10.31	B53	1	7486
8.08	B51	2	7566	11.32	B65	4	7433
8.09	B33	12	7561	11.33	B65	5	7435
8.10	B33	4	7554	11.34	B65	6	7434
8.11	B43	1	7568	11.35	B65	7	7431
9.12	B55	2	7419	11.36	B43	3	7492
9.13	B55	1	7418	11.37	B43	2	7494
9.14	B10	1	7420	11.38	B28	1	7495
9.15	B10	4	7421	11.39	B27	1	7498
9.16	B13	1	7436	11.40	B21	2	7497
9.17	B10	2	7422	11.41	B21	1	7496
9.18	B46	2	7462	11.42	B09	1	7490
9.19	B46	1	7463	11.43	B09	2	7491
9.20	B04	1	7478	11.44	B36	1	7501
9.21	B02	1	7489	11.45	B14	4	7424
10.22	B45	1	7472	11.46	B15	2	7461
10.23	B40	2	7469	11.47	B34	1	7439
10.24	B40	1	7470				

Fig.	Grave	Cat.	DA	Fig.	Grave	Cat.	DA
11.48	B15	1	7459	19.101	B50	2	7538
12.49	B-	1	7570	19.102	B50	1	7537
12.50	B18	2	7600	19.103	B64	2	7539
12.51	B51	1	7565	19.104	B-	4	7526
12.52	B18	1	7601	19.105	B14	2	7542
12.53	B33	7	7555	19.106	B23	2	7527
12.54	B51	4	7564	20.107	B33	8	7517
12.55	B33	5	7556	20.108	B-	2	7521
12.56	B-	1	7598	20.109	B-	3	7524
12.57	B-	13	7599	20.110	B64	1	7525
12.58	B33	1	7557	20.111	B42	4	7519
12.59	B20	1	7597	20.112	B33	9	7522
12.60	B33	2	7559	20.113	B23	1	7520
13.61	B51	3	7567	20.114	B17	2	7530
13.62	B-	7	7569	20.115	B48	3	7523
14.63	B49	1	7484	20.116	B38	1	7532
14.64	B42	1	7500	20.117	B-	3	7518
14.65	B54	1	7487	20.118	B17	4	7529
14.66	B06	1	7480	21.119	B24	1	7507
14.67	B06	3	7479	21.120	B17	1	7508
14.68	B06	2	7481	21.121	B51	5	7548
14.69	B59	1	7450	21.122	B20	4	7546
14.70	B59	2	7455	21.123	B35	1	7549
14.71	B59	4	7451	22.124	B24	2	7543
14.72	B59	5	7454	22.125	B45	5	7544
14.73	B59	3	7452	22.126	B20	3	7545
15.74	B62	1	7445	22.127	B-	5	7547
15.75	B56	1	7442	22.128	B35	2	7571
15.76	B56	2	7441	22.129	B35	3	7572
15.77	B61	1	7446	22.130	B35	4	7573
15.78	B36?	3	7449	22.131	B35	5	7574
16.79	B65	1	7428	22.132	B11	2.1	7575
16.80	B65	3	7429	22.133	B11	2.2	7576
16.81	B58	1	7458	22.134	B13	4	7577
16.82	B21	1	7437	22.135	B-	9	7578
16.83	B14	1	7425	22.136	B42	7	7579
16.84	B08	1	7488	22.137	B08	2	7582
16.85	B13	2	7502.1	22.138	B19	1	7583
16.86	B34	2	7440	22.139	B36	2	7584
17.88	B01	2	7510	22.140	B32	1	7585
17.87	B25	1	7509	22.141	B32	2	7586
17.89	B49	2	7511	22.142	B32	3	7587
17.90	B42	3	7512	22.143	B32	4	7588
17.91	B04	2	7513	22.144	B-	10	7589
17.92	B11	1	7514	22.145	B37	2	7590
17.93	B-	1	7515	22.146	B42	8	7580
17.94	B33	10	7516	22.147	B42	9	7581
18.95	B48	4	7503	23.148	B42	10	7591
18.96	B20	2	7504	23.149	B42	11	7592
18.97	B42	2	7505	23.150	B05	1	7593
18.98	B37	1	7506	23.151	B05	2	7594
19.99	B42	6	7541	23.152	B-	11	7595
19.100	B42	5	7540	23.153	B65	8	7596

## THE „HONEYCOMB CEMETERY“: CONCORDANCE BY GRAVES NO.

Grave	Fig.	Cat.	DA	Grave	Fig.	Cat.	DA
B-	08.3	6	7550	B20	22.126	3	7545
B-	10.25	14	7476	B21	11.40	2	7497
B-	10.26	15	7477	B21	11.41	1	7496
B-	12.49	1	7570	B21	16.82	1	7437
B-	12.56	1	7598	B23	19.106	2	7527
B-	12.57	13	7599	B23	20.113	1	7520
B-	13.62	7	7569	B24	21.119	1	7507
B-	17.93	1	7515	B24	22.124	2	7543
B-	19.104	4	7526	B25	16.87	1	7509
B-	20.108	2	7521	B27	11.39	1	7498
B-	20.109	3	7524	B28	11.38	1	7495
B-	20.117	3	7518	B32	22.142	3	7587
B-	22.127	5	7547	B32	22.140	4	7588
B-	22.135	9	7578	B32	22.141	1	7585
B-	22.144	10	7589	B32	22.143	2	7586
B-	23.152	11	7595	B33	08.10	4	7554
B01	17.88	2	7510	B33	08.06	6	7558
B02	09.21	1	7489	B33	08.07	3	7553
B04	09.20	1	7478	B33	08.09	12	7561
B04	17.91	2	7513	B33	12.53	7	7555
B05	23.150	2	7594	B33	12.55	5	7556
B05	23.151	1	7593	B33	12.58	1	7557
B06	08.4	4	7562	B33	12.60	2	7559
B06	14.66	1	7481	B33	17.94	10	7516
B06	14.67	3	7479	B33	20.107	8	7517
B06	14.68	2	7480	B33	20.112	9	7522
B08	16.84	1	7488	B34	11.47	1	7439
B08	22.137	2	7582	B34	16.86	2	7440
B09	11.42	2	7491	B35	21.123	1	7549
B09	11.43	1	7490	B35	22.128	2	7571
B10	09.14	1	7420	B35	22.129	3	7572
B10	09.15	4	7421	B35	22.130	4	7573
B10	09.17	2	7422	B35	22.131	5	7574
B10	10.30	3	7423	B36	11.44	1	7501
B11	17.92	1	7514	B36?	15.78	3	7449
B11	22.132	2.2	7576	B36	22.139	2	7584
B11	22.133	2.1	7575	B37	18.98	1	7506
B13	09.16	1	7436	B37	22.145	2	7590
B13	16.85	2	7502.1	B38	20.116	1	7532
B13	-	3	7502.2	B40	10.23	1	7470
B13	22.134	4	7577	B40	10.24	2	7469
B14	11.45	4	7424	B42	14.64	1	7500
B14	16.83	1	7425	B42	17.90	3	7512
B14	19.105	2	7542	B42	18.97	2	7505
B15	11.46	2	7461	B42	19.100	5	7540
B15	11.48	1	7459	B42	19.99	6	7541
B17	20.114	2	7530	B42	20.111	4	7519
B17	20.118	4	7529	B42	22.136	7	7579
B17	21.120	1	7508	B42	22.146	8	7580
B18	12.50	2	7600	B42	22.147	9	7581
B18	12.52	1	7601	B42	23.148	10	7591
B19	22.138	1	7583	B42	23.149	11	7592
B20	12.59	1	7597	B43	08.11	1	7568
B20	18.96	2	7504	B43	11.36	3	7492
B20	21.122	4	7546	B43	11.37	2	7494



Grave	Fig.	Cat.	DA	Grave	Fig.	Cat.	DA
B45	10.22	1	7472	B55	09.12	2	7419
B45	10.27	2	7475	B55	09.13	1	7418
B45	10.28	4	7474	B56	15.75	2	7441
B45	10.29	3	7473	B56	15.76	1	7442
B45	22.125	5	7544	B58	16.81	1	7458
B46	09.18	2	7462	B59	14.69	1	7450
B46	09.19	1	7463	B59	14.70	2	7455
B48	08.1	1	7551	B59	14.71	4	7451
B48	08.2	2	7552	B59	14.72	5	7454
B48	18.95	4	7503	B59	14.73	3	7452
B48	20.115	3	7523	B61	15.77	1	7446
B49	14.63	1	7484	B62	15.74	1	7445
B49	17.89	2	7511	B64	19.103	2	7539
B50	19.101	2	7538	B64	20.110	1	7525
B50	19.102	1	7537	B65	08.5	2	7563
B51	08.8	2	7566	B65	11.32	4	7433
B51	12.51	1	7565	B65	11.33	5	7435
B51	12.54	4	7564	B65	11.34	6	7434
B51	13.61	3	7567	B65	11.35	7	7431
B51	21.121	5	7548	B65	16.79	1	7428
B53	10.31	1	7486	B65	16.80	3	7429
B54	14.65	1	7487	B65	23.153	8	7596

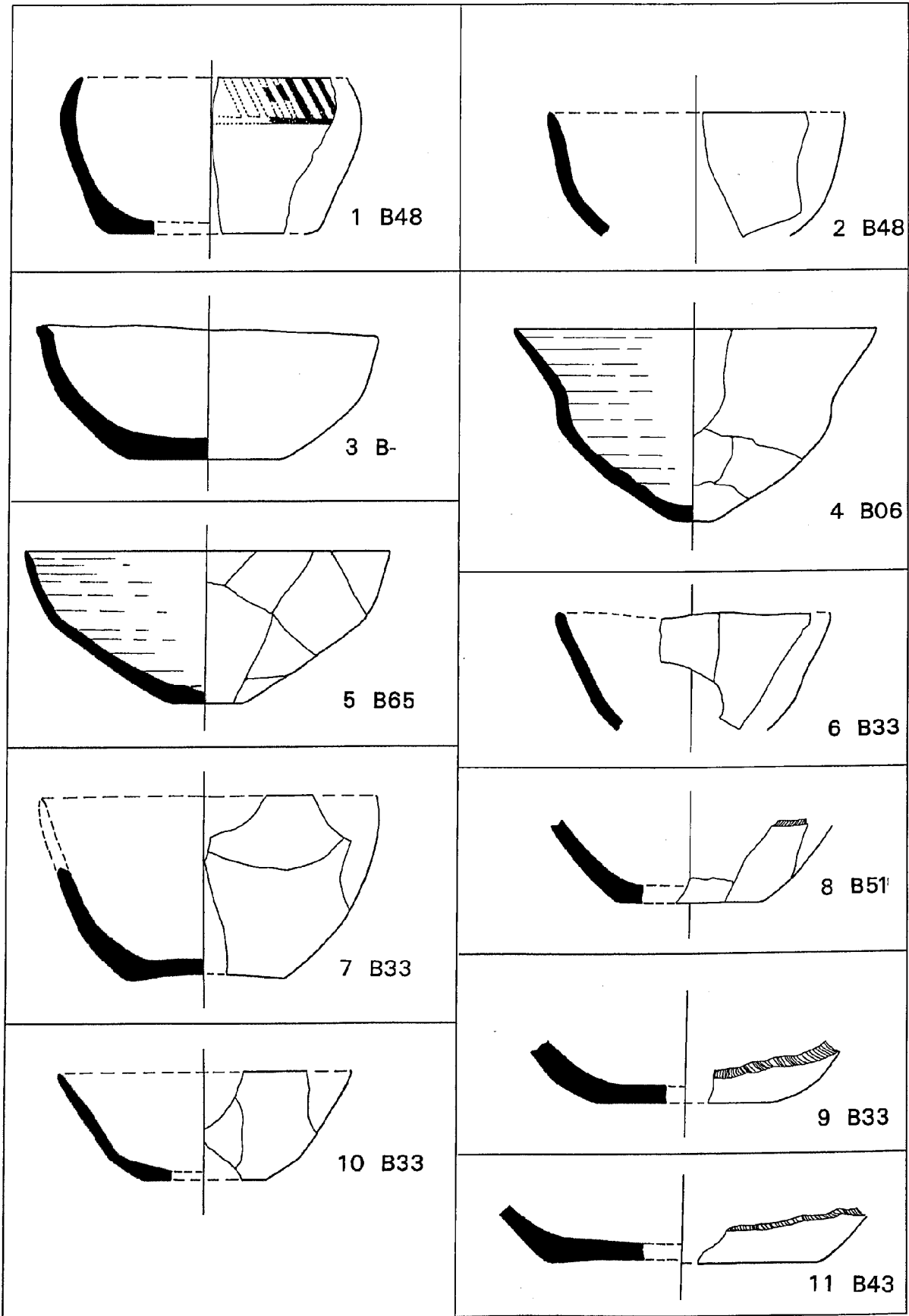


Fig. 8 Pottery from the „honeycomb cemetery“

شكل ٨. فخار من مقبرة قرص العسل.

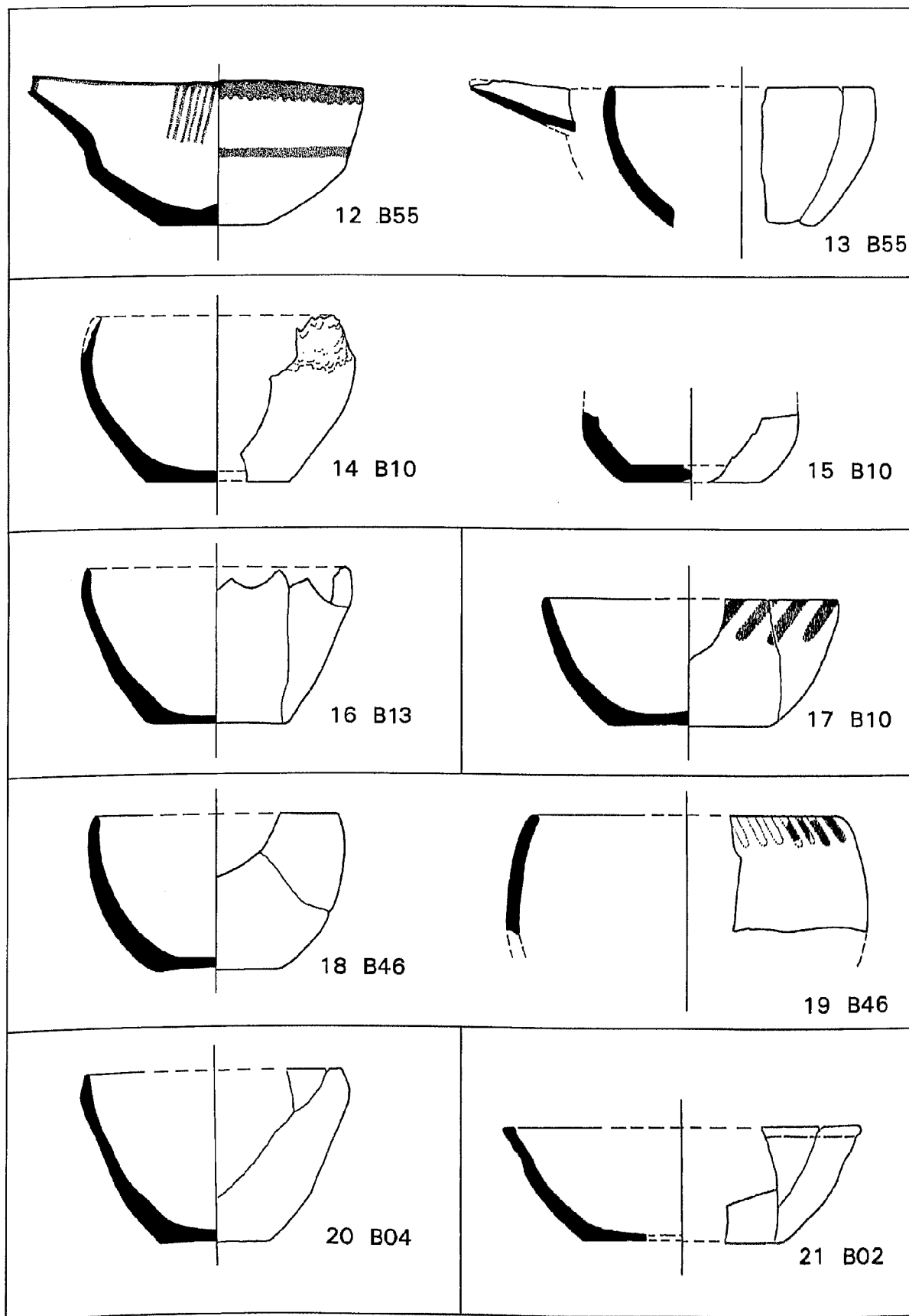


Fig. 9 Pottery from the „honeycomb cemetery“

شكل ٩. فخار من مقبرة قرص العسل.

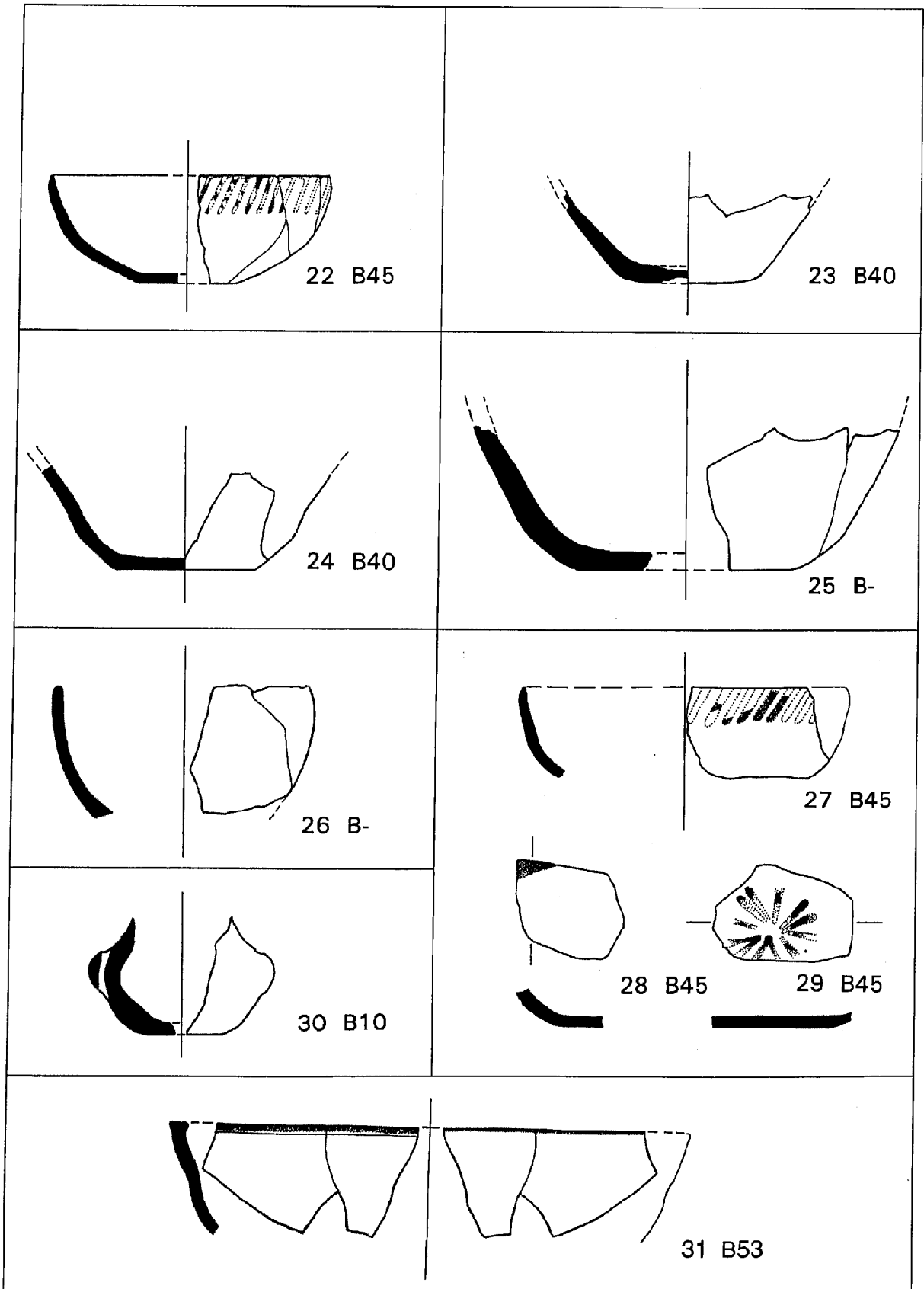


Fig. 10 Pottery from the „honeycomb cemetery“

شكل ١٠. فخار من مقبرة قرص العسل.

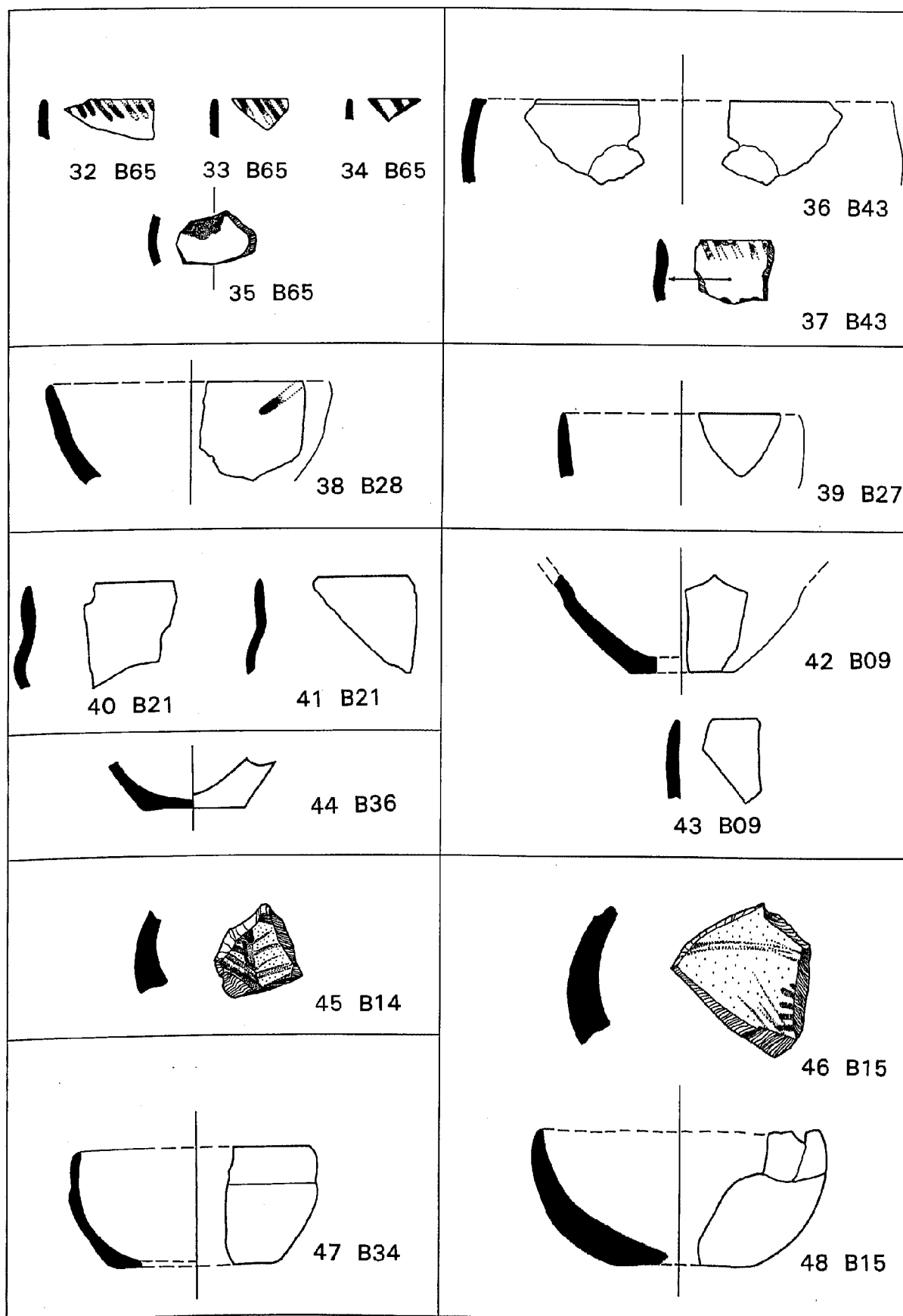


Fig. 11 Pottery from the „honeycomb cemetery“

شكل ١١. فخار من مقبرة قرص العسل.



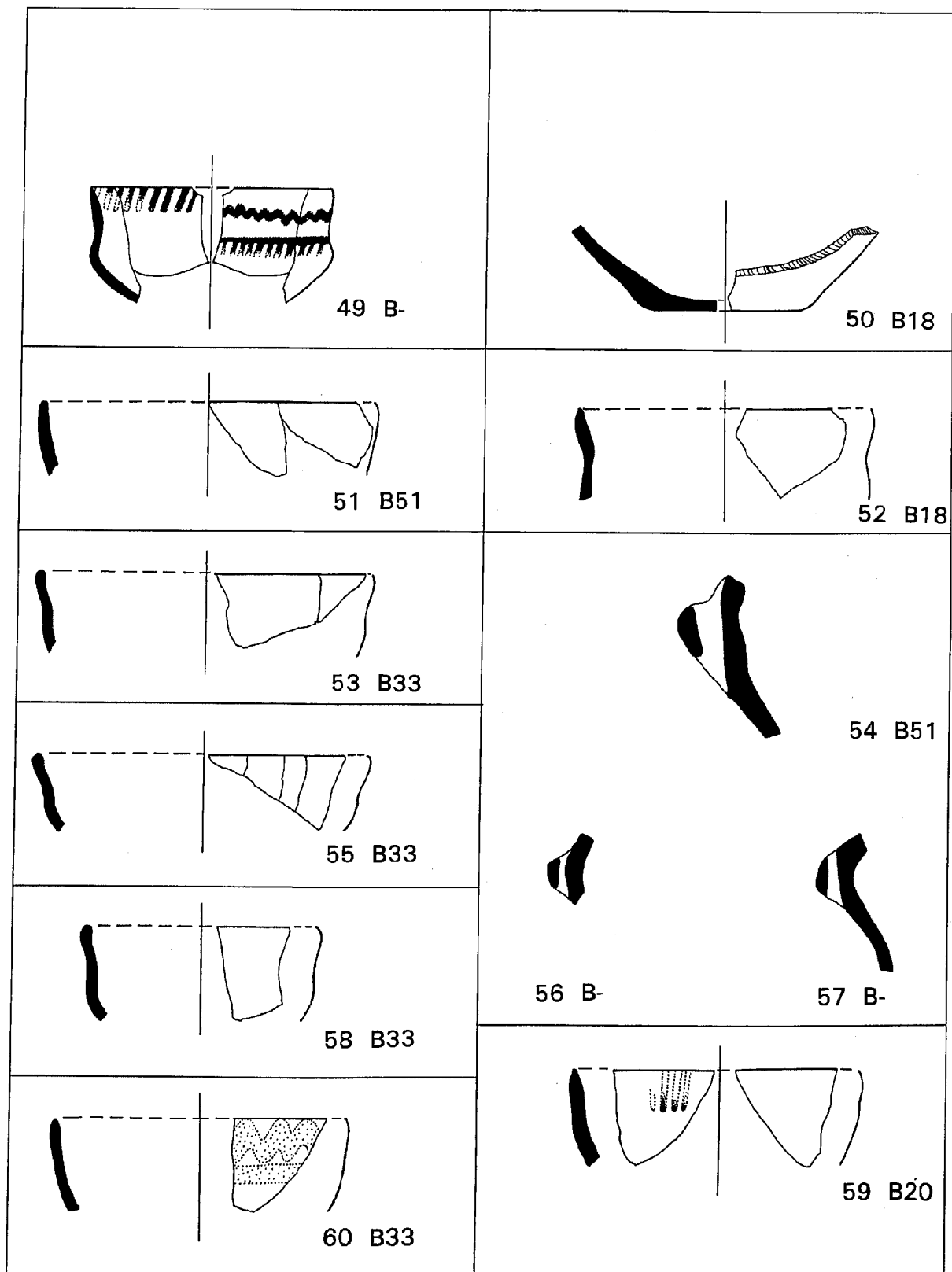


Fig. 12 Pottery from the „honeycomb cemetery“

شكل ١٢. فخار من مقبرة قرص العسل.

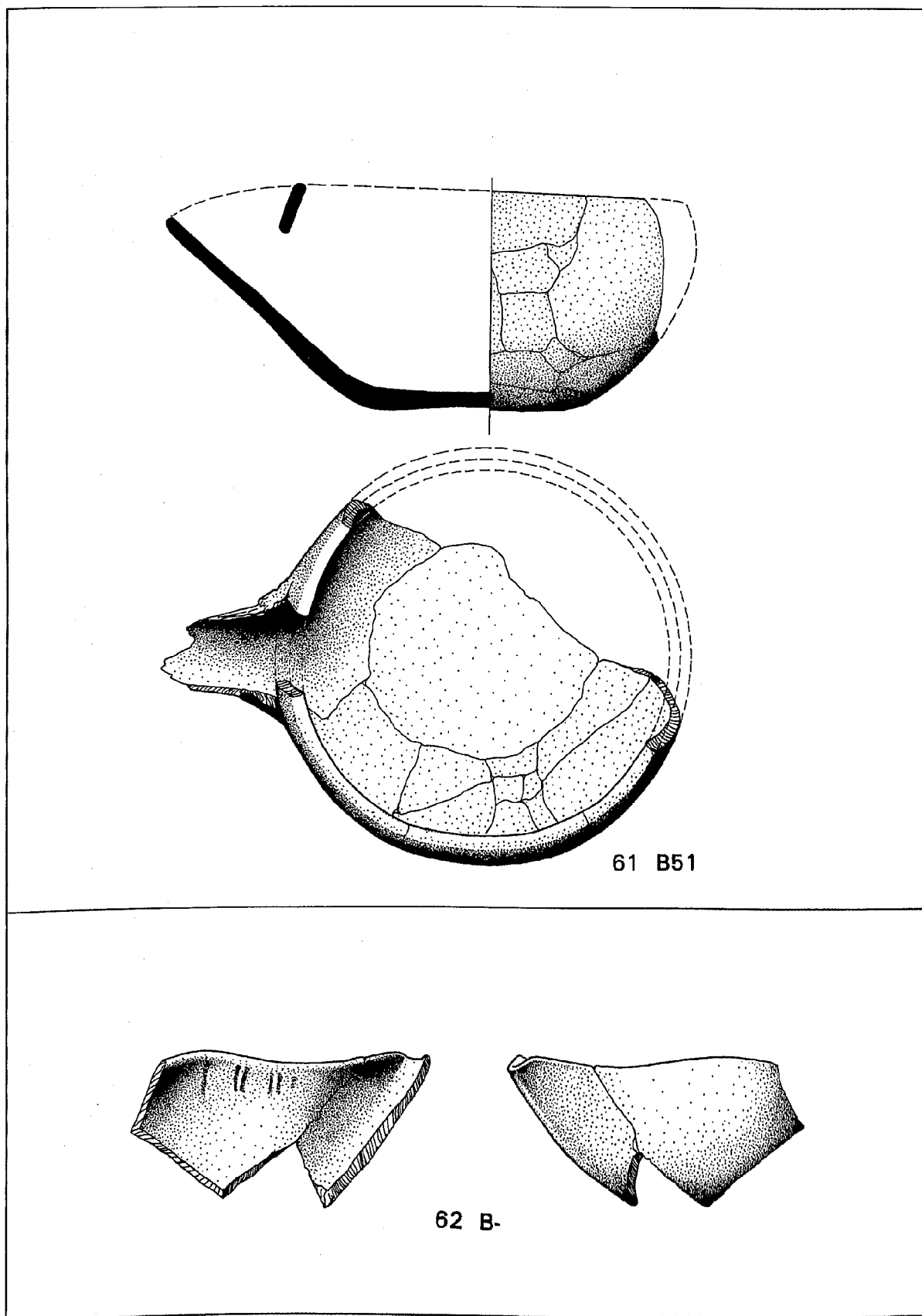


Fig. 13 Pottery from the „honeycomb cemetery“

شكل ١٣. فخار من مقبرة قرص العسل.

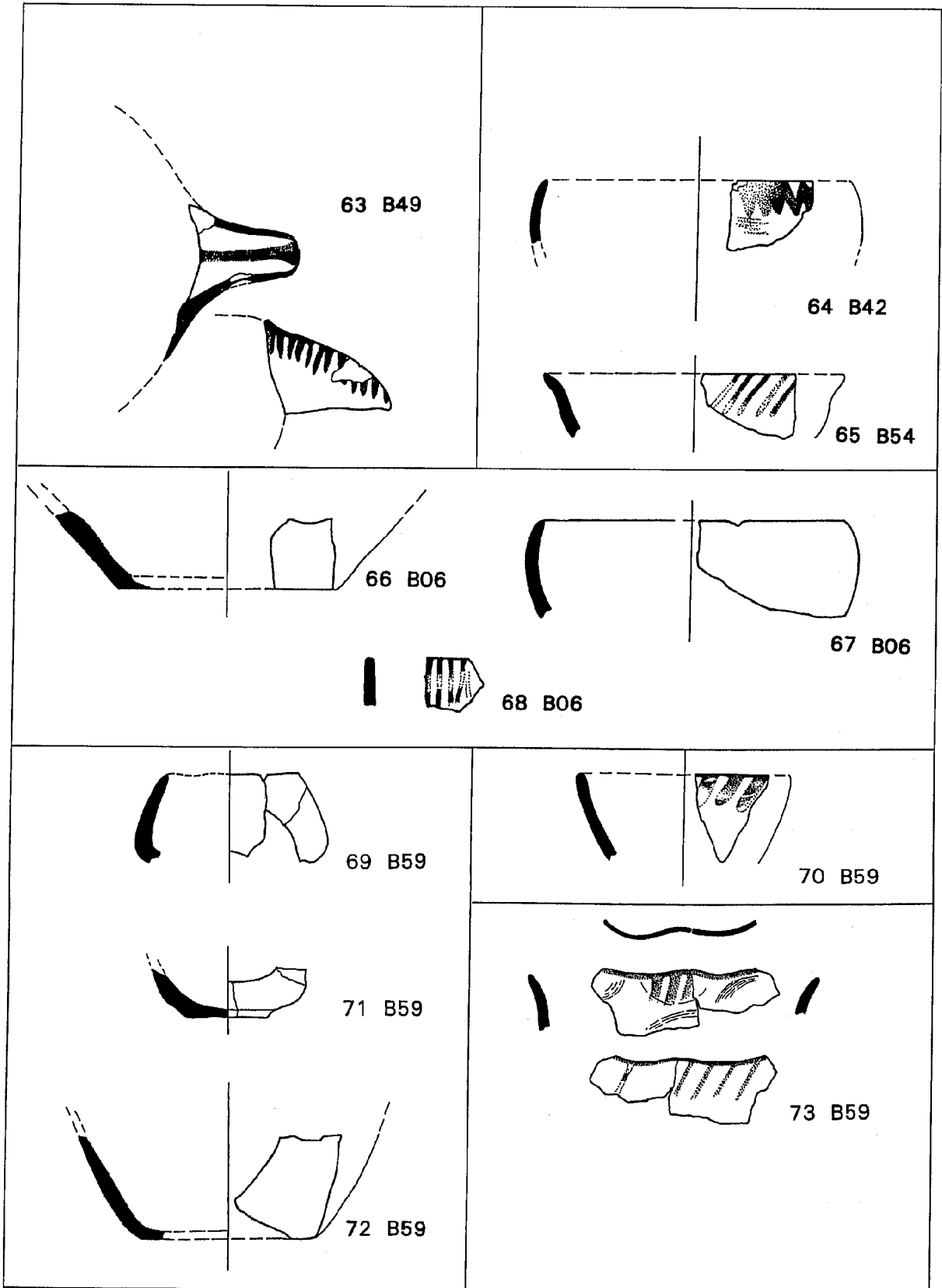


Fig. 14 Pottery from the „honeycomb cemetery“

شكل ١٤. فخار من مقبرة قرص العسل.

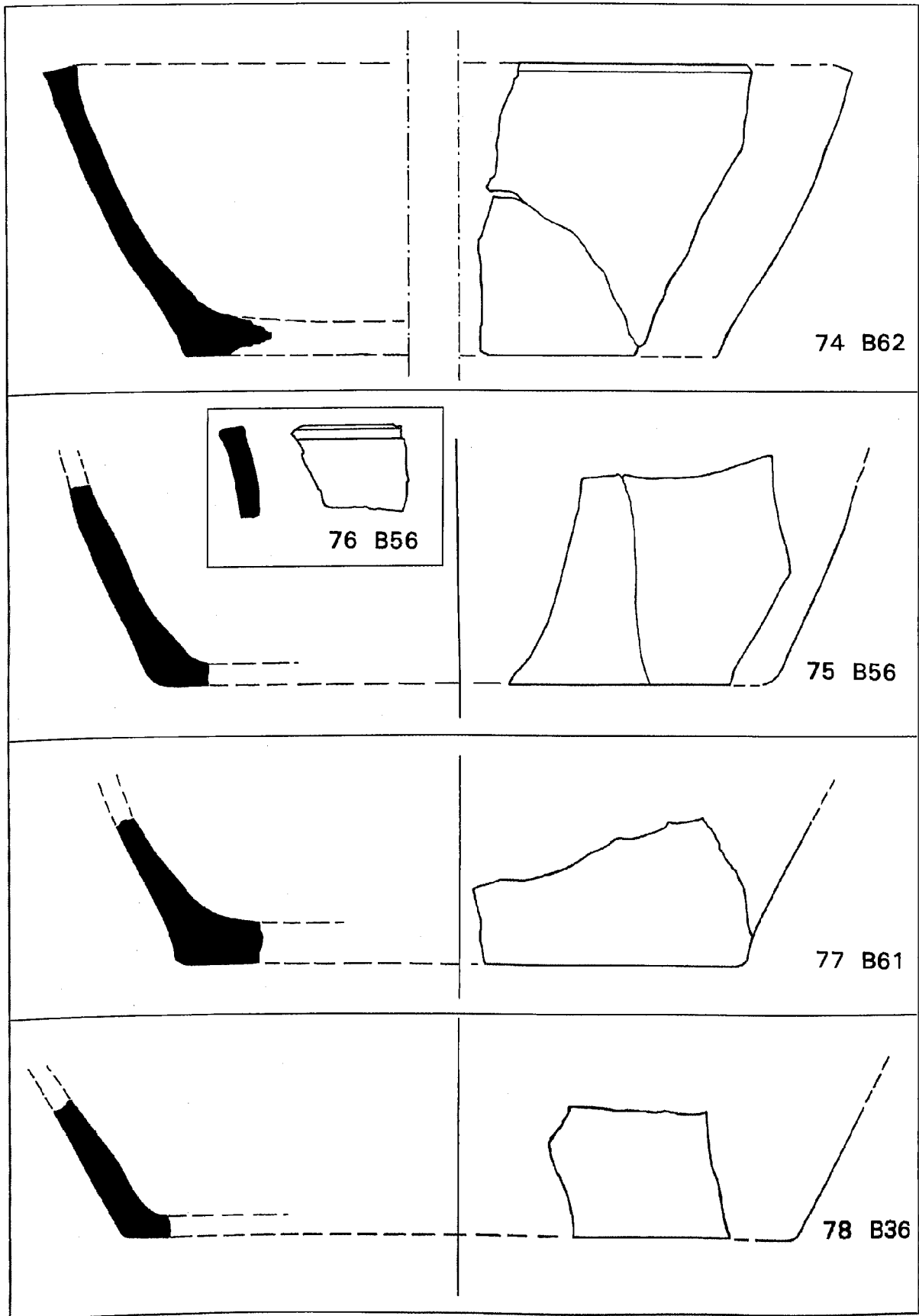


Fig. 15 Pottery from the „honeycomb cemetery“

شكل ١٥. فخار من مقبرة قرص العسل.

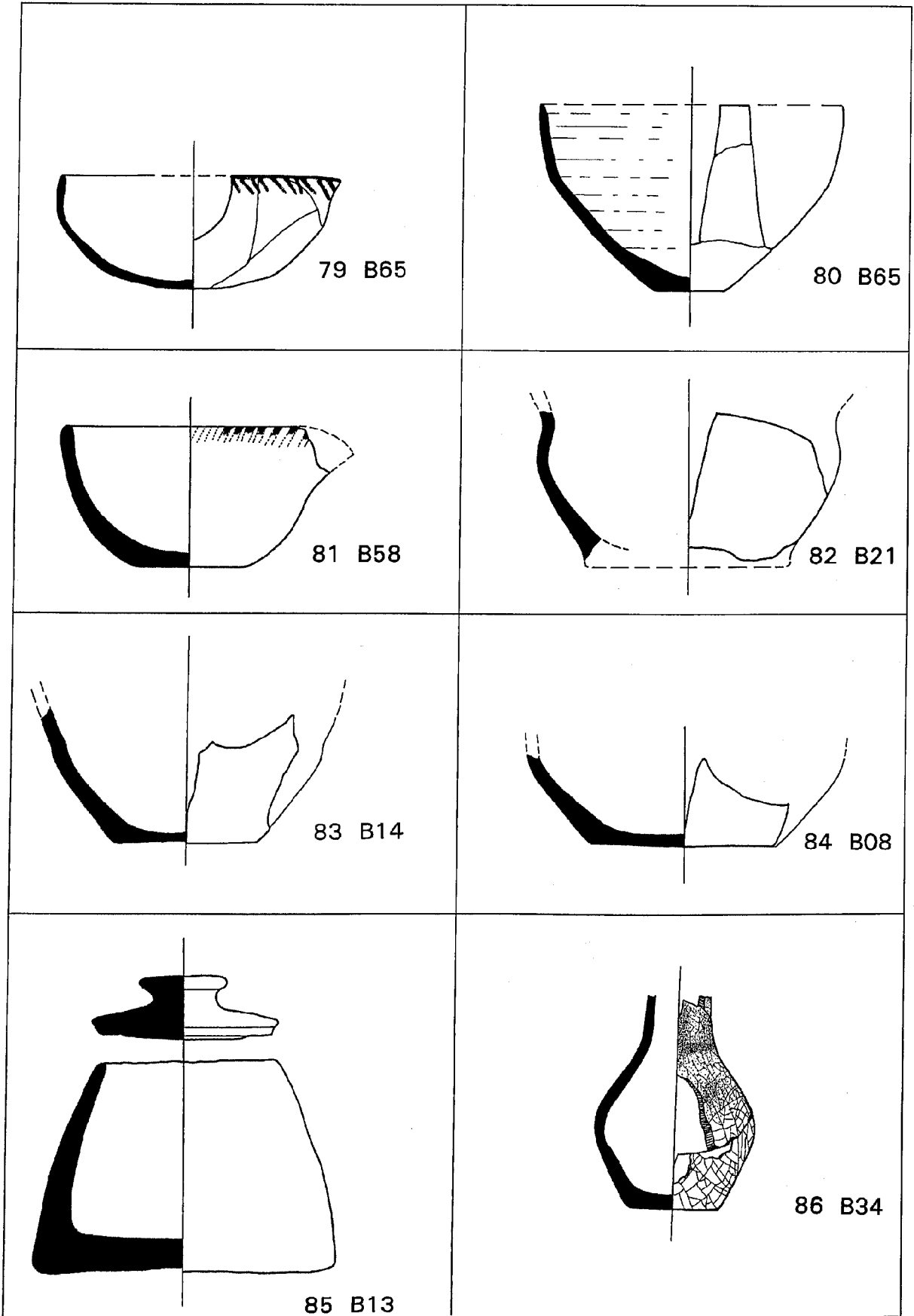


Fig. 16 Pottery from the „honeycomb cemetery“

شكل ١٦. فخار من مقبرة قرص العسل.



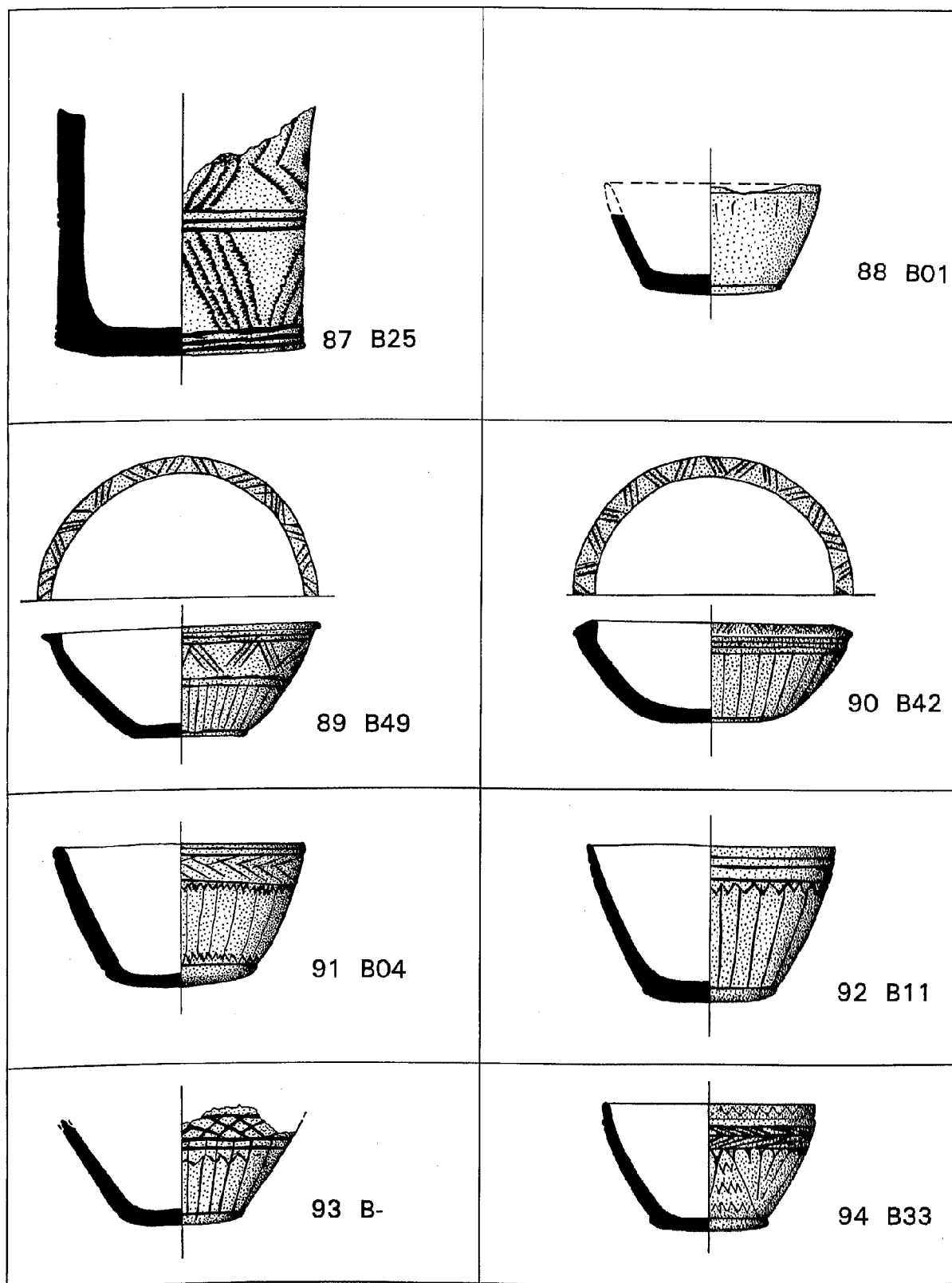


Fig. 17 Stone bowls from the „honeycomb cemetery“  
 شكل ١٧. آنية حجرية من مقبرة قرص العسل.

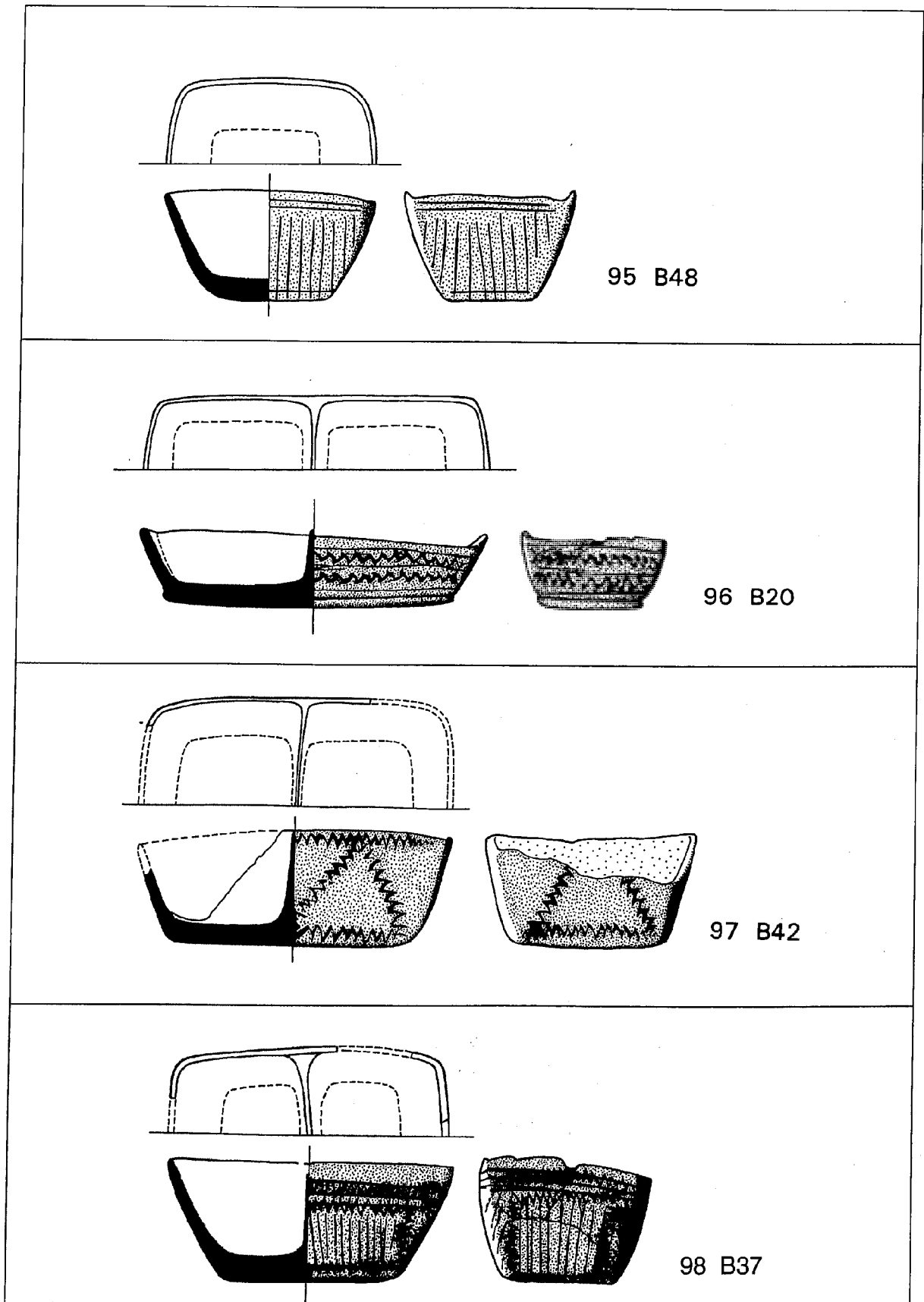


Fig. 18 Stone bowls from the „honeycomb cemetery“

شكل ١٨. آنية حجرية من مقبرة قرص العسل.

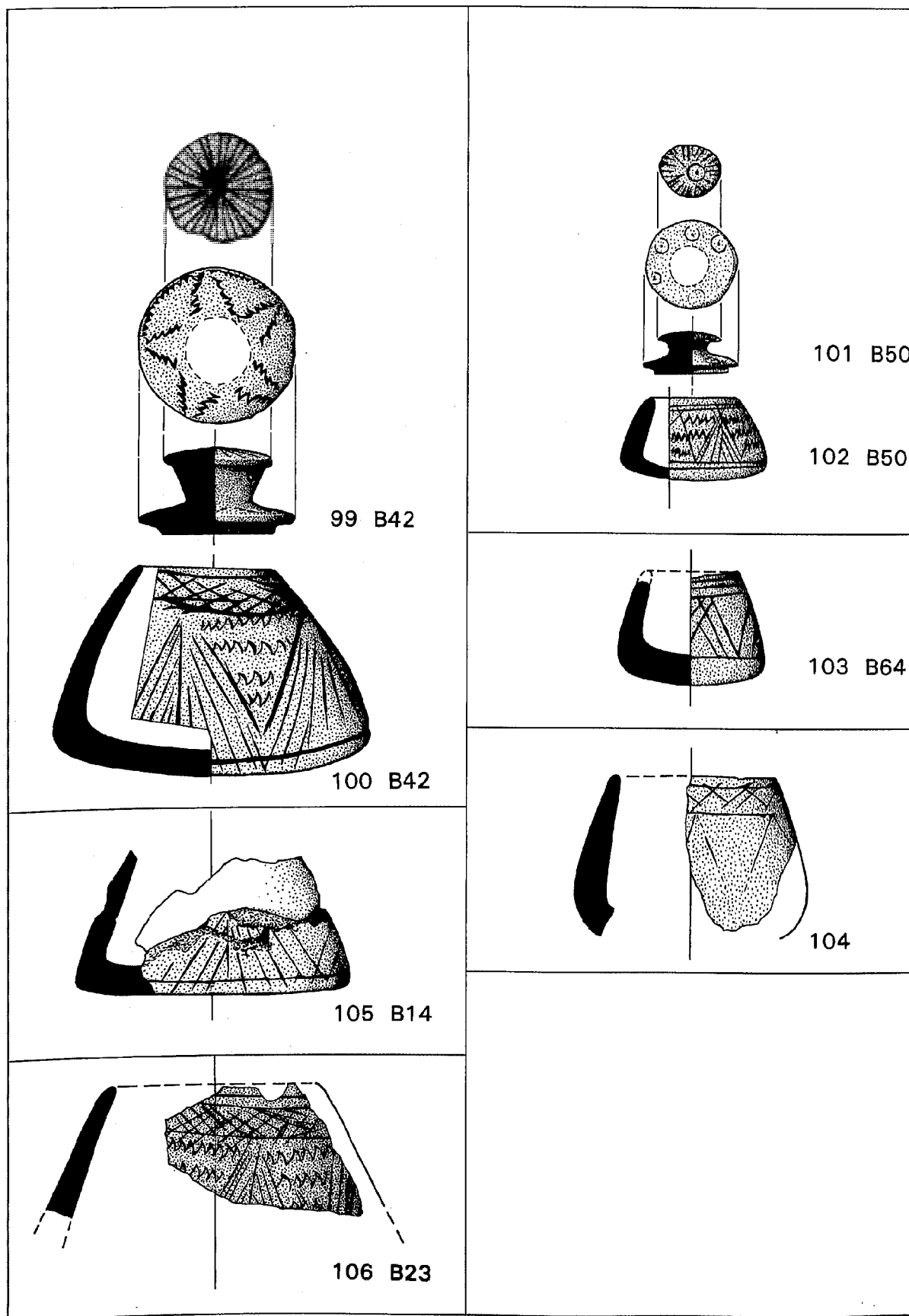


Fig. 19 Stone bowls from the „honeycomb cemetery“

شكل ١٩. آنية حجرية من مقبرة قرص العسل.

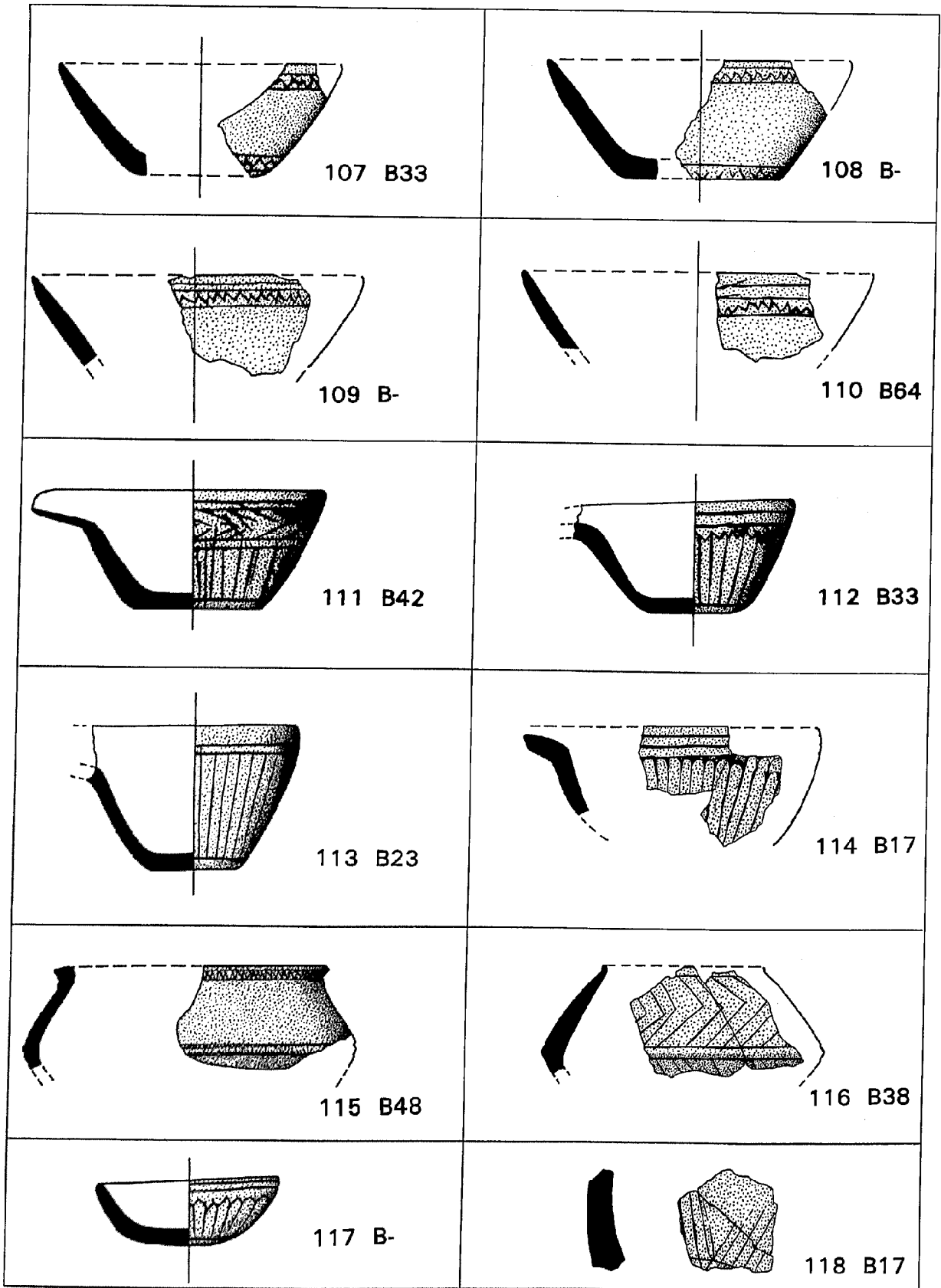


Fig. 20 Stone bowls from the „honeycomb cemetery“

شكل ٢٠. آنية حجرية من مقبرة قرص العسل.

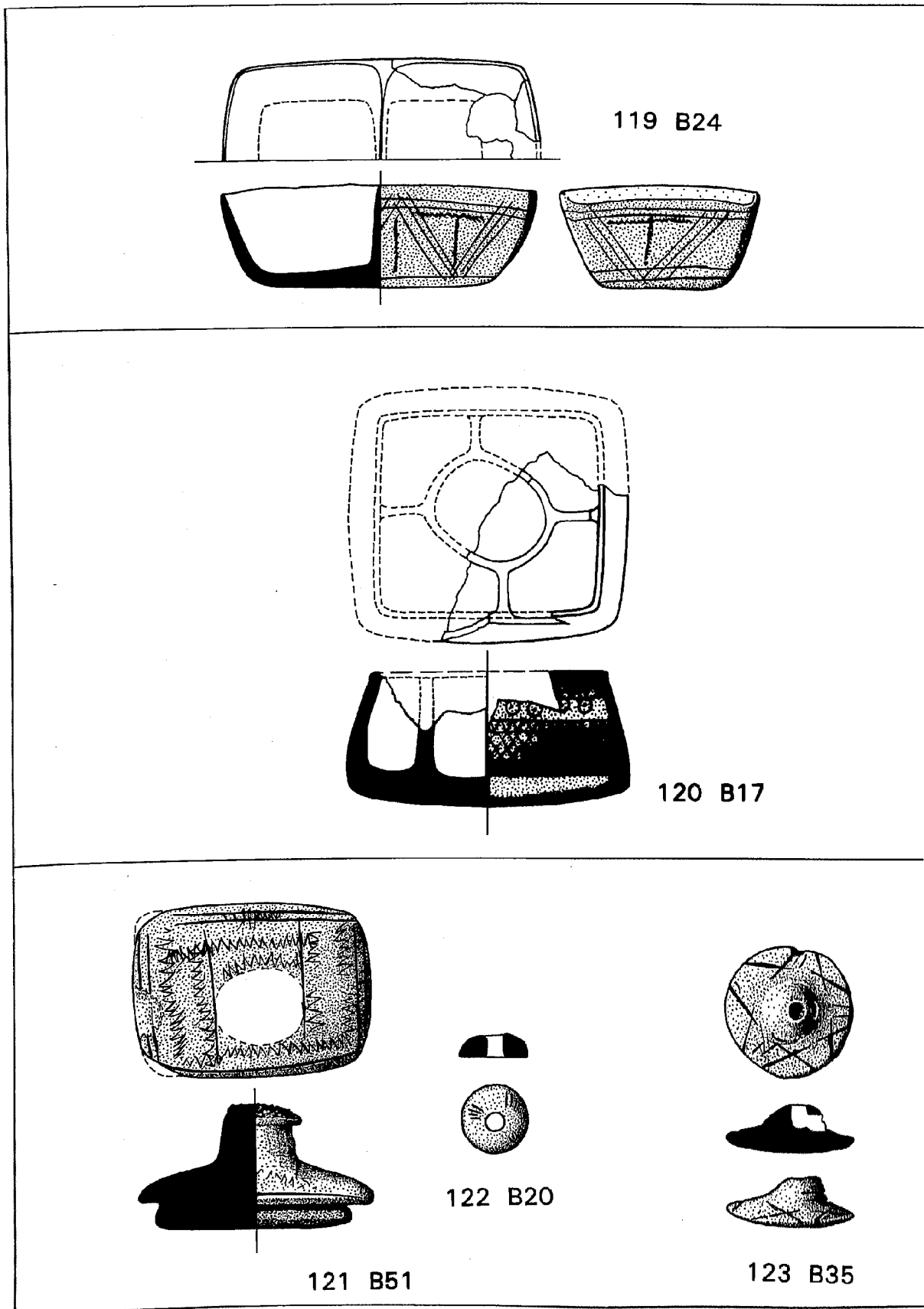


Fig. 21 Stone bowls (119, 120), lids (121, 123), and a spindle whorl (122) from the „honeycomb cemetery“

شكل ٢١. آنية حجرية، أغطية ومغازل من مقبرة قرص العسل.



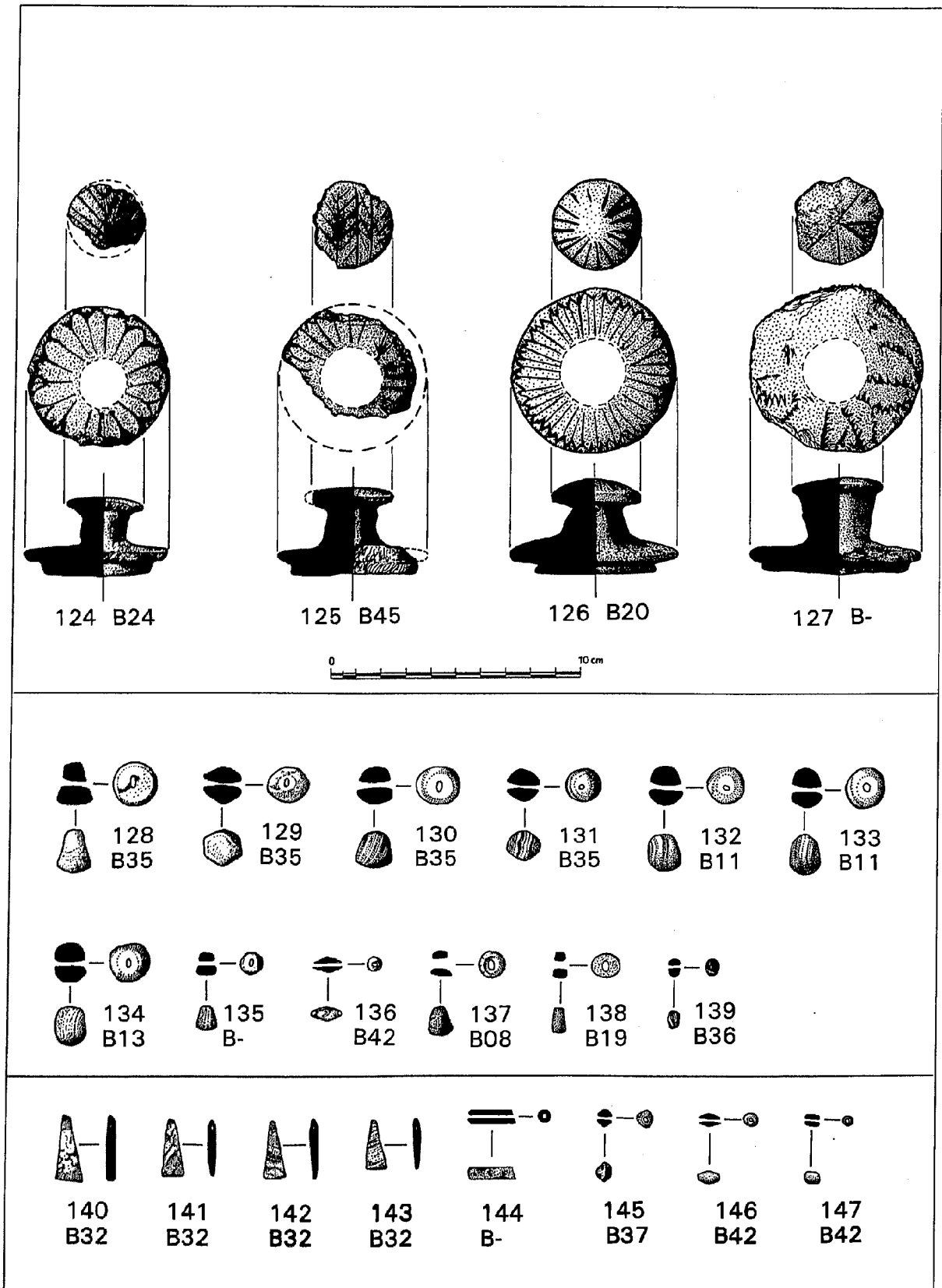


Fig. 22 Stone lids (124-127) and beads (128-147) from the „honeycomb cemetery“. Beads c. 1:2

شكل ٢٢. أغطية حجرية وخرز من مقبرة قرص العسل.

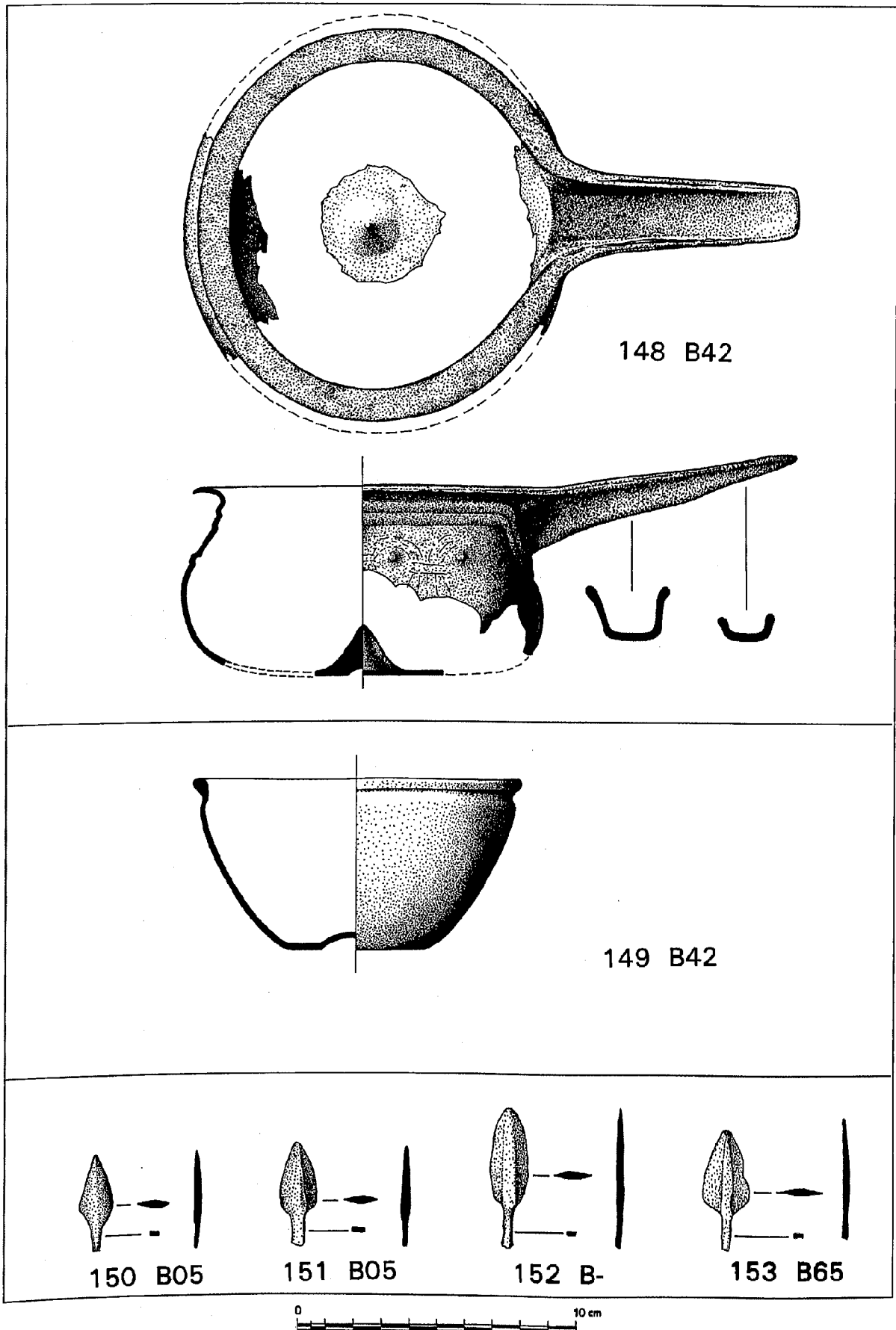


Fig. 23 Metal vessels (148, 149) and arrowheads (150-153) from the „honeycomb cemetery“

شكل ٢٣. أوعية معدنية ورؤوس سهام من مقبرة قرص العسل.

### 4.3 Relative Chronology according to Finds and Stratigraphy

The sequence as rendered below attempts to reflect the physical relationships between the recorded graves, *excluding* as much information as possible emanating from the associated artefacts. The stratigraphy here thus echoes the sequence of actions of superpositioning and manipulation of existing graves in order to accommodate new ones. At the outset it is important to note that the grave sequence derives in part from the determination of the earliest graves. This achieved through describing the overlapping of the walls, the grave features, as well as the finds. At some points the sequence remains however unclear. The structural/chronological description was recorded in the field in 1991. The chronological development of the „honeycomb cemetery“ can be visualized by means of a dendrogram (Fig. 7). On the whole, nine different grave sequences can be discerned which group into two „structures“. These are stratigraphically independent from each other. The structural pattern of growth of the cemetery is described as follows:

Structure 1, comprises the majority of graves, which are subdivided into eight distinct branches labelled with the letters A to H. Branch A can be linked to branch B through the overlapping of Gr. B04 with B22. Gr. B22 overlaps B73, which in turn overlaps B74. Gr. B73 and B74 are overlapped respectively by B20 and B25 of Branch B. Gr. B25 overlaps B30, both of branch B, and B30 overlaps B46 which is located in the centre of the cemetery and is the oldest grave in branch D. Gr. B46 is clearly older than B32, and B33. In turn, B33 is overlapped by B37, which ties four graves into branch D. Branch D is the most stable of all since overlapping inside reconfirms the sequence. Gr. B46 is overlapped by B34 of branch E and B45 of branch F. Gr. B51 of branch G overlaps B45 of branch F. Finally, Gr. B47 of branch H overlaps B46 on the one hand. On the other it is tied into branch G by B80 which overlaps B81 of branch G and B79 of branch H.

Structure 2 is far smaller than structure 1. The former structure is linked internally by the superimposition of Gr. B62 over B65 and B61. The graves of structure 2 lie north-east in relation to the main group. By virtue of the fact that B65 contains pottery of the Samad type, structure 2 post-dates structure 1.

The graves B66-B81 did not exist in the plan of 1981. These grave numbers were assigned subsequently as a result of the investigation of the chronological/structural situation.

Gr. B46 has a north-south oriented long axis which may indicate an origin in the preceding Wadi Süq Period. The earliest graves in the sequence (B02, B46, B47 and B50) need not be of identical age for reasons already stated. In terms of architecture, the latest graves of structure 1 (B17, B77, B27, B80) present a similar situation.

The chronology of the graves in the „honeycomb cemetery“ was determined both on the basis of their stratigraphic sequence and a comparative analysis of their contents. The resolution of the sequence is not satisfactory if based exclusively on the evidence of architectural growth. Verification of the chronology is best obtained through comparison with graves at other sites containing datable finds attributed to Rumaylah 1 (= L), Rumaylah 2 (= R), and Samad (= S) find complexes. In the table below „structure“ refers to the relative position of the grave in the chronological sequence. „R pottery“ means yellowish red/brown fabric comparable to that of the second phase at Rumaylah. „L/R pottery“ indicates a link with Lizq/Rumaylah type pottery. A finer dating is not possible. „R stone vessels“ refers to the sketchy decoration characteristic of the Rumaylah 2 Phase. „Late“ denotes the end of the Rumaylah 2 Phase.

B01:	R? stone vessel
B02:	L/R pottery fabric
B03:	no finds
B04:	L/R? pottery, R stone vessel, structure late
B05:	structure late
B06:	L/R pottery, S! pottery
B07:	no finds
B08:	L/R no pottery fabric
B09:	R pottery
B10:	R pottery
B11:	R? stone vessels
B13:	L? bead
B14:	structure late
B15:	structure late
B16:	no finds
B17:	R stone vessel
B18:	R? structure, R pottery, S? pottery
B19:	structure late, no finds
B20:	R stone vessels
B21:	structure late, R pottery
B22:	R? structure
B23:	structure late, R stone vessel
B24:	structure late, R stone vessel
B25:	R? structure, R stone vessel
B26:	structure late, no finds
B27:	structure late
B28:	structure late

- B29: only a bivalve, isolated grave: late?  
 B30: L structure late, no finds  
 B31: L structure late, no finds  
 B32: L structure, beads  
 B33: L/R pottery fabric, R stone vessels, structure late  
 B34: R/S pottery (glaze)  
 B35: L structure  
 B36: S? pottery, S? structure  
 B37: R stone vessels  
 B38: R stone vessel, structure late  
 B39: structure late  
 B40: structure late  
 B41: structure late, no finds  
 B42: R stone vessels, R structure  
 B43: L/R pottery decoration, R pottery fabric, structure late  
 B44: structure late, only bivalve  
 B45: R pottery fabric, structure late  
 B46: L/R pottery  
 B47: only bivalve  
 B48: R pottery, R stone vessel  
 B49: structure late, L/R pottery  
 B50: R stone vessels  
 B51: R pottery fabric  
 B52: structure late  
 B53: late, structure  
 B54: structure late  
 B55: structure late  
 B56: R pottery form  
 B57: no finds  
 B58: R? structure  
 B59: structure late  
 B60: L architecture  
 B61: S or R, structure  
 B62: S or R, structure  
 B63: S or R, structure  
 B64: R stone vessel, proximity to later, north-east grave group (structure 2)  
 B65: S pottery ware, technique  
 B66: no finds, late, proximity to NE group  
 B67: no finds  
 B68: no finds  
 B69: no finds  
 B70: no finds  
 B71: no finds  
 B72: no finds  
 B73: no finds  
 B74: no finds  
 B75: no finds  
 B76: no finds  
 B77: no finds, structure late  
 B78: no finds

- B79: structure late  
 B80: structure late  
 B81: structure late

#### 4.4 Absolute Chronology

Comparisons with dated pottery and stone vessels from outside Oman serve to establish the dating of the „honeycomb cemetery“. Unfortunately, the only radiocarbon sample from the cemetery turned out to be faulty<sup>37</sup>. With the exception of the excavation report on Rumaylah, there is little to go on. Radiocarbon determinations from Rumaylah have been re-evaluated and the excavators now propose the following chronology<sup>38</sup>:

Lizq/Rumaylah 2 1000/950-350/300 B.C.

Lizq/Rumaylah 1 1350/1300-1150/1000-950 B.C.

Given the nature of the calibration curve and the scarcity of the determinations, especially at the ends of the distribution, the dates of both extremes are speculative. Several calibrated dates from Samad al Shān do exist which support the dating of the Lizq/Rumaylah and subsequent Samad Periods, which both are important for the present discussion. Determinations for the earlier period are far fewer than for the following one. For the Samad Period, plausible calibrated dates begin at around the time of Christ and continue into the tenth century A.D.

Moreover, the archaeological parallels indicate to earlier as well as later classes of EIA pottery<sup>39</sup>. The dating for EIA South-east Arabia is buttressed by the anti-quarian dating of the late phase of the Wādī Sūq Period. Further such comparisons for the Samad Period suggest a date from approximately 100 B.C. to 500 A.D., which must be complemented by the evidence of <sup>14</sup>C dating. There is a lacuna between the <sup>14</sup>C determinations of the later Lizq/Rumaylah Period and earliest ones of the Samad Period. In view of the dearth of evidence, it seems more likely that the date of the Rumaylah 2 Phase should be lowered to 100 A.D. rather than raising the Samad Period to 300 B.C. For this reason the „honeycomb cemetery“ may be dated to the last quarter of first millennium A.D.

<sup>37</sup> Hd 15640-16345 from Gr. B42 yielded a conventional <sup>14</sup>C dating of 981 ± 89 BP, cal AD 990 - 1170 at 1 σ.

<sup>38</sup> R. Boucharlat and P. Lombard 1991, 307-308.

<sup>39</sup> S. Kroll 1991, 315-320; P. Yule in press.

Two smaller problems remain with regard to the dating of Bawshar. The dating of the Jāl type graves at Bawshar is unclear because it is based largely on the finds from grave BI which contained Bronze Age metal objects. But this grave is well preserved and an early date is implausible. Graves from the Wādī Sūq Period are generally badly preserved.

A second question which deserves mention is the sword which came to light in Gr. BIIb. This weapon and the accompanying arrowheads cannot be dated exactly, but general similarities with weapons from the Samad Period/Culture suggest a dating within the first half of the first millennium A.D.<sup>40</sup>

The following chronology is proposed for the Sultanate in the periods under discussion:

First Imamate	793	- 893 A.D.
Juland	631	- 793 A.D.
Samad	post 300 B.C.	- 900 A.D.
Lizq/Rumaylah 2	900?	- post 300 B.C.
Lizq/Rumaylah 1	1200	- 900 B.C. <sup>41</sup>
Late Wādī Sūq	1600	-1200 B.C.
Wādī Sūq	2000	-1600 B.C.
Umm an Nar	2500	-2000 B.C.
Hafit	2900	-2700 B.C.

<sup>40</sup> Cf. D. Nicolle 1991, 312, 318 fig. 2b (sword of the calif 'Ali) and fig. 2c (8th cent.).

<sup>41</sup> While the present study was in the final stages, an article appeared which introduces a new definition for the „Iron Age“ of Oman. P. Magee 1996, 240-252.



## 5 BURIAL CUSTOMS

The burial customs attested in the graves B0, B1, B11a, and B11b differ from those represented in the „honeycomb cemetery“ and are not of the same date. In the latter graves containing vessels which belong to the Samad inventory (e.g. Gr. B65) are limited to one part of the cemetery, and these may differ from the rest in terms of their burial customs. First indications suggest that these graves post-date the majority in the cemetery. Clearly, the Samad Culture did extend to this part of Oman, since it is also represented at al Bustan and Bandar Jiṣṣa<sup>42</sup>. But in the „honeycomb cemetery“ those graves containing vessels of the Samad inventory do not necessarily date to the Samad Period *per se*. They could be forerunners before the main series begins. Their absolute dating is not secure.

Given the disturbed condition of all of the graves in the „honeycomb cemetery“, it is unclear whether all dead were interred in the same way. One sign of disturbance is the small number of finds. Moreover, the fact that arrowheads occur in the graves of women (B05, B65) casts doubt either on the reliability of the gender identifications or else on the intactness of the assemblages. Women's graves from the following Samad Culture hardly ever contain weapons, and it seems possible that this is also the case for the Liza/Rumaylah Period. The occurrence of beads are not much helpful with regard to this question. In the „honeycomb cemetery“ most of the beads were found in men's graves, but women no doubt also wore beads, as we know from other Pre-Islamic contexts in Oman. The occurrence of a spindle whorl in Gr. B20 is not surprising since these objects occur in men's graves of the Samad Culture. Today men in Oman also hand spin<sup>43</sup>. Pottery, bivalves, stone bowls, and their lids occur in the graves of both sexes. The low number of women in the „honeycomb cemetery“ is curious, and their numbers are proportionately even fewer than in the cemeteries of the Samad Culture.

Only Gr. B33 and B42 still contained numerous finds that had eluded the hands of the looters. Their owners were identified as males on the strength of the skeletal evidence. Men of the Samad Culture, the best known Pre-Islamic population in Oman, were buried with far more grave offerings than the women. Needless to say, at Bawshar there were also poor men and wealthy women. But in terms of finds, none of the eight women identified in the „honeycomb cemetery“ could be considered to have been wealthy.

Given the scarcity of finds, a development in the burial customs cannot be determined.

The find of a skeleton in supine position in Gr. B11b is unique in the Sultanate. Considering the presence of weapons in the grave, it can hardly be Islamic. It seems rather to belong to the non-Samad LIA. In the following table anthropologically sexed skeletons are listed with their accompanying finds. The ones identified as „probably“ male/female appear as positive identifications. The ones sexed with the remark „perhaps“ (male/female) are marked with „?“.

anth ♂	anth ♀	grave goods
X	-	no data
B01	-	stone bowl
B04	-	stone bowl, pottery bowl
-	B05	arrowheads
-	B07	pot sherd
-	B08	bowl, bead, bivalve
B12	-	no finds preserved
B14	-	2 bowls, stone bowl, bivalve
B18	-	bowl, pot sherd, bivalve
B20	-	bowl, compartment vessel, lid, spindle whorl, 2 bivalves
B21	-	bowl
B22x2	-	sherd
B23	-	stone bowl, bowl
B26	-	no finds preserved
-	B28	bowl, bivalve
B30	-	pot sherd
B31	-	no finds preserved
B32	-	beads
B33	-	6 bowls, 2 stone bowls, pot sherds, bivalve
B35?	-	lid, 2 beads
-	B36	pot sherd
B38	-	stone bowl
-	B41	no finds preserved
B42	-	bowl, compartment vessel, 2 stone bowls, 3 beads, 2 metal vessels, 1 snail
B43	-	pot sherds, bivalve
B44	-	bivalve
B46	-	2 bowls, stone bowl, bivalve
-	B49?	pot sherds, stone bowl, 2 bivalves
B50	-	stone bowl, knob
B62?	-	bowl, bivalve
-	B65	4 bowls, pot sherds, arrowhead

<sup>42</sup> See below, chapter 11.

<sup>43</sup> G. Jones 1989, 22-29, pls. 8, 11.

## 6 PRE-ISLAMIC GRAVE ARCHITECTURE

Graves were built or dug in non-arable land, and where the desert has not become suitable for settlement or some other purpose may be preserved to varying degrees. The differences in the architecture of the many graves at Bawshar can be most plausibly explained in terms of chronology. One factor determining the local form of the graves is that outside the gardens and wādīs the ground consists of solid rock and great effort is required to dig into it. The earliest graves known in the area belong to the Hafit Culture, but there is no reason to believe that settlement first began at this time, since the prerequisites for settlement existed much earlier. A perusal of the area reveals the remains of several kinds of graves, most notably of Hafit-type graves on the low mountain peaks and ridges<sup>44</sup>. The dating rests on the form of the graves and their situation, but at Bawshar not on the finds, since none of the graves here of this period have been excavated. These graves occur primarily north and east of al Fath. Considering their proximity to populated areas, they are in a surprisingly good state of preservation.

Completely destroyed tombs at Bawshar of the succeeding Umm an Nar Period are visible a few hundred metres north-east of Sād (UTM <sup>6</sup>43700; <sup>26</sup>04600). As just mentioned, settlement here certainly begins earlier.

Grave BI contained finds which at first glance indicate a dating to the second millennium B.C. Stone bowls decorated with dotted double circles date, however, generally to the third and early second millennium B.C. (Fig. 3)<sup>45</sup>. A razor of the R04 class is characteristic of the Wādī Sūq and Late Wādī Sūq Periods<sup>46</sup>. The stone bowl may well be earlier than its context, a survival from the Umm an Nar or Wādī Sūq Period. Grave B0 and BI are

of the Jāl type. The preservation of these free-standing graves is better than one would expect for such an early age, considering their age and their location in a populated area. The finds from these graves also are possibly „heirlooms“ of the Wādī Sūq Period. In any case, such freestanding graves cannot be linked to those of the Samad Culture.

The „honeycomb cemetery“ of the EIA is the result of a development which the builders initially could not foresee. Certainly, they did not set out to create the honeycomb form. The interstices between the earliest graves were gradually filled up with smaller graves, the shape of which depended on the space available. The grave group to the north-east is later, dating toward the transition to the Samad Period. Other graves belonging to the EIA in Areas 4 and 5 are in a poor state of preservation. Their dating is based on the double wall construction method.

The original appearance of Gr. BIIa and BIIb cannot be discussed because of their flawed documentation. But Gr. BIIb may be dated on the basis of its grave goods to the non-Samad Late Iron Age before the arrival of Islam. The absence of graves from the Samad Culture reflects a deficiency of research. Little prospecting and excavation has taken place here. Some of the grave structures in Area 1 may belong to this period, but they are too poorly preserved to date with certainty.

<sup>44</sup> K. Frifelt 1970, 355-382.

<sup>45</sup> P. Yule in press.

<sup>46</sup> P. Yule in press.

## 7 INDIVIDUAL SKELETAL DIAGNOSES

- ١٩٨٣

The material under study comes from the Early Iron Age cemetery of Bawshar in the western part of the capital area. I am grateful to Dr. P.M. Costa, then Muscat, who kindly placed this skeletal material at my disposal for anthropological investigation.

The most interesting aim of studying skeletal material is the biological reconstruction of a population with its racial affinities and demographic profile. We also want to know something about ancient pathology and about diachronic changes in the population of a given geographical region.

Regretably, the skeletal remains from Bawshar are badly preserved due to the acidity of the soil. The average weight of the skeletal remains of a single individual was not more than 350 g. The bone fragments were in even worse condition than is usual for cremated remains, and further damaged by the lifting, transportation and storage.

It was therefore often not possible to determine the age at death or the sex of each individual. But in some cases it was possible to make definite statements on the bone constitution and pathological changes.

### 7.1 Individual Description of the Human Remains

X:<sup>47</sup> Only fragments: cranium and post-cranial skeleton; age: adult or older (more than 20 years); sex: probably male; bone constitution: gracile; diseases: circular perforation on a skull fragment (trephine hole).

Y: Only fragments of left ulna; age: adult or older; sex: indeterminate.

B01: Only fragments: cranium and long bones; age: adult (20-40 years); sex: probably male.

B03: Only fragments of long bones; age: probably adult; sex: indeterminate.

B04: Only fragments: cranium and long bones; age: mature (40-60 years); sex: with a high probability male; bone constitution: relatively robust with prominent muscle attachments.

B05: Only fragments: cranium and post-cranial skeleton; age: early adult (20-30 years); sex: probably female; bone constitution: relatively robust.

B06: Only fragments: cranium and long bones; age: adult or older; sex: indeterminate; bone constitution: gracile.

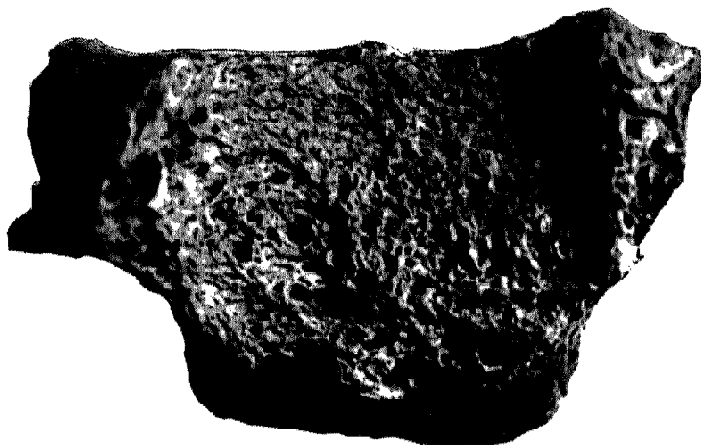
B07: Only fragments: cranium, long bones and *claviculae*; age: adult or older; sex: probably female.

B08: Only fragments: cranium, long bones and *claviculae*; age: adult or older; sex: probably female; bone constitution: gracile.

B09: Only fragments of long bones; age: probably adult; sex indeterminate.

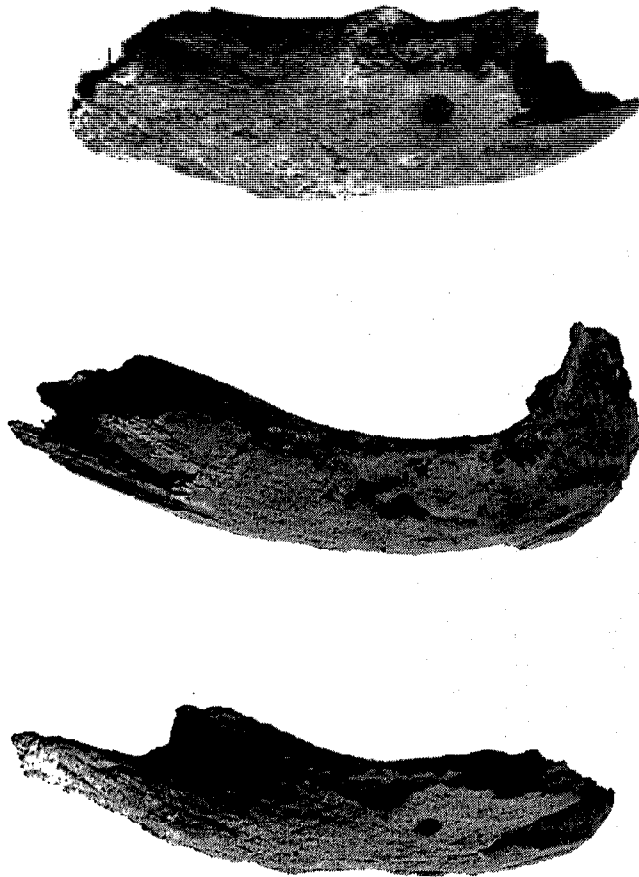
B10: Only fragments: cranium, long bones, *vertebrae* and phalanges; age: adult or older; sex: indeterminate; bone constitution: gracile.

<sup>47</sup> The designations „tomb X“ and „tomb Y“ are otherwise not recorded in the documentation of the cemetery. Perhaps they refer to Gr. BI, BIIa, or BIIb. Gr. BIIb contained a skeleton which is not identified in M. Kunter's study; Possibly this is the skeleton of grave „X“ (ed.).



Pl. 29 *Cervical vertebra* with osteochondrosis (Grave B22) (M.K.)

لوحة ٢٩. فقرة عنقية مع تنكس عظمي غضروفي (M.K.)



Pl. 30 Mandibular fragments with *intra vitam* tooth loss (Grave B22, B46 and B52) (M.K.)

لوحة ٣٠. كسر عظمية من الفك السفلي فُقدت أسنانها خلال حياة صاحبها (M.K.).

- B11: Only fragments of long bones; age: probably adult or older; sex: indeterminate.
- B12: Only fragments: cranium, long bones, *vertebrae*; age: mature to senile (50-70 years); sex: probably male; diseases: *spondylosis deformans* at *vertebrae cerv.*
- B15: Only fragments: cranium and long bones; age: adult or older; sex: indeterminate.
- B16: Only fragments: cranium and long bones; age: determination uncertain, possibly juvenile (older than 14 years); sex: indeterminate.
- B18: Only fragments: cranium and long bones; age: mature; sex: probably male.
- B20: Only fragments: cranium, long bones, *vertebrae*, ribs; age: mature; sex: probably male.
- B21: Only fragments: cranium and long bones; age: mature; sex: probably male; bone constitution: gracile.
- B22: Only fragments: cranium and post-cranial skeleton of two individuals; age: both probably adult or older; sex: both probably male; diseases: fragment of mandibles with tooth-loss *intra vitam* (34, 35, 36, 37, 38), one *vertebra cerv.* with osteochondrosis (Pl. 29).
- B23: Only fragments: cranium, long bones, ribs and scapulae; age: adult or older; sex: probably male.
- B25: Only fragments: long bones, *vertebrae*, *claviculae*, *scapulae*; age: adult or older; sex: indeterminate; bone constitution: gracile
- B26: Only fragments: cranium, long bones; age: adult or older; sex: with little doubt male; bone constitution: medium; morphology: *glabella prominent*, nasal root high, minimum breadth of frontal bone = 94 mm.
- B28: Only fragments: cranium, long bones, *vertebrae*, *claviculae*; age: adult or older; sex: probably female.
- B30: Only fragments: cranium, long bones, *scapulae*, pelvis; age: adult; sex: most probably male.
- B31: Only fragments: cranium, long bones, pelvis, thoracic vert.; age: mature; sex: probably male; diseases: *spondylosis def.* on a thor. vert.
- B32: Only fragments: cranium, long bones, phalanges; age: mature; sex: probably male.
- B33: Only fragments: cranium, long bones, *claviculae*; age: adult or older; sex: probably male.
- B34: Only fragments: cranium, long bones, *scapulae*; age: adult or older; sex: indeterminate.

- B35:** Only fragments: cranium, teeth, long bones, foot bones, *vertebrae*, *scapulae*; age: juvenile to early adult (14-30 years); sex: uncertain, perhaps male; bone constitution: gracile, muscle attachments medium.
- B36:** Only fragments: cranium, *scapulae*, *claviculae*; age: early adult (20-30 years); sex: probably female.
- B37:** Only fragments: cranium, long bones, ribs; age: early adult; sex: indeterminate; bone constitution: gracile.
- B38:** Only fragments: cranium, long bones, ribs, *vertebrae*; age: adult or older; sex: probably male.
- B39:** Only fragments: cranium, long bones; age: adult or older; sex: indeterminate.
- B40:** Only small fragments: long bones, phalanges; age: adult or older; sex: indeterminate.
- B41:** Only fragments: cranium, long bones; age: adult or older; sex: probably female.
- B42:** Only fragments: cranium, long bones, *claviculae*, pelvis; age: adult or older; sex: probably male; bone constitution: robust.
- B43:** Only fragments: cranium, long bones, *scapulae*, *vertebrae*; age: adult; sex: probably male.
- B44:** Only fragments: cranium, long bones, ribs, *vertebrae*, phalanges; age: early adult; sex: uncertain, perhaps male.
- B45:** Only fragments: cranium, long bones; age: adult or older; sex: indeterminate.
- B46:** Only fragments: cranium and post-cranial skeleton; most probably two individuals (2 *symphyses mand.*); age: both individuals most probably late adult (30-40 years); sex: one individual most probably male, the sex of the other indeterminate; diseases: one fragment of mandible with loss of premolars and molars *intra vitam* (Pl. 30).
- B49:** Only fragments: cranium, long bones; age: late mature (50-60 years); sex: perhaps female.
- B50:** Only fragments: cranium, postcranial skeleton; age: late mature to senile (50-70 years); sex: probably male; diseases: one thoracic vertebra with *spondylosis deformans*, fragment of left mandible with loss of first premolar and first molar *intra vitam*.
- B51:** Only fragments: cranium, long bones; age: mature; sex: indeterminate.
- B52:** Only fragments: mandible, post-cranial skeleton; age: adult or older; sex: indeterminate; diseases: fragment of right mandible with loss of canines, premolars and molars *intra vitam*.
- B53:** Only fragments: cranium, long bones; age: adult or older; sex: indeterminate.

- B55:** Only fragments: cranium, long bones, *claviculae*; age: mature; sex: indeterminate.
- B59:** Only fragments: cranium, long bones; age: juvenile (14-19 years); sex: indeterminate.
- B60:** Only small fragments: long bones, *vertebrae*; age: adult or older; sex: indeterminate.
- B61:** Only fragments: long bones; age: probably older than 20 years; sex: indeterminate.
- B62:** Only fragments: cranium, long bones, *vertebrae*; age: adult or older; sex: perhaps male.
- B65:** Only fragments: cranium, long bones; age: adult or older; sex: probably female.

## 7.2 Conclusions

The following conclusions are based on the sample of 54 individuals described above.

1. Most of the graves contain single interments. Only Gr. B22 and B46 contain two individuals.
2. No animal bones were found.
3. No remains of children were identified among the bones. If children and infants were buried in this cemetery, they may have vanished owing the chemical action of the soil.

4. The age and sex distribution is as follows:

	male	female	indeterminate
juvenile (14-19)	1	0	2
adult (20-39)	5	3	5
mature/senile (40-70)	10	1	2
older than 20	8	4	13
total	24	8	22

Males seem to outnumber females, but in light of the large number of skeletons that were impossible to sex, caution is indicated. It seems that on the average, males lived longer than females. The palaeo-demographic results agree with those gathered in other contemporary populations of the Middle and Near East. The mean life expectancy was relatively low, about 35 years, and we must reckon with a high mortality rate in child- and adulthood.

5. Metric and non-metric data could not be registered and therefore no reliable statement as to the physical type and racial likeness of the Bawshar population can be given. There appear to be affinities with the Late Iron Age populations of al Maysar/Samad in Oman and in Ḥadramaut<sup>48</sup>. A certain mixing of populations between South Arabia and the Oman Peninsula must have occurred in the Iron Age.

<sup>48</sup> M. Kunter 1981.

6. The bone constitution of the Bawshar population is in most cases gracile and muscle attachments are relatively weak. This means that the average individual had a more leptosome, delicate figure with a low to medium stature. The morphological sexual differentiation is weak, a fact already observed in Late Iron Age Samad/al Maysar.

7. Observable bone diseases were mostly degenerative. The frequent loss of premolars and molars *intra vitam* is very interesting as it may have been due to a sugary diet based on dates that caused caries. The same tooth loss was observed at al Maysar, where dates were the major food source. In this case life in Early Iron Age Bawshar may have been based mainly on an oasis

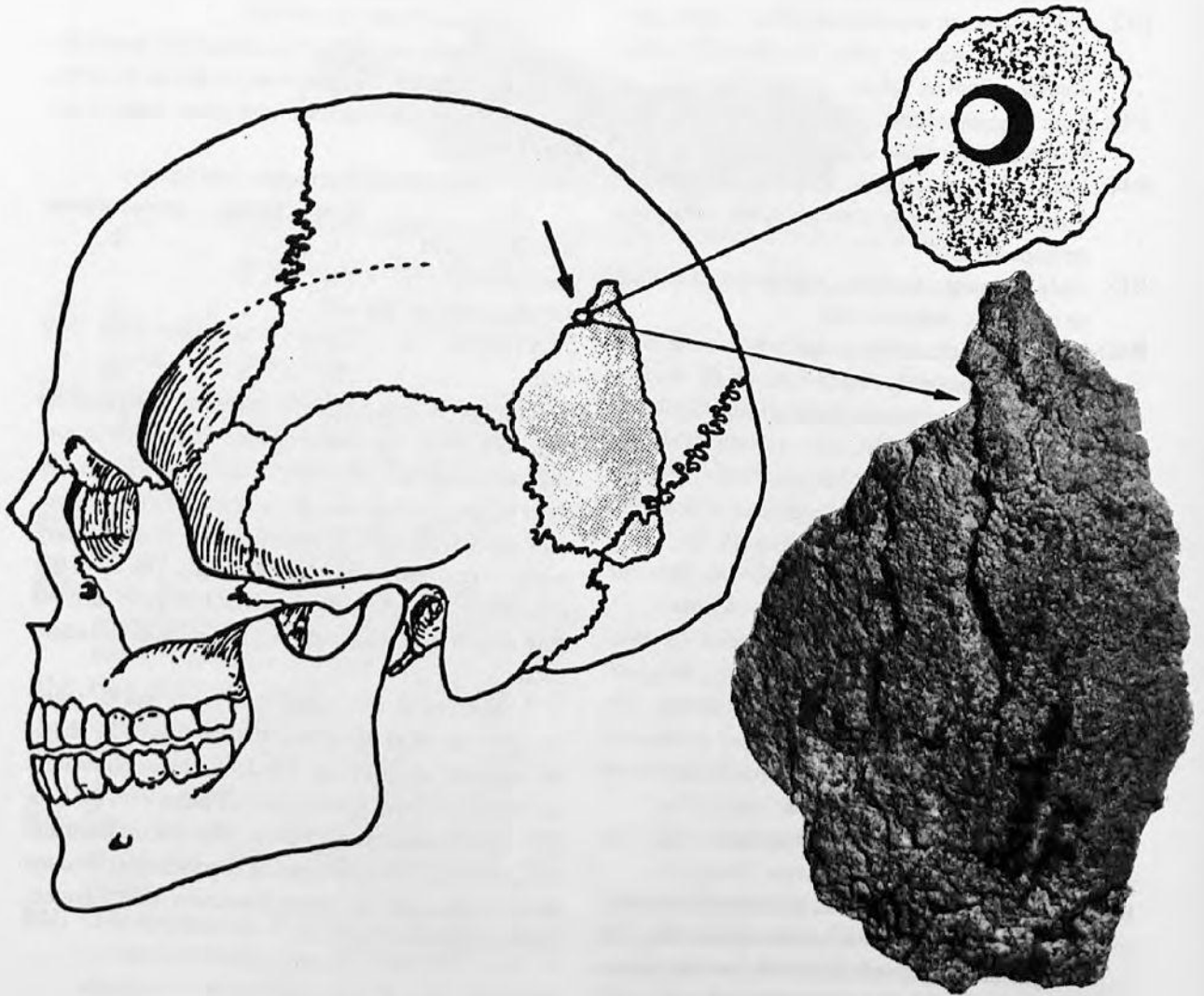
economy (*falaj* system) although fish and shellfish would have been available from the nearby sea.

In tomb X (male, adult) a small fragment of the left parietal bone shows a circular lesion (diameter = 7 mm), that could be a trepan hole (*Pl. 31*). Trepanation of the cranium is well known from different places all over the world<sup>49</sup>. Small trepan holes which can be compared with this lesion are mentioned for a skull from Yugoslavia<sup>50</sup> and three skulls from Tell al Mazar in Jordan<sup>51</sup>. These parallels also date to the Iron Age.

<sup>49</sup> F.P. Lisowski 1967; M. Kunter 1970.

<sup>50</sup> Z. Miki 1980.

<sup>51</sup> A.M. Disi - W. Henke - J. Wahl 1981.



Pl. 31 Trephine hole on a skull fragment with reconstruction (Grave X) (M.K.)

لوحة ٣١. ثقب ونبق ضمن كسرة جمجمة مع إعادة تصورها (M.K.).



## 8 RESTORATION REPORT ON THE IRON SWORD DA 7622 FROM GRAVE BIIB

The sword DA 7622 was broken into seven fragments and was generally poorly preserved. The lower portion of the blade was preserved to a length of approximately 500 mm. There was a dense and closed graphite surface beneath a layer of oxidation.

Three heavily oxidised blade fragments were preserved, in addition to a shoulder and possibly, a hilt. Little metal still existed therein. The old surface could not be traced in all places. A slightly bent hilt was perforated by a rectangular hole for the attachment of the handle<sup>52</sup>. Thus the hilt measured 90 x 30 mm, and the perforation for the handle, 20 x 8 mm.

The grip tang measures 100 mm in length and is rectangular in profile. It is connected to the shoulder of the blade. Two thirds of the pommel are preserved too. A connection with the grip could be observed which permits the reconstruction of the length of the grip.

### 8.1 Restoration Measures

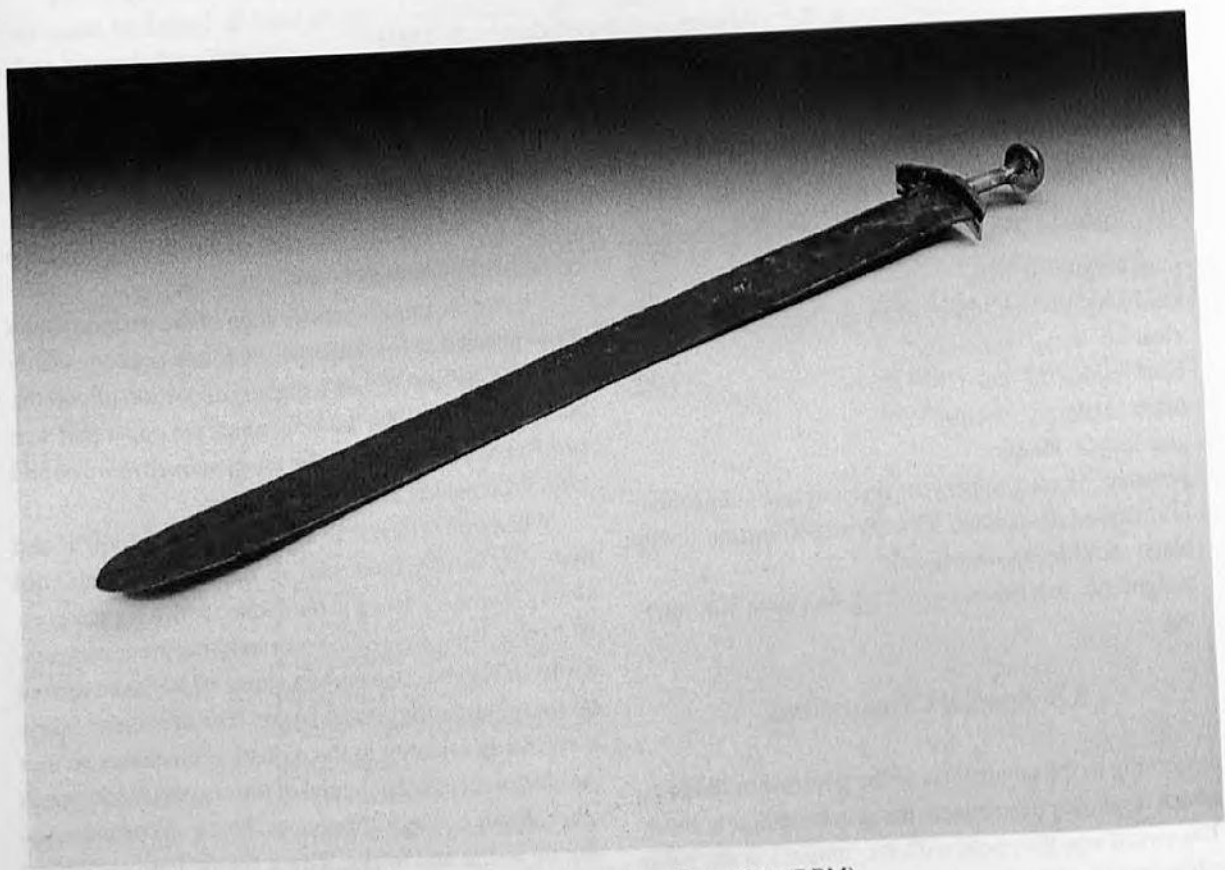
The surface was cleaned mechanically with a rotary tool (diamond) and an ultrasonic chisel (Piezomatic P2).

The metallic fragments were joined to each other with an epoxy resin called *Araldit* (Ciba Geigy) LY 554 + HY 554 diluted 100:20 in a warm oven at 119°C. Glass silk was used to reinforce the lamination (proportion 9 gr/m<sup>2</sup>). The grip was reconstructed with the same material. The reverse side of the blade (that is, the better preserved side is the one now visible in the mounting) was strengthened with glass silk and laminated (Pls. 32, 33).

Conservation measures:

Benzotiazol bath (3% BTA dissolved in denatured ethanol. Four hours in a vacuum at 200 torr. Thereafter micro-wax bath at 130 in a vacuum at 500 torr. Crack point of the micro-wax: 185°C

<sup>52</sup> The hilt of the restored pieces appears in its original excavated position (P.Y.).



Pl. 32 Restored sword from Grave BIIB (DBM).

لوحة ٣٢. سيف مرمم من قبر BIIB.



Pl. 33 Restored sword from Grave BIIb (DBM).

لوحة ٣٣. سيف مرمم من قبر BIIb.

## 8.2 Weapon Restoration

- total length 740 mm
- total length of the blade: 655 mm (blade shoulder unclear no surface preserved)
- blade width: 52 mm
- blade thickness: 3-4 mm
- grip length: 80 mm
- pommel: 35 mm, upper part restored as a hemisphere
- hilt: curved downward, 90 x 30 mm (connection with blade shoulder reconstructed)
- weight: not determined as 1/3 of the sword was missing

## 8.3 Special Observations

Owing to the connection of the pommel to the grip, which is reliably determined, the grip is relatively short. The sword was thus held with the pommel in the palm while two fingers grasped around the hilt were used to hold the grip. A *ricasso*, which must have existed for a

such weapon, was not detected owing to the poor preservation of the metal.

The heterogenous preservation of the weapon raises some questions. It seems that its lower portion, which was well-preserved, had a higher proportion of carbon, being thus harder. On the other hand, the upper part was smithed of softer iron (owing the presumed *ricasso*) and was consequently less well preserved.

When iron is heated to a temperature of 1000°C and then very briefly quenched so that the core can cool slowly, martensite forms at the surface with a regular crystal lattice. This phase of the iron smithing process is relatively stable since the carbon atoms which have drifted off can re-enter the crystal lattice. The martensite fabric is relatively resistant to the oxidation processes so that the electrochemical potential of the crystals among each other allows no large differences. Soft iron consists usually of perlite and ferrite. These crystal lattices oxidise readily.

(November 1987, translation P. Yule)

## 9 THE MOLLUSCAN FINDS

The mollusc shells in the graves were originally identified by K. Smythe in 1982, and photographs of the specimens were examined in 1993 by the present author. The mollusc specimens in the graves are listed in the catalogue below.

Unmodified mollusc shells were part of the funerary assemblage in many of the graves, both male and female. Large edible bivalve molluscs were the most common offerings especially the large venus clam (*Callista erycina*). There were a few cockles (*Rudicardia pseudolima*, *Trachycardium lacunosum*) as well as a single specimen of a pearl oyster (*Pinctada* sp.) and a single spiny oyster (*Spondylus* sp.).

Gastropod species were uncommon; there were three fragments of the mangrove mud creeper *Terebralia palustris*, one dog whelk *Thais tissoti* and a single specimen of *Polinices tumidus*.

With the exception of *Terebralia palustris* all the species in the graves are common today on the Oman coast. *Terebralia palustris* is found exclusively in mangrove and is relatively uncommon but may have had a more extensive distribution in the past<sup>53</sup>.

The large cockle *Rudicardia pseudolima* which is common in Samad al Shān in the so-called Late Iron Age is rare in Bawshar.

### CATALOGUE OF MOLLUSC FINDS

Grave	cat. no.	find			
			B24	3	1 valve <i>Callista erycina</i>
			B24	4	1 valve <i>Trachycardium lacunosum</i>
			B25	2	1 valve Veneridae family
			B27	2	1 eroded valve ? <i>Callista erycina</i>
			B28	2	1 valve <i>Callista erycina</i>
			B29	1	1 valve <i>Callista erycina</i> , 1 fragment Veneridae family
			B33	11	1 heavily eroded valve spiny oyster <i>Spondylus</i> sp. impossible to determine
			B37	3	1 valve <i>Callista erycina</i> , 1 dog whelk, <i>Thais tissoti</i>
			B42	?	1 fragment <i>Terebralia palustris</i> , not previously identified
			B43	4	3 fragments ? <i>Callista erycina</i>
			B43	5	4 fragments of large pearl oyster probably <i>Pinctada margaritifera</i>
			B44	1	1 valve <i>Callista erycina</i>
			B45	6	3 valves <i>Callista erycina</i>
			B46	4	1 fragment shell not identifiable
			B47	1	1 valve <i>Callista erycina</i>
			B48	5	4 fragments <i>Callista erycina</i>
			B49	3	1 valve ? <i>Callista erycina</i>
			B52	1	3 fragments valves ? <i>Callista erycina</i>
			B53	2	1 eroded fragment? Veneridae family
			B54	2	2 fragments? <i>Callista erycina</i>
			B55	3	2 valves <i>Callista erycina</i>
			B56	3	1 valve <i>Callista erycina</i>
			B60	1	1 valve <i>Callista erycina</i>
			B62	2	2 fragments? <i>Callista erycina</i>
			B63	1	1 valve <i>Callista erycina</i>
			B64	3	no photo, listed as ? Veneridae family
B02	2	1 <i>Callista erycina</i> (no photo)			
B05	3	1 Veneridae family ? <i>Paphia</i> sp			
B06	5	1 Veneridae family ? <i>Paphia</i> sp			
B06	5	1 <i>Polinices tumidus</i>			
B08	3	1 fragment <i>Terebralia palustris</i>			
B09	3	1 eroded fragment large bivalve? Ostracidae family			
B11	3	1 fragment cockle <i>Trachycardium</i> sp, 1 fragment <i>Terebralia palustris</i> , 1 fragment other bivalve			
B14	3	2 fragments <i>Callista erycina</i>			
B17	6	1 valve <i>Callista erycina</i>			
B18	3	1 incomplete valve large oyster ? <i>Hyotissa</i> sp (Myfhult)			
B20	5	1 valve large cockle <i>Rudicardia pseudolima</i>			
B20	6	1 valve <i>Callista erycina</i>			
B21	3	1 valve arc shell <i>Anadara</i> cf <i>antiquata</i>			
B21	4	no photo, same specimen as B21 no. 3 ?			



## 10 A SAMAD PERIOD BURIAL IN AL SARŪJ

Near the village of Sarūj the British School was built on the south side of what was to become the east-west motorway which links the various parts of the capital area<sup>54</sup>. On a rocky slope here (N 23° 36' 15.1"; E 58° 27' 30.4" at 45 m above NN [ed.]) a number of cairns were known of which one the Department of Antiquities decided to record and excavate in 1983. The grave is built

of head-size pieces of local limestone (Fig. 24, Pls. 34-37). It consists of two chambers the debris of their walls forming an irregular heap of stones. The grave may either have been placed into an older grave structure but it may also have been built for the occasion the recorded burial. Its preservation is impossible to assess, and therefore cannot be classified to any known grave type.

<sup>54</sup> P. Costa 1989, 108 no. 26.



Pl. 34 Al Sarūj, garden below the British School (P.C.)

لوحة ٣٤. الساروج، حديقة أسفل المدرسة البريطانية (P.C.)



Pl. 35 Al Sarūj, Grave Sar2 during cleaning (P.C.)

لوحة ٣٥. الساروج، قبر سار٢ أثناء التنظيف (P.C.)



Pl. 36 Grave Sar2 after excavation (P.C.)

لوحة ٣٦. القبر سار٢ بعد التنقيب (P.C.).



Pl. 37 Grave Sar2 burial chamber after excavation (P.C.)

لوحة ٣٧. القبر سار٢، غرفة الدفن بعد التنقيب (P.C.).

Secondary reoccupation of graves was common in the prehistory of the Sultanate. As the grave contained known iron arrowheads and a balsamarium (G07.04), it is dated to the Samad Period.

The find list corresponds to that on the original drawing by M. Kuchenburg from Fig. 24.

Finds:

- 1 Ash, burnt material and small pieces of pottery
- 2 Large piece of glazed pottery

- 3 Zone formed by strewn bone fragments and a skull
- 4 Large bone fragments
- 5 Ash and burnt stones (fireplace?)
- 6 Large stone
- 7 Small bone fragments
- 8 Pottery vessel (Samad), DA 7602
- 9 Large snail, no DA no.
- 10 Fragments of badly corroded iron arrowheads, no DA no.

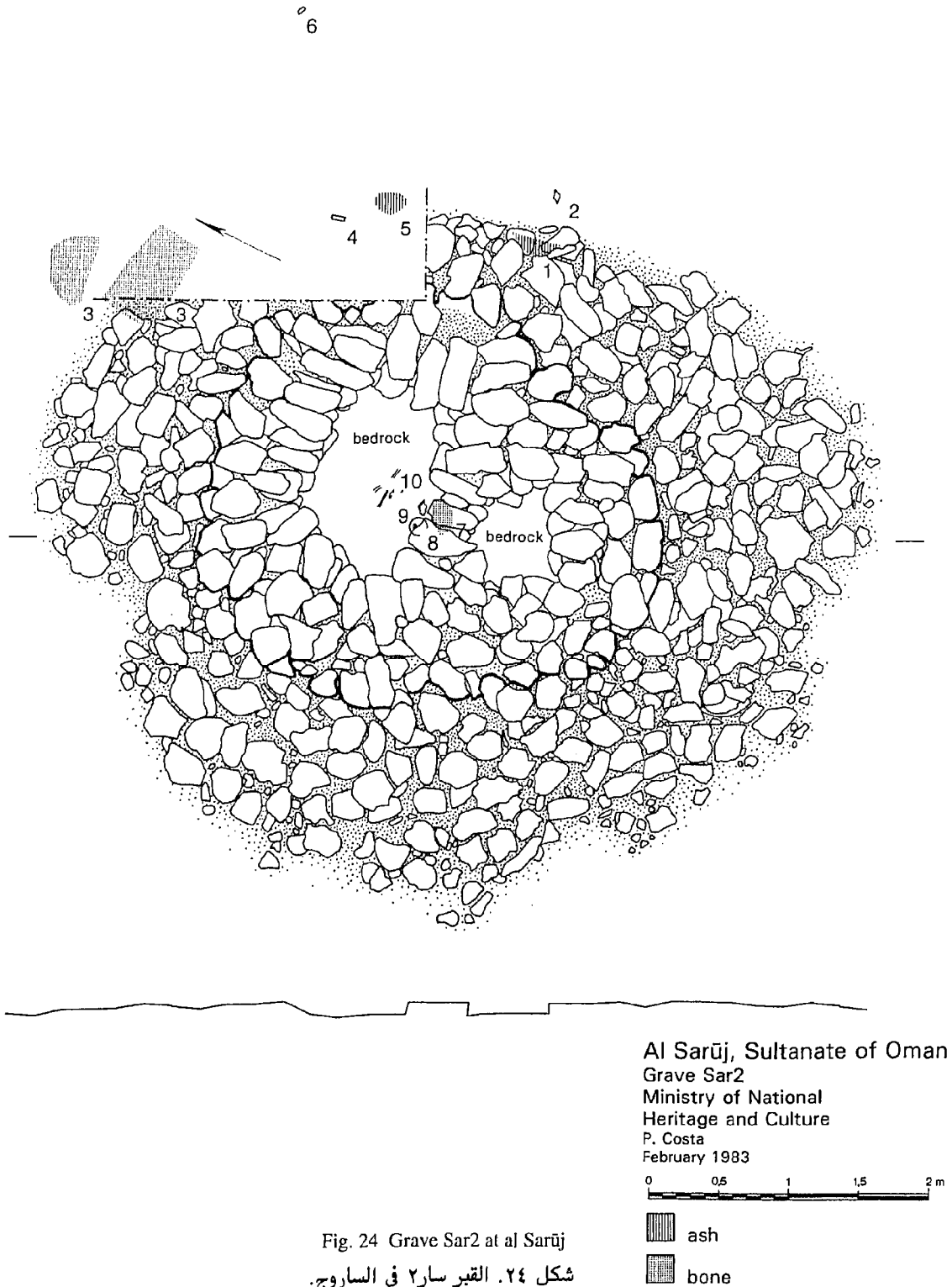


Fig. 24 Grave Sar2 at al Sarūj  
 شكل ٢٤. القبر سار٢ في الساروج.



## 11 BANDAR JIṢṢA, A LATE PRE-ISLAMIC BURIAL GROUND

In 1988 the coastal site of Bandar Jiṣṣa, 10 road kilometers south-east of Muscat, was the object of archaeological investigation within the framework of a plan to develop the area as a National Scenic Reserve and Recreation Area<sup>55</sup>. Representatives of the Department of Antiquities briefly surveyed the area first in 1988. Nestled between two enormous vaulted mountains to the north-west and the east, and bordered to the north-east by a protected natural harbor, the area is accessible by means of the tarmac road which connects the cove village of Qantab with al Bustan. At the time of writing, a 2 km long dirt track (in 1996 blacktopped, ed.) lead through the valley linking the tarmac road with the beach. 300 m from the turnoff into Bandar Jiṣṣa on the north-west side of the road at 30-35 m over sea level lies the monument, the object of the present note. The site consists of some 83 wholly or partly visible and ruined grave structures built on top of, not into the conglomerate. They are rectangular in plan and have rounded ends (Fig. 25, Pls. 38, 39).

The cemetery's irregular shape (Fig. 26a) is conditioned by the unevenness of the terrain. The main concentration of graves measures some 110 x 50 m, and a second smaller group to the north-east 70 x 30 m. In the small wādī between bulldozers have planed an area of some 20 x 40 m, where the cemetery now abruptly stops.

At first noticeable is that the graves consist of an ovoid/rectangular course of stones c. 40 cm in height. On top of these and perpendicular to the main axis, flat and long roof slabs rest. Generally, the interstices of the roof and sides are sealed with a mixture of coarse and fine gravel as well as clay. The graves stand up to 80 cm in height, and measure 3-4 x 2-3 m. This also corresponds approximately with their original size, to judge from the state of preservation and erosion. From the floor to the inside ceiling the distance averages some 20 cm - leaving little room for grave goods. In most cases the roof-stones lie exposed having been caved in by looters many years ago. Hardly any find occurred in the graves or in the immediate area. Moreover, since the graves have been open for a very long (but unknown) period, whatever they might have contained was removed. Significantly, our graves show no *ṣawahid*-stones, which in the case of Islamic graves are vertically standing stones that indicate the gender of the buried.

Dating evidence derives rather from the architecture itself than from the rare small finds. In fact, only two sherds (Fig. 26b, c) have come to light despite extensive searching. Both are handmade, hence not wheel-turned. The body sherd is of a fabric similar to that known from graves of the Samad Period at Samad al Shān: medium amount of medium-sized particles of serpentinite.

A reddish brown motive is painted on a strong reddish brown slip. The fabric also is reddish brown and the interior surface brown. The second sherd is from a pitcher, and is made of a fabric which too was characteristic of the Samad-Period<sup>56</sup>. It contains a medium amount of medium-grain sand temper, and has a reddish brown slip on the outside, while the fabric is red.

Further chronological evidence comes from the architecture. The mapping of the graves reveals a preference for a north-east / south-west orientation of the long axis, as similar to that of graves from the Samad-Period<sup>57</sup>. Deviations from the ideal orientation result mainly from the position of the grave in relation to the slope. The axis tends to run parallel to the slope. Graves at Bandar Jiṣṣa are distinguishable as such by their orientation, the proportion of length to width, size, chamber height, and the general way in which the graves are positioned. They are located on agriculturally unusable land, usually on mountain ridges. For this reason it is useful to speak of the Bandar Jiṣṣa type grave.

The graves of the Samad Period, as best known from Samad al Shān, however, generally lie below the surface. While very low mounds of the Wādī Sūq Period also occur on Maṣīrah at the site of Sachrūt al Ḥadrī, they are more circular or oval than oblong in plan. These Maṣīrah type graves date in the second millennium B.C. The grave architecture at Bandar Jiṣṣa is conditioned by the lack of soil on the bedrock.

At least eight graves similar to those at Bandar Jiṣṣa have been sighted scattered among 90 larger ones of a different type at another place located between the capital and Qurīyat called al Feg<sup>58</sup>. Al Feg lies in the Wādī Sarin 3 km west of the tarmac road to 'Arqī, across the road from Siya Sharqī, and at the west bank of the wādī. The majority of the graves at al Feg<sup>59</sup>, however, are oriented to the north - east / south - west, perhaps the *qibla*-direction. Moreover, these are larger and range up to 9 m in length. In their size, shape and orientation they distinguish themselves from those of the Bandar Jiṣṣa type. From the graves at al Feg no sherds are available. The absence of *ṣawahid*-stones is not evidence for a Pre-Islamic date because for they are of no great antiquity. When the custom of placing two such vertical stones (for males) or three (for females) on graves actually began in Oman is not known.

<sup>55</sup> World Conservation Union 1989, fig. 7; P. Costa 1989, 117 no. 46.

<sup>56</sup> P. Yule and G. Weisgerber 1988: Gr. S101124, find 4, DA 5942.

<sup>57</sup> P. Yule and P. Weisgerber 1988, plan of Samad 21 opposite page 12.

<sup>58</sup> B. de Cardi - S. Collier - D.B. Doe 1976: 151. P. Yule orally expressed information.

<sup>59</sup> B. de Cardi - S. Collier - D.B. Doe 1976, 151 fig. 27, pl. 12.

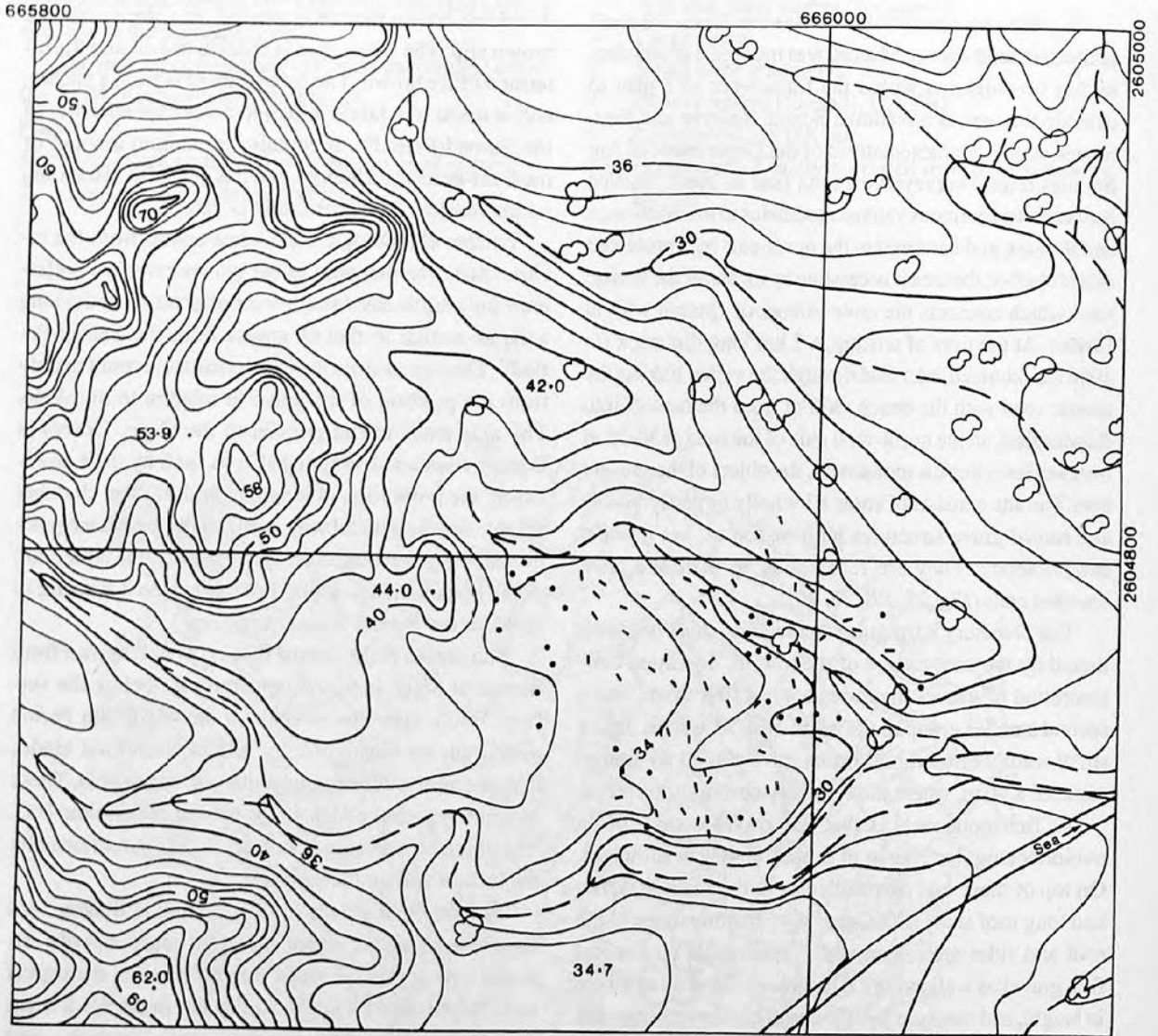


Fig. 25 Sketch plan of the Samad Period cemetery at Bandar Jiṣṣa, scale 1:1125. The horizontal dashes (-) represent clearly discernible graves and the black dots (●) partly visible ones. The topography is based on sheet 6504

شكل ٢٥. رسم تخطيطي لمقبرة بندر جصة من عصر سمذ، المقياس ١:١١٢٥. ترمز الخطوط الأفقية (-) للقبور الممكن تمييزها بوضوح والنقاط السوداء (●) لتلك الواضحة جزئياً. يستند رسم السمات السطحية إلى اللوحة ٦٥٠٤.



Pl. 38 Graves at Bandar Jişsa, 1989 (P.Y.)

لوحة ٣٨. قبور في بندر الجصة، عام ١٩٨٩ (P.Y.).



Pl. 39 Graves at Bandar Jişsa, 1989 (P.Y.)

لوحة ٣٩. قبور في بندر الجصة، عام ١٩٨٩ (P.Y.).

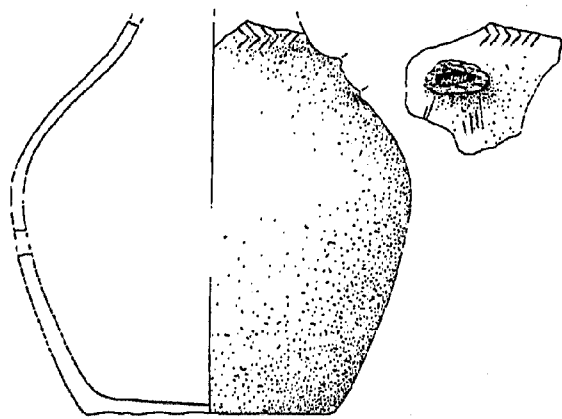
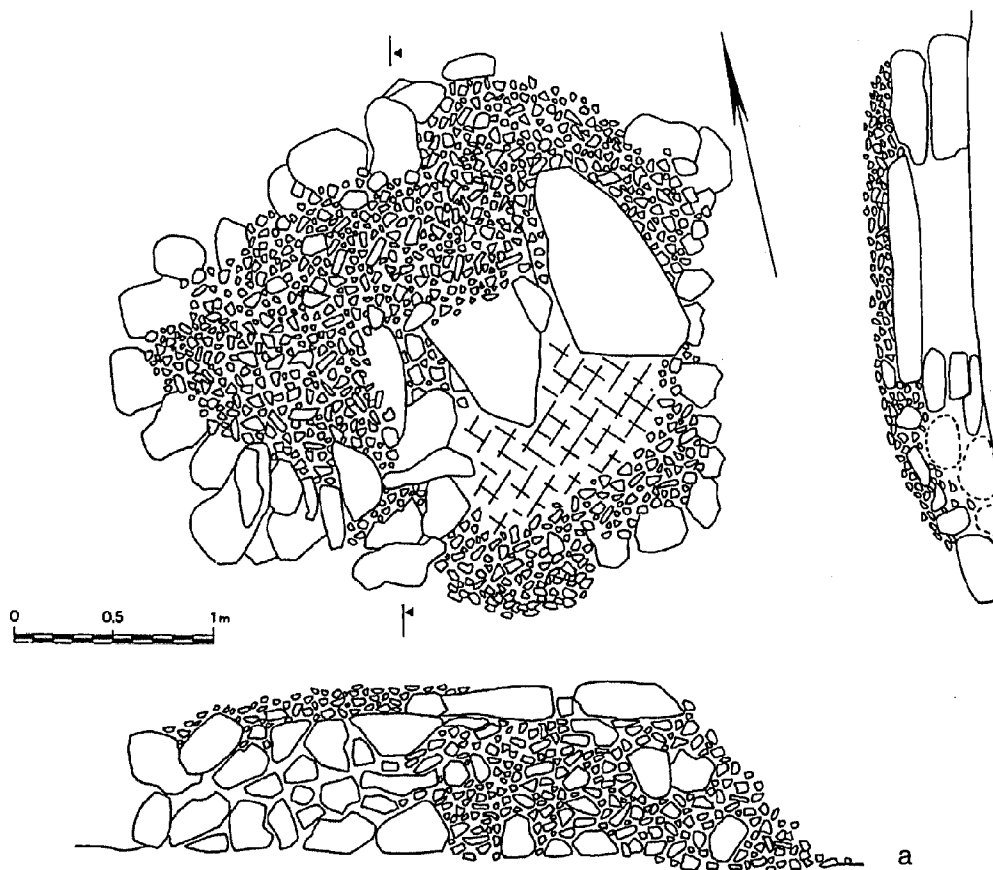


Fig. 26 a Grave at Bandar Jişsa; b, c two sherds from the cemetery surface, both rendered in scale 1:3, both DA 10715

شكل ٢٦a,b,c. قبر وكسر فخارية سطحية من بندر الجصة.

## 12 SUMMARY AND CONCLUSIONS

The funerary structures and finds at Bawshar represent chance finds. There is no reason to doubt continual prehistoric habitation at Bawshar, but it cannot be reconstructed in detail. Until recently, so-called beehive tombs were numerous on the crests of rocky outcrops at Bawshar. Their dating is based on their location on crests and peaks and their architectural features. They generally are built with an inner and outer shell wall with a rubble filling between. Such graves vary greatly in their dimensions and some even originally had the appearance of towers. Some of the tombs which are located intermingled with them, show sub-rectangular bases and when built differed in appearance from the beehives. They resemble huts made of stone. Tombs of this type are datable to the Early Iron Age. Owing to the poor preservation at Bawshar, beehives and huts are often difficult to distinguish. Umm an Nar Period tombs are known only from traces some 300 m south of Faḥ. But for the possible dating of the graves in Area 1 possibly to the Wādī Sūq Period, remains of the second millennium are also missing. Since a reliable source of water occurs at Bawshar, there is no reason to doubt a continuous habitation to the present day.

Graves containing finds from contexts dating to the Early Iron Age occur in the „honeycomb cemetery“.

Some also contain finds datable specifically to the Rumaylah 2 Phase, not to mention those vessels fashioned of balsamarium ware known from the Samad Period. The stone vessels with their sketchily rendered decoration which is typical of the Rumaylah 2 Phase are predominant. Between the EIA pottery, the stone vessels and the Samad Period vessels, the general impression is that the cemetery post-dates 600 B.C. and a few graves perhaps date as late as the time of Christ.

There are hardly any finds or graves from the Samad Period known at Bawshar. Other burial remains give the impression of a heterogeneous population with different burial customs. For example, the non-Samad Late Iron Age Gr. B11b contains iron weapons other than those of the Samad Culture. Moreover, the individual lies supinely in the grave, which is foreign to the Samad Culture. Surprising is also the absence of animal bones in the burials.

Despite the chance nature of the finds, Bawshar is a key Iron Age site in Eastern Central Oman. First results of study on the contemporary pottery from the Interior points to general similarities but no direct correspondences in terms of decoration and fabric.

Nothing has been preserved at Bawshar which dates to the medieval period, and it is first in the 18th century that our sources begin anew.

### أبحاث أثرية في منطقة مسقط

العسل“، وقد كان للأواني الحجرية أهمية خاصة بعملية تأريخها. أدى تنقيب الفعلي والكامل للمنشآت إلى كسب المعرفة حولها على أفضل وجه. كان من الصعب تأريخ الفخار ضمن العصر الحديدي المبكر، حيث صُنِعَ بعضه الذي عُثِرَ عليه في زاوية معينة من المقبرة من نمط خلطة ترافق فترة سمد (٣٠٠٠ ق.م. - ٩٠٠ م.)، هذه الحقبة ال تي يبرهن عليها في بوشر كما هو حال فترة أم النار (٢٥٠٠ - ٢٠٠٠ ق.م.). لقد دُمر العديد من مباني فترة ما قبل الإسلام إبان عملية إنشاء الطرق، في حين استُخدم بعضها الواقع غربي فتح خلال السنوات القليلة الماضية كغرف للسكنى. يروم من المباني في بوشر إلا بيت المقام. ويعتبر كل من بيت والي بوشر في قرية فلج وقلعة فتح مبان أخرى على قدر من الأهمية.

قام قسم الآثار بعمليات مسح وتنقيب للصرح الأثرية، خاصةً حول واحة بوشر، منذ عام ١٩٧٨ وحتى عام ١٩٨٢، حيث بقيت لنا أجزاء رئيسية من التراث الأثري والعماري للسلطنة ضمن منطقة العاصمة. ويمكن حصر البقايا الأثرية العائدة لفترة ما قبل الإسلام بخمس مناطق واقعة خارج ضواحي القرية. بصرف النظر عن العديد من الآثار التاريخية المهمة، فإن البقايا الأثرية الرئيسية هي قبور من فترة حفيت (٣٠٠٠ - ٢٥٠٠ ق.م.) ومن العصر الحديدي المبكر لحضارة ليزق/رميلة (١٢٠٠ - ٣٠٠٠ ق.م.). وبالرغم من تعرض هذه القبور لعمليات النهب، فإنها مازالت تحوي العديد من محتويات القبور. تنطبق هذه الحالة خاصة على أكثر مباني عصر ما قبل التاريخ أهمية في الموقع، وهي ما يسمى ”بمقابر قرص

## 13 BIBLIOGRAPHY

- Boucharlat, R. and Lombard, P. 1991**  
Datations Absolues de Rumeilah et Chronologic de l'Age du Fer dans la Péninsule d'Oman, in: K. Schippmann et al. (eds.) 1991, 301-314
- Calmeyer, P. 1969**  
Datierbare Bronzen aus Luristan und Kermanshah, *Untersuchungen zur Assyrischen und Vorderasiatischen Archäologie NF5* (Berlin)
- Cardi, de B. - Collier, S. - Doe, D.B. 1976**  
Excavations and Survey in Oman, *Journal of Oman Studies* 2, 101-187
- Cleuziou, S. 1989**  
Excavations at Hili 8: A Preliminary Report on the 4th to 7th Campaigns, *Archaeology in the United Arab Emirates* 5, 61-87
- Costa, P. 1985a**  
The Batinah and its Built Environment, *Journal of Oman Studies* 8, 109-116
- Costa, P. 1985b**  
The Palm-Frond House of the Batinah, *Journal of Oman Studies* 8, 117-120
- Costa, P. 1985c**  
The Sur of the Batinah, *Journal of Oman Studies* 8, 121-193
- Costa, P. 1985d**  
Na'man: a Seventeenth Century Mansion of the Coast of Oman, *Journal of Oman Studies* 8, 195-210
- Costa, P. 1989**  
Historical Interpretation of the Territory of Muscat, in: P.M. Costa and M. Tosi (eds.), 97-117
- Costa, P.M. and Tosi, M. (eds.) 1989**  
*Oman Studies* (Rome)
- Disi, A.M. - Henke, W. - Wahl, J. 1982**  
Tell el-Mazar. Study of the Human Skeletal Remains, Publication of the Department of Archaeology of the University of Jordan in Amman (Amman)
- Donaldson, P. 1984**  
Prehistoric Tombs of Ras al-Khaimah, *Oriens Antiquus* 23/3-4, 191-312
- Frifelt, K. 1970**  
Jamdat Nasr Fund fra Oman, *Kuml*, 355-383
- Glover, E. 1991**  
The Molluscan Fauna from Shimal, Ras al-Khaimah, United Arab Emirates, in: K. Schippmann et al. (eds.) 1991, 205-220
- Jones, G.C. 1989**  
*Traditional Spinning and Weaving in the Sultanate of Oman* (Ruwi)
- Kroll, S. 1981**  
Die Bergfestung Lizq-1, in: G. Weisgerber et al. 1981, 226-231
- Kroll, S. 1991**  
Zu den Beziehungen zwischen eisenzeitlicher bemalter Keramikkomplexe in Oman und Iran, in: K. Schippmann et al. (eds.) 1991, 315-320
- Kunter, M. 1970**  
Die Schädelreparation in vor- und frühgeschichtlicher Zeit und bei außereuropäischen Völkern, *Berichte der oberhessischen Gesellschaft für Natur und Heilkunde* Gießen. N.F., Naturwissenschaftliche Abteilung, 37, 149-159
- Kunter, M. 1981**  
Bronze- und eisenzeitliche Skelettfunde aus Oman: Bemerkungen zur Bevölkerungsgeschichte Ostarabiens, *Homo* 32, 197-210
- Lisowski, F.P. 1967**  
Prehistoric and Early Historic Trepanation, in: D. Brothwell and A.T. Sandison (eds.): *Diseases in Antiquity* (Springfield, Ill.) 651-672
- Magee, P. 1996**  
The Chronology of the Southeast Arabian Iron Age, *Arabian Archaeology and Epigraphy* 7, 240-252
- Miki, Z. 1980**  
Ilirska Praistorijska Lobanja iz Krive Retze u Srbiji - Trepanacijski i patoloski tragori, *Glasnik* 17, 163-170
- Nicolle, D. 1991**  
Byzantine and Islamic Arms and Armour; Evidence for Mutual Influence, *Graeco-Arabica* 4, 299-325
- Phillips, C.S. 1982**  
Wadi Bawshar: Summary of Survey and Excavation 1981/82, unpublished report in the Department of Antiquities, Muscat, 10 typed pages
- Phillips, C.S. 1987**  
*Wadi al Qawr, Fashgha 1. The Excavation of a Prehistoric Burial Structure in Ras al Khaimah, U.A.E., 1986* (Edinburgh)
- Schippmann, K. - Herling, A. - Salles, J.-F. (eds.) 1991**  
Golf - Archäologie Mesopotamien, Iran, Kuwait, Bahrain, Vereinigte Arabische Emirate und Oman, *Internationale Archäologie* 6 (Buch am Erlbach)
- Tillmann, A. and Kroll, S. 1981**  
in: G. Weisgerber et al. 1981, 223
- Weisgerber, G. et al. 1981**  
Mehr als Kupfer in Oman, *Der Anschnitt* 33, 174-263
- World Conservation Union 1989**  
*Oman Coastal Zone Management Plan Ra's Suwadi to Ra's al-Hadd*, vol. 2 (Muscat)
- Yule, P. 1994**  
Grabarchitektur der Eisenzeit im Sultanat Oman, *Baghdader Mitteilungen* 25, 519-577
- Yule, P. (in press)**  
*Die Gräberfelder in Samad al Shān, Sultanat Oman, Materialien zu einer Kulturgeschichte*
- Yule, P. and Kervran, M. 1993**  
Iron Age Pottery from Şuhār and Khor Rori, *Arabian Archaeology and Epigraphy* 4, 131-168
- Yule, P. and Weisgerber, G. 1988**  
*Samad ash Shān Excavation of the Pre-Islamic Cemeteries Preliminary Report 1988* (Bochum)
- Yule, P. and Weisgerber, G. (in press)**  
The Metal Hoard from 'Ibrī/Selme, Sultanate of Oman, *Prähistorische Bronzefunde* XX,9 (Wiesbaden)



# A Prehistoric Grave Inventory from Aztaḥ, Zufār<sup>1</sup>

P. Yule

## The Find Circumstances

During his work at al Balid in 1983, Paolo M. Costa received word of archaeological finds that had come to light during landscaping activities preparatory to the building of a military compound some 22 air kilometres north of Ṣalālah (Pls. 1, 2). He visited the site and secured the antiquities for the Department of Antiquities (DA) where they were inventoried in 1983. Gerd Weisgerber drew the beads there. The metal finds later underwent restoration in Bochum in the German Mining Museum and were drawn. In March of 1987 G. Weisgerber and 'Ali b. Ahmad b. Bakhit al Shanfari briefly visited the findspot. But it was neither possible to make photos, nor to obtain detailed provenance information from the finders at the time, aside from the matter that the finds were said to derive from a single grave. Years later, they were re-examined, drafted in ink, and catalogued<sup>2</sup>. Questions pertaining to the date of the artefacts remained indeed just as unanswered as ones relating to whether or not they were grave offerings, or whether or not the inventory was complete.

It was only on the 20.10.1996 that it was possible to revisit the site (N 17° 16' 42.4"; E 54° 12' 22.0", 850 m h.)<sup>3</sup> and to verify the find circumstances. The site is located in the hill country below the Rub' al Khālī, just north of the tarmac road. 'Ali b. Aḥmed b. Maḥāsh al Shaḥerī accompanied the author to the office of the local wālī and then to the site. The name of the site, Aztaḥ, is a Shaḥerī word meaning „belonging to a plantation“ (plantation: *sethut*). Located in the present *niaba Zeak*, the site was initially noted as Bait Kshob, in fact the name of the local tribe. One of the finders, Masa'ūd b. Suhail b. Muḥammad Kshob, was present during our visit. Inside the compound he unhesitatingly showed us the findspot which is not marked in any way, and explained the find circumstances. While moving some large stones, a bulldozer uncovered the finds. Then the stones were pushed toward the back of the compound. Without any prompting, Masa'ūd b. Suhail recounted the finds, three metal points, beads, and long finger-like white stones transversely perforated at both ends. This jibes almost exactly with the finds now stored at the Ministry, and published here<sup>4</sup>. In addition to teeth, there were a radius, an ulna, metacarpals, and several skull fragments from the forehead, of which all were reportedly in poor condition. They disintegrated upon being touched.

Masa'ūd b. Suhail recalled that a plait of human hair had also been among the finds<sup>5</sup>.

Casting about the immediate vicinity, our informant showed us a further low stone cairn some 30 m east of the enclosure wall similar to the one destroyed in 1983. It was a simple ring-like low concentration of stones measuring some 2 m in diameter and 20 cm in height. Numerous other mounds in the immediate vicinity otherwise were explained as the remains of former trees, which because of termites had disintegrated into heaps of approximately 2 m width. Termites had indeed plagued the entire region only some years ago.

## Dating

The dating of the burial is based on that of the finds. A bronze spear head or dagger with a perforated tang has proven to be of benefit (cat. 15). Related to it in its general proportions and shape is a weapon from grave As, alignment A4, in 'Aṣimah, UAE<sup>6</sup>. Architecture, pottery, and lance heads date the context to the Umm an Nar Period<sup>7</sup>. The shapes and materials of a number of long beads (cat. 9-12) bring to mind the carnelian and shell specimens imported from western India to Sumer in the third and early second millennia B.C.<sup>8</sup>. Those from India however, are perforated along the long axis, as opposed to the ones presented here (Figs. 1-12). Nonetheless, the beads would support an early dating of the assemblage. The long beads consist of a whitish soft

<sup>1</sup> I thank Gerd Weisgerber, who suggested that I write up this note. Michael Prange, Deutsches Bergbau-Museum, Institut für Archäometallurgie, contributed the chemical analyses. 'Ali b. Aḥmed b. Maḥāsh al Shaḥerī was of enormous help in finding the site and in translating.

<sup>2</sup> They are listed in the inventory book of the Department of Antiquities as deriving from „Bait Kshob“.

<sup>3</sup> Read from a Geographical Positioning System decoder, map sheet NE 40-9D. The fort is not indicated on this map.

<sup>4</sup> A few small fragments are not catalogued.

<sup>5</sup> This observation was accompanied by the explanation that until some 50 years ago both local men and women wore these. This means that the plait was probably secondarily placed next to the burial, and thus is irrelevant for its dating.

<sup>6</sup> B. Vogt 1994, 128 fig. 57.1; 129.

<sup>7</sup> P. Yule in press.

<sup>8</sup> J. Marshall 1931, 1 520, pl. CLI, 10; readily available source: H.J. Nissen 1987, 44, cat. no. C33. Beads from Warka: K. Limper 1988, pl. 8.74b, 75; 10.91; 11.92; 12.95f; 13.96b (Jemdet Naṣr); 19.123 (Early Dynastic).



Pl. 1 The fort at Aztah (P.Y.).

لوحة ١. حصن أزتج.



Pl. 2 Mound outside the fort (P.Y.).

لوحة ٢. رابية خارج الحصن.

stone. In terms of shape and size, the closest parallel is a surface find from layered serpentine recovered at Bandar Khairan (Fig. 18), several kilometres south-east of the capital<sup>9</sup>. The shape of the axe butt (Fig. 17) gives weak evidence for a high dating<sup>10</sup>.

The spear head (Fig. 15) and the dagger (Fig. 16) are made of tin-bronze and the butt end of a palstave (Fig. 17) of copper<sup>11</sup>. This incongruity means that the pieces need not have an ultimate common origin. On the other hand, one does not expect weapons of tin-bronze or copper (see below) to appear in a grave from the Early Medieval or later periods, but rather ones of iron or steel. The date of the introduction of bronze to this region is still unknown. Tin-bronze has been reported in Umm an Nar period contexts in the United Arab Emirates<sup>12</sup>. In the Sultanate it is first attested later, during the Wādī Sūq<sup>13</sup> and late Wādī Sūq Period, as for instance some of the weapons from the collective grave al Wāsiṭ W1<sup>14</sup>.

The presence of weapons in the grave suggests the buried person was a man. The date of the damage to the dagger (Fig. 16) is not known. Despite the problematic

nature of the provenance but owing to the dating, this non-Islamic grave inventory is published as it is known, in the hope of stimulating future research.

<sup>9</sup> Bandar Khairan: N 23° 30'; E 58° 44', map sheet NF40-04. Regarding their survey, P. Biagi and R. Maggi 1990, 543. The bead has no DA no.

<sup>10</sup> Cf. find-class A01 and/or A02 both date to the Umm an Nar Period. P. Yule in press.

<sup>11</sup> A ±2 % error in the analyses cited is that read unchanged from the inductive coupled plasma optical emission spectrometer. Therefore the sums of the three analyses do not add up to 100 %.

<sup>12</sup> L.R. Weeks 1997, 20, 31 table 2; 32 table 3.

<sup>13</sup> Samad al Shān, grave S1080, DA 5018. A. Hauptmann 1987, 216 table 3. 8% Sn.

<sup>14</sup> A. Hauptmann 1987, 211 Tab. 1; 213 Tab. 2; 214 fig. 7. These analyses are of artefacts of the Umm an Nar and Wādī Sūq Periods. Clear tin bronzes are present in the Early Iron Age finds of the Selme hoard (ibid. 216 Tab. 3). Regarding the tin content of the finds from metal weapons from al Wāsiṭ: orally expressed information from M. Prange, German Mining Museum, Bochum. Tell Abrāq: L.R. Weeks 1997, 35 table 4 and 5 for the periods Wadi Suq II and III (=1900-1600 and 1600-1400 B.C.).

## Catalogue

object	artefact		x	length (cm)	breadth	h/th	weight (g)
	class	DA					
1 bead, soft stone	Pe	7643	0	2.48	1.3	1.3	-
2 bead, soft stone	Pe	7644	0	-	0.5	0.2	-
3 bead, soft stone	Pe	7645	0	-	0.8	0.2	-
4 bead, agate	Pe	7646	0	-	0.9	0.5	-
5 bead, soft stone	Pe	7647	0	-	0.5	0.25	-
6 bead, shell	Pe	7648	1	-	1.3	0.2	-
7 bead, shell	Pe	7648	2	-	1.3	0.2	-
8 bead, carnelian	Pe	7649	0	1.0p <sup>15</sup>	0.7	0.7	-
9 bead, soft stone	Pe	7654	0	11.0	1.2	1.2	25
10 bead, soft stone	Pe	7655	0	9.0p	1.1	1.2	20
11 bead, soft stone	Pe	7657	2	6.7p	1.6	1.4	20
12 bead, soft stone	Pe	7657	1	10.5p	1.6	1.5	50
13 pendant, oval shape	Pe	7650	0	2.5	1.4	0.7	-
14 pendant, soft stone	Pe	7651	0	2.9	1.1	0.2	-
15 spear point?, bronze	D	7652	0	19.1	4.5	0.5	120
16 dagger, bronze?	D	7653	0	27.5p	4.43	0.62	195
17 dagger tang, bronze	D	7658	0	-	-	-	-
18 metal point, bronze?	U08	7660	0	2.0p	0.3	-	-
19 axe, fragment, copper	A	7659	0	2.7p	3.2	0.5	30
20 fragment	U08	7656	0	-	-	-	-

<sup>15</sup> „p“ means preserved dimension of a damaged object.

## AAS Analyses

	spear DA 7652 Fig 15	dagger DA 7658 Fig 16	axe frag. DA 7659 Fig 17
Cu	91.0	89.7	95.0
Sn	9.4	8.2	0.012
Fe	0.19	0.085	0.60
Pb	0.04	2.3	0.007
Zn	<0.0001	<0.0001	0.034
Co	0.002	<0.0004	0.01
Ni	0.039	0.021	0.035
Sb	0.022	0.009	0.022
As	0.26	0.14	0.62
Bi	0.006	0.007	0.004
Se	0.014	0.022	0.003
Te	0.014	0.012	0.021
Ag	0.004	0.012	0.005
Sum	101.0	100.5	96.4

## Bibliography

- Biagi, P. and Maggi, R. 1990**  
Archaeological Surveys along the Oman Coast: Preliminary Results of Five Years of Research (1983-1987), in: *South Asian Archaeology 1987* (Rome) 543-553
- Hauptmann, A. 1987**  
Kupfer und Bronze der südöstlichen Halbinsel, *Der Anschnitt* 39, 209-218
- Limpert, K. 1988**  
*Uruk: Perlen, Ketten, Anhänger, Grabungen 1912-1985* (Mainz)

**Marshall, J. 1931**

*Mohenjo-Daro and the Indus Civilization* (London) 3 vols.

**Nissen, H.-J. 1987**

Frühe Hochkulturen im Nahen und Mittleren Osten, in: *Vergessene Städte am Indus* Exhibition Catalogue Aachen (Mainz)

**Weeks, L.R. 1997**

Prehistoric Metallurgy at Tell Abraq, U.A.E., *Arabian Archaeology and Epigraphy* 8, 11-85

**Yule, P. (in press)**

Die Gräberfelder in Samad al Shān, Sultanat Oman, Materialien zu einer Kulturgeschichte

## Abstract

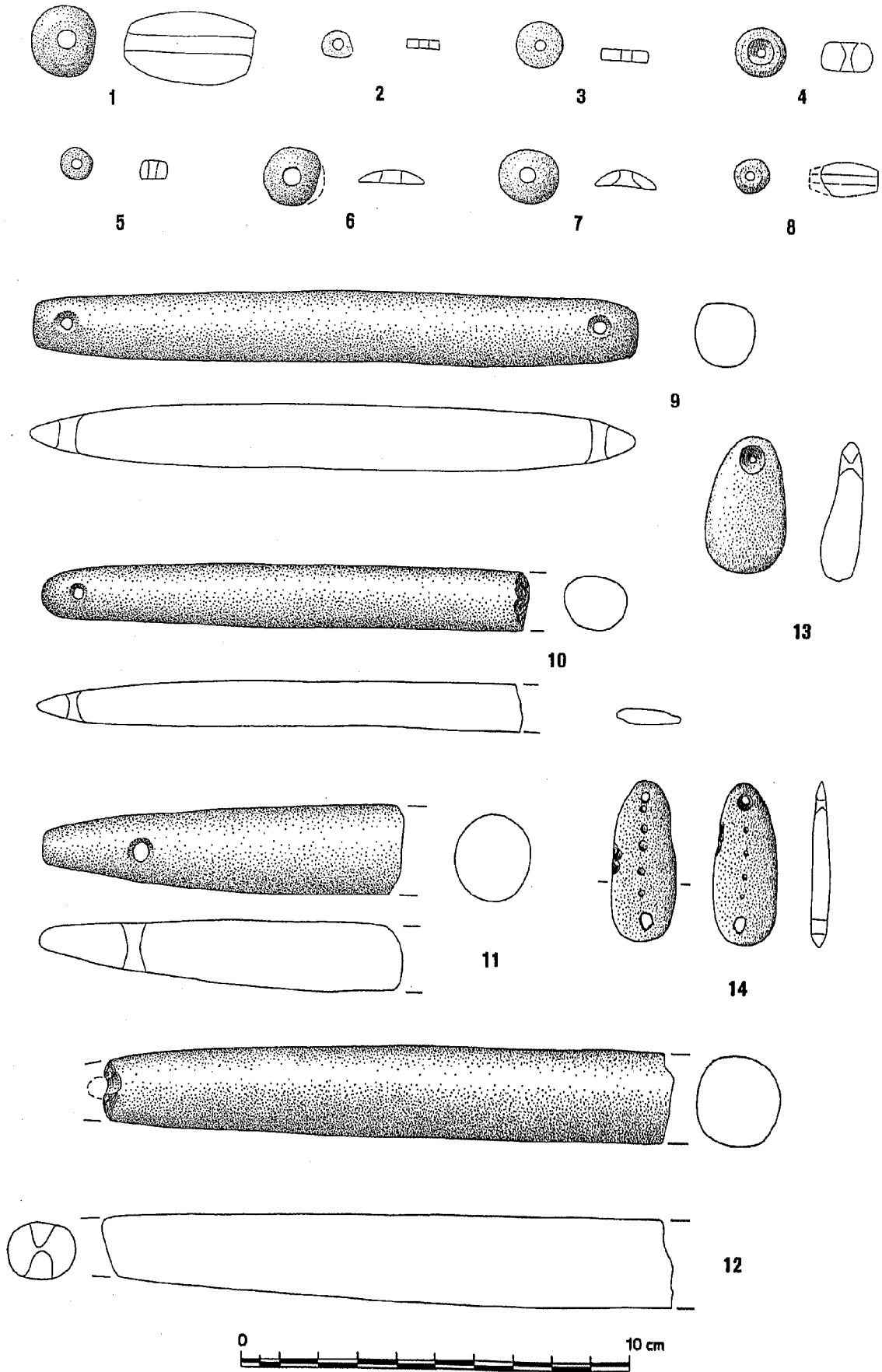
In 1983 some 22 air kilometers north of Şalālah the contents of a Pre-Islamic grave came to light while a fort was being built. The artefacts were brought to the Ministry of National Heritage and Culture. It was not clear whether the finds were in fact grave goods, to which period they belonged, or whether the inventory was complete. First on 20.10.1996 it was possible to revisit the site and confirm the find situation. An eye witness confirmed that the finds had derived from a grave. They include large, elongated stone beads, a spear head, the butt of a flat axe, and a dagger. The grave is not the only one alone to exist in this area. The closest parallel finds date to the mid third millennium B.C. Two artefacts are made of bronze and a third of copper. One cannot plausibly doubt the provenance of the pieces, though they need not have had a common origin in antiquity. This discovery is of some importance as the third millennium is otherwise unknown in this part of the Sultanate.

## محتويات قبر يعود لعصر ما قبل التاريخ من أرتح (ظفار)

فأس مسطحة وخنجر، هو القبر. هذا القبر الذي يكن وحيداً في المنطقة. إن أفضل ما يمكن مقارنته من اللقى المشابهة يؤرخ في منتصف الألف الثالث ق.م، إثنان من تلك الأدوات مصنوعتان من البرونز وثالثة من النحاس. ليس باستطاعة المرء أن يشكك ظاهرياً بمصدر القطع الأثرية، على الرغم من أنه ليس من الضروري أن تكون جميعها من أصل مشترك في القدم. يمكن القول أن هذا الاكتشاف ذو أهمية بارزة في كون فترة الألف الثالث ق.م غير معروفة في هذا الجزء من السلطنة.

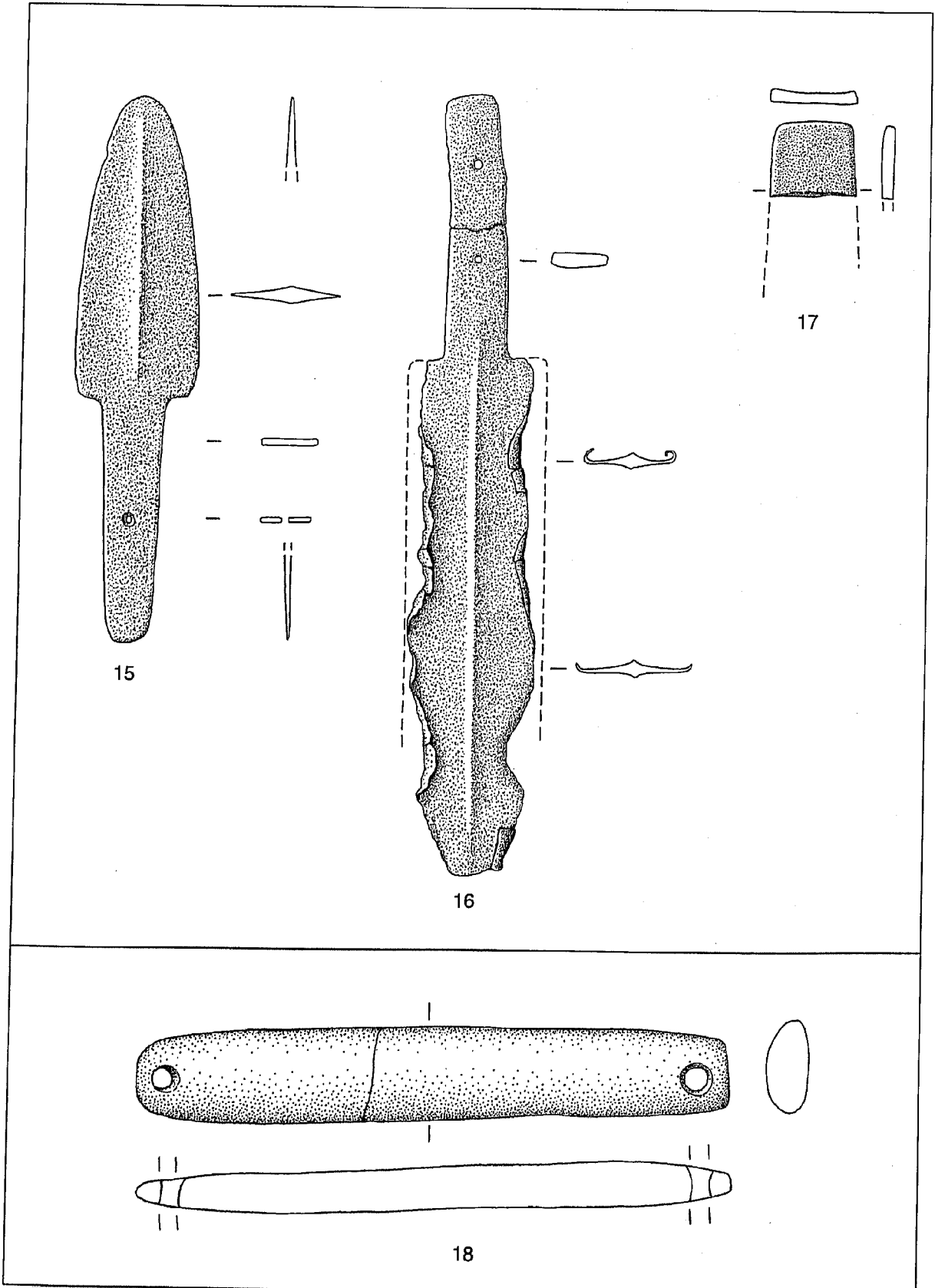
اكتشاف محتويات قبر يعود تاريخه إلى ما قبل الإسلام أثناء عملية تشييد حصن في منطقة تقع حوالي ٢٢ كم جوي شمالي صلالة في عام ١٩٨٣. يكن من الواضح، حين إحصار تلك الأدوات إلى وزارة الثقافة والتراث الوطني، فيما إذا كانت هذه الآثار بالفعل محتويات قبر وإلى أي فترة زمنية تعود أو إذا كانت هذه المحتويات المكتشفة كاملة. و تمكن زيارة الموقع من جديد والتأكد من وضع اللقى إلا في ٢٠/١٠/١٩٩٦. وقد استطاع شاهد عيان التأكيد بأن مصدر اللقى، المتكونة من خرزات طولية حجرية كبيرة، رأس رمح، الطرف الغليظ من

ب.يول، غ. فايسغريبر



Figs. 1-14 Beads and pendants

شکل ۱-۱۴. خرز و قلایند.



Figs. 15, 16, 17 Spear head, dagger, and axe fragment; 18 bead from Bandar Khairan  
 شكل ١٥. رأس حربة؛ شكل ١٦. خنجر؛ شكل ١٧. كسرة فأس؛ شكل ١٨. خرزة من بندر خيران.



# Preliminary Report of the 1996 Season of Excavation in the Sultanate of Oman<sup>1</sup>

P. Yule – G. Weisgerber

## Summary

Since the late 1970's the German Archaeological Mission has been active in fieldwork in the ancient land of Magan/Makkan. In 1987 emphasis was laid on the Samad Culture of Central Oman (post 300 B.C.-900 A.D.). In the framework of a project labelled „A Structuring of the Iron Age in Eastern Arabia“, archaeological fieldwork began in 1996 in Central Oman and in a little-researched, northern part of the Sultanate, where the main aim was to locate an equivalent to the Samad Culture. Building on this prerequisite, a second objective was set to shed light on the transition from the Early to the Late Iron Age. It was hoped that the reverse of the strategy originally used in Oman would be useful in this respect. Previous archaeological research in this region concentrated on dating developments in metallurgical technology. We hoped that alterations in the method of producing copper could be used in tracing the general chronology. If until 1992 work centred on grave inventories and cemetery analysis, the new excavations at Rākt in Northern Oman and al Maysar in Central Oman placed the accent this year on settlement chronology.

## Goals and Objectives

The current project of the German Archaeological Oman Expedition, „A Structuring of the Iron Age in Eastern Arabia“, developed out of a previous interest for the Iron Age and more particularly, the LIA in the Sultanate<sup>2</sup>. Such excavations took place mostly in the late 1980's and early 1990's at Samad al Shān in the Eastern Central Province, the Sharqīyah. The overall goal of the current project is to refine the relative and absolute chronology of the Iron Age with the help of settlement contexts which we consider to have existed over a limited time span. More particularly, four problem areas for our project were determined:

First, the Sultanate, as large as the old Federal Republic of Germany, encompasses some 250.000 km<sup>2</sup>. The majority of the research has taken place in Central Oman. To the north, excavation has centred on the Hafit<sup>3</sup>, Umm an Nar<sup>4</sup>, and Wādī Sūq Periods<sup>5</sup>. Information on the Lizq/Rumaylah Period (Early Iron Age = EIA)<sup>6</sup> derives from these two eponymous sites, on the one hand in Central

Oman, and the other in the United Arab Emirates. Both were investigated in the early 1980s<sup>7</sup>. In Central Oman most of the evidence for dating the Iron Age reveals itself from a time between 0 and 900 A.D., being its later part following the onset of the Samad Culture<sup>8</sup>. With the exception of Šūhār, in the north next to nothing is known

<sup>1</sup> Our 15th season was made possible by a grant from the Fritz Thyssen Foundation granted to Paul Yule. Suggestions and corrections in the text were contributed by B. Salje, B. Vogt, P. Larsen, and K. Sachsenberg. The team consisted of three groups. Members of the first team (P. Yule, P. Eckerle, C. Falb, K.-J. Rommel, J. Schreiber) arrived on the 6th and 13th of February. The team was in the field 44 days from 17 February to 31 March. A. Morwood, an expatriate resident, joined the staff of our excavation at al Maysar. A second team consisting of G. and A. Weisgerber, J. Cierny, T. Klaus, A. Maas, and O. Sprave carried out investigations in Rākt 2 from 28 February to 22 March. On the 3rd of March a third group consisting of F. Begemann, A. Hauptmann, M. Prange, and S. Schmitt Strecker conducted a brief sampling campaign on pre-Islamic copper metallurgy. The projects of the teams ended respectively on April 8th, March 30th, and March 10th. While in the capital area, we used the Ministry flat in al Ghubrah as our base. We rented a house in Sulaif and another in al Ma'mūrah/Samad al Shān. At the end of the excavation season the first team studied finds in the department for 8 further days. We were pleased to welcome M. Ibrahim (al Khod), C. Rösch (Würzburg), a group of visitors from the Oman Historical Association, and Dr. A. al Shanfari, Director General of Archaeology, who visited the site.

<sup>2</sup> The discovery and definition of Central Oman's Late Iron Age: G. Weisgerber 1981, 174-263; idem 1982, 81-93; P. Yule and B. Kazenwadel 1993, 251-277; P. Yule 1994, 527 Fig. 4 below, 528-544; idem in press.

<sup>3</sup> P. Gentelle and K. Frifelt 1989, 119-126.

<sup>4</sup> B. de Cardi – S. Collier – D.B. Doe 1976, 101-187; K. Frifelt 1975, 329-423.

<sup>5</sup> A.A.B. al Shanfari and G. Weisgerber 1989, 17-30.

<sup>6</sup> This term indicates the wide distribution of this assemblage over North-west, Central and less so South Oman.

<sup>7</sup> R. Boueharlat and P. Lombard 1985, 44-73; S. Kroll 1981, 226-231. Kroll's new text has been prepared for publication.

<sup>8</sup> Potentially problematic is the question whether it is appropriate to speak of a prehistoric LIA in Central and South Oman. First Šūhār had a partly literate Christian population. While Islam existed in Šūhār and perhaps Samā'il the question remains whether literacy had any real currency. With the spread of Islam in the 9th and 10th centuries in Oman, and with the availability of the Qur'ān one can speak at least of a literate minority. The earliest available texts are *fiqh* texts of about this time. Therefore much of Oman was prehistoric for example the way Scandinavia was until the beginning of the Viking Period. The terms „Hellenistic/Parthian“, useful in the north-west, are ill-suited for Central Oman which needs to be discussed in its own terms. In short, there is no Mediterranean and little visible Persian influence in the archaeological record of Central Oman at this time.

from the terminal Wādī Sūq until Islam<sup>9</sup>. Regional and chronological differences which must be sorted out, are manifest in the Lizq/Rumaylah pottery.

Second, the semi-historical national epoch, the *Kashf al Ghumma*, recounts the emigration of tribes from the Yemen to Central Oman. Without clarifying the chronology of the archaeological periods in the Sultanate, there is no way to correlate them archaeologically with the arrival of the tribes: Are the migrating tribesmen the population of the Samad Culture, and does their arrival coincide with its onset? To date, no plausible explanation has been presented neither for the demise of the Lizq/Rumaylah Culture after 300 B.C., the rise of the Samad Culture, nor for the transition between them. It therefore is now especially fitting to study this problem with a new stratified ceramic material.

Third, only since sufficient radiocarbon determinations became available in 1993, has the chronology of the Samad Culture become known. But its beginning is neither secured in terms of antiquarian parallels nor radiocarbon dates. One solution to this problem is to confirm its onset by means of an investigation of a settlement, as an alternative to the present chronology which is based on grave architecture and grave inventories.

Fourth, the Samad Culture and its distinctive pottery are concentrated in the northern part of the Sharqiyah and in Dakhliyah, particularly near Nizwá. Until recently, the distribution seemed to end to the south with the Wahiba sands, although a few years ago such pottery was excavated at Ra's al Hadd and al Wāfi<sup>10</sup>. Since there is no desert barrier to the north of Central Oman, the border here is not defined geographically, but rather in terms of datable sites and finds. The distribution of the recently published finds and sites in the present-day United Arab Emirates (North-west Oman) into the northern part of the Sultanate requires clarification. A key problem centres on the nature of the Iron Age in the northern part of the Sultanate because the few excavations are located in adjacent areas, and are little published.

The question remains open as to the nature of the culture in the northern part of the Sultanate coeval with the Samad Culture/Period of Central Oman. We also sought to shed light on the technique of copper production during Oman's Iron Age. Over the years work on this topic illuminated the metal production of the Early Bronze Age, the Early Iron Age, and the Medieval Period (8th-10th century A.D.), but that of the LIA remains undefined. Indications exist that the size of the slag cakes increased, and that there must have been some accompanying development in the metallurgy.

Cultural resource management of archaeological monuments plays a key role in the selection of the sites which we excavate. The authors have pointed out sev-

eral times that nowadays in the Sultanate even remote places are subject to stone robbing and destruction due to building activities. Many of the places investigated by our Mission in former years subsequently have been damaged, or now exist only in our photographs. The sites selected for investigation recently were damaged, face gradual and/or imminent destruction, and cannot be protected. In a few years time the archaeological sources will thin out, will yield fewer results, and for this reason will become more expensive. But one of the advantages of the northern region in our work, is that it is not as densely settled as Central Oman. For this reason archaeological sites there have a better chance for survival.

### Al Maysar

Excavation began again this year on two sites close to one another, both 1 km north of the village al Maysar (*Fig. 1*). The village has doubled its area in the past 10 years and has extended over the southernmost part of the settlement M43. As a result of the rebuilding of the *falaj* to al Maysar in 1992, more than a dozen of the grave mounds just west of M43 hill 01 (*Fig. 2*) were bulldozed, but surprisingly most of the known settlement mounds still remained intact. M43 consists of some 44 mounds. In the next 10 years the present-day village will have covered the entire ancient settlement.

Both M42 and M43 lie alongside the *falaj* which today supplies the village of al Maysar. The *falaj* originated to supply the Early Iron Age settlement M42. During this period the water table fell, the floor of the *falaj* was deepened and its end exited a few hundred metres to the south and deeper than M42 at the site of M43. A cross section drawing made above the new *falaj* at a point between M42 and M43 shows the possible position of the original one lying at about 3 m below the present surface (*Fig. 3*). The entire structure was robbed but possibly preserved as a „ghost structure“. According to local informants, the old parts of the *falaj* still in use are 3 m high inside.

In 1981 the M43 settlement was described as resembling beads strung on a necklace alongside the *falaj*<sup>11</sup>. On the strength of finds from survey and excavation, M43 mound no. 04 was dated to the Lizq/Rumaylah (1200 -

<sup>9</sup> For Islamic finds see the useful article of Donald S. Whitcomb: Whitcomb 1975, 123-157. This article centres on the Sharqiyah.

<sup>10</sup> Ra's al Hadd, pers. communication J. Reade. Al Wāfi: internal report of the German Archaeological Mission.

<sup>11</sup> G. Weisgerber 1981, 234-238. *Falaj* and *qanat* are the Arabic terms for the Persian *Kariz*. *Qanat* is an Arabic loan-word used in Persia.

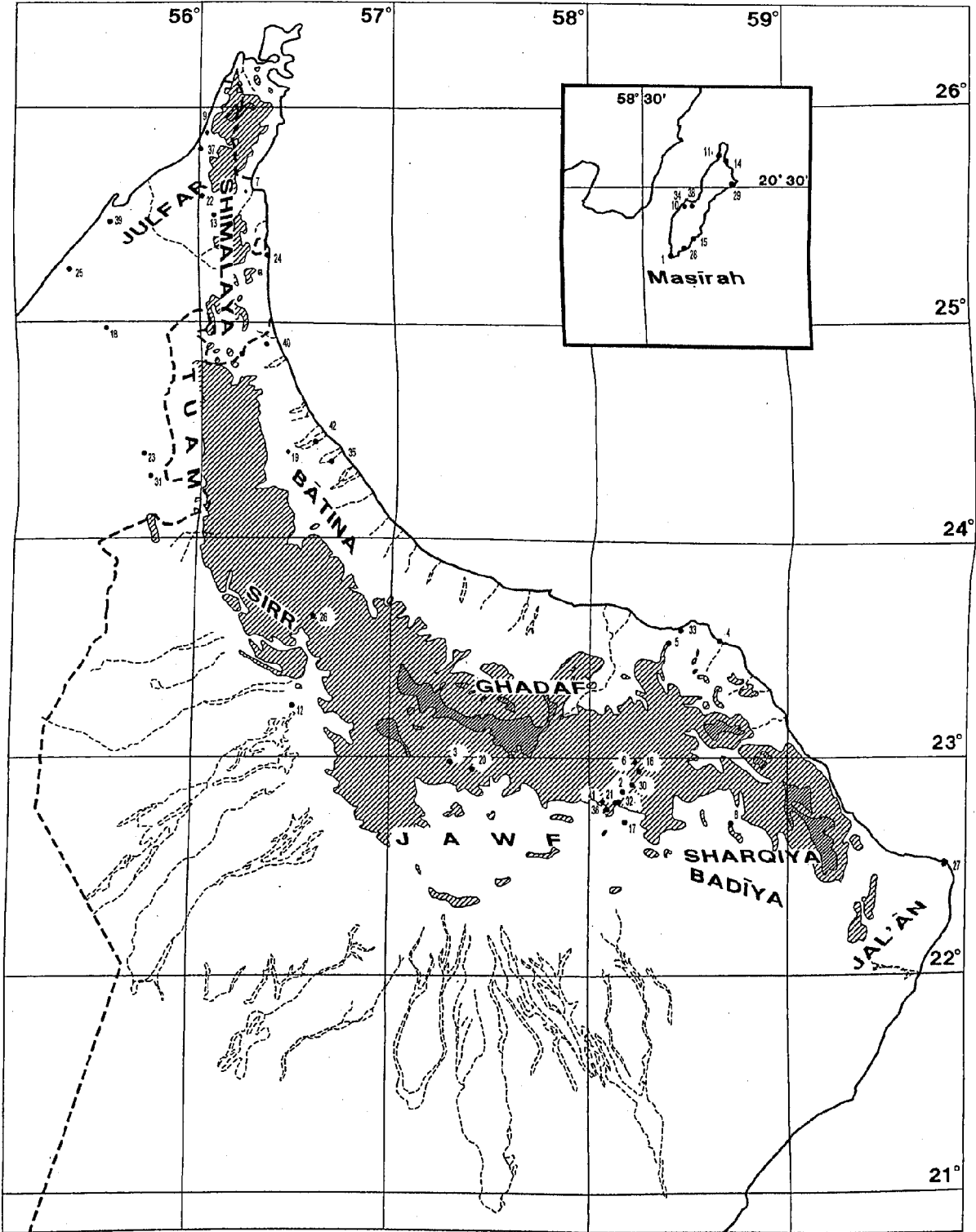


Fig. 1 Sultanate of Oman, main Early Iron Age sites. 1 Abū Magirah, 2 al Akhdar; 3 Baḥlā; 4 Bandar Jiṣṣa; 5 Bawshar; 6 Bilād al Mā'din; 7 Dibba; 8 al Dhurra, 9 Ghalīlah; 10 Ghasur ghas; 11 Hilf; 12 'Ibrī/Selme; 13 al Khatt; 14 Jebel Hamr; 15 Jebel Qīdī; 16 Jebel Salāyli, 17 Lizq; 18 al Madam; 19 Magan; 20 al Maskūteh; 21 al Maysar; 22 Nud Ziba; 23 Qarn Bint Sa'ād; 24 Qidfah, 25 al Qusais, 26 Rākī; 27 Ra's al Ḥadd; 28 Ra's Zarrī 29 Rasya fi Wādī Wāhid; 30 Rawdah-Muqatta; 31 Rumaylah; 32 Samad al Shān; 33 al Sarūj; 34 Sawir al Tuyar; 35 SH-11 (Ghail Shabul); 36 al Shewt; 37 Shimāl; 38 Sur Maṣīrah; 39 Tell Abrāq; 40 Wādī al Kawr; - Wādī al Tayya, Bilād Tabud; 41 Wādī Salḥ; 42 Zahra. Hatching: 500-1000 m, fine hatching 1000+ m.

شكل ١. سلطنة عُمان، مواقع العصر الحديدي المبكر الرئيسية.

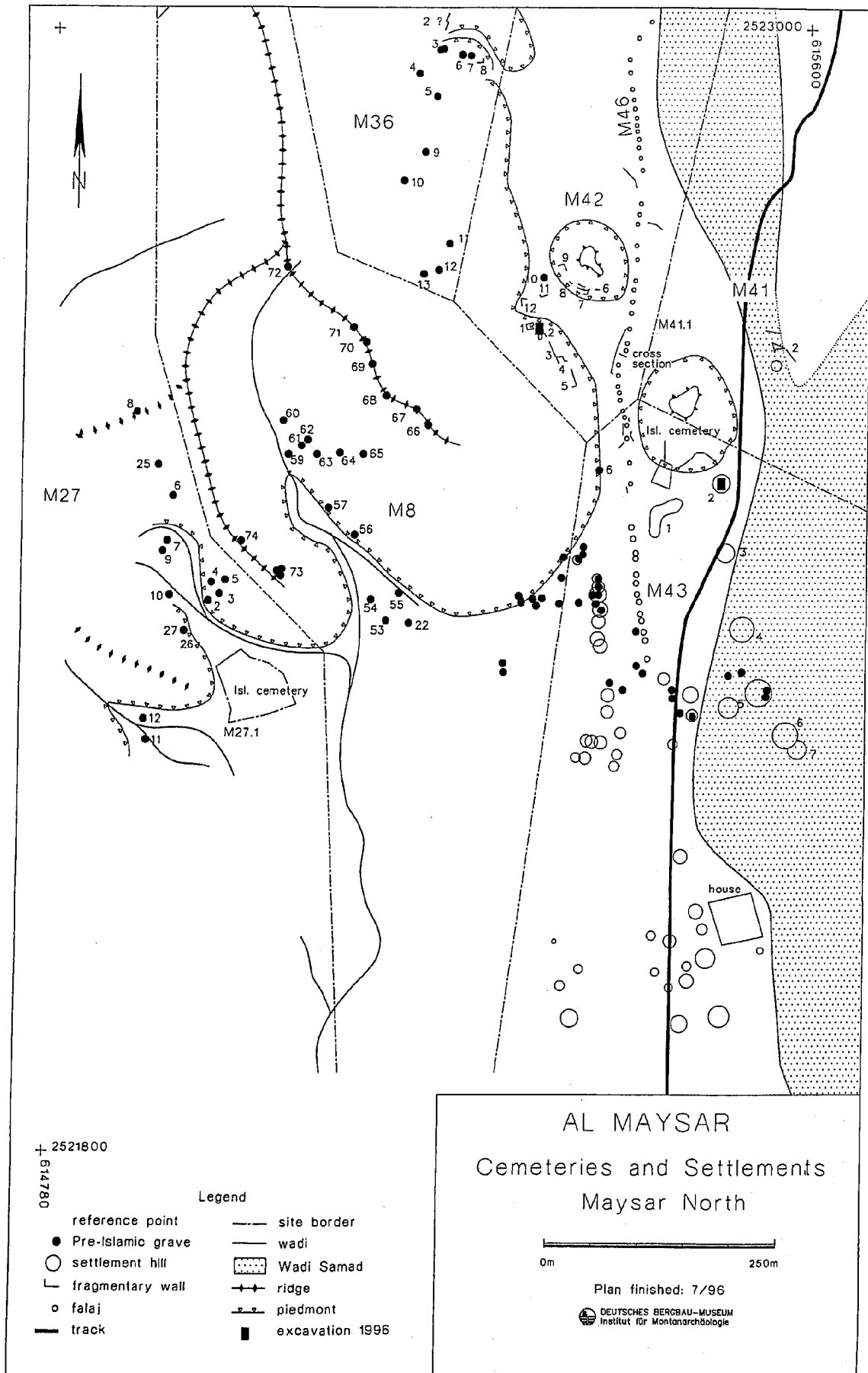


Fig. 2 Plan of al Maysar North 1996

شكل ٢. مخطط ميسر-الشمالي ١٩٩٦.

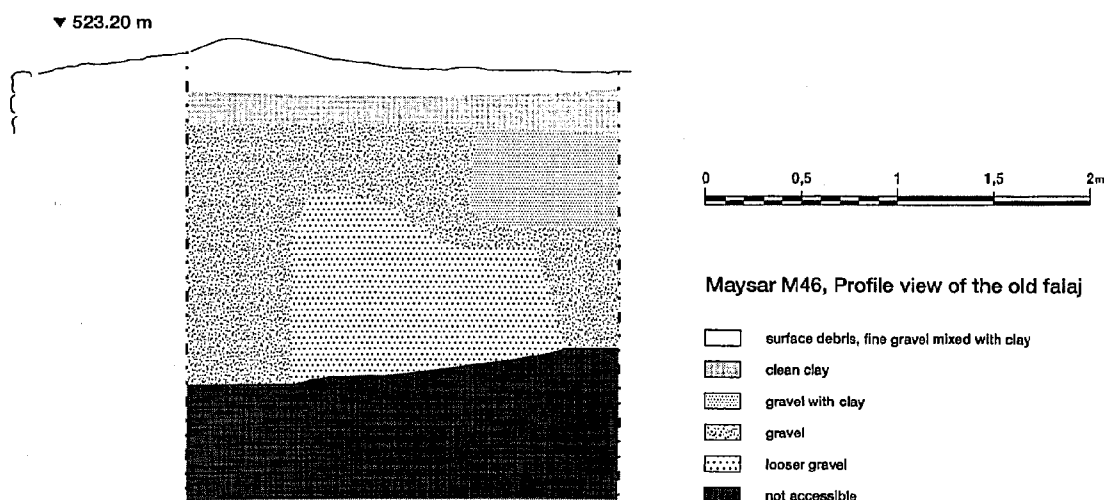


Fig. 3 Cross section of the *falaj* M46

شكل ٣. خندق متقاطع في الفلج M46.

post 300 B.C.) and the Samad Period/Culture. A small trench dug at the site in 1981 yielded a little Samad Period pottery atop a layer which contained Early Iron Age wares. Pottery of both periods lay strewn on the surface. The surface of other mounds belonging to M43 yielded pottery and soft stone sherds of the Samad Period.

On the other hand, the dating of M42 was fixed clearly to the Lizq/Rumaylah Period by virtue of its pottery. Moreover, a thermoluminescence assay of a storage vessel previously excavated at the site yielded a date of  $280 \pm 170$  BC<sup>12</sup>. The fine chronology rests on the relative chronology of the *falaj* mechanics and the thermoluminescence assay. The associated *falaj* M46 is the Sultanate's earliest datable example, but certainly not the earliest one *per se*<sup>13</sup>.

In order to document the transition from the Lizq/Rumaylah to the Samad Culture, M42 was selected for excavation, since it seemed to date to the end of the earlier of the two cultures. A second excavation was to provide some verification for the results of this excavation. Initially, mound M43 02 appeared to belong to the Early Samad Period for different reasons. First, it is close (300 m to the south-east) to M42, alongside the same *falaj* at almost the same elevation. Second, it is part of the M43 mounds, which on account of surface finds date to the Samad Period. Some of the sherds found at M43 in 1981 were similar to those from the earliest, and more closely dated graves of the Samad Period. Thus from M42 and M43 respectively, we expected to sample material from a settlement dating to the Late Lizq and Early Samad Period.

A further question was to find out whether it were possible to trace some sort of continuity between the earliest *falaj* and the present day one. Was there only one or were there more? If so, were they positioned one above the other, or beside each other?

Study was taken up again on the pottery excavated at M43 04, M42 and other sites visited by „pioneer“ archaeologists in 1981<sup>14</sup>. In light of this year's study of the old excavation documentation and find slips it has become clear that all of the Samad material from M43 which was gathered in 1981, only occurred on the surface.

#### MAYSAR M43 02

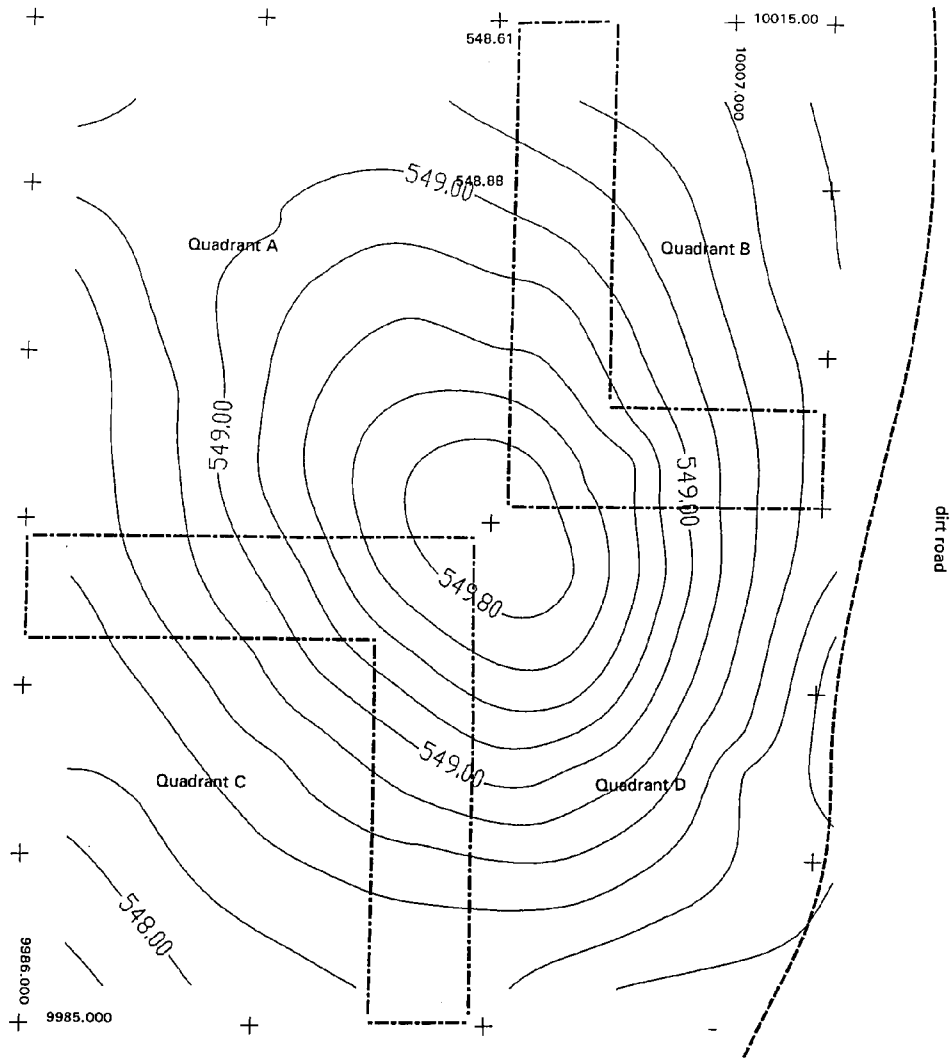
In late February excavation began on the 20 m wide M43 02, one of the numerous small tells formed by architectural debris. During the course of excavation, the site proved to be badly eroded. We divided the mound into four quadrants oriented cardinally. Those to the north-east and south-west were sectioned each by means of an L-shaped trench in plan. In a few days a surface comprising 137 m<sup>2</sup> was excavated down to a disturbed level still above virgin soil (*Fig. 4, Pl. 1*). Both trenches revealed strata consisting of alternating layers of fine and coarse gravel (*Fig. 5*).

Few clear architectural features were detected. In the profiles to the south and east, a low circular feature was clearly visible. Broken mud-bricks and disturbances in the stratigraphy were all that remained of the architecture. The incline of the layers downward to the north-west, and the presence of the wādī directly to the east, give indication of extensive erosion of the mound. On the basis of the stratigraphy, it became evident that originally the highest portion of the mound, which no longer exists, must have been located in the wādī to the south-

<sup>12</sup> Hd TL 10. Unpublished data from Günther Wagner, Heidelberg.

<sup>13</sup> At the 1996 Seminar for Arabian Studies *afāj* datable to the Early Iron Age were reported by W.Y. al Tikriti at Hili H2 and H15. M. Mouton and J.M. Córdoba reported another of this date at al Madam.

<sup>14</sup> G. Weisgerber 1981, 234-238.



Al Maysar, Sultanate of Oman  
Site M43 02  
Plan of the settlement hill  
البعثة الألمانية للحفريات الأثرية في عمان  
Deutsche Archäologische Oman-Expedition  
23.02.1996



Fig. 4 al Maysar M43 02, plan  
شكل ٤. الميسر M43 02، مخطط.



Al Maysar M43 02  
Sultanate of Oman  
Settlement hill  
Profile 3  
9.03.1996

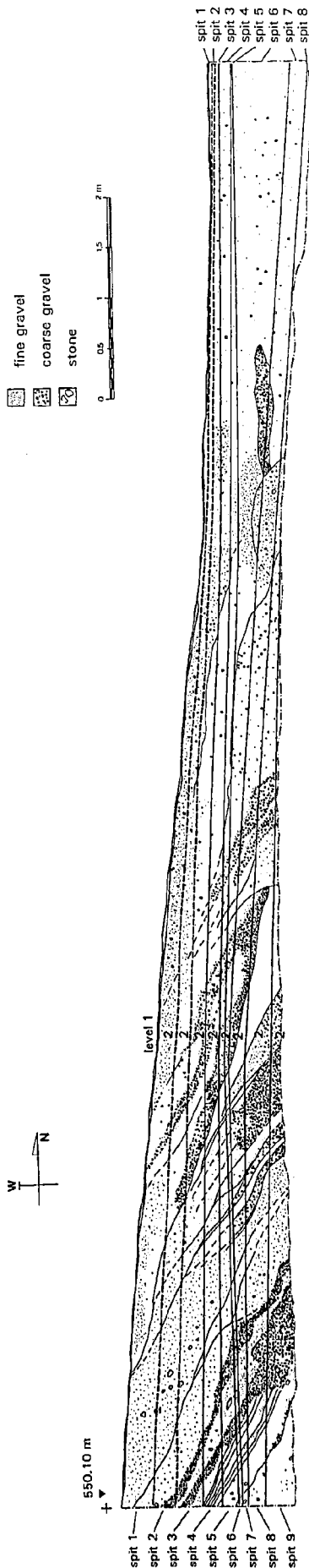


Fig. 5 al Maysar M43 02, profil  
شكل هـ. اليسر M43 02، مقاطع.



Pl. 1 al Maysar M43 02  
 لوحة ١ . الميسر M43 02.



Pl. 2 al Maysar M42  
 لوحة ٢ . الميسر M42.

east. Samples from a fireplace stratified deep in the mound were subjected to AMS and radiocarbon analysis (KIA528) but yielded no plausible dating results.

This year's activities also included research on the Early Medieval Period. Historical accounts describe the devastation inflicted on Central Oman to have taken place much later than the EIA, i.e. in 873 A.D. at the hand of Muḥammad b. Nūr („al Būr“), the Abbasid governor of Baḥrain, who in a dispute sided against the Ibādi Imam. The tactics of war included the wreckage of the 'aflāj. In 1993 local inhabitants lead the authors to a cemetery (Samad S07) which they believe to contain the mortal remains of patriots who rose against the invaders. In the southernmost (that is latest) mounds of M43 it was hoped to find further evidence of the destruction of Muḥammad b. Nūr, whose campaign presumably coincides with the demise of the Samad Period settlement. But this could not be confirmed archaeologically. On this matter one must rely exclusively on the written sources.

#### MAYSAR M42

##### THE SETTLEMENT

With the conclusion of the documentation of M43, we turned to M42. First the profile of the 1.5 x 7.0 m excavation of 1981 was cleaned for re-examination. Immediately north of it, a trench was opened measuring 8 x 12 m (Fig. 7, Pl. 2). During 17 work days we investigated an area of 435 m<sup>2</sup> without reaching the foundations of the building therein. This settlement proved larger than originally believed, and its houses extend some 350 m further north and 100 m toward the east. It encompasses a large number of dwellings of which we have excavated only a small part. The settlement known from this year's and previous excavation consisted of at least two dwellings composed of several rooms. Repairs and alterations of the architecture were evident at different points in the settlement. They need not be linked to a single major rebuilding. The structure underwent two phases of use. This is indicated by the addition of new rooms and by entries which were sealed off.

House walls up to 30 cm in height stand above a floor made of broken mud bricks. The foundations are identical with the walls with respect to size and construction method. This construction is double faced and made of head-size stones with smaller ones as fill material, hence similar to the walls of the hut graves of the same culture. But this construction method does not exclusively belong to this period. It also occurs, for example, in the Umm an Nar Period settlement Maysar M1. The walls were up to 50 cm thick with an average of 40 cm. The most substantial wall of the settlement was on its west-

ern side and also contained an entrance. The rooms were terraced, thus respecting the settlement's location on a surface sloping towards the west.

The settlement fell into disuse and later served as a burial site. Two Samad graves (Figs. 6, 10, Pl. 3) datable by their morphology and/or diagnostic finds came to light in the older settlement. One feature, M4203, consisted of simple pile of stones (no finds) disposed in such a way as to suggest a grave.

#### GRAVE M4201 (Fig. 6)

Azimuth of the long axis: 168/348 gon (= SSE/NNW)

Length of the grave floor: 1.75 m

Breadth of the floor: 0.56 m

Depth of the floor below surface: 1.10 m

Finds: Samad

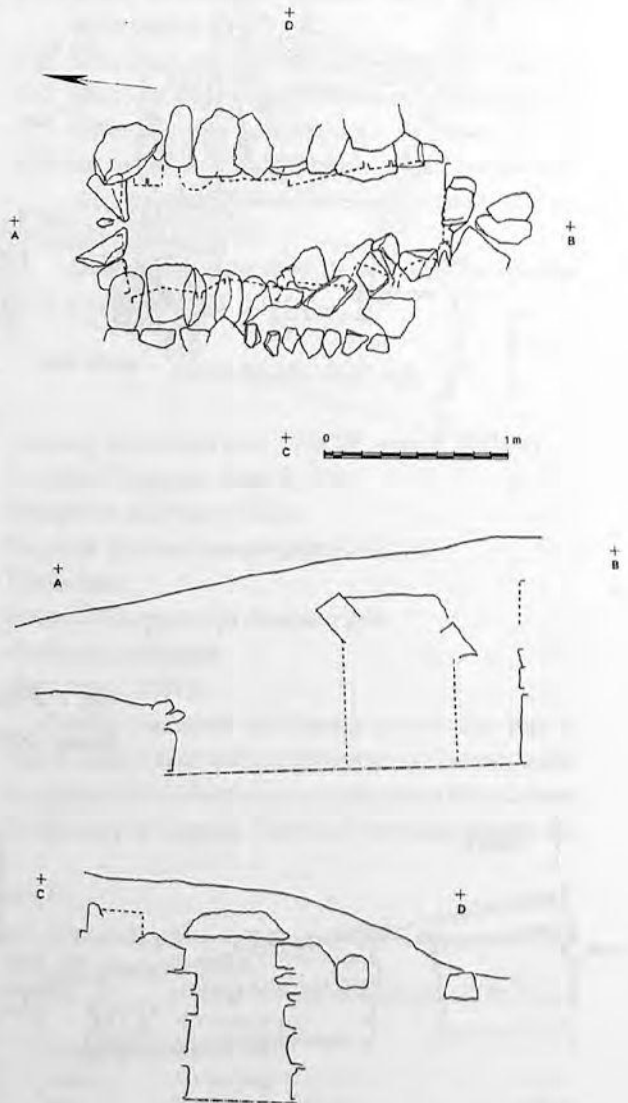


Fig. 6 Grave M4201

شكل ٦. القبر M42 01.

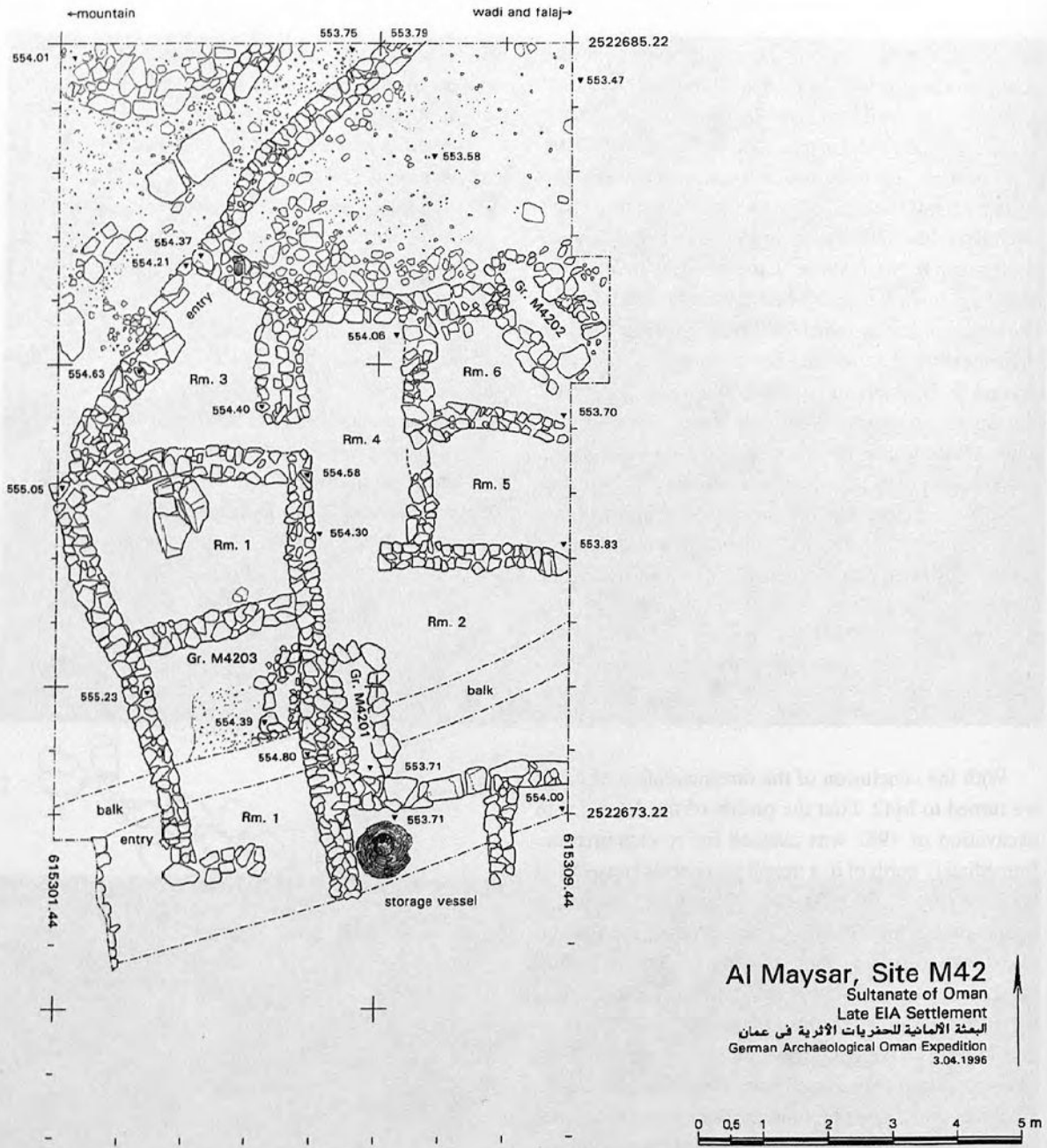


Fig. 7 al Maysar M42, plan  
شكل ٧. الميسر M42، مخطط.

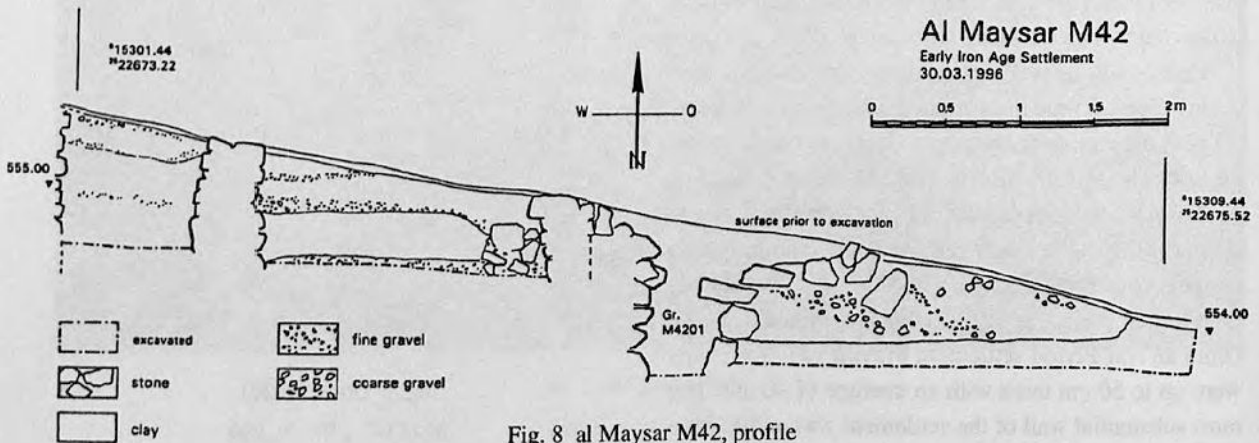


Fig. 8 al Maysar M42, profile  
شكل ٨. الميسر M42، مقاطع.





Pl. 3 Grave M4201

لوحة ٣. القبر M42 01.

Reuse of the grave not demonstrable

Architecture: Samad

Grave type: RWOs<sup>15</sup>

While cleaning the stones of the profile balk, one turned out to be a disturbed roof stone of a grave. Following the removal of the roof stones, the identification was confirmed. The grave was built alongside the southwestern corner of room 2, and was clearly a later intrusion. The southern part of the chamber had been damaged during the investigation of 1981. The upper portion of the grave showed a bar wall, support stones and cantilever stones. The lower part of the grave was built of orthostats. The grave was robbed.

Wādī Site Finds (Fig. 9):

- 1.01 Micro-beads, very small<sup>16</sup>, glass, opaque, colour not identifiable/badly faded, lightly banded, x4
- 1.02 Micro-beads, very small, mollusc shell, straw yellow, undecorated, x21
- 1.03 Irregularly round, fine, glass, opaque, dark grey, undecorated, x13
- 1.04 Irregularly round, fine, glass, heavily weathered, colour not identifiable/badly faded, lightly banded, x19
- 1.05 Cylindrical, middle-large, sintered faience, chrome-yellow, undecorated, x3

- 1.06 Oblate, fine, carnelian, orange red, undecorated, x2
- 1.07 Micro-beads, small, glass, opaque, ochre, undecorated, x19
- 1.08 Snail (*engina mendicaria*), middle-large, mollusc shell, white, undecorated, x9
- 1.09 Snail (*conus ?biraghii omanensis*), middle-large, mollusc shell, white, undecorated, x1
- 1.10 Concave/convex, snail point, fine-middle, mollusc shell, white, undecorated, x1
- 1.11 Flat ring, large hole, fine-middle, mollusc shell, white, undecorated, x2
- 1.12 Oval pedant, CS oval, fine-middle, mollusc shell, white, undecorated, x1
- 1.13 Wrapped band, fine, „copper“, colour not identifiable/badly faded, undecorated, x1
- 1.14 Micro-bead, very small, glass, opaque, colour not identifiable/badly faded, undecorated, x1
- 1.15 Snail, fine-middle, mollusc shell, beige-grey, undecorated, x1
- 1.16 Disc, small, mollusc shell, beige-grey, undecorated, x1
- 1.17 Micro-bead, very small, translucent glass, bright violet-blue, lightly banded, x1
- 1.18 Biconvex discoids, flat edge, small, not identifiable, light greenish yellow, undecorated, x18. total: 118, DA 13061
- 2 Small bottle (Samad), 17.0 x 18.5 cm, old break at rim, DA 13059

## GRAVE M4202 (Fig. 10)

Azimuth of the long axis: 125/325 gon (= SE/NW)

Length of the grave floor: 1.70 m

Breadth of the floor: 0.50 m

Depth of the floor below surface: 0.85 m

Finds: none

Reuse of the grave not demonstrable

Architecture: Samad

Grave type: RWOs

During the course of clearing the western part of trench 2 and 3 in room 6, a concentration of stones measuring up to 35 x 55 cm came to light which turned out to be the roof of a grave. The roof slabs (missing in the

<sup>15</sup> RWOs = Riegelmauer, Widerlager, Orthostaten, schmal: P. Yule 1994, 527 Fig. 4; 541 Tab. 8.

<sup>16</sup> tiny < 0.5 mm (length measured through the axis of the string hole)

very small	0.5-1.0 mm
small	1.1-2.0 mm
fine	2.1-3.0 mm
fine-middle	3.1-5.0 mm
middle-large	5.1-10.0 mm
large	10.1-20.0 mm
very large	20.1+ mm

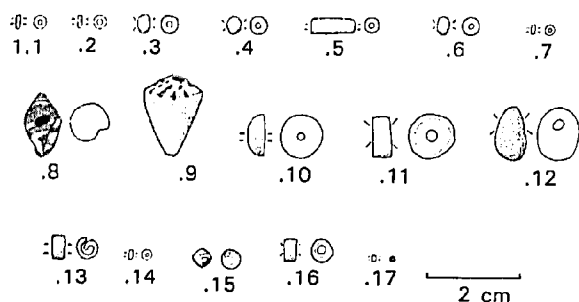


Fig. 9 Finds from Grave M4201

شكل ٩. لقي من القبر M4201.

drawing) seemed to be partially *in situ* so that the grave was first thought to be intact. The roof stones lay beneath fallen debris from a wall and wādī stones. The grave proved to be completely robbed.

At the north-west end of the grave a small bar wall appeared fashioned of a row of 10 x 15 cm sized stone. Cantilever stones were in evidence. The side walls consisted of three layers of broken stone and the lowest course was built of stones 50 cm high. The upper two layers consisted of stones up to 20 cm thick. The interstices were filled with smaller stones. The stones varied greatly in size and were not carefully fit together.

The chamber was filled with earth and gravel. A few stray pottery sherds of a thin-walled fabric (not reproduced) were recovered from the upper debris.

#### Finds:

1 Pottery sherds (Lizq/Rumaylah), DA 13050

The pottery of the old and new excavations of M42 and M43 is under study. It is exclusively handmade and rarely painted (Fig. 11). The sherds belong either to the Lizq/Rumaylah Culture or else remain as yet unclassified. Several of the decorated sherds show hitherto un-

known motives. They include floral and figural designs. Some of the floral designs are reminiscent of those found on Nabataean pottery from the region far removed to the north-west<sup>17</sup>. Characteristic of the later Lizq/Rumaylah Period at Rumaylah in the U.A.E. is a handmade undecorated pottery, especially with a brownish orange slip, which has a similar date to that at Rumaylah and Bawshar<sup>18</sup>. No wheel-turned pottery and little or no „orange ware“ occur either at M42 or M43. A selection of stratified pottery was recorded according to what little natural strata was available in these two sites<sup>19</sup>.

- 1 inside: light reddish brown, outside: light red, break: grey, fine clean clay, DA 12955
- 2 inside: light reddish brown self slip, outside and break: pink, heavy amount of coarse grit temper, DA 12961
- 3 inside: not visible, outside: very pale brown, bichrome painted, break: dark grey, light amount of fine grit temper, DA 12924
- 4 inside and outside: light red self slip, break: red, light amount of very fine grit temper, DA 12961
- 5 inside, outside and break: light reddish brown self slip, coarse amount of fine to medium grit temper, DA 12942
- 6 self slip, DA 12915
- 7 inside, outside and break: reddish yellow, heavy amount of coarse chaff and grit temper, DA 12961
- 8 inside: pink slip, outside: pink, slip, thick black paint, DA 12068
- 9 inside and outside: very pale brown, break: reddish yellow, medium amount of fine grit temper, DA 12931

### Wādī Rākī

A visit in 1995 to the mining and smelting sites of Wādī Rākī near Yānqūl (Fig. 1) confirmed the important role the mineral deposits played there throughout history<sup>20</sup>. Until recently, the Early Islamic mining settlements and smelting installations at Rākī, and at Ṭawī Rākī (Fig. 12) were well preserved, but owing to the opening of the Rakah Gold Mining pit at the site of Rākī, about 50% of the ancient remains have now been destroyed. At Ṭawī Rākī around some of the large farm dwellings bulldozing continues to take its toll.

<sup>17</sup> G.S. Schmidt 1993, 57 fig. 117.

<sup>18</sup> R. Bouchariat and P. Lombard 1985, 57 („...some of it is wheel-turned“). Wheel-turned pottery does not actually occur at Rumaylah in the EIA. It is pattern-burnished and therefore only awakens this impression. A. Benoist 21.07.1996 pers. communication.

<sup>19</sup> We documented and saved for study purposes 1/3 of the 39 kg of excavated pottery. The rest we registered and buried in the dump of M42.

<sup>20</sup> P. Yule and G. Weisgerber 1996, 135-155.



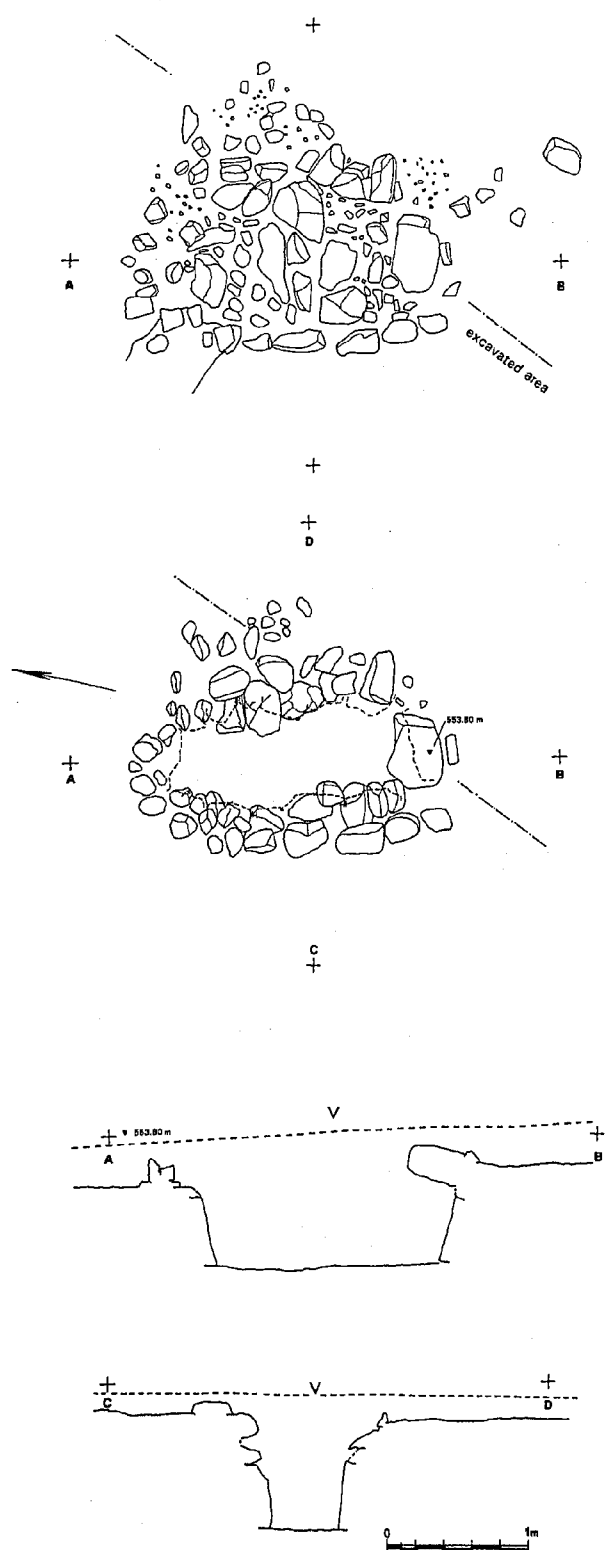


Fig. 10 Grave M4202  
شكل ١٠. القبر M4202.

Current interest on the site of Rākī 2 is centered on the property of Salim b. Sa'īd al Farsi. Here a 5 m high dump of slag and several other dumps lower in height date to the Early Iron Age (Pl. 4). They indicate that the site of Rākī 2 is the largest and best preserved prehistoric copper production site of that period in all of Oman. Between and under the slag heaps ruins of a large settlement are visible. The settlement is situated between two wādīs on a low triangular terrace and measures some 400 m in length and 400 m at its broadest width. A large number of wall fragments and foundations of houses are visible at the surface and in the ravines cut by the wādīs. The surface is literally covered with potsherds. On the basis of these finds it seemed possible that the settlement was occupied and that copper was produced during the entire Iron Age.

The purpose of this year's season of excavation was to assign the pottery wares to the successive phases, and to try to distinguish the characteristics of the copper production. Excavation started at the ruins of a house partly visible below a slag deposit cut by a wādī. This house was stratigraphically older than the last slag (Pl. 5). Excavations continued at two locations where houses (I and II) were built on top of low mounds, therefore seemingly of later dates. These first presumptions were partly confirmed, but as usual the situation was much more complicated than initially suspected.

#### RĀKĪ 2, HOUSE COMPLEX I

In different sondages 84 m<sup>2</sup> were excavated here. Situated at the western side of the settlement area, and visible as a low mound, it became clear that the building had partly suffered the effects of erosion. Only the south, the east, and a part of the north walls of the house were preserved. In the north and the west, the mound was eroded to such a degree that the walls had not survived. Therefore the preserved wall lengths were only a fragment of their original size. The remaining corner in the east measured only about 2 m, the length of the complete south-eastern wall 9.35 m, and at the south-western wall 5.5 m were recorded. The 0.50 m thick walls were well constructed of medium-sized wādī boulders and some fragments of slag cakes on the outside faces, the filling consisting of rubble. The fill was mud mortar and an enormous amount of small fragments of slag. The walls were built in and on a slag heap which in the upper part had smaller and further below larger fragments of slag. Neither the eroded floors, doors nor the inner walls could be detected. The purpose of a house of this size is unclear. In the sections outside the house, a red „industrial“ layer covered the main layer of broken slag. The red layer was covered by aeolian loess and stray slag.

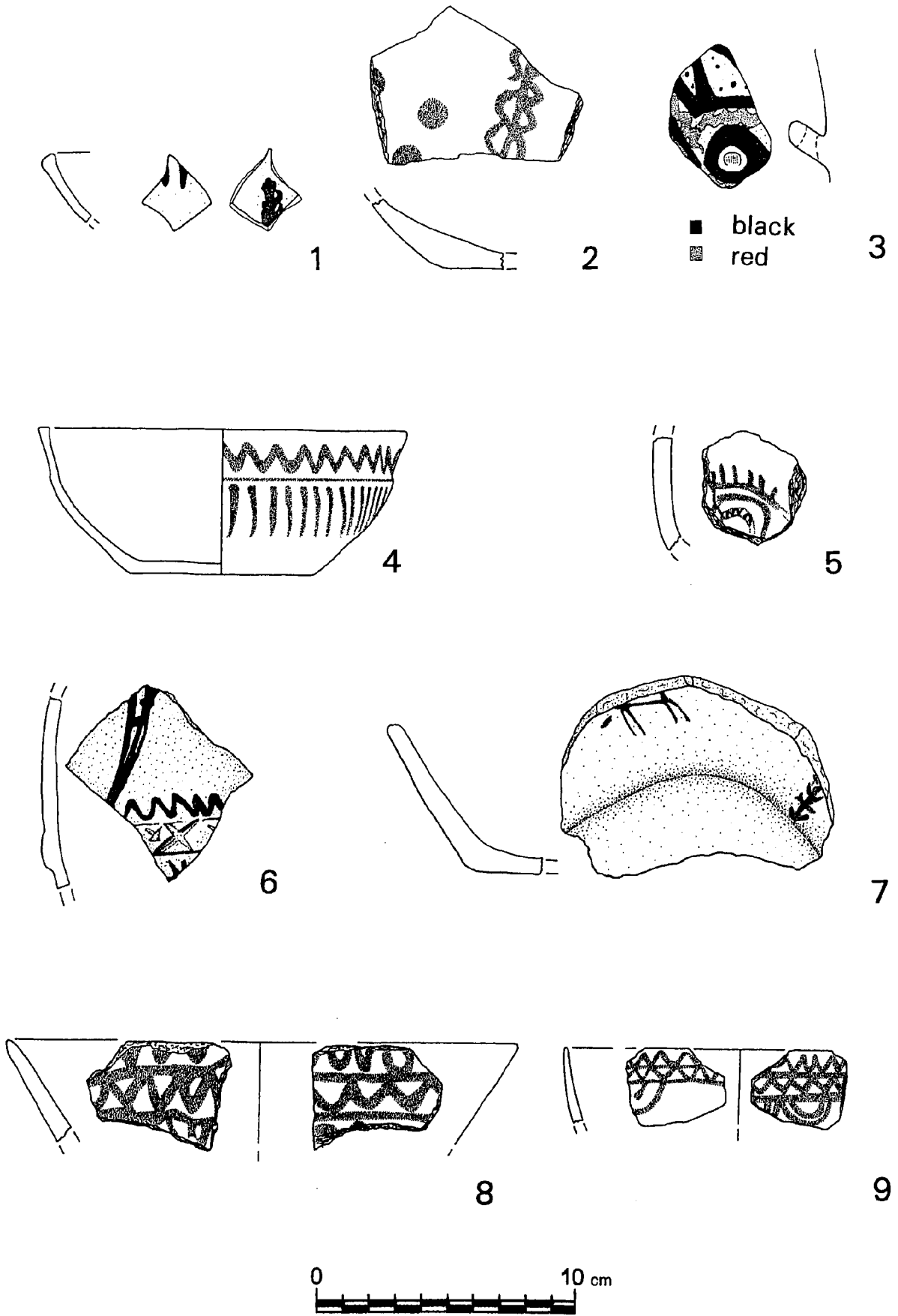


Fig. 11 al Maysar M43 02 selected pottery sherds

شكل ١١. الميسر M43 02، كسر فخارية مختارة.

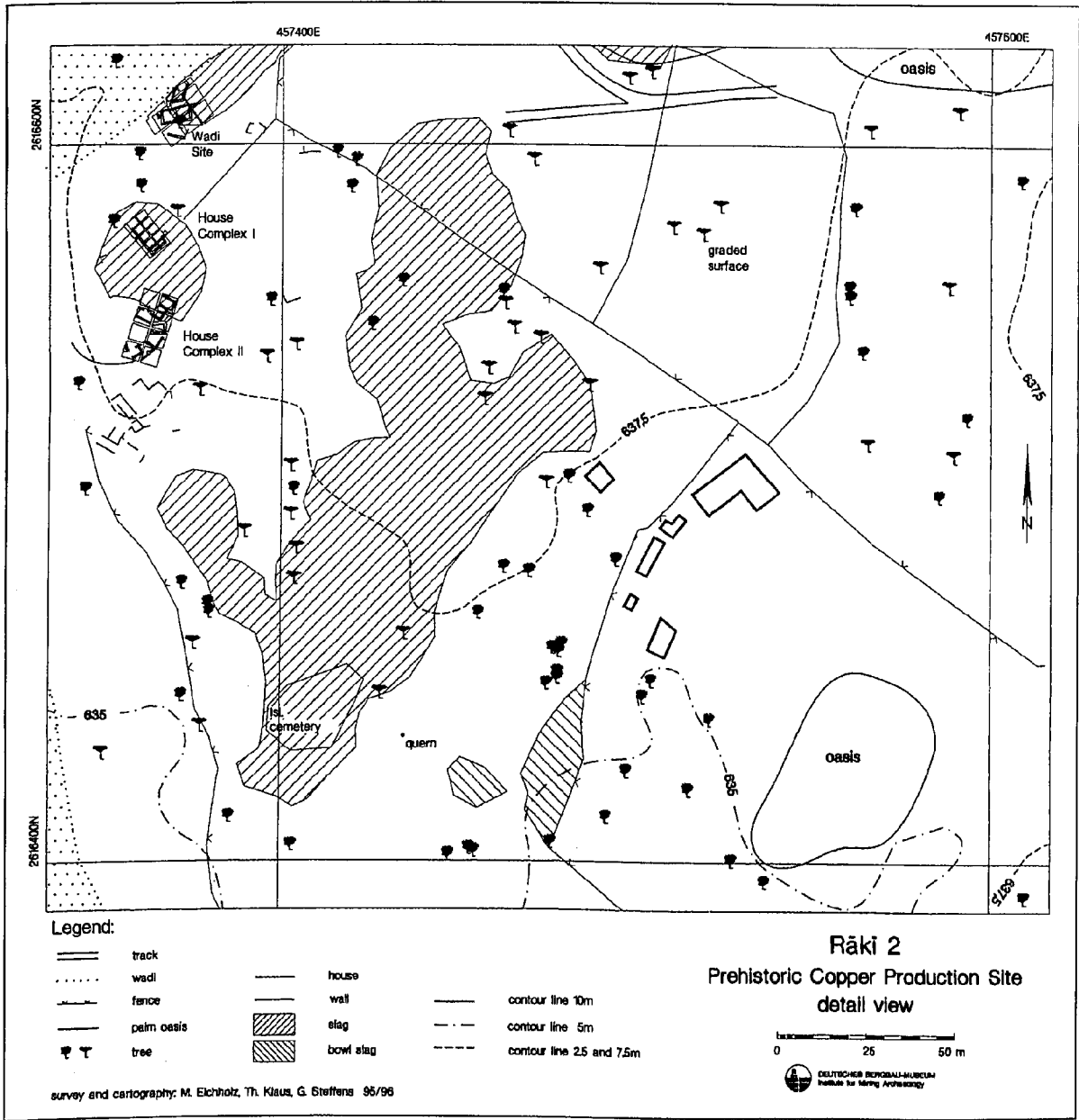


Fig. 12 Plan of Rāki 2

شکل ۱۲. مخطط راکي ۲.



Pl. 4 Slag heap at Rākī  
 لوحة ٤. كوم الخبث في راكي.



Pl. 5 Rākī 2, house beside the wadi (front) and below a slag heap  
 لوحة ٥. بيت بجانب الوادي (في المقدمة) وخلفه كوم الخبث.

### Finds:

Curious are small gabbro balls approximately 4 cm in diameter and stones weighing between 95 and 106 g. These may be weight stones. They were found in and outside the walls of every house.

The surface and the trenches yielded an enormous number of potsherds. Both the normal Lizq/Rumaylah and the later light-coloured wares with incised ornaments consisting especially of wavy lines were recorded (Fig. 13). This is also true for levels 1 and 2, but in the deeper lying levels 3 and 4, the later wares seem to be missing. It is remarkable that the pottery from sondage D definitely was tumbled in water since all edges are rounded. This jibes with the observation that there are lenses of wādī gravel above the slaggy basement. This might owe to a filling in the wādī gravel (with rolled sherds) on top of the slag during construction.

## RĀKĪ 2, HOUSE COMPLEX II

The complex designated House Complex II is a low mound situated south of House Complex I. Because many fragmentary walls of stone were observed while surveying the area, a rectangular area of 20 x 10 m was cleared. In addition, large amounts of ceramic as well as some hammer and anvil stones occurred at the surface. Slag covered the whole surface of this second area. After cleaning the surface of each trench, we expected to find the walls of several perhaps combined huts or small houses. The area was divided into eight trenches (IIA-IIH). Because of the limited time available, only a first layer could be removed to clarify the situation of the walls.

Excavation showed that the walls were constructed in the same technique as those of House I. They were built with a double facing, measuring between c. 35 to c. 50 cm in thickness. The building material can be divided into three classes. On one hand stone material included rolled wādī pebbles and larger pieces of slag for building the inner and outer walls, on the other small stones of local origin, and in a larger amount, small pieces of slag for filling the space between the walls. As opposed to House I, larger slag pieces were used for building the walls and in larger amounts relative to stone. In some cases the walls were combined in such a way that we can suppose they belong to a single large building. In sections IIA-IIB a rectangular wall structure of c. 4.50 x 3.50 m was excavated, but unfortunately it was impossible to find traces of the structure in IIE, so that the exact proportions of the building remain unknown. The western wall of this structure was combined with a wall-angle which extended nearly parallel but shifted to the north. Thus, the western wall of the first building forms the

eastern wall of the second. In this appendix a large saddle quern of about 46 x 16-20 cm may indicate household or industrial activities.

In trench IIB-IIC another house/room differs in its orientation from that of the preceding structures. In IIC parts of the formerly free-standing walls lay collapsed in the trench. In trenches IIC-IID-IIG-IIH a wall of more than 10 m length forms a slightly bent curve from the middle of IIC to the northern corner of IIH. In IIH this bent wall forms an angle and runs out of the excavation boundaries.

In close proximity to the curving wall was a roughly rectangular room with a possible entrance in the SW. In this room a circular structure of about 60 cm diameter was excavated. No ashes, charcoal, burnt bones etc. were observed, but close to this structure some interesting ceramic was found (see below). At least two other rooms appeared in IIH. The positions of the walls are difficult to explain because it seems that the walls do not replace each other in chronological order. As with House I, we observed a kind of chalk/limestone mortar adhering to some of the wādī boulders. Further excavations should clarify the stratigraphic relations of the different walls.

In IIE-IIF-IIG another complex of rooms came to light. The rectangular room in IIF is the most interesting of these because of its preserved entrance situated in the eastern wall which is approximately 7 m long. Its upper courses are combined with a small appendix in IIB where a millstone is situated. In the lower part of this wall we found an opening of c. 60 cm width. In the northern part of this entrance the end of the wall was constructed with three smaller stones. There a door-socket stone fashioned for a wooden door and stone shaped as a stopper were *in situ*. Inside the house in IIF near the entrance, a large rounded anvil-stone (c. 46 x 30 x 35 cm) was excavated. 13 depressions suggest its use for crushing materials like slag and ores.

At site II a minimum of four house/room complexes which are combined with each other, extend distinctly over the limits of the excavation. Limitations of time prevented the investigation of more than the upper layers of the site. Little is known about its stratigraphy.

All finds derived from the first level (0-20 cm), which consisted of yellow sandy soil and some wādī gravel. Slag (except the slag for constructing the walls) was not found in significant amounts in this level. The ceramic assemblage of House I occurred here too, but as opposed to House I, large storage jugs (pithoi) came to light *in situ*. Decorated lids for pithoi (IID) were numerous. Among the sherds of the largest pithos in IIA some molluscs occurred. In addition to the pithoi in IIC an almost complete decorated bottle with four handles was found. The amount of coarse ware seems to be greater com-

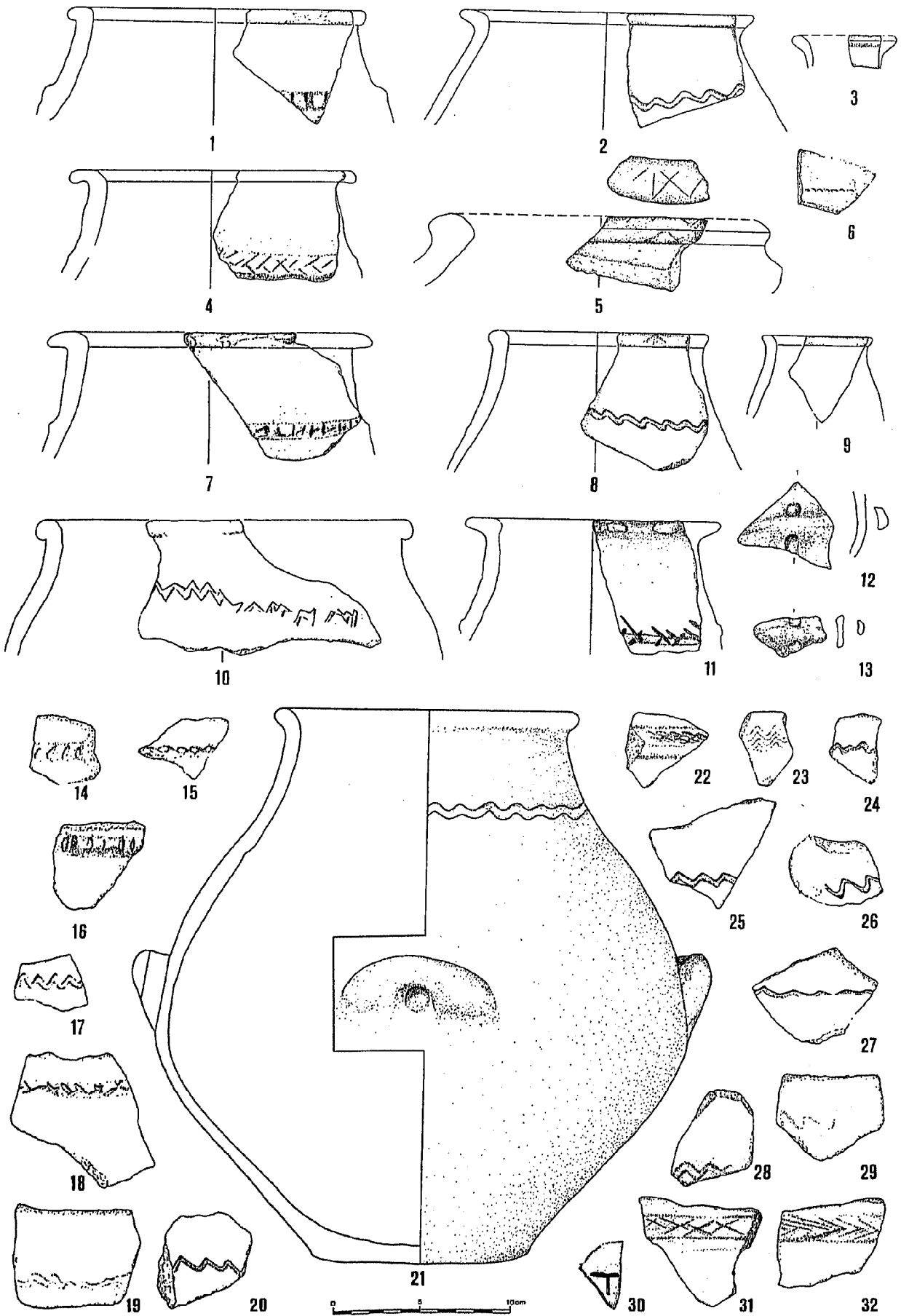


Fig. 13 Pottery from Rāki 2 (surface finds)

شكل ١٣. فخاريات من راکي ٢ (لقي سطحية).



pared to House I. Another smaller millstone was situated in IIB, but seems to have been reused for wall construction. In IID near the circular structure, the bottom of an incised soft stone vessel, a painted spout and a decorated piece of ceramic with a handle were found. In trenches IIC, IID and IIG some of the small round stone balls known from the Wādī Site and House I were found. In IID two anvil/hammer-stones were discovered *in situ*. In general, the amount of ceramics was huge. Finds, walls, and houses give an impression of the considerable archaeological potential of this site.

### RĀKĪ 2, WĀDĪ SITE

This site is characterised by an almost 5 m high slag heap on the bank of Wādī Rākī which was cut in two by water erosion. Eroded wall ruins which had been built both into and on top of slag deposits as well as subsequently covered by them are visible in the ruins. Because of the potential of the stratigraphy, two sondages were deepened, others followed later (A-L).

The nine trenches of 189 m<sup>2</sup> reveal two complexes of buildings (Pl. 5). Due to erosion, their walls are not always complete. From the double faced walls only 3 layers remain. The walls are filled with gravel, a few slag fragments, and a kind of mud mortar (Arab., *gus*“).

Two different layers can be distinguished. The uppermost lies below the surface and is covered by many fragments of slag and potsherds above a yellow sediment of 10-60 cm thickness. Below this, a layer of slag is visible in the section which resulted from wādī erosion. In a sondage the bottom of the slag layer was reached 1.8 m below the surface or, remarkably enough 0.8 m below the present day *sail wādī* (deepest wādī bed). The slag layer was divided in two different layers because of different sediments and different sizes of slag pieces.

In trench D, directly beneath the summit of the slag heap the *sail wādī* lies at a mere 2.80 m depth. Trench 8 revealed different layers of slag, sometimes separated by ash or sediments. Charcoal samples extracted from different layers date the deposition of the slag between 1100 and 800 (calib.) B.C.

Situated at the edge of the wādī, House Complex I covers the trenches A, B and partly C and H. The northern part was destroyed by water erosion. At least two rooms are preserved. In the SE corners ash concentrations may indicate the existence of fireplaces.

In trench A the walls of this complex overlay an older room with 0.6 m high walls constructed exclusively of

slag pieces. Up to seven layers of slag remain. Size and building material definitely distinguish these walls from the later ones. The floor of the room is marked by some large pithos sherds.

House Complex II is situated in trenches C, E, I and J. The northern wall runs parallel to Complex I, leaving some sort of passage between them. The two rooms have entrances at the same side. One has a large threshold stone with a door socket stone located *in situ*, the other is formed by a flat type stone never observed elsewhere in the excavations. In one room a millstone lay in place (50 x 30 cm).

Context	half-life	13C	CALIB3 cal 2 σ BC	Lab number
Section C	2804±53	-24.52	1000-865	Hd-18743
D above loc8	2764±32	-25.08	920-840	Hd-18790
D r+1 above loc1	2864±34	-24.21	1040-940	Hd-18789
B fire place	2787±35	-23.97	975-865	Hd-18742
D r-1.4 m bel. surf., above loc4	2807±39	-24.79	995-900	Hd-18765

Radiocarbon dates from Rākī 2, Wādī Site, EIA find context, charcoal samples in stratigraphical order.

House Complex III in trench J belongs to a third building. Unfortunately, it is disturbed by the growth of two trees and was therefore not submitted to further investigation. A badly preserved double faced wall continues into trenches E and G.

The finds of the Wādī Site complex date the houses described above. Among the pithoi lids, the thick flat ones belonging to a type of hole mouth jar occur predominantly on the surface and in the upper layers, whereas the stout triangular lids belong to the lower phases. Statistically, yellowish sherds with wavy line impressions occur more frequently in the upper layers, whereas painted and slipped wares dominate in lower levels. In and outside the Wādī Site houses the stone balls described above also occur.

The excavations at Rākī 2 reveal the great archaeological potential of this site. Deeper layer sequences may be expected not only in many of the building ruins but also in slag heaps which can attain 5 m in height. In contrast to the many slag heaps dating to the Medieval Period, in which only a few sherds occur, the richness in pottery of the EIA is also manifest in the slag heaps. Much remains to be done in order to understand the archaeo-metallurgical development of this site. But the large slag heap reveals two different kinds of stratified slags which in their own turn represent two different smelting technologies. Further research combined with analytical studies may lead to new insight on copper production in the EIA.

## Conclusion

Radiocarbon determinations were feasible in Rākī 2 but not in al Maysar, owing to insufficient sample material. Pottery was the prevailing artefact. Motifs, which previously were considered to date to the LIA, as in the case of the wavy line, are now clearly evidenced for the EIA. More effort is needed to pinpoint the differences between the ceramics of North, Central, and for that matter South Oman in order to understand their similarities and local peculiarities. Within the scope of the current project, it would be desirable to conduct further work on an iron age cemetery in Northern or Southern Oman, because to our knowledge this has not yet been done. More work is also needed for the definition and evaluation of the stratigraphy in Rākī 2.

## Bibliography

- Boucharlat, R. and Lombard, P. 1985**  
The Oasis of al Ain in the Iron Age: Excavations at Rumeilah 1981-1983, *Archaeology in the UAE* 4, 44-73
- Cardi, B. de – Collier, S. – Doe, D.B. 1976**  
Excavations and Survey in Oman, *Journal of Oman Studies* 2, 101-187
- Frifelt, K. 1975**  
On Prehistoric Settlements and Chronology of the Oman Peninsula, *East & West* 25, 329-423
- Gentelle, P. and Frifelt, K. 1989**  
About the Distribution of Third Millennium Graves and Settlements in the Ibri Area of Oman, in: P.M. Costa and M. Tosi (eds.) *Oman Studies Papers on the Archaeology and History of Oman. Serie Orientale Roma* 63 (Rome) 119-126
- Kroll, S. 1981**  
Die Bergfestung Lizq-1, in: G. Weisgerber, (ed.), *Mehr als Kupfer in Oman, Der Anschnitt* 33, 226-231
- Schmidt, G.S. 1993**  
Die Feinkeramik der Nabatäer, in: Petra und die Weihrauchstrasse, Exhibition catalogue in the „Galerie le Point“ (Zürich)
- Shanfari, al, A.A.B. and Weisgerber, G. 1989**  
A Late Bronze Age Warrior Burial from Nizwa (Oman), in: P.M. Costa and M. Tosi (eds.) *Oman Studie Papers on the Archaeology and History of Oman. Serie Orientale Roma* 63 (Rome), 17-30
- Weisgerber, G. (ed.) 1981**  
*Mehr als Kupfer in Oman: Ergebnisse der Expedition 1981, Der Anschnitt* 33, 174-263
- Weisgerber, G. 1982**  
Aspects of Late Iron Age Archaeology in Oman: the Samad Civilization, *Proceedings of the Seminar of Arabian Studies* 12, 81-93

**Whitcomb, D.S. 1975**

The Archaeology of Oman: A Preliminary Discussion of the Islamic Periods, *Journal of Oman Studies* 1, 123-157

**Yule, P. 1994**

Grabarchitektur der Eisenzeit im Sultanat Oman, *Baghdader Mitteilungen* 25, 528-544

**Yule, P. (in press)**

Die Gräberfelder in Samad al Shān (Sultanat Oman), Materialien zu einer Kulturgeschichte

**Yule, P. and Kazenwadel, B. 1993**

Toward a Chronology of the Late Iron Age in the Sultanate Oman, in: U. Finkbeiner (ed.), *Materialien zur Archäologie der Seleukiden- und Partherzeit im südlichen Babylonien und Golfgebiet* (Tübingen) 251-277

**Yule, P. and Weisgerber, G. 1996**

Die 14. Deutsche Archäologische Oman-Expedition 1995, *Mitteilungen der Deutschen Orient Gesellschaft* 128, 135-155

## Abstract

In the late 1970's the German Archaeological Mission began fieldwork centering on the copper production in ancient Magan/Makkan. In 1987 emphasis was laid on the Samad Culture of Central Oman (post 300 B.C.-900 A.D.). In the framework of a project „A Structuring of the Iron Age in Eastern Arabia“ archaeological fieldwork began in 1996 in Central Oman and in a little-researched part of the Sultanate, located in the north. The first goal was to identify an equivalent for the Samad Culture in that region. Building on this prerequisite, a second aim was to shed more light on the transition from the Early to the Late Iron Age in the north. It was hoped that the reverse of the strategy originally used in Oman would help. Before, archaeology functioned as a means for dating developments in metallurgical technology. We hoped that alterations in the pyrotechnology could be used for tracing the general chronology. If until 1992 work centered on grave inventories and cemetery analysis, the new excavations at Rākī in Northern Oman and al Maysar in Central Oman placed the accent this year on settlement chronology.

## تقرير أولي عن تنقيبات عام ١٩٩٦ في سلطنة عُمان

الحديدي المبكر إلى المتأخر منه في الشمال. وكان من المرتجى أن تساعد في ذلك عملية عكس الاستراتيجية المستخدمة أصلاً في عُمان. حيث بُني علم الآثار سابقاً على ضوء التطور في تقنية المعادن. نحن نأمل بإمكانية استخدام التبدلات في التغيرات الحرارية لوضع تتابع لتسلسل زمني عام. وإذا كانت الأعمال قد انصبت حتى عام ١٩٩٢ على موجودات القبور وتحليل المقابر، فإن التنقيبات الجديدة في راكي شمالي عُمان والميسر في وسطها ستركز جهود هذا العام للبحث في التتابع الزمني للمستوطنة.

في أواخر عام ١٩٧٠ بدأت البعثة الأثرية الألمانية الأبحاث الميدانية التي تركزت على صناعة النحاس في مجان/مكان القديمة. تركزت جهود البحث عام ١٩٨٧ على حضارة سمد في وسط عُمان (<٣٠٠٠ق.م-٩٠٠م). ضمن إطار مشروع "بنيّة العصر الحديدي في شرقي الجزيرة العربية" بدأت عام ١٩٩٦ أعمال بحث ميدانية في وسط عُمان وفي قسم آخر في شمال السلطنة، أُجريت الأبحاث العلمية فيه بشكل ضئيل. كان الهدف الأول هو التعرف على رديف حضارة سمد في ذلك الإقليم. بناءً على هذا الشرط الأساسي، كان الهدف الثاني هو إلقاء المزيد من الضوء على المرحلة الانتقالية من العصر ب. يول



# 'Amla/al Zāhīrah – Späteisenzeitliche Gräberfelder Vorläufiger Bericht der Ausgrabungen 1997<sup>1</sup>

P. Yule

Die Samad-Kultur im Sultanat Oman wurde erstmals 1981 als das zeitliche Bindeglied zwischen dem früh-eisenzeitlichen Lizq/Rumaylah-Komplex und der wenig bekannten Kultur nach Ankunft des Islam erkannt. Die erste Kultur ist im östlichen Teil des Sultanats vertreten, besonders in der Sharqiyah und in Dakhlīyah. Ihre Datierung wurde erst Mitte der 90er Jahre relativ sicher. Die Frage nach Identität und Beschaffenheit einer gleichzeitigen Kultur im Norden des Sultanats wurde danach aufgeworfen. 1995 wurden beim Hügel Qorin al Saḥḥaimah zwei Gräber ausgegraben, die anfangs als späteisenzeitlich betrachtet wurden, sich aber schließlich als der Wādī Sūq-Zeit zugehörig erwiesen. Ein Jahr später sollten im Rahmen des Projektes „Eine Strukturierung der Eisenzeit im östlichen Arabien“ die Nord/Süd-Kulturbereiche sowie die zeitlichen Dimensionen der frühen und späten Perioden im Sultanat untersucht

werden. Dies sollte im Wādī Rākī an der Fundstätte Rākī 2 geschehen, wo vermutlich beide Perioden vorkommen.

<sup>1</sup> Die Mannschaft bestand aus zwei Gruppen. Die erste (P. Yule, M. Anderson, C. Bank, M. Herles, O. Kälin, M. Kunter, P. Pahlen, K.-J. Rommel, K. Sachsenberg) war in 'Amla aktiv. Sie blieb 49 Tage, vom 17. Februar bis zum 6. April 1997, im Gelände. Am 25. Februar war eine zweite Grabungsmannschaft angekommen (G. und A. Weisgerber, M. Böhme, W. Dickmann, D. Rostoff, J. Schreiber, O. Sprave, G. Stefens und D. Steiniger). Diese Grabungskampagne an der Fundstätte Rākī 2 dauerte 40 Tage. Am 6. April hörte die Arbeit im Gelände auf. Während unseres Aufenthaltes in der Hauptstadt konnten wir in der Gästewohnung des Ministeriums in al Ghubbra übernachten. Im Feld wurden zwei Unterkünfte angemietet: Die eine Mannschaft kam auf der Daressalaam Farm in 'Ibrī unter, die andere etwas außerhalb von Yānqūl. Das Projekt wurde durch eine Zuwendung der Fritz Thyssen Stiftung an Dr. P. Yule ermöglicht. Khalifa b. Khamis al Rassiby vertrat zu Beginn der Geländearbeiten den omanischen Antikendienst. Dieses Jahr war es uns eine Freude, sowohl J. und J. Orchard als auch C. und Y. Velde als Gäste auf der Grabung zu begrüßen.

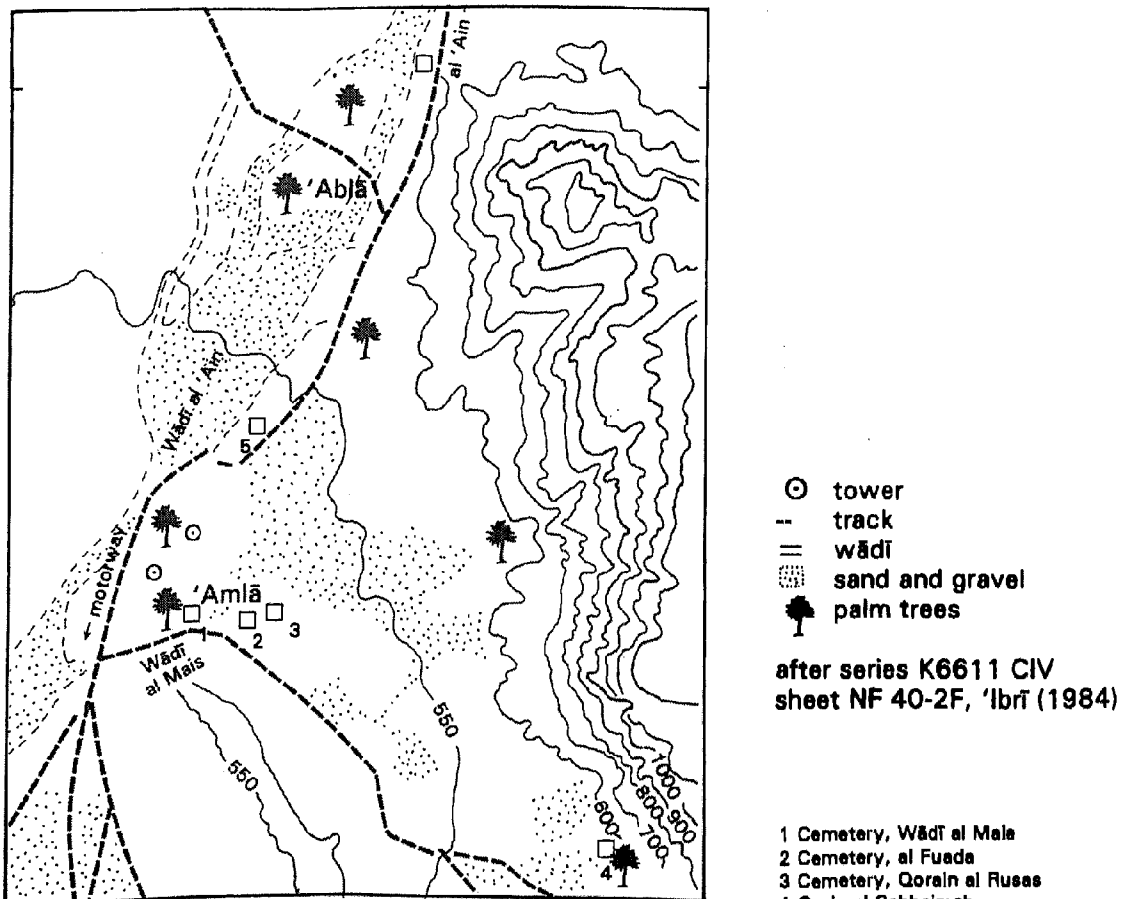


Fig. 1 Das Gebiet um 'Amla

شكل ١. المنطقة المحيطة بعلا.

1996 kamen in al Maysar zwei früheisenzeitliche Kleinsiedlungen hinzu.

Im Dezember 1990 brachte Sa'īd b. Khalifa b. Sa'ad al Hinai dem Department of Antiquities des Ministry of National Heritage and Culture einige antike Eisenschwerter, -dolche und -pfeilspitzen und verschwand wieder. Laut einem Beizettel stammten die Artefakte aus Gräbern des unweit von 'Ibrī gelegenen Bāt, dem wohl eindrucksvollsten bronzezeitlichen Bestattungsplatz des Sultanats. Um die Provenienz der neuen Funde abzuklären wandte ich mich am 20. März 1996 an den *wālī* in 'Ibrī. Einer der dortigen Angestellten brachte mich zum Haus von Sa'īd b. Khalifa in 'Amla/Wahara, etwa 42 km Luftlinie südlich von 'Ibrī. Da der Finderlohn vom Antikendienst an Sa'īd b. Khalifa noch ausstand, wurde er nun beglichen.

Beim Gespräch stellte sich heraus, daß nicht er der Finder war, sondern Sulaiman b. 'Aisa b. Amar al Hinai, der 1990 auf seinem Grundstück - 1 km östlich des Ortskerns von 'Amla in al Fueada (N23° 07'52.2"; O56° 54'07.2", Fig. 1) gelegen - inoffizielle Ausgrabungen unternommen hatte und dabei eiserne Objekte fand, die er für „Teile eines Wagens“ hielt. Die von ihm genannte Stelle wurde im Zuge der diesjährigen Grabung als Gr. Fu05 dokumentiert<sup>2</sup>.

Vor Beginn der Arbeit wurden in unmittelbarer Nähe des Hauses von Sulaiman b. 'Aisa etwa 15 unterirdische

Gräber an der Oberfläche bemerkt. Zwei davon zeigten leichte Eintiefungen - Spuren der illegalen Grabungen. Im Verlauf der Kampagne wurden weitere Spuren sowohl antiken als auch rezenten Grabraubs festgestellt, so z. B. bei Gr. Fu21.

Das untersuchte Gräberfeld liegt 2 km westlich des Fußes des Jebel Kawr (Pls. 1, 2). 400 m westlich befindet sich der Ostrand der heutigen Oase. Die Position der antiken Siedlung kann hier gesucht werden. Zweifellos war sie kleiner als die heutige Oase. 3 km südöstlich von al Fueada liegt das vorher erwähnte vorwiegend Wādī Sūq-zeitliche Gräberfeld nahe dem Qorin al Saḥḥaimah, das B. de Cardi und D.B. Doe Mitte der 70er Jahre entdeckten<sup>3</sup>.

1997 wurden in 'Amla insgesamt 23 Gräber untersucht (Pls. 3-5). 18 erstreckten sich in etwa 80 m nördlich des Hauses von Sulaiman b. 'Aisa auf dessen Grundstück. 140 m nordöstlich des Anwesens - auf dem Qorain al Rusas - kamen weitere fünf Gräber zutage.

<sup>2</sup> Diese Fundstätten sind sichtbar in einem Übersichtsfoto, das 1976 veröffentlicht wurde (B. de Cardi et al. 1976, 176 Taf. 1). Die Zelte oberhalb und rechts von „2“ entsprechen heute der Position von Sulaiman b. 'Aisas Haus. Der Südtail des Gräberfeldes entspricht „6“ im Foto.

<sup>3</sup> B. de Cardi et al. 1976, 167: site 43 Ma'wal. Brief von de Cardi 27. Januar 1991.



Pl. 1 Das Gräberfeld in al Fueada, nach Norden

لوحة ١. منطقة القبور في الفويدة، نحو الشمال.





Pl. 2 Das Gräberfeld in al Fueda, nach Süden

لوحة ٢. منطقة القبور في الفويدة، نحو الجنوب.

Da vermutet wurde, daß nicht alle Gräber an der Oberfläche sichtbar waren, wurde flächenweise abgetragen. An verschiedenen Stellen fanden sich Steinansammlungen, die keine Gräber waren. Weitere Suchaktionen unmittelbar nördlich des Zauns zum Grundstück blieben erfolglos. Mit Ausnahme von einem Grab, in das ein Strommast plaziert war, wurden alle erkannten Gräber nördlich des Hauses untersucht.

Die Grabfunde ähnelten denen, die Sa'ūd b. Khalifa dem Antikendienst eingereicht hatte. Sie sind der späten vorislamischen Zeit zuzuordnen.

350 m südwestlich dieser Fundstätte im Wādī al Mais auf dem Grundstück von Khalifa b. 'Ali al Hinai waren mehrere Gräber im Hang gesichtet worden. Zwei davon sind untersucht worden und konnten ebenfalls der späten Eisenzeit zugeordnet werden, da sie eiserne Waffen und Glasperlen enthielten. Außerdem wiesen sie eine für die Späteisenzeit typische Bauweise auf. Auf dem gesamten dazugehörigen Hügel waren späteisenzeitliche Gräber zu sehen.

Da die 25 untersuchten Gräber in ihrer Form weitgehend homogen sind, erhärtete sich der Eindruck, daß sie eine zeitliche Einheit darstellen.

Am 22.03. wurden die Grabungen beendet und die Gräber auf Sulaiman b. 'Aīsa Grundstück wiederaufgefüllt. Auf dem Qorain al Rusas ließen wir drei Gräber zur Besichtigung offen.

## Al Fueda

### Grab Fu01 (Fig. 4)

Azimet der Längsachse: 111/311 gon (= O/W)

L. der Sohle: 1.82 m

Br. der Sohle: 0.54 m

T. der Sohle u. Of.: 1.09 m

Niv. der Sohle: 599.74 m<sup>4</sup>

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Das Grab wurde im Zuge der Abräumung einer der Grabungsflächen festgestellt. Abgesehen von den schräg gesetzten Steinen im Osten fehlten andere Teile der Abdeckung. Die Grabfüllung bestand aus lehmigem, mit kleinen Steinen durchsetztem Erdreich. Die Eingangskonstruktion im Osten war intakt. Der Steinkranz war im Westen, Süden und spurenweise im Norden erhalten. Widerlager waren nur im Norden erhalten. Das Grab war ursprünglich leicht aufgeschüttet.

<sup>4</sup> Die Bezugshöhe für das Gräberfeld wurde geschätzt, bevor eine Landkarte verfügbar wurde.



Pl. 3 al Fueda, ausgegrabene Gräber

لوحة ٣. الفويدة ، قبور مُنقبة.



Pl. 4 Grab Fu04

لوحة ٤. القبر Fu04.



Pl. 5 Grab Fu09

لوحة ٥. القبر Fu09.

Wider- und Auflagesteine bestanden weitgehend aus Bruchsteinen. Die Kammerwand bestand aus gleichmäßig geformten, dunklen Bruchsteinen (Orthostaten). Im Süden waren die Auflagesteine längs verlegt, im Norden quer. Das Niveau der Kammersohle wird durch die Unterkante der Orthostaten definiert.

In diesem beraubten Grab war keine Spur eines Skelettes erkennbar. Tonscherben kamen bei der Oberflächenabtragung zutage. Im Westen des Grabes war das Erdreich unterhalb der Oberkante der Auflagesteine durch Asche dunkelbraun/grau verfärbt.

Funde:

	L	Br	St	g	H.ü.N.	DA
1 Keramik SEZ	-	-	-	-	-	13332
O.K. 8.03.1997						

**Grab Fu02 (Figs. 5, 29)**

Azimet der Längsachse: 121/321 gon (= OSO/WNW)

L. der Sohle: 1.88 m

Br. der Sohle: 0.62 m

T. der Sohle u. Ofl.: 0.94 m

Niv. der Sohle: 599.71 m

Funde: 'Amla

Wiederbelegung eventuell nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Zu Beginn der Arbeit war das Grab durch regelmäßig gesetzte, faustgroße Steine an der Oberfläche erkennbar. Der Steinkranz war an der Westseite unvollständig erhalten. Am westlichen Ende der Grabkammer wuchs ein Baum, der das Kammerende in das Grab gedrückt hatte. Deckplatten waren nicht mehr vorhanden. An der Nord- und an der Südostseite waren Widerlager *in situ*. Die Verfüllung des Grabes bestand aus lehmigem, mit ei- bis faustgroßen Steinen durchsetztem Erdreich.

Als Widerlager dienten teils Gerölle, teils Bruchsteine. Darunter standen Orthostaten, zumeist Bruchsteine, die an den Schmalseiten der Kammer größer waren als an den Längsseiten. Die südöstliche Ecke war nicht vermauert. Die Grabsohle wurde durch die Unterkante der Orthostaten und das Niveau einiger Funde definiert.

Aus der Lage der Funde ließ sich keinerlei Ordnung erkennen. Im südlichen Bereich der Kammer lagen sie konzentriert, aber nicht *in situ*. Die Niveaus der am tiefsten gelegenen Funde ließen auf die Höhe Grabsohle schließen (599.71 m). Die größten Schwertfragmente (10 und 11) lagen in der oberen Verfüllung, die Pfeilspitzen verstreut und auf unterschiedlichen Höhen. Zumindest die Hälfte davon zeigte nach Osten. Nach der Zahl der Funde zu urteilen, wurden hier vermutlich zwei männliche Individuen bestattet - eine Zuweisung der Beigaben zu den einzelnen Bestattungen war nicht möglich. Das Fundinventar umfaßt zwei Armreife (1 und 2), drei Dol-

che (3, 4 und 5), eine Lanzenspitze (8), mindestens 41 Pfeilspitzen (9), zwei Kurzschwerter (10 und 11) und Tonscherben (12). Spuren von Skeletten waren nicht vorhanden.

Funde:

	L	Br	St	g	H.ü.N.	DA
1 Armreif, Fe	7.8	6.2	1.0	24	599.75 <sup>5</sup>	13307
2 Armreif ?, Fe	3.7p <sup>6</sup>	0.7	0.7	49	599.77	13308
3 Dolch, Fe	14.5p	2.7p	1.2p	76	-	13303
4 Dolch, Fe	10.1p	1.9p	1.0	38	599.74	13305
5 Dolch ?, Fe	7.5p	1.5p	1.0	12	599.80	13306
6 Dolchfrag.?,	-	-	-	116	-	13311
7 Dolchfrag., Fe	-	-	-	-	599.88	13312
8 Lanzensp., Fe	11.8p	2.7p	1.0	529	-	13304
9 Pfeilspitzen	7.5p	1.5	1.25	18	599.78	13315.1
„	8.45	2.1	1.3	24	599.77	13315.2
„	6.2p	1.5	1.0	8	599.75	13315.3
„	6.5p	1.3	0.9	14	599.76	13315.4
„	7.4p	1.7	1.2	18	599.73	13315.5
„	6.7	1.5	0.7	16	599.75	13315.6
„	6.7p	1.4	0.7	16	599.71	13315.7
„	5.3p	1.4	1.8	10	-	13315.8
„	5.8p	1.5	0.9	16	-	13315.9
„	6.3p	1.3	0.7	16	-	13315.10
„	8.1p	1.1	0.6	14	-	13315.11
„	7.5p	1.4	1.0	20	-	13315.12
„	5.4p	1.3	0.7	10	-	13315.13
„	5.6	1.3	0.6	10	599.74	13315.14
„	8.1p	1.7	1.3	22	599.73	13315.15
„	7.8	1.6	1.3	18	599.79	13315.16
„	6.4p	1.6	0.9	12	599.73	13315.17
„	6.8p	1.7	1.3	20	599.78	13315.18
„	7.1p	1.6	1.3	12	599.74	13315.19
„	6.1	1.8	1.3	28	599.75	13315.20
„	7.0p	1.5	1.0	12	599.73	13315.21
„	7.7p	1.7	1.3	20	599.73	13315.22
„	4.8p	1.8	1.0	10	599.75	13315.23
„	3.7p	1.5	0.8	2	599.72	13315.24
„	5.6p	1.6p	1.1	14	599.74	13315.25
„	3.7p	1.0p	0.8	4	599.76	13315.26
„	4.9p	1.5	1.1	8	599.72	13315.27
„	3.6p	1.0	0.7	6	599.73	13315.28
„	2.8p	1.1	0.6	4	599.71	13315.29
„	4.2p	1.2	0.6	10	599.71	13315.30
„	7.6p	1.5	0.7	10	599.75	13315.31
„	5.9	1.5	0.6	11	599.89	13315.32

<sup>5</sup> Wenn nicht anders vermerkt, wurde die Unterkante des Objektes nivelliert. Fehlende Höhen im Katalog spiegeln Funde aus der Kammerfüllung wider.

<sup>6</sup> „p“ bedeutet die erhaltene, „c“ die ungefähre Dimension. Nach einer Dimension geschrieben, bedeutet „o“ die wahrscheinliche ursprüngliche Dimension.



	L	Br	St	g	H.ü.N.	DA
..	3.7p	1.5	0.4	6	-	13315.33
..	5.9p	1.4	0.9	9	599.74	13315.34
..	6.5p	1.8	1.1	20	-	13315.35
..	8.7p	1.5	0.9	20	-	13315.36
..	3.7	0.9	0.4	-	-	13315.37
..	6.5	1.6	0.9	12	-	13315.38
..	2.2p	0.6	0.6	2	599.74	13315.39
..	3.7p	1.2	0.7	2	599.76	13315.40
..	3.8p	1.0p	0.4p	3	599.76	13315.41
10 Kurzschw., Fe	44.4p	4.4	1.7	366	-	13301
Grifffrag.	3.1p	1.3p	0.4p	10	599.78	13316.1
Grifffrag.	4.7p	1.8	0.4	6	599.72	13316.2
Grifffrag.	3.4p	1.8	0.4	4	599.72	13316.3
Grifffrag.	6.8p	1.3	0.3	4	599.71	13316.4
Frag., Fe	-	-	-	-	-	13317
Griffangel, Fe	5.4p	1.4	1.4	20	599.75	13309
Griffangel, Fe	6.2p	1.4	1.4	18	599.76	13310
11 Kurzschwert, Fe	42.8p	3.8p	1.2p	284	599.76	13302
12 Tonscherben SEZ	-	-	-	-	-	13313
13 Schnecke	2.1p	0.5	0.5	-	-	13314

M.H. 01.03.1997

**Grab Fu03 (Figs. 6, 31)**

Azimut der Längsachse: 131/331 gon (= OSO/WNW)

L. der Sohle: 1.68 m

Br. der Sohle: 0.65 m

T. der Sohle u. Ofl.: 1.09 m

Niv. der Sohle: 599.60 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Das Grab war zu Beginn der Arbeiten als leichte Erhöhung mit einer Konzentration von faustgroßen Flußsteinen an der Oberfläche erkennbar. Am Ostende lag ein Dachstein, an der Südseite lagen Widerlager *in situ*. An der nördlichen und an der westlichen Seite fehlten teilweise die Auflagesteine. Die Grabfüllung bestand aus lehmiger Erde, die mit Steinen unterschiedlicher Größe durchsetzt war.

Das Grab zeigte an der Oberfläche eine ansonsten nicht beobachtete Anhäufung faustgroßer Steine, deren Streuung annähernd oval war. Dachkonstruktion und Kammermauern bestanden aus Bruchsteinen. Die Zwischenräume waren mit bis zu faustgroßen Flußsteinen gefüllt. Die Grabsohle wurde durch die Unterkante der Kammerummauerung und die Lage der Knochenfragmente definiert (k. LZ-Nr.). Die Eingangskonstruktion war im westnordwestlichen Kammerende.

Das Grab war beraubt. Die Funde lagen ohne ersichtliche Ordnung in unterschiedlichen Höhen. Lediglich in der Südostecke lag auf der Grabsohle eine Phalange.

Funde:

	L	Br	St	g	H.ü.N.	DA
1 Ring	-	1.9	0.26	0.5	-	13320
2 Ring	-	1.85	0.15	0.5	-	13321
3 Pilgerflasche	18.3	14.8	10.4	-	-	13318
4 Anhänger	1.6	1.25	1.25	1	-	13319
5 Anhänger	4.4	3.9	0.2	8	-	13322
6 Frag., Pb	9.1p	1.5	0.9	22	-	13323

K.S. 05.03.1997

**Grab Fu04 (Figs. 7, 31)**

Azimut der Längsachse: 142/342 gon (= SO/NW)

L. der Sohle: 1.52 m

Br. der Sohle: 0.62 m

T. der Sohle u. Ofl.: 1.06 m

Niv. der Sohle: 599.62 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOg

Beim Abdecken der Fläche wurden die ersten Anzeichen des Grabes sichtbar. Im Süden und Westen war der Steinkranz fast vollständig erhalten, während im Nordosten und Ostsüdosten mehrere Steine fehlten. Die Dachplatten in der östlichen Hälfte des Grabes lagen *in situ*, ebenso eine schräg daran angelegte Steinplatte (L. 0.90 m), die mit Steinen (L. 0.60 m) beschwert war. Im Norden war ein einziges, an der südlichen und südwestlichen Seite waren alle Widerlager erhalten. Dieser Grabbau gehörte zu den am besten erhaltenen.

Der Steinkranz bestand aus faustgroßen Steinen. Am Westende des Grabes ließ sich eine Konzentration von Steinen anstelle des Steinkranzes feststellen, die eventuell *in situ* lagen. Die Widerlager, zumeist Bruchsteine, waren etwa 0.50 m breit. Die Auflagesteine fehlten nur am östlichen Eingang, während die Kammerorthostaten im Westen ihre Funktion übernahmen. Die Grabsohle hat eine unregelmäßige subovale Form. Im Westen, Osten und Norden bestand die Kammermauerung aus bis zu 0.30 m breiten Bruchsteinplatten. Im Süden war die Mauer aus drei breiten Steinplatten konstruiert. Die Unterkante der Orthostaten definierte die Grabsohle.

Skelettreste waren nicht vorhanden. Die Funde 2-4 lagen zusammen auf Sohlenebene und könnten zu einem Spinnrocken gehört haben. Ein Dolchfragment (1) lag etwas höher.

Funde:

	L	Br	St	g	H.ü.N.	DA
1 Dolchfrag.	3.7p	1.7	0.6	8	599.69	13382
2 Spinnwirtel	-	12.6	1.4	8	599.65	13383
3 Flint	-	4.5	1.6	0.4	599.62	13384
4 Stäbchen, Fe	9.8	0.35	0.35	1	599.64	13385

O.K. 15.03.1997

**Grab Fu05 (Figs. 8, 31)**

Azimut der Längsachse: 153/353 gon (= SO/NW)

L. der Sohle: 1.70 m

Br. der Sohle: 0.70 m

T. der Sohle u. Ofl.: 1.20 m

Niv. der Sohle: 599.09 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Laut eigener Aussage hat Sulaiman b. 'Aisa b. Amar al Hinai auf seinem Grundstück im Jahr 1990 in diesem Grab geschürft. Aber die von ihm gefundenen eisernen Waffen stammen vielleicht nicht nur aus diesem Grab, da ihre Anzahl zu groß ist. Seine Grabungsstelle wurde später als Müllhalde benutzt. Bei einem Besuch im Jahr 1995 waren Splitter menschlicher Knochen auf der Oberfläche in einer leichten Mulde sichtbar. Das Grab wurde bereits in der Antike beraubt. Dachplatten lagen nicht *in situ*.

Die Grabkammer bestand weitgehend aus Bruchsteinen, die Kammermauer vorwiegend aus etwa 30 x 40 cm großen Orthostaten. Darauf lagen Auflagesteine und Widerlager. Einer der Decksteine lag unmittelbar neben der Kammer. Am östlichen Ende lag ein plattenförmiger Stein, der nach innen geneigt war.

Die Funde und Skelettreste stammten aus der Grabfüllung und lagen in unterschiedlicher Höhe. In der oberen Verfüllung, unmittelbar außerhalb der Kammermauer, lag ein bronzener Deckelgriff. Aus dem Grab stammt das Fragment einer Schwertklinge (2). Vereinzelt Menschen- und vielleicht Tierknochen kamen zutage. Schädelscherben eines Erwachsenen (LZ 12) lagen in der Mitte und im südöstlichen Ende der Kammer etwas oberhalb der Sohle. Knochen eines kleinen Widerkäuers kamen an der südöstlichen Kammermauer vor. Im Grab lag auch Abfall neueren Datums (DA 13330).

Funde:

	L	Br	St	g	DA
1 Deckel, Cu	8.0	2.0	4.9	48	DA 13328
2 Schwertfrag.	3.0p	1.5p	4.65	32	DA 13329
3 Knochen	-	-	-	-	LZ 7
4 Tonscherben SEZ	-	-	-	-	DA 13331

Ausgräber: P.Y. 27.02.1997

**Grab Fu06 (Figs. 9, 32)**

Azimut der Längsachse: 137/337 gon (= SO/NW)

L. der Sohle: 1.77 m

Br. der Sohle: 0.70 m

T. der Sohle u. Ofl.: 1.05 m

Niv. der Sohle: 599.07 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Das Grab wurde erst beim Säubern der Grabungsfläche erkannt. Dachsteine waren weder *in situ* noch in der unmittelbaren Umgebung vorhanden.

Widerlager, Auflagesteine und Orthostaten bestanden vorwiegend aus gebrochenen Steinen. Am südöstlichen Kammerende deuteten die oberen, schräg plazierten Steine darauf hin, daß sich hier ein Eingang befand. Die Grabsohle wurde durch das Niveau der Knochen und einzelner Funde definiert.

Das Grab wurde beraubt und die Funde, von denen nur wenige auf der Kammersohle lagen, waren sichtlich gestört. In der südöstlichen Ecke lag eine Schale aus Buntmetall (2)<sup>7</sup>, unmittelbar nordwestlich davon eine Parfümflasche (1). Nahe der westlichen Ecke fand sich ein Dolch (3). In der Verfüllung der südwestlichen Ecke lag eine Pinzette (4). Das Skelett (LZ 123, 198 g) war gestört und seine ursprüngliche Lage unklar. Im südöstlichen Ende kamen ca. 10 cm oberhalb der Kammersohle einige Tonscherben (5) vor. Eine Trachtnadel (6), die in der oberen Verfüllung gefunden wurde, gehörte vielleicht nicht zum Grab.

Skelettbefund:

Alter: 60-80 Jahre

Geschlecht: Männlich

Totenlage: Skelett gestört

Funde:

	L	Br	St	g	H.ü.N.	DA
1 Parfümflasche	-	11.5	14.5	-	599.07	13326
2 Schale, Cu	-	16.5	5.6	370	599.07	13324
3 Dolch	13.7p	2.7	1.1	38	599.07	13343
4 Pinzette, Fe	7.1	1.1	1.1	10	599.15	13327
5 Tonscherben	-	-	-	-	-	13736
6 Trachtnadel	7.3p	0.6	0.6	4	599.95	13325

Ausgräber: P.Y. 01.03.1997

**Grab Fu07 (Figs. 10, 32)**

Azimut der Längsachse: 141/341 gon (= SO/NW)

L. der Sohle: 1.64 m

Br. der Sohle: 0.70 m

T. der Sohle u. Ofl.: 0.97 m

Niv. der Sohle: 599.79 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Die Stelle wurde wegen einer leichten Erhebung der Oberfläche und einer schlecht erhaltenen, ringförmigen Steinsetzung an der südöstlichen Ecke untersucht. Wähl-

<sup>7</sup> Auf eine Beschreibung des Dekors der vier dieses Jahr ausgegrabenen Exemplare muß bis zur Restaurierung verzichtet werden.

rend Dachplatten und Widerlager fehlten, waren noch alle Auflagesteine *in situ* vorhanden.

Der Steinkranz bestand aus Geröllen, die größer als eine Faust waren. Sowohl Auflagesteine als auch Orthostaten bestanden aus spröden Bruchsteinen. Die großen Bruchsteine an den beiden Enden wurden von außen durch zahlreiche kleinere Bruchsteine abgestützt. Im Osten waren die Bruchsteine stark zersplittert. An diesem Ende standen die Steine mit der Oberkante nach innen geneigt. Alle Orthostaten hatten annähernd die gleiche Größe und waren regelmäßig verputzt. Die Orthostaten zu beiden Enden waren größer. Die Grabsohle war schwer zu erkennen und wurde durch die Unterkante der Kammermauerung und die Lage der Funde definiert.

Alle Funde stammten aus dem westlichen Kammerende und befanden sich in gestörter Lage nahe bzw. auf der Sohle (6-9, 11-12). Die Schnecke (10) lag vermutlich als Ergebnis antiker Störungen tiefer. Spuren von Skelettmaterial waren nicht vorhanden.

Funde:

	L	Br	St	g	H.ü.N.	DA
1 Parfümflasche	-	7.8	7.74p	-	599.91	13344
2 Balsamarium	-	9.8	15.3	-	599.93	13347
3 Tonscherben SEZ	-	-	-	-	599.85	13354
4 Steingefäß	6.6	6.1	7.0	-	599.90	13345.1
5 Steingefäß	-	8.5	1.74	-	599.85	13346
6 Steindeckel	3.44	3.23	2.2	-	599.81	13345.2
7 Pfeilspitze	4.8p	0.65	0.6	2	599.79	13353.1
Pfeilspitze	4.4p	0.8	0.8	4	599.79	13353.2
8 Ring, Ag	-	1.8	0.01	c.0.5	599.79	13348
9 Ring	-	0.75	0.59	c.1.0	599.79	13349
10 Schnecke	2.5	0.8	0.8	-	599.69	13350
11 Muschelschale	4.0	3.0	0.8	-	599.80	13351
12 Muschelschale	-	-	-	-	599.80	13352

M.H. 09.03.1997

#### Grab Fu08 (Fig. 11)

Azimet der Längsachse: 131/331 gon (= OSO/WNW)

L. der Sohle: 1.66 m

Br. der Sohle: 0.58 m

T. der Sohle u. Ofl.: 0.88 m

Niv. der Sohle: 599.57 m

Funde: -

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Eine schlecht erhaltene, ringförmig angelegte Steinsetzung wurde beim Abtragen der Oberfläche sichtbar. Sie bestand aus unregelmäßig geordneten, faustgroßen, gelegentlich etwas größeren Steinen. Dachplatten konnten nicht beobachtet werden. Widerlager waren nur noch an der Nordost-Ecke erhalten und *in situ*. An der südlichen Längsseite lagen zwei Widerlager verrutscht. Auf-

lagesteine waren nur an der Nordseite vollständig, an der südlichen Längsseite nur noch lückenhaft vorhanden und *in situ*. Das Grabinnere enthielt ei- bis faustgroße Steine in sandig-lehmiger Füllung.

Die Auflagesteine bestanden aus großen, z.T. sehr spröden Bruchsteinen. Die Kammermauer bestand aus annähernd gleich großen Orthostaten aus Bruchstein. Zu beiden Enden waren die Orthostaten größer. An der Südseite waren zwei große Gerölle verbaut worden. Die Ummauerung der Grabkammer zeigte ein annähernd regelmäßiges Fugenbild mit bis zu 5 cm großen Lücken, die mit ei- bis faustgroßen Kieselsteinen verkeilt waren. Am östlichen Ende ragten die Auflagesteine schräg in das Grabinnere hinein. Die Grabsohle wurde durch die Unterkante der Orthostaten definiert.

Es gab weder Funde noch Spuren eines Skelettes.

M.H. 10.03.1997

#### Grab Fu09 (Figs. 12, 32, 33)

Azimet der Längsachse: 135/335 gon (= OSO/WNW)

L. der Sohle: 2.24 m

Br. der Sohle: 0.60 m

T. der Sohle u. Ofl.: 0.92 m

Niv. der Sohle: 599.65 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: WOs

Die ersten Anzeichen des Grabes zeigten sich beim Abdecken. Dachplatten fehlten. Die Eingangskonstruktion befand sich im Osten. Die Auflagesteine waren vollständig erhalten. Von den Widerlagern waren im Norden nur einer und im Süden drei erhalten. Die Kammerfüllung bestand aus sandig-lehmigem, mit kleinstückigen Kieselsteinen durchsetztem Erdreich.

Die erhaltenen Widerlager bestanden aus Geröllen. Im Norden lagen die Auflagesteine quer, im Süden parallel zur Längsachse. Orthostatensteine bildeten die unterste Lage der Kammermauerung und der Abstand zu den Auflagesteinen wurde mit kleinen Steinen und an einer Stelle mit einer Steinplatte ausgeglichen. Im Osten bestand die Wand aus einem ca. 0.40 m in das Grabinnere eingedrungenen länglichen Stein, auf dem zwei sich überschneidende Steinplatten die Auflage für die Verschlussplatte bildeten. Das Niveau der Funde sowie das der Unterkante der Orthostaten definieren die Grabsohle. Zwei Tongefäße am westlichen Ende schienen *in situ* zu stehen. Da ihre Niveaus ca. 8 cm über denjenigen der anderen Funde waren, besteht die Möglichkeit, daß die Sohle im Westen etwas höher war.

Trotz Beraubung lagen einige Funde vermutlich annähernd *in situ* auf der Grabsohle. Zu nennen ist eine mit der Öffnung nach unten liegende Metallschale (1),



unter der sich ein Reifen mit Kolbenenden (2) und ein Ring (3) befanden. In unmittelbarer Nähe und 0.20 m südlich davon lagen Perlen (4). Am westlichen Ende des Grabes standen ein Steingefäß (5) und eine Wasserflasche (6); wenige Zentimeter nördlich davon eine leicht nach Westen gekippte Pilgerflasche (7), hinter der - zur Kammerwand hin - ein Messer (8) zutage kam. Weiter nach Osten in der Verfüllung lag ein unbestimmbares Objekt aus Ton (9) und eine Pfeilspitze (10).

Funde:

	L	Br	H/St	g	H.ü.N.	DA
1 Schale, Cu	-	17.0	5.4	422	599.71	13335
2 Armreif, Ag	6.88	5.4	2.2	96	599.71	13341
3 Ring	-	2.1	0.65	-	599.71	13337
4 Perlen	-	-	-	-	599.67	13342.1
4 Perlen	-	-	-	-	599.66	13342.2
4 Perlen 2x	-	-	-	-	599.64	13342.3
5 Steingefäß	-	4.9	3.54	-	599.68	13336
6 Vorratsflasche	-	25.8	37.5	-	599.04	13334
7 Pilgerflasche	16.7	21.8	26.3	-	599.89	13333
8 Messer	5.7p	1.42	0.65	10	599.59	13339
9 Funktion unbek	3.58	1.78	1.3	-	599.77	13340
10 Pfeilspitze	7.3	0.8	0.8	6	599.79	13338
- Erdprobe	-	-	-	-	599.71	LZ 20

O.K. 13.03.1997

### Grab Fu10 (Figs. 13, 34)

Azimet der Längsachse: 121/321 gon (= WNW/SO)

L. der Sohle: 2.84 m

Br. der Sohle: 0.74 m

T. der Sohle u. Ofi.: 0.86 m

Niv. der Sohle: 599.52 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Das Grab war an der Oberfläche durch einen Steinkranz von überfaustgroßen Steinen erkennbar. Dachplatten fehlten. Sämtliche Widerlager und alle Auflagesteine lagen *in situ*. Das Grabinnere enthielt ei- bis faustgroße Steine in einer sandig-lehmigen Verfüllung.

Die Widerlager bestanden vorwiegend aus spröden Bruchsteinen und einigen wenigen großen Geröllen. Die Orthostaten bestanden aus Bruchsteinen unterschiedlicher Größe. Kein regelmäßiges Fugenbild war erkennbar. Die größten Orthostaten befanden sich zu beiden Enden sowie im westlichen Bereich der Grabkammer. Am östlichen Ende ragten Steinplatten in den oberen Kammerbereich. Die Grabsohle wurde durch die Lage des Skelettes Nr. 2 und der dazugehörigen Funde definiert.

Das Grab enthielt zwei Skelette, die symmetrisch zueinander in Hockerstellung niedergelegt worden waren.

Skelett 1 lag in der westlichen Hälfte der Grabkammer auf einer Höhe von 599.59-.60 m. Vor dem Becken auf dem Femur lag ein Schwert (1), mit der Spitze nach Westen. Hinter der Schulter auf der Grabsohle befand sich ein Balsamarium (2). Skelett 2 ruhte in der östlichen Hälfte auf 599.52 m Höhe. Hinter den unteren Extremitäten lagen ein Schwert (4) mit abgebrochenem Griff (3), dessen Spitze nach Osten wies, und parallel dazu ein fragmentarischer Dolch (k. Nr.). Beide sind nach der Freilegung sofort zerfallen. Hinter dem Becken des Skelettes gab es ein Bündel nach Osten weisender Pfeilspitzen (5). Zwischen den Fragmenten des Schwertes (3) befand sich eine Nadel (6). Die restlichen Funde lagen in gestörter Position im Kammerschutt. Die Funde 7 und 8 lagen am östlichen Ende und wurden daher vorläufig Skelett 2 zugeordnet. Die symmetrische Totenlage läßt eine gleichzeitige Bestattung der beiden Individuen vermuten. Ein Teil der Beigabenausstattung von Skelett 1 scheint zu fehlen.

Skelettbefund:

#### Skelett 1

Totenlage: rechtsseitiger Hocker, Kopf nach WNW, Blick nach S, Hände vor dem Gesicht

Geschlecht: Männlich

Alter: 30-50 Jahre

#### Skelett 2

Totenlage: rechtsseitiger Hocker, Kopf nach OSO, Blick nach NNO

Geschlecht: Männlich

Alter: 30-50 Jahre

Funde:

	L	Br	H/St	g	H.ü.N.	DA
<b>Skelett 1:</b>						
1 Schwert	32.0p	6.0	-	198	599.59	13360
2 Balsamarium	-	9.0	13.3	-	599.63	13357
<b>Skelett 2:</b>						
3 Schwertfrag.	-	-	-	8	599.53	13355
Schwertgriff	c.72	c.5.0	c.2.0	760	599.68	13355
Schwertfrag.	-	-	-	54	599.63	13355
4 Schwert	28.0p	6.0	-	330	599.64	13361
5 Pfeilspitzen	5.9p	1.4	1.0	12	599.58	13358.1
„	5.9p	2.2	1.1	10	599.58	13358.2
„	7.1p	1.2p	0.6p	10	599.58	13358.3
„	5.8p	1.7p	0.6p	8	599.58	13358.4
„	6.1p	1.4p	0.8p	4	599.58	13358.5
„	3.9p	1.4p	0.7p	2	599.58	13358.6
„	4.9p	1.9p	0.8p	16	599.58	13358.7
„	frag.	-	-	184	599.58	13358.8
6 Nadel	4.4	0.2	0.2	1	599.68	13356
Vermutlich Skelett 2 der oberen Verfüllung zuzuordnende Funde:						
7 Pfeilspitze	6.9p	1.5	1.1	16	599.79	13359.1
Pfeilspitze	7.2p	1.6	0.7	12	599.79	13359.2
8 kl Metallfrag.	-	-	-	-	599.79	13362

M.H. 09.03.1997

**Grab Fu11** (Figs. 14, 38)

Azimut der Längsachse: 132/332 gon (= OSO/WNW)

L. der Sohle: 1.72 m

Br. der Sohle: 0.77 m

T. der Sohle u. Ofl.: 0.90 m

Niv. der Sohle: 599.72 m

Funde: 'Amla

Wiederbelegung nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Das Grab wurde erst bei Abtragung des Oberflächenschuttes erkennbar. Der Steinkranz war rudimentär erhalten und verfügte über acht markante Steine. Im Westen lag ein Dachstein *in situ*. Widerlager waren in der Südost-, Südwest- und Nordwestecke *in situ*. Die Grabfüllung bestand aus lehmigem, mit Steinen durchsetztem Erdreich.

Nach Entfernung des Dachsteines konnte man sehen, daß er vermutlich von den benachbarten Steinen gestützt wurde, da er nicht auf Auflagesteinen ruhte. Die Kammermauerung wurde aus unterschiedlich geformten Orthostaten gebildet. Beide Kammerenden wurden von einem jeweils glatten und regelmäßig geformten Stein abgeschlossen. Die Auflagesteine waren komplett erhalten (s. jedoch die vorstehende Beschreibung des erhaltenen Decksteins), zusätzlich diverse Widerlager. Die Zwischenräume in der Kammermauerung waren mit kleineren Geröllen verfügt. Besonders fielen die beiden steil nach oben einkragenden Steine am Ostende auf, die den Einstiegsbereich bildeten. Das Sohlenniveau wurde durch die Unterkante der Orthostaten definiert.

Keinerlei Knochenreste. Ca. 10 cm über der angenommenen Sohlenhöhe lag in leicht gekippter Stellung eine reliefierte Schale aus Buntmetall (1).

Fund:

	L	Br	H/St	g	H.ü.N.	DA
1 Schale, Cu	-	16.2	4.5	362	599.73	13363

K.S. 6.03.1997

**Grab Fu12** (Figs. 15, 35, 36, 37)

Azimut der Längsachse: 122/322 gon (= OSO/WNW)

L. der Sohle: 2,48 m

Br. der Sohle: 0.63 m

T. der Sohle u. Ofl.: 1.30 m

Niv. der Sohle: 599.30 m

Funde: 'Amla

Wiederbelegung nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Zu Beginn der Arbeit war das Grab an der Oberfläche kaum erkennbar. Lediglich am Ostende des Grabes lagen mehrere große, den Steinkranz bildende Bruchsteine. Das Südwestende wies Steinkranzreste aus kopf-

bis faustgroßen Steinen auf. Am Westende des Grabes waren die Reste eines Baumstumpfes erkennbar, wie dies am Grabungsort mehrfach auftrat. Etwa 35 cm unterhalb der rezenten Oberfläche kamen Deckplatten zutage. Sie lagen *in situ* und deckten das Grab zur Hälfte ab. Am Nordostende der Kammer waren sowohl ein Auflagestein als auch ein großes Widerlager in südlicher Richtung zur Seite gehoben und übereinander getürmt worden. Dadurch war ein schmaler, ca. 35 cm breiter Einstiegsweg entstanden, der als Raubgang gedient hatte. Die Kammerfüllung erwies sich als heterogen und bestand aus lehmigen, teils mit größeren, teils mit kleineren Kieselsteinen durchsetzten Lagen.

Das gesamte Baumaterial bestand aus Bruchsteinen unterschiedlicher Größe. Ost- und Westseite der Grabkammer wurden jeweils durch einen glatten Orthostaten gebildet. Auffallend an der Konstruktion des Grabes war - abgesehen von seiner ungewöhnlichen Länge - die Tatsache, daß alle Auflagesteine mindestens doppelt, also zweireihig, großteils sogar dreireihig gesetzt waren. Beide längsseitigen Kammerwände waren aus mehreren regelmäßig gesetzten Orthostaten gebildet. Am Südostende kragte eine Steinplatte nach oben ins Grabinnere. Die wenigen Fugen waren mit lehmiger Erde und kleinen Steinen verfüllt. Alle Orthostaten und Auflagesteine sowie die Mehrzahl der Widerlager waren *in situ*. Das Niveau der Grabsohle war durch die Störungen schwer zu bestimmen. Einige der Funde lagen in einer definierbaren Zone von 599.30-.35 m. Vermutlich gerieten durch den frühen Grabraub einige der Funde etwas unter diese Ebene. Unter der Vorratsflasche (16) lagen die Fragmente eines Schwertes (4), die einen Anhaltspunkt für die Sohlenhöhe gaben.

Der Grabbau und sein Inhalt waren stark gestört. Im Nordwestviertel der Grabkammer wurden zwei winzige Knochenfragmente (LZ 227, 5 g) gefunden, die keine Aussage über Alter und Geschlecht des Bestatteten zulassen. Im Raubgang befand sich eine Metallnadel (2). Das Grab war mit einer Vielzahl von Waffen ausgestattet, die in allen Höhen der Grabfüllung lagen. Es handelte sich hierbei um Pfeilspitzen und deren Fragmente (1), sowie Bruchstücke diverser Schwerter und Dolche. Eine große, grünlich-golden glasierte zweihenklige Vorratsflasche (16) wurde im westlichen Kammerende vorgefunden. Sie lag auf der Seite und darunter fanden sich der Griff und die Fragmente des o. g. Kurzschwertes (4). Insgesamt war festzustellen, daß die gefundenen Waffenfragmente aus massiv erhaltenem Metall bestanden. Die genaue Anzahl der beigelegten Waffen ließ sich aufgrund des fragmentarischen Zustandes der einzelnen Objekte nur schwer bestimmen. Anscheinend waren fehlende Fragmente während einer der Beraubungen entfernt worden. Soviel konnte festgestellt werden: Zur Beigaben-

ausstattung gehörten ursprünglich mindestens vier Schwerter und ein Kurzschwert. Zahlreiche kleine Eisenfragmente bildeten Aufhängung und Scheide der Schwerter (10). Dazu kamen mehr als zwei Dolche, 49+ Pfeilspitzen, ein Spinnwirtel (15) und am Fußende eine überarbeitete Tonscherbe, die als „Kultobjekt“ (14) gedeutet wurde. In Anbetracht der großen Zahl der Beigaben ist denkbar, daß hier zwei Individuen bestattet worden waren.

Funde:

	L	Br	H/St	g	H.ü.N.	DA
1 Pfeilspitze	8.4	1.6	0.9	16	599.46	13365. 1
„	7.6	1.4	0.9	20	599.46	13365. 2
„	7.9	1.7	0.8	16	599.46	13365. 3
„	5.7p	1.3	0.8	30	599.46	13365. 4
„	6.1p	1.5	0.8	-	599.46	13365. 5
„	9.1	2.4	1.1	22	-	13365. 6
„	7.5	1.7	1.2	16	599.36	13365. 7
„	8.3	1.8	0.9	20	599.32	13365. 8
„	7.3p	1.9	0.8	20	-	13365. 9
„	7.3p	1.9	0.9	12	599.36	13365.10
„	7.8	1.9	1.0	18	599.30	13365.11
„	7.1	1.1	1.3	22	599.30	13365.12
„	6.8p	1.6	1.0	22	599.29	13365.13
„	6.3p	1.4	1.0	20	599.38	13365.14
„	7.0p	1.4	1.2	20	599.30	13365.15
„	7.1p	1.9	1.7	26	599.34	13365.16
„	7.6p	1.5	0.9	16	599.37	13365.17
„	6.0p	1.5	0.8	12	599.36	13365.18
„	6.5p	1.6	0.9	18	599.33	13365.19
„	5.7p	1.5	0.8	10	599.40	13365.20
„	5.3p	1.6	0.9	10	599.30	13365.21
„	5.2p	1.4	0.9	10	599.53	13365.22
„	5.1p	1.9	1.0	16	599.42	13365.23
„	7.4p	1.9	1.1	20	599.30	13365.24
„	4.9p	1.9	0.8	12	599.25	13365.25
„	5.8p	1.7	1.1	16	599.25	13365.26
„	5.7p	1.5	1.0	14	599.58	13365.27
„	4.8p	1.6	0.7	12	599.36	13365.28
„	6.4p	1.6	0.8	12	599.49	13365.29
„	5.3p	1.5	0.8	10	599.29	13365.30
„	3.9p	1.5	1.2	6	599.35	13365.31
„	4.2p	1.5	1.0	10	599.42	13365.32
„	4.7p	1.9	0.8	4	599.50	13365.33
„	3.6p	1.5	0.9	4	599.50	13365.34
„	4.2p	1.5	0.9	10	599.42	13365.35
„	5.1p	1.5	0.9	12	599.32	13365.36
„	4.9p	1.6	0.8	8	599.32	13365.37
„	3.4p	1.5	0.9	8	-	13365.38
„	4.0p	1.5	0.8	8	599.30	13365.39
„	3.4p	1.5	0.7	6	599.30	13365.40
„	4.3p	1.4	0.7	6	599.37	13365.41
„	3.3p	1.4p	0.9	4	599.42	13365.42
„	4.7p	1.3p	0.7	4	599.29	13365.43

	L	Br	H/St	g	H.ü.N.	DA
1 Pfeilspitze	3.4p	1.5p	0.7	4	599.29	13365.44
„	8.0	1.1	0.8	14	599.49	13365.45
Pfeilspitzenfr.	-	-	-	-	-	13366. 0
2 Trachtnadel	6.1p	0.7	0.7	4	600.23	13367. 0
3 Kurzschwert	c.50	4.6	2.1p	522	-	13368. 0
4 Schwert	>40.0	4.4	c.1.4	>302	599.34	13369. 0
5 Schwert	36.0p	3.5	1.1	270	599.35	13370. 0
6 Schwertfr.	11.9p	3.0	1.4	80	599.43	13373. 0
7 Schwertfr.	9.2p	3.0	1.9p	92	599.37	13374. 0
8 Schwertfr.	11.2p	4.0p	1.4	98	599.31	13375. 0
9 Schwertfr., kl	3.2	2.8	1.4	18	599.45	13378. 1
„	3.6p	3.3p	1.2	18	599.42	13378. 2
10 Schwertzubehör	6.0p	-	0.9	10	599.36	13379. 1
„	4.4p	-	0.8	6	599.36	13379. 2
„	3.5p	-	0.7	4	599.40	13379. 3
„	-	-	-	6	599.53	13379. 4
„	-	-	-	2	599.31	13379. 5
„	-	-	-	2	599.30	13379. 6
11 Dolch	28.5p	4.5	2.1	290	-	13371. 0
12 Dolch	c.21	3.5	2.2	92	599.40	13372. 0
13 Dolchfrag, kl	-	-	-	16	599.36	13377. 1
„	-	-	-	10	599.41	13377. 2
„	-	-	-	22	599.37	13377. 3
„	-	-	-	8	599.31	13377. 4
„	-	-	-	16	599.32	13377. 5
„	-	-	-	36	599.33	13377. 6
14 „Kultobjekt“	13.0	11.0	2.3	-	599.35	13380. 0
15 Spinnwirtel	6.7	4.0p	1.8	50	-	13376. 0
16 Vorratsflasche	-	25.5	34.3	-	599.32	13381. 0
insgesamt: 73						
K.S. 13.03.1997						

### Grab Fu13 (Figs. 16, 38)

Azimut der Längsachse: 115/315 gon (= OSO/WNW)

L. der Sohle: 1.18 m

Br. der Sohle: 0.72 m

T. der Sohle u. Of.: 0.86 m

Niv. der Sohle: 599.45 m

Funde: 'Amla

Wiederbelegung nachweisbar

Architektur: 'Amla

Grabtyp: SOs

Im nordöstlichen Bereich der Grabkammer waren an der Oberfläche Reste eines Steinkranzes aus faust- bis kopfgroßen Steinen sichtbar. Davon waren etwa 10 Steine erhalten. Das nordöstliche Ende der Grabkammer war von Wurzeln durchsetzt. Weder Dachplatten noch Widerlager waren vorhanden. An der Nordseite waren Auf- lagesteine vollständig, an der südwestlichen Seite keine erhalten. Das Grabinnere enthielt sandig-lehmiges, mit ei- bis faustgroßen Steinen durchsetztes Erdreich.

Die erhaltenen Auflagesteine waren Bruchsteine, ebenso die darunterliegenden Orthostaten, die bis auf die südwestliche Längsseite 0.50 m breit waren. Regelmäßig geformte Steine prägten das Fugenbild. Die Grabsohle definierte sich durch das Niveau der Unterkante der Orthostaten.

Die Funde bestanden lediglich aus einem Fragment eines Steingefäßes in gestörter Lage. Spuren von Skelettmaterial waren nicht vorhanden.

Funde:

	L	Br	H/St	g	H.ü.N.	DA
1 Steingefäß	-	20.0u	6.9	-	599.61	13364

M.H. 9.03.1997

#### Grab Fu14 (Figs. 17, 40)

Azimet der Längsachse: 131/331 gon (= OSO/WNW)

L. der Sohle: 0.80 m

Br. der Sohle: 0.54 m

T. der Sohle u. Ofl.: 1.04 m

Niv. der Sohle: 599.70 m

Funde: -

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SOg

Das Grab war verhältnismäßig gut erhalten, in seinem westlichen Bereich lagen Dachplatten teilweise *in situ*. Die Kammer enthielt eine sandig-lehmige, mit ei- bis faustgroßen Steinen durchsetzte Füllung.

Unregelmäßig positionierte Steine an der Oberfläche wurden als Reste eines Steinkranzes verstanden. Die Dachplatten waren bis zu 60 cm breit. Auflagesteine und Widerlager bestanden vorwiegend aus Bruchsteinplatten, vereinzelt jedoch aus Geröll. Auffällig waren bei diesem Grab Auflagesteine, die spitz ins Kammerinnere ragten. Die Orthostaten waren 15-20 cm breit und erreichten eine Höhe von etwa 40 cm. Die Eingangskonstruktion am östlichen Kammerende bestand aus einer Platte, die schräg auf einem sog. Trittstein auflag.

Es kamen weder Skelettmaterial noch Funde vor.

#### Grab Fu15 (Figs. 18, 38)

Azimet der Längsachse: 136/336 gon (= OSO/WNW)

L. der Sohle: 1.92 m

Br. der Sohle: 0.98 m

T. der Sohle u. Ofl.: 1.06 m

Niv. der Sohle: 599.65 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOg

In der Grabungsfläche kam eine ringförmige Steinsetzung zutage. Dachplatten konnten nicht beobachtet werden. Widerlager waren nur im südwestlichen und im

nordöstlichen Kammerbereich erhalten und *in situ*. In der Mitte der südlichen Langmauer lag ein Widerlager nicht mehr *in situ*. Die Auflagesteine waren in ursprünglicher Position vollständig erhalten. Die Kammer enthielt eine sandig-lehmige mit ei- bis faustgroßen Steinen durchsetzte Verfüllung.

Widerlager und Auflagesteine bestanden sowohl aus großen Geröllern als auch aus Bruchsteinen. Die Orthostaten bestanden aus annähernd gleich großen Bruchsteinen. Zu beiden Enden hin waren die Mauersteine jedoch größer. Die Vermauerung zeigte ein regelmäßiges Fugenbild. Am Ostende befand sich ein großer Bruchstein, der schräg nach innen in die Kammer ragte. Die Grabsohle wurde durch die Lage der Unterkante der Orthostaten definiert.

Das Skelett und die Beigaben waren stark gestört. Skelettreste waren nur als winzige Fragmente eines Langknochens vorhanden. Eine Bestimmung nach Geschlecht und Alter war daher nicht möglich.

Funde:

	L	Br	H/St	g	H.ü.N.	DA
1 Röhrchen, Cu	9.8	0.35	0.35	1	599.66	13386
2 Trachtnadel	3.9p	0.4	0.4	1	599.68	13387
3 Zwinge, Ag	1.5	1.2	1.1	c.1	599.68	13388
4 Pfeilspitze	5.5p	0.8	0.9	4	599.66	13389
5 Spinnwirtel	-	2.0	1.5	2	-	13390
6 Steingefäß	-	4.7	5.4	-	599.68	13391

M.H. 10.03.1997

#### Grab Fu16 (Figs. 19, 38)

Azimet der Längsachse: 114/314 gon (= OSO/WNW)

L. der Sohle: 1.34 m

Br. der Sohle: 0.46 m

T. der Sohle u. Ofl.: 0.96 m

Niv. der Sohle: 599.69 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SOs

Das Grab wurde erst bei der Abtragung der Oberfläche sichtbar. Außerhalb des westlichen Kammerendes lagen vereinzelt Steine eines Steinkranzes. Weder Dachplatten noch Widerlager waren vorhanden. Ansonsten war der Baubefund nahezu intakt. Die Kammerfüllung bestand aus sandig-lehmigem, mit Steinen durchsetztem Erdreich.

Auf den Kammerorthostaten ruhten Auflagesteine aus dünnen, glatten Bruchsteinplatten. Sie kragten schräg in die Kammer. Die Orthostaten waren 20 bis 40 cm breit und bis zu 45 cm hoch. Die Konstruktion bestand generell aus Bruchstein. An der westlichen Schmalseite schloß die Kammer mit einem querliegenden Orthostaten. Darauf ruhte ein Stein, um den Höhenunterschied zu den

Auflagesteinen auszugleichen. Von der Eingangskonstruktion im Osten war nur der „Trittstein“ erhalten. Eine Besonderheit dieses Grabes war seine stratigraphische Relation zum westlich benachbarten Gr. Fu21: Dessen Steinkranz zog über den von Fu16, so daß ein Hinweis über die relative Chronologie der Entstehung der beiden Gräber entstand. Das Niveau der Grabsohle wurde durch einige Knochenbrösel wenige Zentimeter unterhalb der Funde bestimmt.

Skelett und Funde waren stark gestört und zersetzt. Ein Schwert (1) lag entlang der nördlichen Kammerwand. Wenige Zentimeter darüber lag dazu ein Kurzschwert (2). Pfeilspitzen (3) fanden sich im Bereich des Schwertgriffes. Sie lagen in einer kleinen Gruppe locker zusammen.

Skelettbefund:

Alter: 20-70 Jahre

Geschlecht: ungewiß

Totenlage: Skelett gestört, nur Langknochensplitter

Funde:

	L	Br	St	g	H.ü.N.	DA
1 Schwert	c.66.0	5.0	1.2	498	599.80	13392.0
2 Kurzschwert	c.36.0	c.7.0	1.5	340	599.82	13393.0
3 Pfeilspitze	8.2	1.4	0.8	8	599.75	13394.1
„	6.1p	1.4	0.7	8	599.75	13394.2
„	6.2p	1.5p	0.9	8	599.75	13394.3
„	6.6p	1.6p	0.6	4	599.75	13394.4
„	3.8p	1.4p	0.8	6	599.75	13394.5
„	6.8p	1.4p	0.6	4	599.75	13394.6
„	4.3p	1.3p	0.8	4	599.75	13394.7
„	4.1p	1.4	0.9	6	599.75	13394.8
„	4.3p	1.4	0.6p	1	599.75	13394.9
„	3.6p	1.3	0.7	2	599.75	13394.10
„	2.8p	1.3	0.6	1	599.75	13394.11
Pfeilspitzenfr.	-	-	-	38	599.75	13394.12

O.K. 17.03.1997

### Grab Fu17 (Figs. 20, 39, 40)

Azimet der Längsachse: 119/319 gon (= SSO/NNW)

L. der Sohle: 2.10 m

Br. der Sohle: 0.74 m

T. der Sohle u. Ofl.: 1.0 m

Niv. der Sohle: 599.20 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Das Grab lag in einem durch die Errichtung eines Strommastes gestörten Bereich. Trotzdem waren an der Oberfläche Spuren der Bedachung sichtbar. Südwestlich der Grabkammer waren etwa sechs Steine eines Steinkranzes noch vorhanden. Im Osten lag ein Dachstein *in situ*, von den Widerlagern waren nur am südlichen Ende

zwei erhalten. Das Grabinnere war mit sandig-lehmigem Erdreich gefüllt.

Die vorhandenen Steine des Steinkranzes waren faustgroße Geröllsteine. Dachplatten, Auflagesteine und Widerlager bestanden aus bröseligem Bruchstein. Die Orthostaten waren ungewöhnlich breit, einer davon beinahe 1 m. Am östlichen Kammerende ruhte auf zwei „Trittsteinen“ eine schräg nach innen gelehnte Platte, die als Eingangskonstruktion angesehen wurde. Sie wurde durch weitere Bruchsteine gestützt. Das Niveau der Kammersohle wurde durch die Unterkante der Orthostaten definiert.

Spuren eines Skelettes fehlten. In der nordöstlichen Kammerecke - vermutlich ungestört - kam wenige Zentimeter oberhalb der Grabsohle eine Pilgerflasche (1) zutage. An der nördlichen Kammerwand lagen ohne sichtliche Ordnung Pfeilspitzen (2) in einer 25 x 30 x 10 cm großen Zone. Darunter fand sich das Fragment eines Schwertes (3). Ein weiteres Fragment, das im oberen Kammerschutt lag, könnte dazugehören.

Funde:

	L	Br	H/St	g	H.ü.N.	DA
1 Pilgerflasche	26.0	22.7	18.2	-	599.34	13395.0
2 Pfeilspitze	8.3p	1.7	0.7	14	599.27-38	13397.1
„	6.2p	1.5p	0.9	8	599.75	13394.3
„	6.6p	1.8	0.9	14	599.27-38	13397.2
„	5.8p	1.5	0.9	14	599.27-38	13397.3
„	4.2p	1.8p	0.7p	6	599.27-38	13397.4
„	4.3p	1.5p	0.6	6	599.27-38	13397.5
„	4.3p	1.6	0.6	4	599.27-38	13397.6
„	3.9p	1.7	0.8	4	599.27-38	13397.7
Pfeilspitzenfr	-	-	-	44	599.27-38	13397.8
3 Schwertfrag.	6.9p	3.9p	1.1	32	599.27-38	13396.2
„	8.6p	4.2	1.1	76	-	13396.1

O.K. 9.03.1997

### Grab Fu18 (Figs. 21, 40)

Azimet der Längsachse: 327 gon (= WNW)

L. der Sohle: 2.64 m

Br. der Sohle: 0.62 m

T. der Sohle u. Ofl.: 0.86 m

Niv. der Sohle: 600.84 m

Funde: 'Amla

Wiederbelegung nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

An der Oberfläche war eine leicht gerundete Steinsetzung aus faustgroßen Steinen sichtbar. Am Westende des Grabes lag eine Dachplatte *in situ*. Sowohl Widerlager als auch Auflagesteine waren an der Südseite vollständig *in situ* erhalten. An der Nordseite waren jeweils nur ein Widerlager und ein Auflagestein vorhanden.

Widerlager und Auflagesteine bestanden jeweils aus unterschiedlich großen Steinen. Das östliche Ende zeigte keinerlei Spuren von gesetzten Steinen. Außer einem großen Bruchstein am Westende konnte keine Ummauerung der Grabkammer beobachtet werden. Die Grabgrube war in das zerklüftete Vulkangestein eingetieft. Die Grabkammer enthielt eine sandige, mit kleinstückigen Steinen durchsetzte Verfüllung. Die Grabsohle wurde durch die Lage des Skelettes und der Funde definiert.

Das Skelett und die Funde lagen weitgehend auf der Grabsohle. Ein Anhänger (1) fand sich unter der linken Femur des Skelettes. Westlich des Kopfes, am Kammerende auf der Sohle, befand sich eine Metallschale (2). Ebenfalls auf Sohlenebene, 10 cm nördlich der Schale, stand ein Tongefäß (4). Zwischen ihnen kam eine Pfeilspitze (3) zutage. Außer zwei Tonscherben (5) aus der oberen Verfüllung kamen keine weitere Funde vor. Die Grabausstattung zeigte keine augenfälligen Störungen.

Skelettbefund:

Alter: 30-40 Jahre

Geschlecht: Männlich

Totenlage: rechtsseitiger Hocker, Kopf im W, Blick nach S, Unterarme zum Kopf angehoben

Funde:

	L	Br	H/St	g	H.ü.N.	DA
1 Perle	2.1	2.4	0.9	-	599.84	13702
2 Schale, Cu	-	16.5	6.0	434	600.86	13700
3 Pfeilspitze ?	5.8p	1.5p	0.4p	4	600.95	13701
4 Flasche	-	17.8	20.5	-	600.86	13704
5 Tonscherben	-	-	-	-	-	13703

M.H. 13.03.1997

### Grab Fu19 (Figs. 22, 40, 41, 42)

Azimet der Längsachse: 100/300 gon (= O/W)

L. der Sohle: 1.94 m

Br. der Sohle: 0.74 m

T. der Sohle u. Ofl.: 0.84 m

Niv. der Sohle: 600.94 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Das Grab war an der rezenten Oberfläche durch einen großen Felsbrocken, der das Gelände um 0.4 m überragte, besonders gut zu erkennen. Auch einige graue Wadigerölle, die zu dem Steinkranz des Grabes gehörten, und zwei Bruchsteine eines Widerlagers waren an der Oberfläche zu beobachten. Der Steinkranz des Grabes war als lückenhafte, ovale Steinsetzung nur noch im Norden und Westen des Grabes erhalten geblieben. Die Abdeckung des Grabes war vollkommen entfernt, auch die Steine der Grabkammer und der Auflage des Daches fehlten im Norden völlig. Die Verfüllung der Grabgrube

bestand aus kaum bindigem grobem Sand, der mit grobem Splitt stark durchsetzt war.

Als Baumaterial sind für die Grabkammer und die Widerlager dunkle rostrote Bruchsteine des hier anstehenden Felsens, für die Widerlager und den Steinkranz auch graue Gerölle, wie sie im nahegelegenen Wadi zu finden sind, verwendet worden. Die Auflagesteine bestanden in der Regel aus großen flachen, hellgrauen Kalkplatten. Die Grabgrube war in das zersetzte, stark zerklüftete Ausgangsgestein eingetieft worden. Sie war lang rechteckig und im Westen stark abgerundet. Die Wände der Kammer waren leicht abgeschrägt. Im Westen hatte das Grab einen Zugang, der zuunterst mit einem Orthostaten, auf dem zwei Lagen Bruchsteine aufgeschichtet waren, zugesetzt worden war. Über dieser Zusetzung war ein massiver Felsbrocken in die Grabgrube verstürzt. Die Sohle des Grabes war von West nach Ost um bis zu 6 cm geneigt, im Norden 4 cm tiefer als im Süden.

Auf dem Niveau der aus dem Felsen herausgeschlagenen Grabkammer, noch 0.3 m oberhalb der Grabsohle, lag flach aufliegend eine große Pilgerflasche (1) mit der Öffnung nach Westen. Möglicherweise lag sie ursprünglich am Westende der Kammer und ist bei der Beraubung des Grabes auf das bis dahin zusedimentierte Niveau transportiert worden. Das westliche Viertel des Grabes war ab einem Niveau von 600.20 m stark mit verlagerten Knochenbruchstücken und Eisenfragmenten durchsetzt. Dagegen war der Rest des Grabes ungestört geblieben. *In situ* befanden sich noch stark zersetzte Reste des Schädels, die Ober- und Unterarme, Teile der Hände und der obere Bereich der Wirbelsäule des Bestatteten. Zwischen dem Skelett und der nördlichen Kammerwand lagen zwei Schwerter (2 und 3, Pl. 6) mit dem Griff knapp oberhalb des Kopfes und der Spitze des Blattes im Westen. Die Schwerter waren stark korrodiert. Daher wurde Schwert „1“ (2) in einer Gipskapsel geborgen, Schwert „2“ (3) *in situ* präpariert, zeichnerisch und fotografisch dokumentiert. Zu diesem gehörten Teile der Schwertscheide bzw. Aufhängung (4). Die Eisenfragmente aus dem westlichen Bereich des Grabes konnten unter Feldbedingungen zu einem dritten Schwert (5) zusammengesetzt werden. Der Fund eines Pfeilspitzenbündels ließ zudem auf einen Köcher mit Pfeilen schließen (6). Dieser lag unterhalb von Schwert „1“ und zwischen diesem und der nördlichen Kammerwand. Auch die Spitzen dieser Pfeile wiesen in westliche Richtung. Auf dem Schwert „1“ lagen in einer Reihe drei Pfeilspitzen (7) mit der Spitze nach Westen. Auf den Schwertern aufliegend und in unmittelbarer Nähe lagen zahlreiche Pfeilspitzen (8), die in der Regel ebenfalls nach Westen zeigten. Dazu kam ein kleiner Dolch (9) und ein Schwertfragment (10), das nicht mit den anderen in Verbindung gebracht werden konnte. Ein weiteres Fragment eines



Dolches bzw. einer Pfeilspitze (11) lag auch an dieser Stelle. Im westlichen Bereich kam ein Eisenfragment (12) vor, das nicht als Gerät identifiziert werden konnte.

Skelettbefund:

Alter: 15-18 Jahre

Geschlecht: Männlich

Totenlage: rechtsseitiger Hocker, Kopf im O, Blick nach N, Unterarm zum Kopf angehoben, Hände vor dem Gesicht

Funde:

	L	Br	H/St	g	H.ü.N.	DA								
							7	„	4.3p	1.6	0.5	2	601.07	13715.15
							8	„	7.8	1.4	0.4p	6	600.±03	13715.1
							8	„	5.5p	1.4	0.7	4	600.±03	13715.2
							8	„	4.7p	1.5	0.7	6	600.±03	13715.3
							8	„	6.2p	1.6	0.6	8	600.±03	13715.4
							8	„	3.7p	1.4	0.7	2	600.±03	13715.5
							8	„	3.9p	1.2	0.4p	c.1	600.±03	13715.6
							8	„	5.1p	1.4	0.6	2	600.±03	13715.7
							8	„	5.6p	1.2p	0.4p	2	600.±03	13715.8
							8	„	4.1p	1.2p	0.2p	c.1	600.±03	13715.9
							8	„	6.3p	1.3	0.5	4	600.96	13715.10
1 Pilgerflasche	35.8	28.2	19.7	-	601.28	13725.0	8	„	7.4p	1.2	0.6	6	600.96	13715.11
2 Schwert „1“	64.0	4.3	-	-	600.98	13717.0	8	„	5.6p	1.4	0.3	4	600.96	13715.12
3 Schwert „2“	61.0	5.5	1.5	554	600.91	13718.0	8	„	6.3p	1.5	0.6	6	601.17	13715.16
4 Schwertzubeh.	c.15	0.8	0.4	14	600.91	13719.0	8	„	3.8p	1.3	0.6	4	601.17	13715.17
5 Schwert	47.0	4.1	1.5	324	601.17	13720.0	8	„	4.7p	1.2	0.5	2	601.17	13715.18
6 Pfeilspitze	7.5	1.2	0.7	10	600.96	13716.1	8	„	5.6p	1.4	0.5	2	601.17	13715.19
6 „	7.4	1.3	0.8	10	600.96	13716.2	8	„	4.1p	1.6	0.7	4	601.17	13715.20
6 „	6.9	1.3	0.8p	10	600.96	13716.3	8	„	4.1p	1.3	0.4	2	601.17	13715.21
6 „	7.1	1.4	0.8	10	600.96	13716.4	8	„	4.1p	1.3	0.6	4	601.17	13715.22
6 „	8.0	1.4	0.7	8	600.96	13716.5	8	„ fr.	-	-	-	3	600.96	13715.23
6 „	5.6	1.3	0.7	4	600.96	13716.6	9	Dolch	10.2p	1.9p	1.0p	30	600.96	13721.0
6 „	-	1.3	0.7	10	600.96	13716.7	10	Schwertfrag.	6.3p	3.0p	1.0p	30	600.96	13722.0
6 „ (x7)	8.0	3.5	2.0	78	600.96	13716.8	11	Dolchfrag.?	5.2p	2.5	0.9	12	600.96	13723.0
6 „ (x4)	-	-	-	30	600.96	13716.9	12	Metallfrag.	-	-	-	28	601.17	13724.0
7 „	5.6p	1.6	0.8	8	601.07	13715.13	insgesamt: 43							
7 „	4.4p	1.5	0.6	4	601.07	13715.14	P.P. 25.03.1997							



Pl. 6 Zwei Schwerter in Grab Fu19

لوحة ٦. سيفان في القبر Fu19.

**Grab Fu20** (Figs. 23, 42)

Azimut der Längsachse: 121/321 gon (=OSO/WNW)

L. der Sohle: 1.70 m

Br. der Sohle: 0.50 m

T. der Sohle u. Ofll.: 0,88 m

Niv. der Sohle: 601.08 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Zu Beginn waren Steine einer ovalen Steinsetzung an der Oberfläche sichtbar. Der Steinkranz war nur im südwestlichen Bereich teilweise erhalten. Wenn ein Eingang hier bestanden hat - wie üblich bei den Gräbern des Gräberfeldes - dann war er als Ergebnis der Störungen nicht mehr feststellbar. Dachplatten konnten nicht beobachtet werden. Sowohl Widerlager als auch Auflagesteine waren vollständig vorhanden und bis auf die Südostecke *in situ*.

Bei den Widerlagern handelte es sich grundsätzlich um kopfgroße Geröllsteine. Die Auflagesteine bestanden alle aus spröden Bruchsteinen. Lediglich an der Südwestpartie konnte man von einem einzigen Orthostaten sprechen. Ansonsten war die Grabkammer an das anstehende Felsgestein angesetzt und durch mehrere Steinlagen auf ein ebenes Niveau gebracht. Diese bestanden aus ein bis drei Lagen. Die Steine waren unregelmäßig gesetzt. Die Kammerfüllung bestand aus unterschiedlich großen Steinen in sandigem Erdreich. Die Grabsohle wurde durch die Lage der Funde und der Knochenreste definiert.

Das Grab wurde beraubt und gestört. Nur Fragmente des o. g. menschlichen Skelettes (LZ 182, 92 g) waren erhalten. Darunter befand sich ein Ziegenknochen (1). Die restlichen Funde (2-4) lagen in der Verfüllung.

Skelettbefund:

Alter: 10-15 Jahre

Geschlecht: Weiblich

Totenlage: rechtsseitiger Hocker, Schädel im O, Blick nach N, Totenlage rekonstruiert

Funde:

	L	Br	St	g	H.ü.N.	DA
1 Knochen, Ziege	-	-	-	6	601.07	LZ 182
2 Perlen (x5)	-	-	-	-	601.17	13712
3 Tonscherben	-	-	-	-	-	13713
4 Tonscherben SEZ	-	-	-	-	601.17	13714

M.H. 13.03.1997

**Grab Fu21** (Figs. 24, 42)

Azimut der Längsachse: 29/229 gon (= NNO/SSW)

L. der Sohle: 1.34 m

Br. der Sohle: 0.60 m

T. der Sohle u. Ofll.: 0.94 m

Niv. der Sohle: 599.73 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Nach der vollständigen Freilegung der Gräber Fu03 und Fu16 wurde dieses Grab erkannt. Die obere Partie des Grabbaus war stark vom später errichteten, westlich gelegenen Fu03 in Mitleidenschaft gezogen worden. Andererseits überlagerte der Steinkranz das östlich gelegene Gr. Fu16. In seiner oberen Partie war Fu21 besser erhalten als andere Gräber. Über der nördlichen Hälfte der Kammer lagen Dachplatten *in situ*. Wider- und Auflagesteine waren im Westen und Osten des Grabes vorhanden. Das Grab war beraubt und grüne Blätter lagen in der Grabfüllung.

Die Reste des Steinkranzes bestanden aus einreihig gesetzten, kopfgroßen Bruchsteinen. Die Konstruktion bestand weitgehend aus Bruchstein. Die Widerlager waren bis zu 0.50 m, die Auflagesteine bis zu 0.40 m breit. Im Westen und im Osten bestand die Kammerwand aus 0.30 m breiten Orthostaten. Der Orthostatenstein der Südwestwand war an der westlichen Ecke rund bearbeitet. Eine schräg auf einem „Trittstein“ stehende Platte bildete die Eingangskonstruktion im Norden. Auf ihr lehnten weitere kleinere Platten. Die Kammersohle wurde teils durch das Niveau der Unterkanten der Orthostaten, teils durch herein gefallene Steine definiert.

Spuren eines Skelettes konnten nicht beobachtet werden. Der einzige Fund war eine Parfümflasche (1), die schräg mit dem Fuß nach oben in der Verfüllung lag.

Fund:

	L	Br	H/St	g	H.ü.N.	DA
1 Parfümflasche	-	8.0	12.7	-	-	13711

O.K., K.S. und P.Y. 19.03.1997

**Grab Fu22** (Fig. 25)

Azimut der Längsachse: 99/299 gon (= O/W)

L. der Sohle: 2.62 m

Br. der Sohle: 0.74 m

T. der Sohle u. Ofll.: 1.08 m

Niv. der Sohle: 601.10 m

Funde: 'Amla

Wiederbelegung nachweisbar

Architektur: 'Amla

Grabtyp: WOs

Vor Beginn der Arbeit waren kopfgroße Bruchsteine vereinzelt als Steinsetzung an der Oberfläche sichtbar, die sich als Widerlager herausstellten. Ein Dachstein lag am Westende *in situ*. Die Widerlager waren an der südlichen Längsseite vollständig erhalten und *in situ*, an der nördlichen Längsseite waren sie nur lückenhaft erhalten. Bis auf die nordöstliche Kammerecke waren alle Auflagesteine erhalten und *in situ*. Der östliche Kammer-

bereich war gestört. Ob eine Eingangskonstruktion hier bestand, blieb unklar.

Bis auf wenige Ausnahmen bestanden der Dachstein und alle Widerlager aus überkopfgroßen Bruchsteinen. Die Auflagesteine bestanden aus unregelmäßig großen Bruchsteinen, die irregulär angelegt waren. Die Orthostaten bestanden aus Bruchsteinen, deren Breite zwischen 20 und 45 cm variierte. Die Verfugung war lückenhaft und die Zwischenräume mit kleinen Steinen verschlossen. Die Grabkammer zeigte eine annähernd regelmäßige Ummauerung. Im südlichen mittleren Kammerbereich bestand die Mauer aus zwei Lagen. Die Kammerfüllung enthielt sandig-lehmiges, mit unregelmäßig großen Steinen durchsetztes Erdreich. Im Osten, außerhalb der Grabkammer, fand sich eine unregelmäßige Steinsetzung aus Geröllen und Bruchsteinen. Es war nicht erkennbar, ob sie zu dem ansonsten nicht beobachteten Steinkranz oder zur äußeren Kammermauer gehört haben könnte. Die Kammersohle wurde durch das Niveau der Funde und der Skelette definiert.

Die Skelette und ihre Beigaben waren gestört. Erste lagen etwas tiefer als die Funde, also auf der Kammer-  
sohle. Der Kopf des Skelettes 2 lag auf dem Becken von Skelett 1. Vermutlich waren die Funde durch eine Be-  
raubung aufgewühlt. Trotzdem konnten die spärlichen Funde den Skeletten zugeordnet werden. Kleine Frag-  
mente eiserner Waffen (1) lagen im Rückenbereich von Skelett 1, jedoch in einem höheren Niveau. Auf demsel-  
ben Niveau lagen einige Eisenfragmente (2-4), die sich zu Füßen von Skelett 2 befanden. Tonscherben (5) lagen  
im Kammerschutt. Die Funde waren stark fragmentiert.  
Skelettbefund:

Reihenfolge der Bestattungen: erst 2, dann 1

Skelett 1 (LZ 186, 474 g)

Alter: 6-8 Jahre

Geschlecht: Männlich

Totenlage: rechtsseitiger Hocker, Schädel im O, Blick nach N, Hände zum Gesicht angehoben

Skelett 2 (LZ 184, 1780 g)

Alter: 20-30 Jahre

Geschlecht: Männlich

Totenlage: rechtsseitiger Hocker, Schädel im O, Blick nach N, Schädel direkt am Becken von Skelett 1, Knie extrem angezogen.

Funde:

	L	Br	St	g	H.ü.N.	DA
1 Metallfrag.	-	-	-	34	601.22	13726
Skelett 2						
2 Metallfrag.	-	-	-	68	601.15	13727
3 Dolchfrag.	-	-	-	34	601.15	13728
4 Pfeilspitzenfr.	-	-	-	34	601.15	13729
5 Tonscherben SEZ	-	-	-	-	-	13730

M.H. 16.03.1997

### Grab Fu23 (Figs. 26, 42)

Azimut der Längsachse: 80/280 gon (= ONO/WSW)

L. der Sohle: 1.62 m

Br. der Sohle: 0.92 m

T. der Sohle u. Ofl.: 0.90 m

Niv. der Sohle: 600.94 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: SWOs

Als Folge eines Suchschnittes zwischen Gr. Fu19 und Fu20 kam Fu23 zutage. Ein Steinkranz war nicht erhalten. Dachplatten lagen im gesamten östlichen Bereich des Grabes noch *in situ*. Sowohl alle Widerlager als auch Auflagesteine waren vorhanden und *in situ*. Die Grabfüllung bestand aus ei- bis faustgroßen Steinen in sandig-lehmigem Erdreich.

Die Dachplatten bestanden aus großen, flachen Bruchsteinen. Bis auf wenige Ausnahmen bestanden die Widerlager aus kopfgroßen Geröllen. Die Auflagesteine hingegen waren regelmäßig zugehauene Bruchsteine, ein einziger Stein bildete hier die Ausnahme. Orthostaten konnten nicht beobachtet werden. Am Ostende der Kammer wurde eine zweischichtige Steinlage in der Kammerabgrenzung beobachtet. Ebenfalls am Ostende ragten die Auflagesteine schräg ins Kammerinnere. Diese Konstruktion wurde durch eine Steinpackung gefestigt. Die Grabkammer war in das anstehende Ausgangsgestein eingetieft. Durch die Lage der Funde und des Schädels wurde das Niveau der Kammersohle ermittelt.

Skelett (LZ 193, 1800 g) und Beigaben waren stark gestört. Nur der Schädel lag *in situ*. Mit Ausnahme von Kat.-Nr. 5 (nahe der Oberfläche) lagen die Funde (1-4) wenige Zentimeter höher.

Funde:

	L	Br	H/St	g	H.ü.N.	DA
1 Pfeilspitze	6.1p	1.5	0.6	6	601.05	13731
2 Dolchfrag.	-	-	-	38	601.05	13732
3 Schwertfrag.	7.8p	2.9p	0.9p	30	601.05	13733
4 Parfumflasche	-	10.5p	8.0p	-	601.09	13735
5 bauchiger Topf	-	17.5	21.0p	-	601.56	13734

M.H. 22.03.1997

### 'Amla/Wādī al Mais

#### Grab Mai1 (Pl. 7, Figs. 27, 43)

Azimut der Längsachse: 121/321 gon (= O/W)

L. der Sohle: 1.03+ m

Br. der Sohle: 0.47 m

T. der Sohle u. Ofl.: 1.00 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: WOs



Pl. 7 Wādī al Mais nach Nordosten

## لوحة ٧. وادي الميس نحو الشمال الشرقي.

Dieses Grab lag exponiert an der Wädikante und war von der Piste aus sichtbar. Das Ostende des Grabes wurde von dem Wādī zerstört. Es blieben eine Dachplatte und die Kammermauerung teilweise *in situ*. Die Länge der Grabkammer war nicht feststellbar. Das Grabinnere enthielt eine sandig-lehmige, mit kleinen Steinen durchsetzte Füllung. Bevor das Grab vollständig gezeichnet werden konnte, fiel es während eines Regensturms zusammen. Die Zeichnung gibt die Ausrichtung der Grabkammer wider.

Die Dachplatte und die Kammermauerung bestanden aus gebrochenen Steinen, die locker zusammengefügt worden waren. Die Grabsohle wurde durch die Lage eines Dolches und durch das Niveau der Unterkante der Kammermauerung definiert.

Die gestörten Skelettreste (LZ 300, 54 g) lagen nahe der Grabsohle. Darunter befand sich ein zerbrochener Eisendolch (1) und die Öffnung einer Dolchscheide (2). Aus der Grabfüllung stammte eine früheisenzeitliche Tonscherbe (3), die nicht zur Beigabenausstattung gehörte.

Skelettbefund:

Alter: 20-70 Jahre

Geschlecht: Männlich

Totenlage: nicht erkennbar

Funde:

	L	Br	St	g	H.ü.N.	DA
1 Dolch	31.2p	3.9	1.2	252	-	13398
2 Dolchzubehör	8.0	3.9	0.5	18	-	13399
3 Tonscherbe FEZ	-	-	-	-	-	13737

P.Y. 16.03.1997

**Grab Mai2 (Figs. 28, 43)**

Azimut der Längsachse: 120/320 gon (= O/W)

L. der Sohle: 1.55+ m

Br. der Sohle: 0.44 m

T. der Sohle u. Ofl.: 1.00 m

Funde: 'Amla

Wiederbelegung nicht nachweisbar

Architektur: 'Amla

Grabtyp: Os

Ebenso wie Gr. Mai1 lag dieses Grab exponiert an der Wädikante und war so von der Piste aus sichtbar. An der Oberfläche war es nicht bemerkbar. Mehr als die Hälfte der Grabkammer war bis auf Sohlenebene erhalten. Die Kammermauerung und einige Auflagesteine lagen teilweise *in situ*.

Auflagesteine und die Kammermauerung bestanden aus gebrochenen Steinen. Spuren einer Eingangskonstruktion waren nicht vorhanden. Die Grabsohle wurde durch die Lage der Funde definiert.



Das Grab war beraubt. Bis auf eine auf der Seite liegende Parfümflasche (3) lagen die Funde leicht westlich der Kammermitte auf der Grabsohle. An der nördlichen Kammermauer fand sich ein Spinnwirtel (1). Gegenüber an der südlichen Kammermauer lagen drei Perlen (2). Wenige Zentimeter westlich des Spinnwirtels stand ein Schälchen aus Kalzit (4). In gestörter Lage fanden sich eine Muschelschale (5) und einige Zentimeter südlich davon ein Bronzering (6). Knochenmehl und kleine Splitter waren sichtbar, aber derart bröselig, daß sie nicht geborgen werden konnten.

Funde:

	L	Br	H/St	g	H.ü.N.	DA
1 Spinnwirtel	-	1.95	0.75	4	-	13710
2 Perlen 3x	-	-	-	-	-	13708
3 Parfümflasche	-	9.0	9.5p	-	-	13707
4 Steingefäß	-	9.0	3.2	-	-	13705
5 Muschelschale	8.5	7.2	2.1	-	-	13706
6 Ring	-	2.0	0.6	2	-	13709

P.Y. 16.03.1997

## Diskussion

Die Erhebung beruht auf 25 untersuchten Gräbern aus drei Konzentrationen. Der größte Befund wurde durch Flächenabtragungen untersucht und liegt auf dem Grundstück von Sulaiman b. \*Aisa. Das Gräberfeld in al Fueda sowie die fünf außenliegenden Gräber zeigen eine Anordnung in Reihen. Nur wenige der Gräber liegen in einem nicht erschlossenen Friedhof unmittelbar westlich des Wādī al Mais.

Laut anthropologischer Bestimmung sind neun der Skelette männlich, eins weiblich und zwei unbestimmbar. Das Skelett Fu22/1 ist das eines 6-8 Jahre alten männlichen Kindes, dasjenige aus Fu20 ist das eine 10-15 Jahre alten weiblichen Person, dasjenige aus Fu06 ist das eines 60-80 Jahre alten Mannes. Bei den anderen Skeletten handelt es sich um solche von Männern zwischen 20 und 70 Jahren.

## GRABARCHITEKTUR

Es handelt sich um unterirdische längliche Kammergräber, die ohne Mörtel verbaut sind. Die meisten zeigen einen Steinring auf der alten Oberfläche. Sie bestehen weitgehend aus gebrochenen Steinen für die Dachplatten, Auflage- und Widerlagersteine. Üblich für die Kammermauerung sind senkrecht stehende Orthostaten. In einigen Fällen (z. B. Fu16 und Fu17) sind sie jedoch quer verbaut, extrem glatt und eng aneinander angepaßt. Die Grabkammer sind vornehmlich nach Ost-südosten (12), Südosten (5) und Ostnordosten (3) ausgerichtet. Im Regelfall liegen die Eingänge am östlichen Kammer-

ende<sup>8</sup>. Sie bestehen aus einem Stein in der Kammermauer, die als „Trittstein“ bezeichnet wird. Ausnahmen kommen im Westen (Fu02 und 03) und im Norden (Fu21) vor. Diese Gräber unterscheiden sich von denen der Samad-Kultur in der Gestaltung des Eingangs und in der Verwendung von regelmäßig geformten Orthostaten. Die Gräber al Fuedas bilden einen eigenen Grabtyp.

Gr. Fu21 liegt zwischen Fu03 und Fu16. Die stratigraphische Reihenfolge der drei Gräber ist Fu16, Fu21 und dann Fu03. Die Abweichung bei der Ausrichtung des Gr. Fu21 relativ zu den anderen ist schwer zu erklären. Vielleicht lag Fu03 vorher an derselben Stelle und wurde wieder eröffnet, um eine neue Bestattung zu ermöglichen. Somit könnte der Bauschutt der Neubestattung das Gr. Fu21 überlagert haben.

## KERAMIK

14 ganze bzw. annähernd ganze Gefäße und eine Anzahl von Scherben verleihen einen ersten Blick in die späteisenzeitliche Keramik dieser binnenländischen Region (Pl. 8). Mehrere davon zeigen stärkere Affinitäten zur zeitgleichen Keramik aus den V.A.E. als zu der in Zentral Oman. Als Importe von dorthier kommen lediglich zwei Pilgerflaschen aus Gr. Fu17 und Fu19<sup>9</sup> in Frage. Eine Flasche aus Gr. Fu18 erinnert an den Samadzeitlichen Formenschatz<sup>10</sup>, ist aber aus einem hier einheimischen, sandigen Ton produziert worden. Sieben glasierte Gefäße sind Importe, vermutlich aus dem Zweistromland oder Iran. Bevorzugt wird eine Sandmagerung wie in ed Dür und Mleiha in den V.A.E. Zwei Gefäße scheinen lokal hergestellt zu sein: ein bauchiger Topf mit geglätteter Oberfläche aus Fu23 mit Wellenlinien-dekor und eine große zweihenkelige Vorratsflasche aus Fu09. Beide sind scheibengedreht. Balsamaria aus Gr. Fu07 und Fu10 (Pl. 9)<sup>11</sup> sind in Hinblick auf die Form und Machart ähnlich zu denen der Samad-Kultur und denen des Nordwest-Oman. Der bemalte Dekor ist etwas aufwendiger in Nordwest-oman. Eins zeigt ein senkrecht bemaltes geordnetes Leitermuster (Fu07) in einer Zone zwischen zwei Horizontallinien. Von der unteren Linie hängen senkrechte Striche. Beim anderen zeigen sich drei Horizontalen mit senkrechten Strichen (Fu10).

<sup>8</sup> Bei den Gräbern Fu19 und Fu20 ist dies fraglich. Mai1 und Mai2 waren gestört. Ob und wo eine Eingangskonstruktion lag, bleibt deswegen unklar.

<sup>9</sup> Fundklasse G10.02 und G10.06.

<sup>10</sup> Vorratsflasche Klasse G08.03.

<sup>11</sup> Vgl. Klasse G07.03.



Pl. 8 Gefäße aus 'Amla

لوحة ٨. آنية من عملا.



Pl. 9 Balsarium aus Grab Fu10/1

لوحة ٩. وعاء بلسم من القبر Fu10/1.



Grab	Form	Mager.	Md.	Mg.	Fi.	Außenfarbe	Bruch	Sw./n	DA <sup>12</sup>
Fu02	Fl.?	Hä.S.	S.st.	Hä.le.	f.	-	-	j	13313
Fu02	Schü?	org.	m.	m.	-	-	r.ge.	n	13313
Fu03	Pfl.	S.	st.	f.	-	u. he.bl.gr.st. Gl.	he.ge.	j	13318
Fu05	Vgef.	Steg.S.	st.	f. m.	-	s. le. br.st. Gl.	he.r.	n	13331
Fu06	Parfl.	S.	st.	m.	-	gr.+du.tbl. st. v.	ge.+gra.br.	j	13326
Fu06	Vfl.	Hä.S.	le.	m.	-	s. he.br.	r.ge.	n	13736
Fu07	Parfl.	S.	st.	f.	-	Gl. uspr. sgr.	s. he.br.	j	13344
Fu07	Bals.	keine	-	-	-	Bem. s. du.r.	-	j	13347
Fu09	Vfl.	Ste.	m.	grob	r.ge.	r.	-	j	13334
Fu09	Pfl.	keine	-	-	-	he.ge. Gl. li/w	-	j	13333
Fu10/1	Bals.	keine	-	-	-	a.us.du.	-	j	13357
Fu12	Vgef.	S.	st.	f.	-	Gl. ggr.	he.ge.	j	13381
Fu17	Pfl.	Ste.	le.	m.	-	li	w	j	13395
Fu18	Fl.	Serp.S.	m.	f.	-	he.br.	St.br.	j	13704
Fu19	Pfl.	vw. Ch.Hä.	st.	m.	r.	r.	r.	j (Hals)	13725
Fu20	Parfl.	S.	st.	f.	-	Gl. ge.	s. he.br.	j	13714
Fu21	Parfl.	S.	st.	f.	-	he. gr.ge.st. v.	ge.+gra.	j	13711
Fu22	Vgef.	S.Hä.,Ste.	-	f. m.	-	s. he.br.	li	j?	13720
Fu23	Vase	org.+Steg.	le.	f.	s. u.gra.br.	he.r.	s.du.gra	j	13734
Fu23	Parfl.	S.	st.	f.	s. he.br.	Gl. he.tbl.	s. he.br.	j	13735
Mai1	Schale	-	le.	f.	r.br.	le.r.	ge.r.	n	13737
Mai2	Parfl.	keine	-	-	-	Gl. gr.ge.st. v.	s. du.gra.	j	13707

## STEINGEFÄSSE

Kalzit ist das bevorzugte Material der ausgegrabenen Gefäße. Einige Gefäße wurden mit der Drehbank hergestellt und alle sind unverziert (*Pl. 10*). Alle finden Parallele in ed Dür und Mleiha.

## WAFFEN

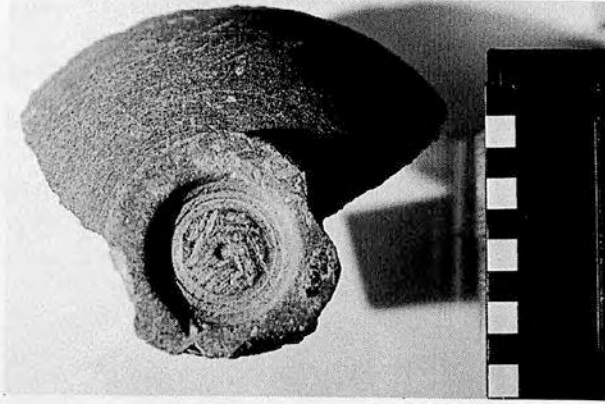
In den Gräbern waren erstaunlich zahlreich Schwerter, Kurzschwerter, Dolche und Pfeilspitzen. Mit wenigen Ausnahmen war ihre Erhaltung derart schlecht, daß sie weder bewegt noch berührt werden durften, um nicht zu zersplittern<sup>13</sup>. Aus Fu12 sind die Waffen am besten erhalten bzw. aus einem besseren Eisen geschmiedet (*Pl. 11*). Die Randgriffe der Schwerter sind besser erhalten als ihre Klingen. Verschiedene Schwertklassen kommen mit stark profilierter Klinge vor. Besonders schwer bewaffnet sind die Männer in Fu02, Fu12 und Fu19. Das 15-18 jährige Individuum in Fu19 besaß u. a. drei Schwerter. Vermutlich ist die Ausstattung der Gräber mit Pfeilen auch wegen des Grabraubs sehr unterschiedlich: Fu02: 41, Fu10/2: 8+, Fu12: 45, Fu16: 12+, Fu17: 8, Fu19: 23+, Fu22/2: 1 und Fu23: 1. Gr. Fu03 enthält eine stark korrodierte Waffe, die als Speerspitze anzusprechen ist.

## PERLEN

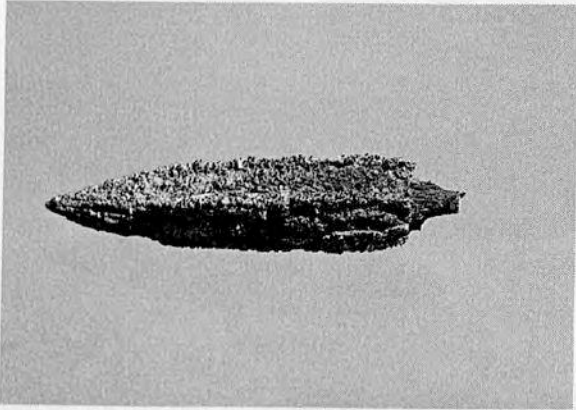
Dieses Jahr fanden wir erstaunlich wenige Perlen. Dies läßt sich durch das Geschlecht der Bestatteten erklären. Vom Beigabemuster her zu urteilen, handelt es sich vorwiegend um Männergräber. Glas und Bein sind als Perlenmaterialien vertreten.

<sup>12</sup> Die Formenbezeichnungen richten sich nach der Gliederung in P. Yule, Samad al Shān (im Druck). Die Magerungsgrobheit und -dichte beziehen sich auf das Material in al Fueda. Sie sind nicht genormt und werden hier nur beschrieben. Abkürzungen: a. = abgerieben; Bals = Balsarium; Bem. = Bemalung; bl. = blau; br. = braun; du. = dunkel; Fi. = Farbe innen; Fl. = Flasche; ge. = gelb; Gl. = Glasur; gr. = grün; gra. = grau; Hä = Hächsel; he. = hell; j = ja; le. = leicht; li. = lila; Mager. = Magerung; m. = mittel; Md. = Magerungsdichte; Mg. = Magerungsgrobheit; n = nein; org. = organisch; Parfl. = Parfumflasche; Pfl. = Pilgerfl.; r. = rot; S. = Sand; s. = sehr; Serp. = Serpentin; sgr. = smaragdgrün; st. = stark; Ste. = Steinchen; Steg. = Steingrus; Sw. = Scheibenware; tbl. = türkischblau; v. = verwittert; Vgef. = Vorratsgefäß; vw. = vorwiegend; w. = weiss; ggr = goldgrün; u. = unterschiedlich; us. = ursprünglich

<sup>13</sup> Diese Funde wurden in einem unrestaurierten Zustand gezeichnet. Durch die Korrosion sind besonders die Dolche und Schwerter aufgequollen. Die gezeichneten Querschnitte sind zum Teil stärker als sie ursprünglich waren. Bei den eisernen Artefakten, die nicht aufgequollen sind, hat sich die Stärke vermutlich nicht geändert. Es ist unmöglich festzustellen, ob es sich um Stahl oder Eisen handelt.



Pl. 10 Steingefäß aus Grab Fu13  
 لوحة ١٠. وعاء حجري من القبر Fu13 .



Pl. 11 Pfeilspitze aus Grab Fu12.  
 لوحة ١١. رأس سهم من القبر Fu12 .



Pl. 12 Vermutetes Kultobjekt auf Grab Fu12  
 لوحة ١٢. أداة من القبر Fu12، من المفترض أنها ذات وظيفة دينية.



Pl. 13 Buntmetallische Schale aus Grab Fu11  
 لوحة ١٣. إناء معدني ملون من قبر Fu11 .

## SPINNWIRTEL

Vier Gräber enthielten Spinnwirtel. Das Geschlecht und das Alter der Bestatteten wurde nicht anthropologisch, sondern anhand der Begleitfunde bestimmt. Sowohl die Männer als auch die Frauen haben handgesponnen.

## EIN MÖGLICHES KULTOBJEKT

Aus Gr. Fu12 stammt ein viereckiges Objekt aus einer sekundär verwendeten, 12 cm großen Tonscherbe, das als dekoratives oder als kultisches Objekt plausibel erklärt werden kann (*Pl. 12*). Damit wäre es das einzige, bekannte vorislamische Kultobjekt aus dem Oman.

## METALLGEFÄSSE

Zu den ästhetisch interessantesten Funden der Grabung gehören vier buntmetallische Schalen mit eingravierten figürlichen Szenen (*Pl. 13*). Aus Fu05 stammt eine Henkelattasche mit Griff.

## GRABSITTE

Frauen unterscheiden sich von Männern durch ihre Beigabenausstattung, aber nicht in bezug auf die Seitenlage. Nur rechtsseitige Bestattungen, einschließlich des einzigen Frauenskeletts (Fu20), wurden dokumentiert. Ebenso kommen geschlossene (Fu18) und wenige zusammengesetzte Skelette (Fu10) vor. Gräber, die laut Beigabemuster Frauen enthalten, führen keine Waffen (Fu03, Fu20, Fu21 und Mai2). 1.80 m ist der Durchschnittswert der Sohlenlänge der 25 Gräber. Die Sohlenlänge der vier Frauengräber liegt jedoch bei 1.58 m. Dies sind also 87% der Durchschnittslänge. Als einziges sicheres Kindergrab kommt Fu14 (Sohlenlänge 0.80 m) in Frage. Eine Zweitbestattung eines Jungen fand in Fu22 statt. Bei skelettführenden Gräbern fand sich zumeist der Kopf im östlichen Kammerende (Fu10/2, Fu19, Fu20, Fu22/1 und 2, Fu23), das mit der üblichen Position des Eingangs am östlichen Kammerende übereinstimmt. Eine Ausnahme bildet Fu10, in dem zwei Personen bestattet wurden. Der Kopf der zweiten Person (Fu10/1) zeigte nach Westnordwesten - in entgegengesetzter Richtung vom ersten (Fu10/2). Dabei stellt sich die Frage, ob die Kopfrichtung oder die Blickrichtung entscheidend war. Ein rechtsseitiger Hocker mit dem Kopf im Osten würde nach Norden schauen. Die Bedeutung dieser Positionierung kann nur anhand von umfangreicherem Material erklärt werden.

## BEIGABENSITTE

Anhand des Vergleichs zwischen dem Beigabemuster und Geschlecht der Bestatteten der Samad-Kultur gilt, daß waffenführende Gräber grundsätzlich den Männern gehörten. In al Fueda kam nur ein einziges Skelett (Fu20) einer weiblichen Person vor, womit man eine Vorstellung von der Beigabenausstattung der Frauen gewinnen konnte. Andererseits wurden bis zu neun männliche Personen bestimmt. Ihre Beigaben bestätigen das bereits geltende Beigabemuster der benachbarten Samad-Kultur. Ein einziges Kinderskelett (Fu22/1) mußte seine Altersgruppe vertreten. Ihm ist lediglich ein Eisenfragment, vermutlich von einer Waffe, zuweisbar. Das Skelett aus Fu20 stammt von einer 10-15 jährigen weiblichen Person, die nach den antiken bzw. frühmittelalterlichen Sitten als erwachsen und heiratsfähig galt. Die Zahl und handwerkliche Qualität der Beigaben sagen etwas über die gesellschaftliche Stellung bzw. den Status der Frau aus. Nach der geringeren Zahl der Beigaben her zu urteilen, genoß sie eine untergeordnete gesellschaftliche Rolle. Bereits beschädigte (z. B. aus Fu18) Tongefäße waren für das Grab gut genug. Inwiefern Beigaben anderer Gattungen bereits beschädigt waren, bleibt zu klären.

Besitz eines Schwertes zeigte Wohlstand und dadurch können wir von rangindizierenden Objekten sprechen. Weitere derartig klare Fälle würden z. B. das beobachtete Vorkommen von Pferdegeschirr einschließen, was in al Fueda allerdings nicht dokumentiert wurde. Gemessen an der Größe des Grabbaus, der Zahl und handwerklichen Qualität der Beigaben, dürfte Gr. Fu12 eine hochrangige Persönlichkeit enthalten haben. Zwei Funde deuten besonders darauf hin; erstens, die große Vorratsflasche (16) mit einer goldenen Glasur und zweitens, das hier als Kultobjekt (10) bezeichnete Artefakt. Die Beigabe der schweren Waffen in Fu19 deutet mehr auf die Autorität des jungen Mannes als auf seinen Reichtum.

## GRABRAUB

Dachplatten fehlten meistens, was verschiedene Gründe haben kann. In erster Linie dienten sie als Baumaterial - sogar für andere Gräber. Andererseits war Edelmetall, wie das des Armreifens aus Gr. Fu09 attraktiv für Plünderer gewesen. Dies galt auch für buntmetallische Objekte. Die frühgeschichtlichen Gräbern Omans enthalten häufig Beigaben aus Eisen. Dieses Metall stellte zu dieser Zeit keinen Anreiz für den Grabraub dar. Meistens waren die übriggebliebenen wertvollen Fundstücke für die Plünderer hinter eingefallenen

Steinen oder unter Schutt nur schwer erkennbar. Die Gräber in al Fueda wurden über die Jahrhunderte hinweg beraubt, wie altkorrodierte Bruchflächen der Eisenobjekte erkennen lassen. Fehlende Klinglefragmente sind wohl darauf zurückzuführen, daß bereits zerbrochene Waffen bei späteren Beraubungen auf die umliegenden Oberfläche geworfen wurden und dort vergingen. Neuzeitlicher Grabraub ist ein Faktum im Sultanat.

### DIE BEVÖLKERUNG

Vom Skelettyp her zu urteilen, handelt es sich vornehmlich um den südarabischen Typus<sup>14</sup>. Eine Ausnahme bildet der junge Mann aus Fu19: Sein Körperbau ist außerordentlich groß (175 cm) und kräftig. Die Vielzahl und Auswahl der Waffenbeigaben sprechen für eine besondere Persönlichkeit. Wenige Meter von Fu19 lag ein weiteres Grab - Fu22 - in dem ebenfalls ein außerordentlich kräftiges Individuum vorgefunden wurde. Der Zahnbefund deutet auf eine Nahrung, die nicht auf Datteln basiert. Beide stammen wohl nicht aus der Gegend. Die Vielzahl und Auswahl der Waffenbeigaben sprechen für eine besondere Persönlichkeit. Dafür spricht auch die deutliche obertägige Markierung der Grabstelle durch einen Felsen im Osten.

### RADIOKARBONDATEN

Skelettmaterial aus den Gräbern Fu10/1, Fu18 und Fu19 wurde zwecks Datierung im AMS-Beschleunigungs- und Radiokarbonverfahren analysiert. Allerdings enthielten die Proben zu wenig organisches Material und erbrachten daher keine zuverlässigen Ergebnisse.

Lab-Nr. Grab	14C	kalib. 1	Probe
KIA2505	Fu10/1	10±60 BP	1954-1955 AD Fraction B. Durchschnitt
KIA2507	Fu18	740±340 BP	985-1454 AD Fraction A. Knochen. Rest mit Filter
KIA2506	Fu19	1500±70 BP	474-479 AD Fraction B. Kollagen

### CHRONOLOGIE

Keramik und Steingefäße liefern Anhaltspunkte für die Datierung des Gräberfeldes. Im Hinblick auf die einheitliche Form der Gräber, scheint eine über Jahrhunderte ausgedehnte Besiedlung an diesem Platz nicht wahrscheinlich zu sein. Die Synchronismen mit der Chronologie aus Mleiha und ed Dür können leicht zusammengefaßt werden:

Periode	Fundgattung	Grab	M. Mouton 1992
PIR.A	Steindeckel	Fu07	fig. 26.6
	Steingefäß	Fu13	fig. 25.8
	Steingefäß	Fu15	fig. 26.5
PIR.B	Steingefäß	Fu07	fig. 45.2
	Steingefäß	Fu09	fig. 45.2
	Pilgerflasche	Fu17	fig. 32.12
	Schwert	Fu19	fig. 40.5

Mouton<sup>15</sup> nahm folgende Periodisierung von Mleiha und ed Dür vor:

Periode	absolute Jahre	
PIR.D	ca. 225	- 1. Viertel 4. Jh. n.Chr.
PIR.C	1. Jh.	- 2. Jh. n.Chr.
PIR.B	2. Hälfte 2. Jh.	- 1. Jh. v.Chr.
PIR.A	3. Jh.	- 1. Hälfte 2. Jh. v.Chr.

Zusätzlich zu den o.g. Datierungen kommen zwei Balsamaria (aus Gr. Fu07 und Fu10) der Fundklasse G07.03 hinzu, die in den Zeitraum post 300 v.Chr. bis 200 n.Chr. eingestuft werden<sup>16</sup>. Nach den datierbaren Funden zu urteilen, wurde das Gräberfeld in den Jahrhunderten unmittelbar vor der Zeitenwende belegt.

### Tabellarische Darstellung der Skelettbefunde<sup>17</sup>

Grab	Skel	W	M	v	b	L	R	Ko
Fu03	1	0	0	20	70	N	N	-
Fu06	1	0	2	60	80	N	N	-
Fu10	1	0	2	30	50	N	J	WNW
Fu10	2	0	2	30	50	N	J	OSO
Fu16	1	0	0	20	70	N	N	-
Fu18	1	0	3	30	40	N	J	WNW
Fu19	1	0	3	15	18	N	J	O
Fu20	1	2	0	10	15	N	J	OSO
Fu22	2	0	3	20	30	N	J	O
Fu22	1	0	2	6	8	N	J	O
Fu23	1	0	3	20	40	N	J	ONO
Mai01	1	0	2	20	70	N	N	-

insgesamt 12

28.03.1997

<sup>14</sup> Alle anthropologischen Beobachtungen stammen von M. Kunter, der die Skelette *in situ* bestimmte.

<sup>15</sup> M. Mouton 1992, 35.

<sup>16</sup> P. Yule im Druck.

<sup>17</sup> Abkürzungen: „Skel“ = Skelett-Nr., „W“ = weiblich (0-3), „M“ = männlich (0-3), „v“ = Alter von, „b“ = Alter bis, „Ko“ = Kopf-richtung des Bestatteten.



Tabellarische Darstellung der Grabbauten und Skelette<sup>18</sup>

Grab	L	Br	H	ki	Aus	Ein	Fun	Arc	l. Be	SH	an	ar	Typ <sup>19</sup>	Finished
Fu01	1.82	1.09	0.80	-	O	O	SEZ	SEZ	SEZ	SEZ	e	e	SWOs	24.02.1997
Fu02	1.88	1.00	0.64	-	OSO	WNW	SEZ	SEZ	SEZ	SEZ	e	em	SWOs	24.02.1997
Fu03	1.68	1.09	0.78	-	OSO	WNW	SEZ	SEZ	SEZ	SEZ	e	ew	SWOs	05.03.1997
Fu04	1.52	1.06	0.60	-	SO	SO	SEZ	SEZ	SEZ	SEZ	-	em	SWOs	02.03.1997
Fu05	1.90	1.14	0.64	-	SO	SO	SEZ	SEZ	SEZ	SEZ	-	em	SWOs	01.03.1997
Fu06	1.77	1.05	0.75	-	SO	SO	SEZ	SEZ	SEZ	SEZ	em	em	SWOs	01.03.1997
Fu07	1.64	0.98	0.68	-	SO	SO	SEZ	SEZ	SEZ	SEZ	-	em	SWOs	09.03.1997
Fu08	1.66	1.12	0.42	-	OSO	OSO	-	SEZ	SEZ	SEZ	-	-	SWOs	10.03.1997
Fu09	2.26	0.92	0.62	-	OSO	OSO	SEZ	SEZ	SEZ	SEZ	-	em	WOs	13.03.1997
Fu10	2.84	0.90	0.75	-	OSO	OSO	SEZ	SEZ	SEZ	SEZ	em	em	SWOs	09.03.1997
Fu11	1.72	0.90	0.60	-	SO	SO	SEZ	SEZ	SEZ	SEZ	-	e	SWOs	06.03.1997
Fu12	2.48	1.30	0.94	-	OSO	OSO	SEZ	SEZ	SEZ	SEZ	e	em	SWOs	13.03.1997
Fu13	1.18	0.86	0.63	-	OSO	OSO	SEZ	SEZ	SEZ	SEZ	-	-	SOs	09.03.1997
Fu14	0.72	0.90	0.48	x	OSO	OSO	-	SEZ	SEZ	SEZ	-	m	Og	16.03.1997
Fu15	1.92	1.10	0.74	-	OSO	OSO	SEZ	SEZ	SEZ	SEZ	-	em	SWOs	10.03.1997
Fu16	1.34	0.82	0.60	-	OSO	OSO	SEZ	SEZ	SEZ	SEZ	e	em	SOs	17.03.1997
Fu17	2.10	0.96	0.82	-	SSW	NNO	SEZ	SEZ	SEZ	SEZ	-	em	SWOs	09.03.1997
Fu18	2.64	0.86	0.50	-	WNW	-	SEZ	SEZ	SEZ	SEZ	em	em	SWOs	13.03.1997
Fu19	2.08	0.84	0.64	-	O	O	SEZ	SEZ	SEZ	SEZ	em	em	SWOs	25.03.1997
Fu20	1.70	0.60	0.60	-	OSO	OSO	SEZ	SEZ	SEZ	SEZ	ew	ew	SWOs	13.03.1997
Fu21	1.34	0.94	0.70	-	NNO	NNO	SEZ	SEZ	SEZ	SEZ	-	w	SWOs	19.03.1997
Fu22	2.62	1.00	0.74	-	O	O	SEZ	SEZ	SEZ	SEZ	em	em	SWOs	16.03.1997
Fu23	1.62	1.00	0.58	-	ONO	ONO	SEZ	SEZ	SEZ	SEZ	em	em	Ws	22.03.1997
Mai1	1.08-	0.72	0.70	-	ONO	-	SEZ	SEZ	SEZ	SEZ	em	em	WOs	16.03.1997
Mai2	1.62	0.76	0.70	-	ONO	-	SEZ	SEZ	SEZ	SEZ	-	ew	Os	22.03.1997
insgesamt 25														
28.03.1997														

## Bibliographie

**Cardi de, B. – Collier, C. – Doe, D.B 1976**

Excavations and Survey in Oman, *Journal of Oman Studies* 2, 101-187

**Mouton, M. 1992**

*La Péninsule d'Oman de la Fin de l'Âge du Fer au Début de la Période Sassanide*, unveröffentlichte Dissertation, Université de Paris I

**Yule, P. 1994**

Grabarchitektur der Eisenzeit im Sultanat Oman, *Baghdader Mitteilungen* 25, 519-577

**Yule, P. (im Druck)**

Die Gräberfelder in Samad al Shān, Sultanat Oman, Materialien zu einer Kulturgeschichte

**Yule, P. (im Druck)**

\*Amla/al Fueda - A Cemetery of the Late Pre-Islamic Age in al Zahīrah (Sultanate of Oman), *Nubica*

<sup>18</sup> Abkürzungen: L = Kammerlänge; B = Kammerbreite; H = Firsthöhe; ki = Kindergrab; Aus = Längsausrichtung der Kammer; Ein = Eingangsende; Fun = Datierung der Funde; SEZ = Späteisenzeit; Arc = Datierung der Grabarchitektur; l. Be = Datierung der ersten Bestattung; SH = späteste Bestattung; an = anthropologische Bestimmung nach Geschlecht und Alter (e = erwachsen; w = weiblich; m = männlich); ar = anthropologische und archäologische Bestimmung; Typ = Grabtyp; Fin = fertiggestellt.

<sup>19</sup> P. Yule 1994, 541.

### Abstract

A cemetery was sought in the northern part of the Sultanate coeval with the Samad Culture of Central Oman. After some prospection in 1996 iron weapons from clandestine excavations were traced to a place called al Fueda near the village of 'Amla. Excavation began in February of 1997. Time allowed the clearing of 23 graves which seem to date to the time of Christ. The dead were buried in long subterranean graves built of stone. 18 pottery vessels give a first impression of the appearance of Late Iron Age ceramics of this area. Several stone

vessels were made of calcite and soft stone. The number of iron weapons including daggers, swords, and arrow-heads is remarkable. Certain individuals were indeed heavily armed. Most interesting was a cult object made from a sherd and four bronze vessels with relief decorations. Women and men were buried on their right sides inside the graves. Generally men were equipped with more and higher quality grave goods than women. The graves were robbed at least once. Indeed, we became aware of the cemetery from someone who had participated in its looting. The skeletons are those of a population of South Arabian type.

### عملا/الظهيرة - مقابر من العصر الحديدي المتأخر - ١٩٩٧

الأسلحة الحديدية، المتضمنة للخناجر والسيوف ورؤوس السهام، أمراً ملفتاً للنظر، ومن المؤكد أنه كانت تنتمي لأشخاص كانوا مدججين بالسلح. وكانت اللقية الأكثر إثارة هي أداة دينية مصنوعة من كسرة فخارية وأربع أواني برونزية مزينة بنحت بـ ارز. دفن النساء والرجال ممددين على جانبهم الأيمن داخل القبر. وبشكل عام زُوِّدَت قبور الرجال مقارنة مع قبور النساء بكميات أكبر ونوعيات أفضل من ودائع القبور. لقد نُهبَت القبور حتى آخر واحد فيها. من المؤكد إمكانية حصولنا على اطلاع جيد عن المقبرة بمساعدة شخص كان مشتركاً بسلبها. يمكن إرجاع صنف الهيكل العظمية إلى نموذج سكان جنوبي الجزيرة العربية.

بُحث عن مقبرة في الجزء الشمالي من السلطنة تعاصر حضارة سمد في وسط عُمان. أدى اقتفاء أثر أسلحة حديدية أنت لحيز الوجود عن طريق حفريات سرية، بعد بعض المؤشرات في عام ١٩٩٦، إلى مكان يدعى القويدة قرب قرية العملا. بدأت أعمال التنقيب، التي سمحت مع مرور الوقت بتوضيح معاً ٢٣ قبراً يظهر أنها تعود بتاريخها إلى فترة المسيح، في شباط عام ١٩٩٧. دفن الموتى في قبور طويلة مبنية من الحجر تحت سطح الأرض. تعطي ١٨ من الأواني الفخارية المعثور عليها انطباعاً أولياً عن ظهور فخاريات العصر الحديدي المتأخر في هذه المنطقة. وقد صُنِعَ العديد من الأواني الحجرية من الكالسيت أو الأحجار الملساء. وكان عدد من ب. يول، ك. برغوفن



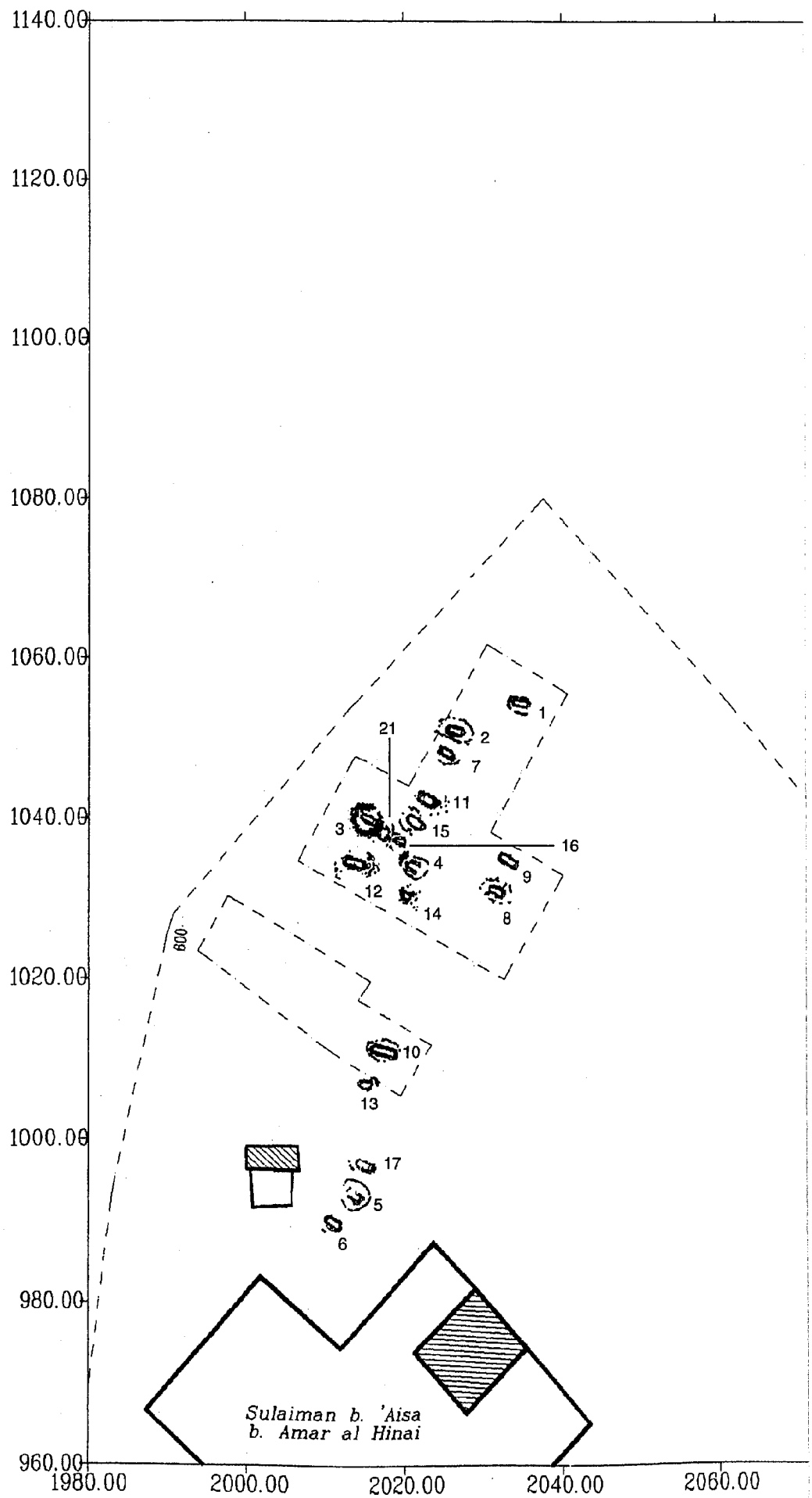


Fig. 2 Das G  
 ور في الفويذة.

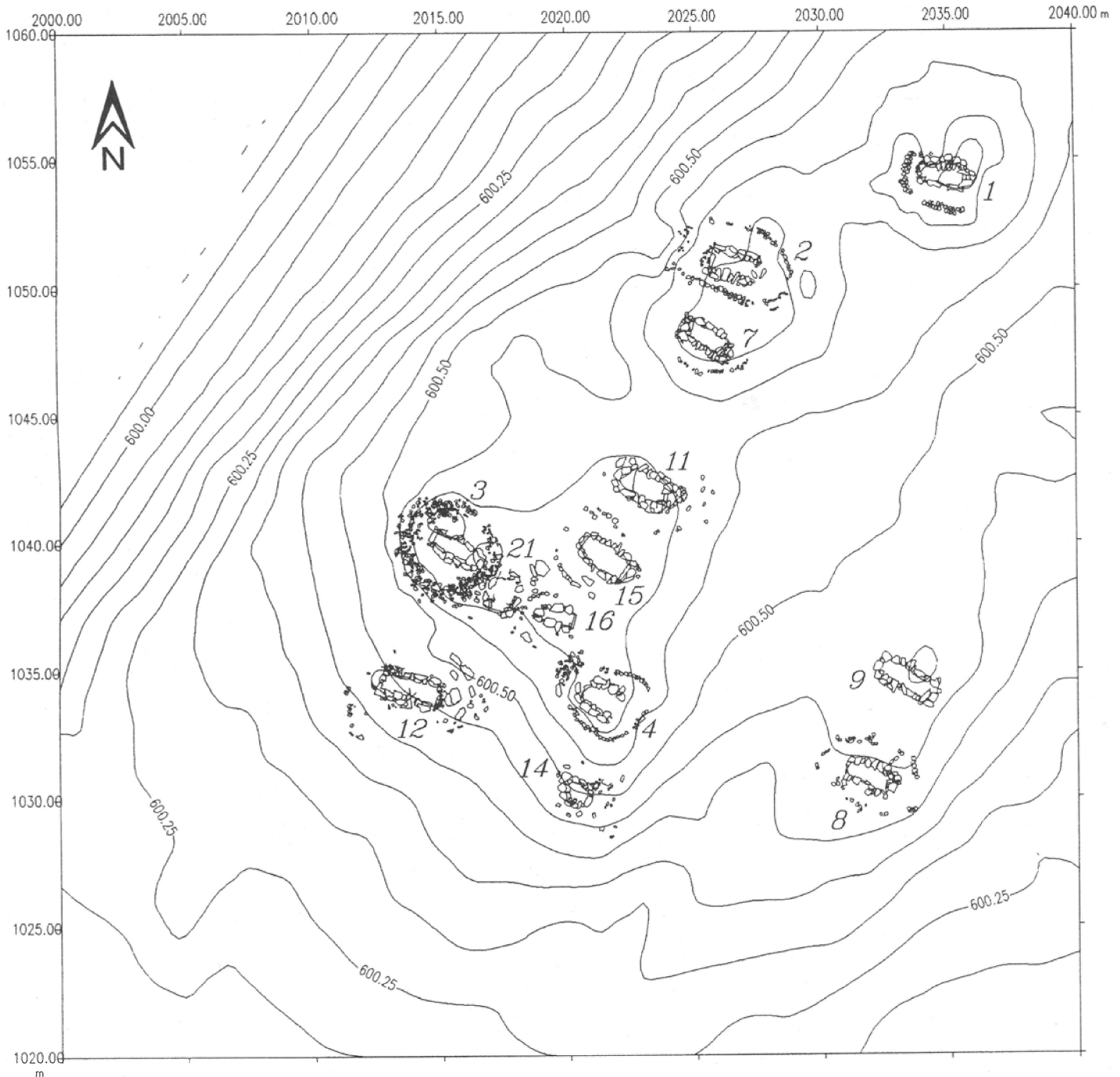


Fig. 3 Das Gräberfeld in al Fueida, Detailansicht

شكل ٣. منطقة القبور في الفويدة، منظر تفصيلي.

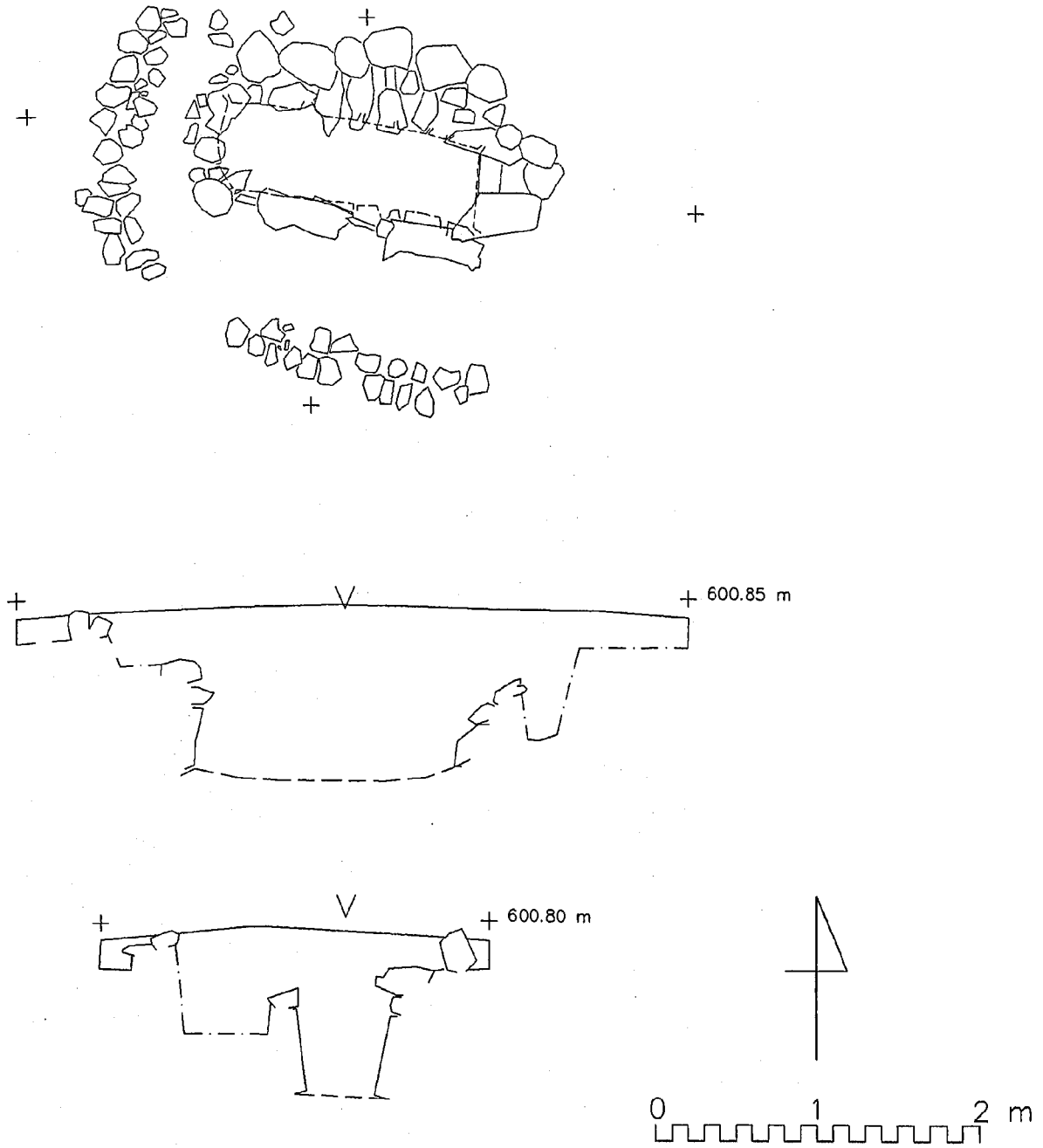


Fig. 4 Grab Fu01  
شكل ٤. القبر Fu01.

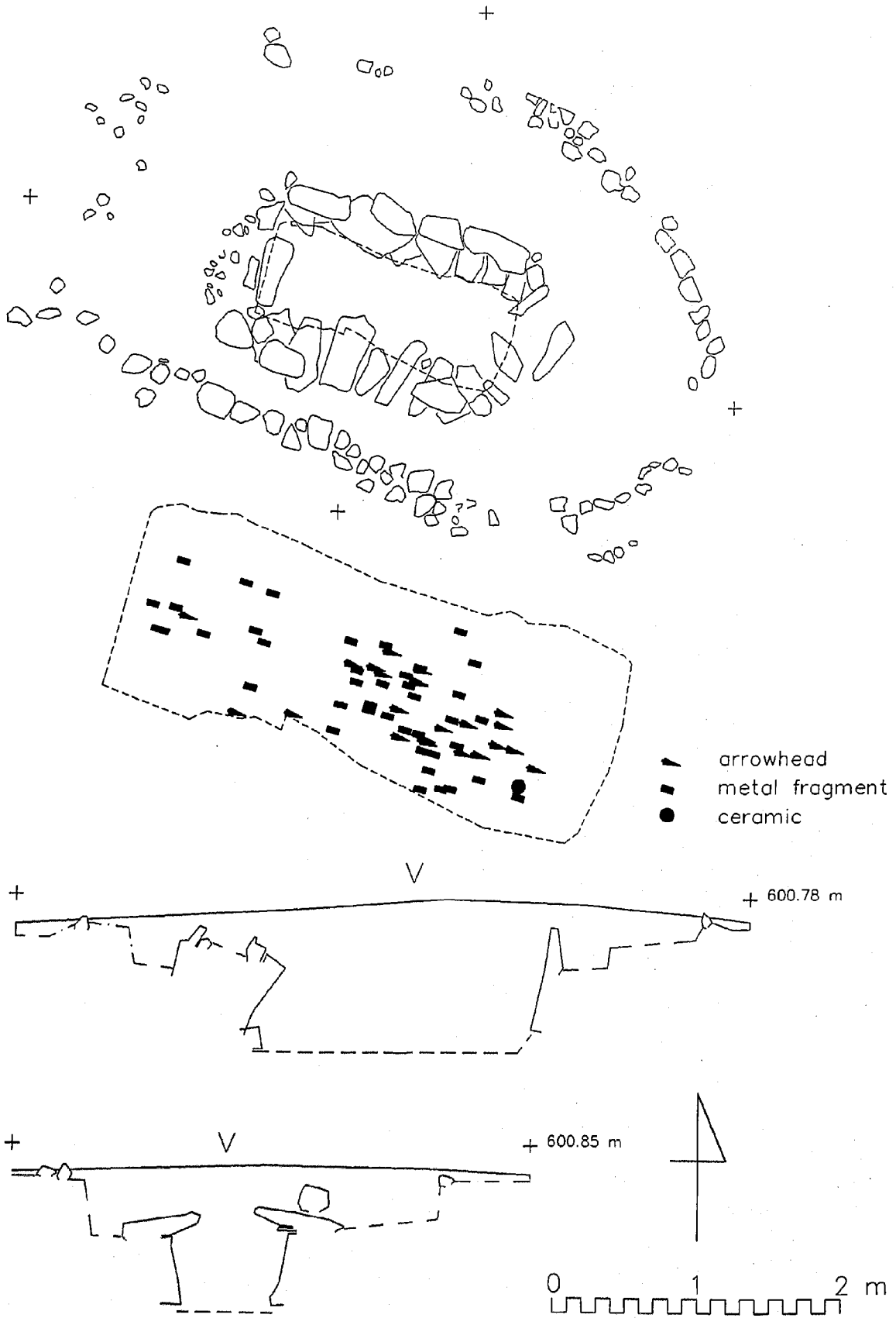


Fig. 5 Grab Fu02  
شكل ٥. القبر Fu02.

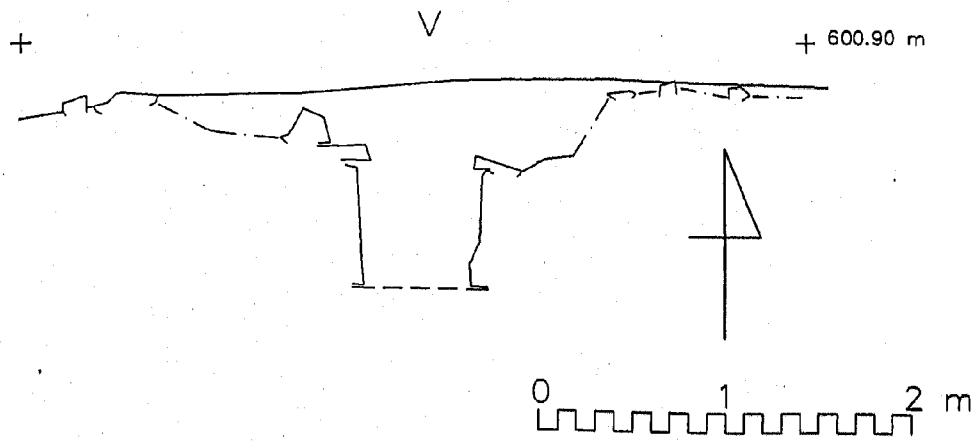
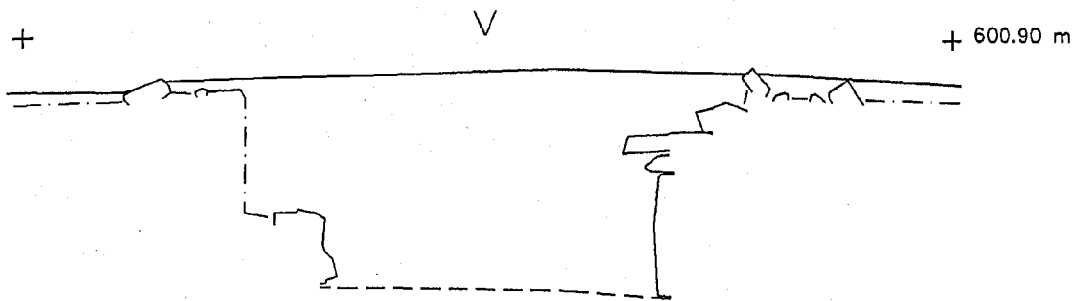


Fig. 6 Grab Fu03

شكل ٦. القبر Fu03.

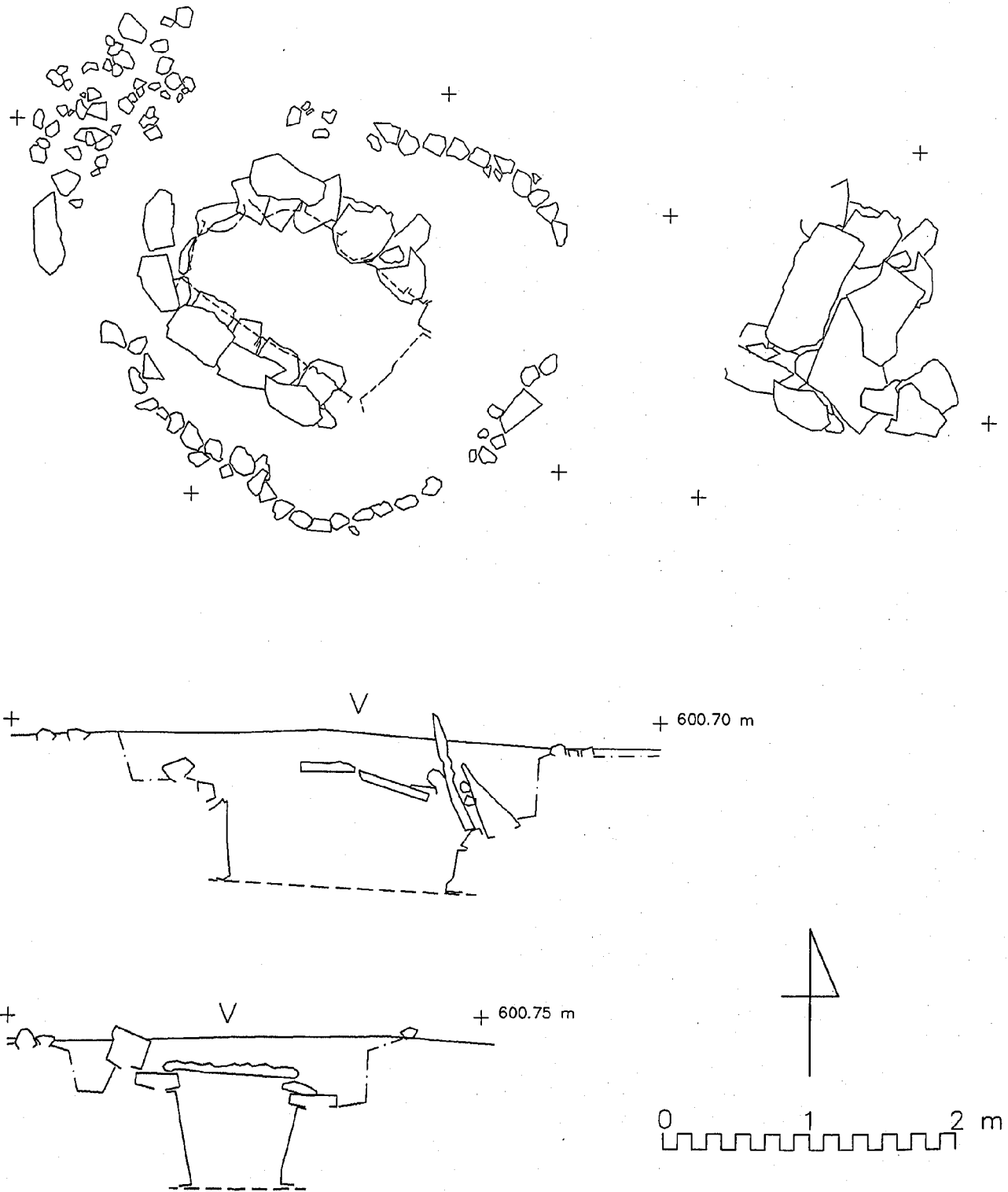


Fig. 7 Grab Fu04  
شكل v. القبر Fu04.



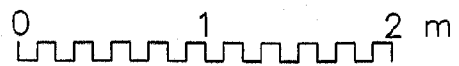
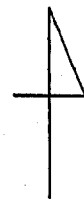
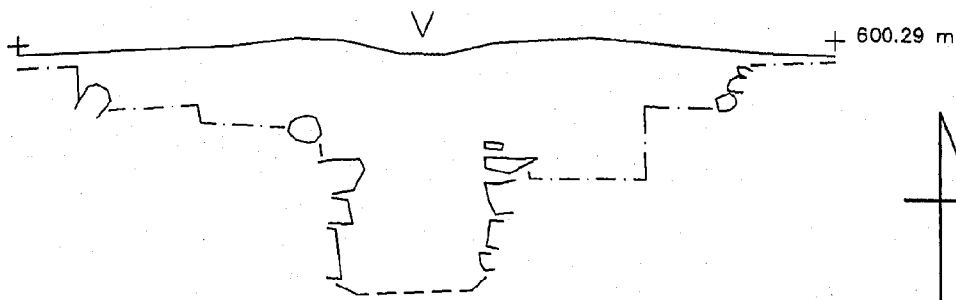
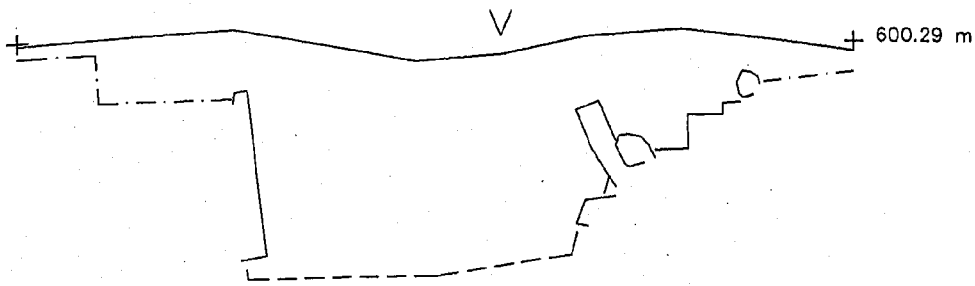
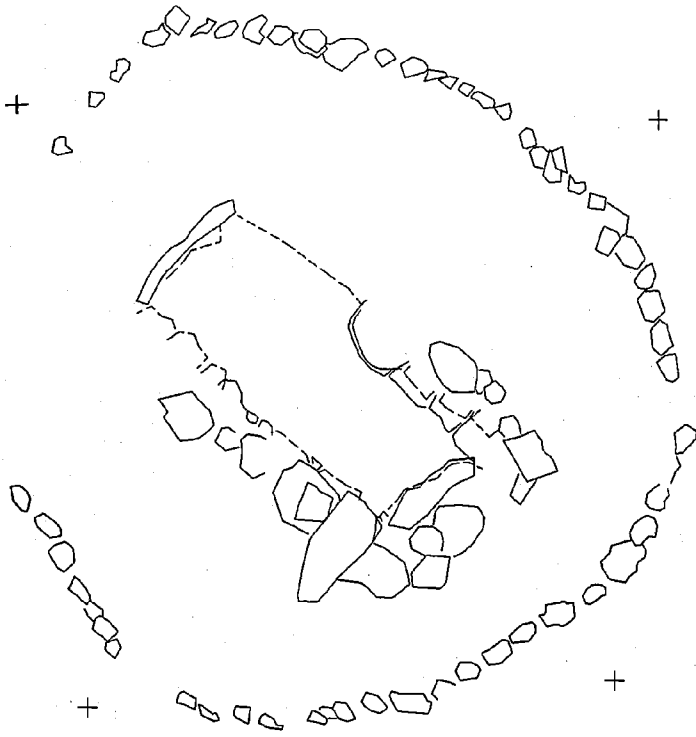


Fig. 8 Grab Fu05  
شكل ٨. القبر Fu05.

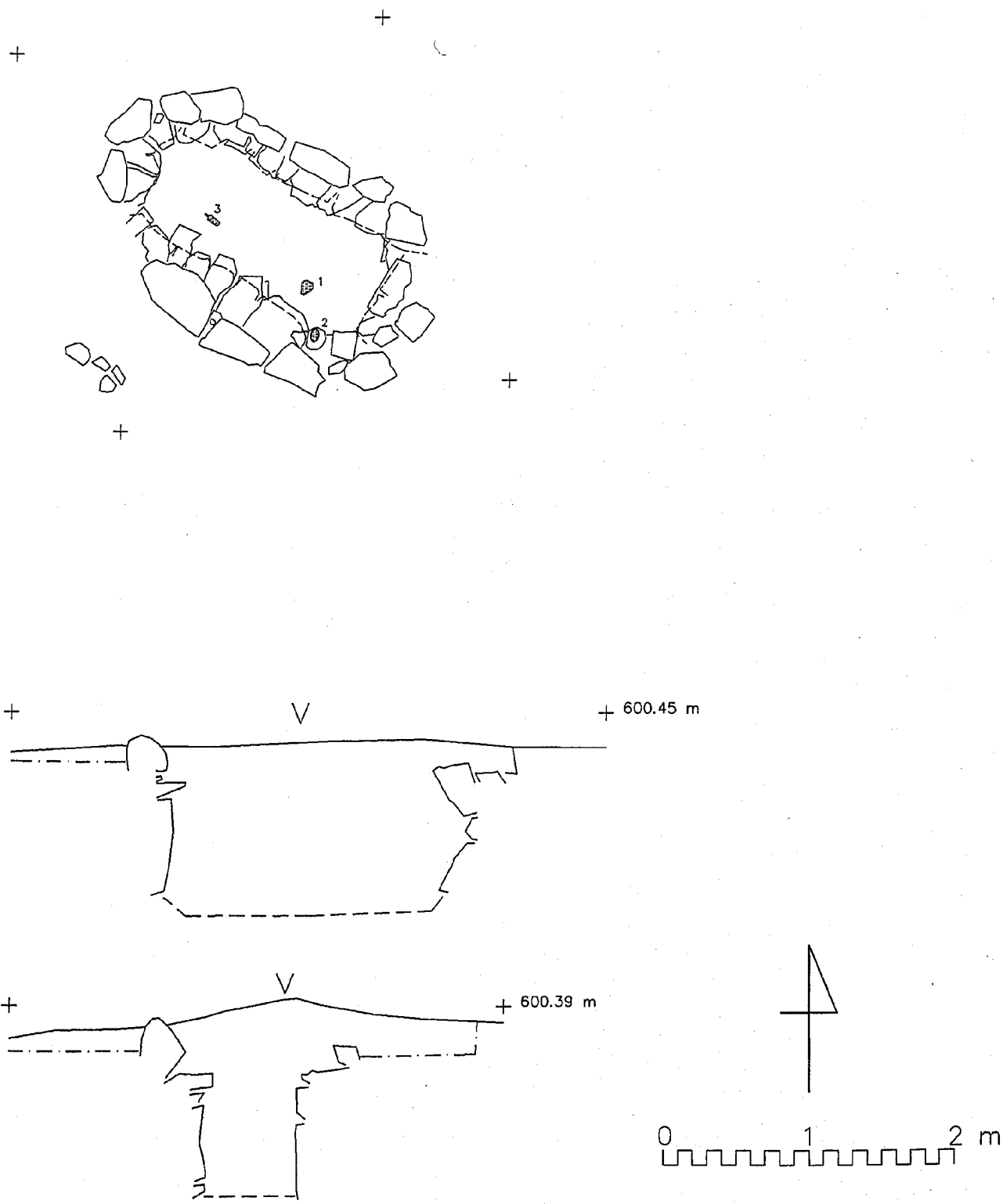


Fig. 9 Grab Fu06

شكل ٩. القبر Fu06.

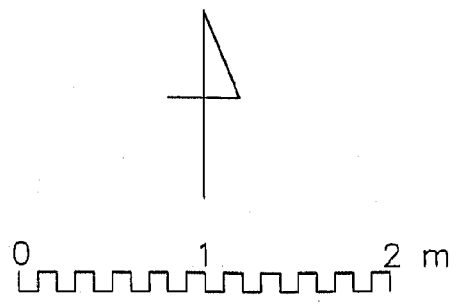
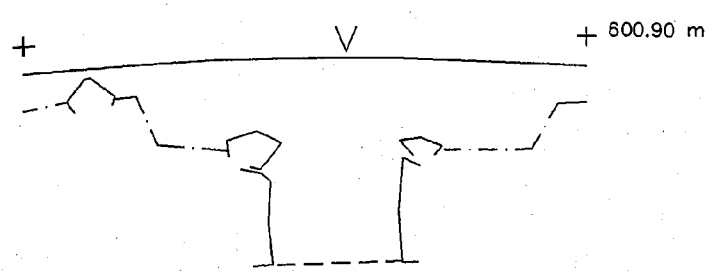
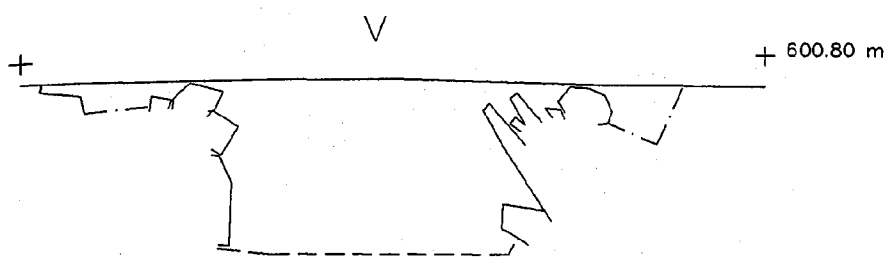
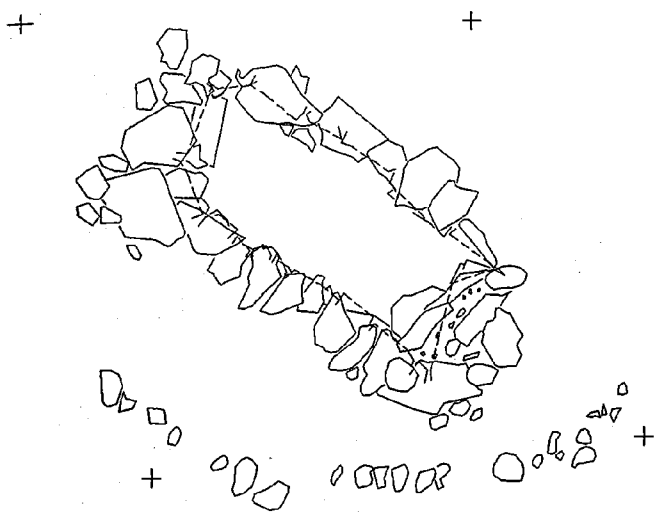


Fig. 10 Grab Fu07  
شكل ١٠. القبر Fu07.

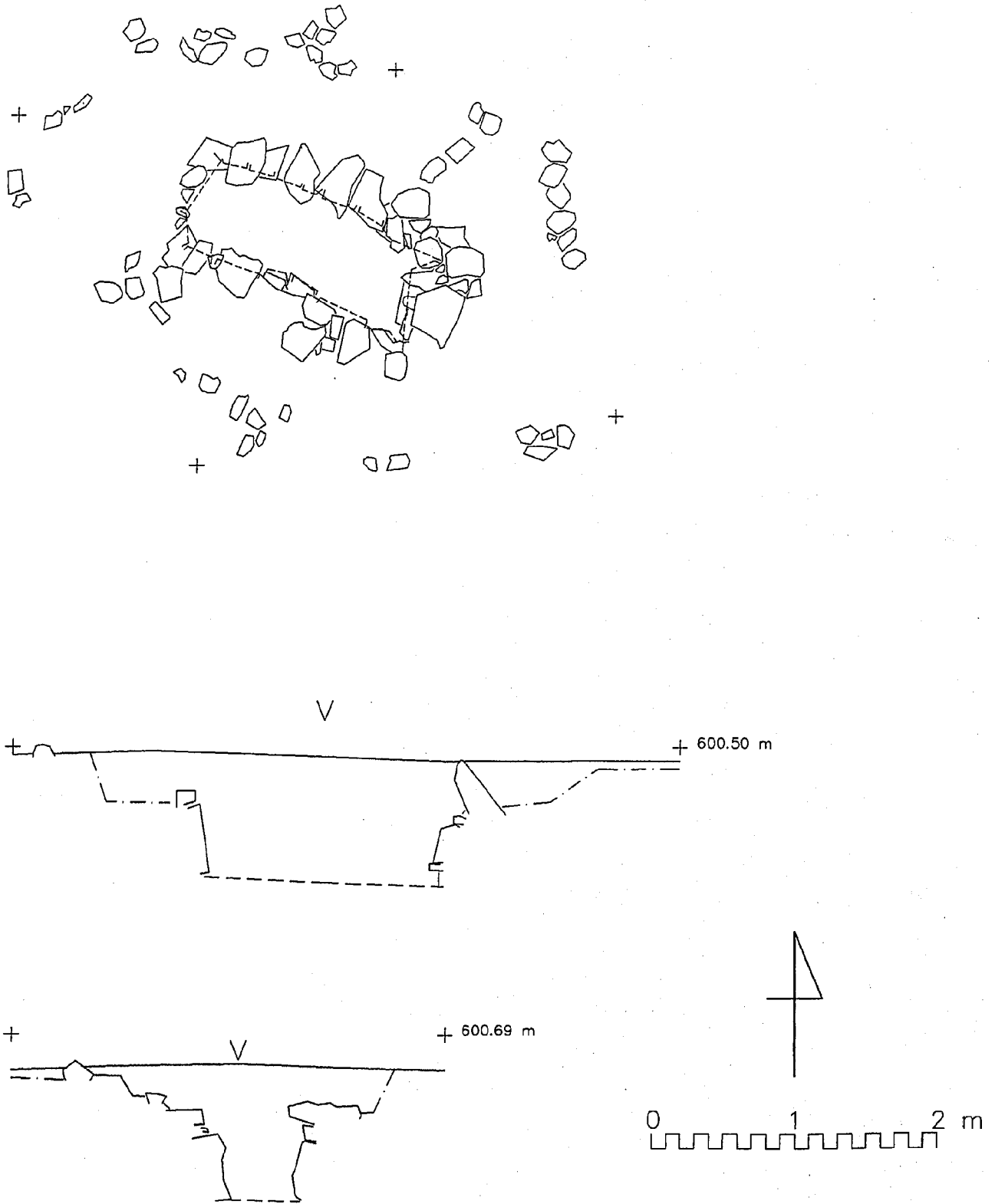


Fig. 11 Grab Fu08  
شكل ١١. القبر Fu08.

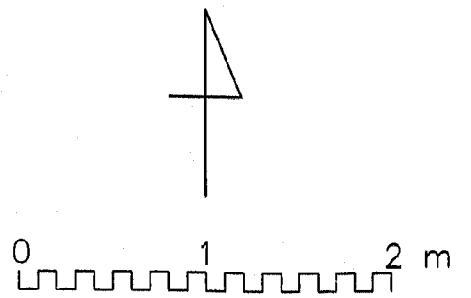
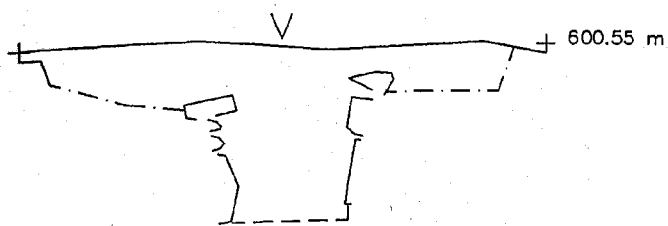
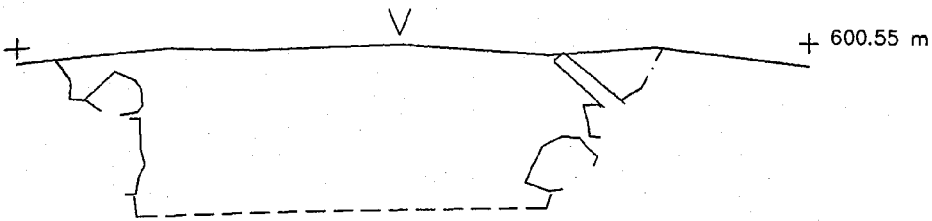
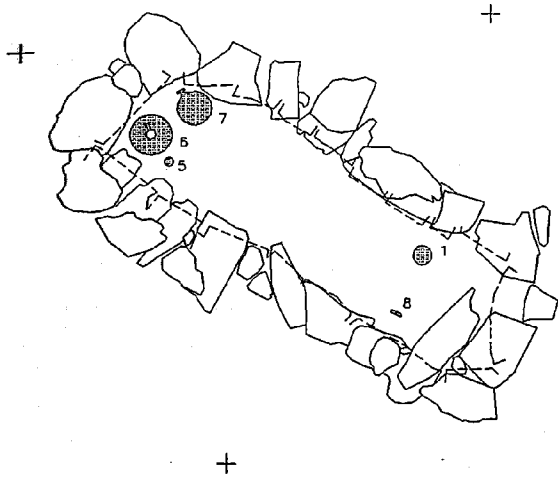


Fig. 12 Grab Fu09  
شكل ١٢. القبر Fu09.

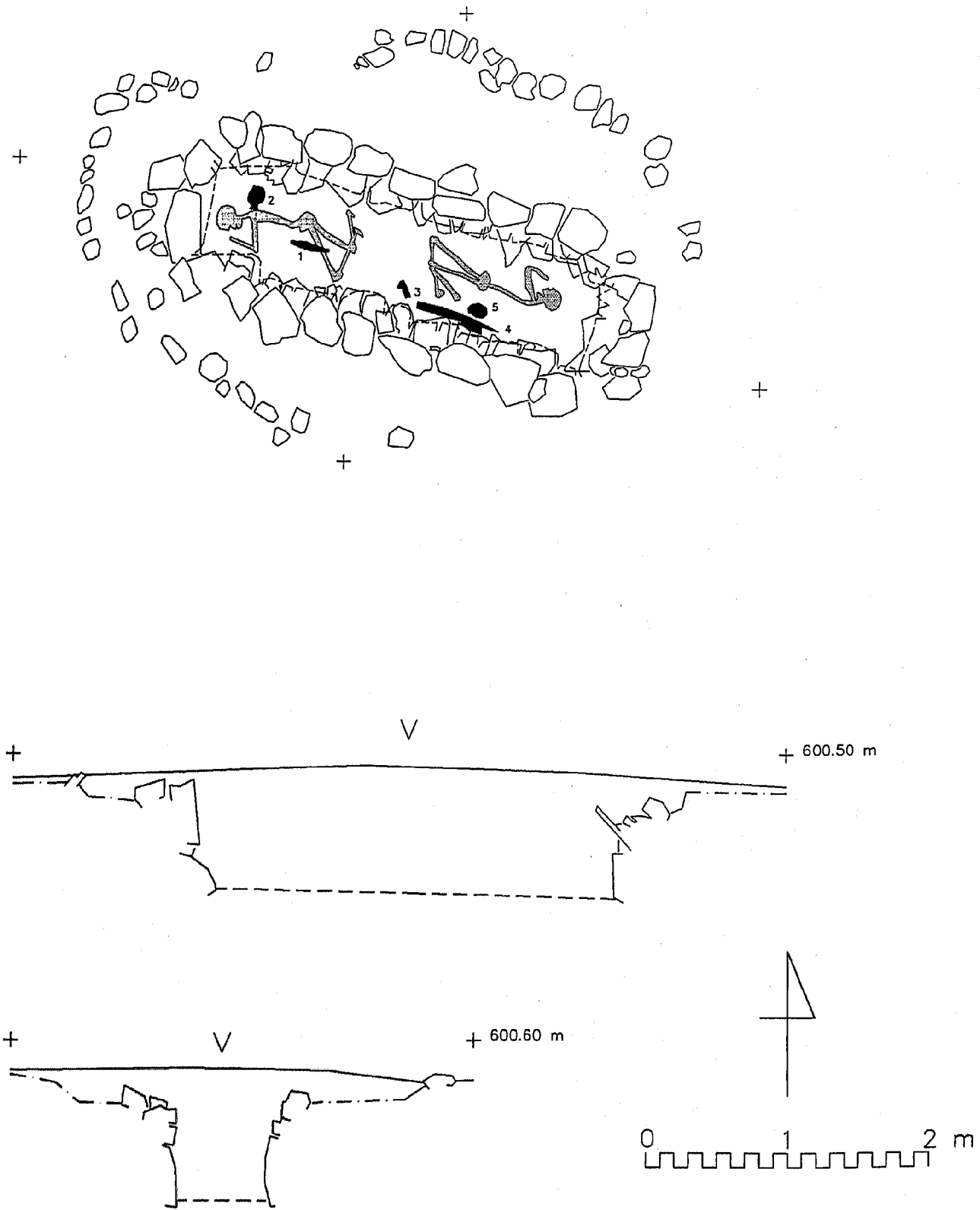


Fig. 13 Grab Fu10  
شكل ١٣. القبر Fu10.



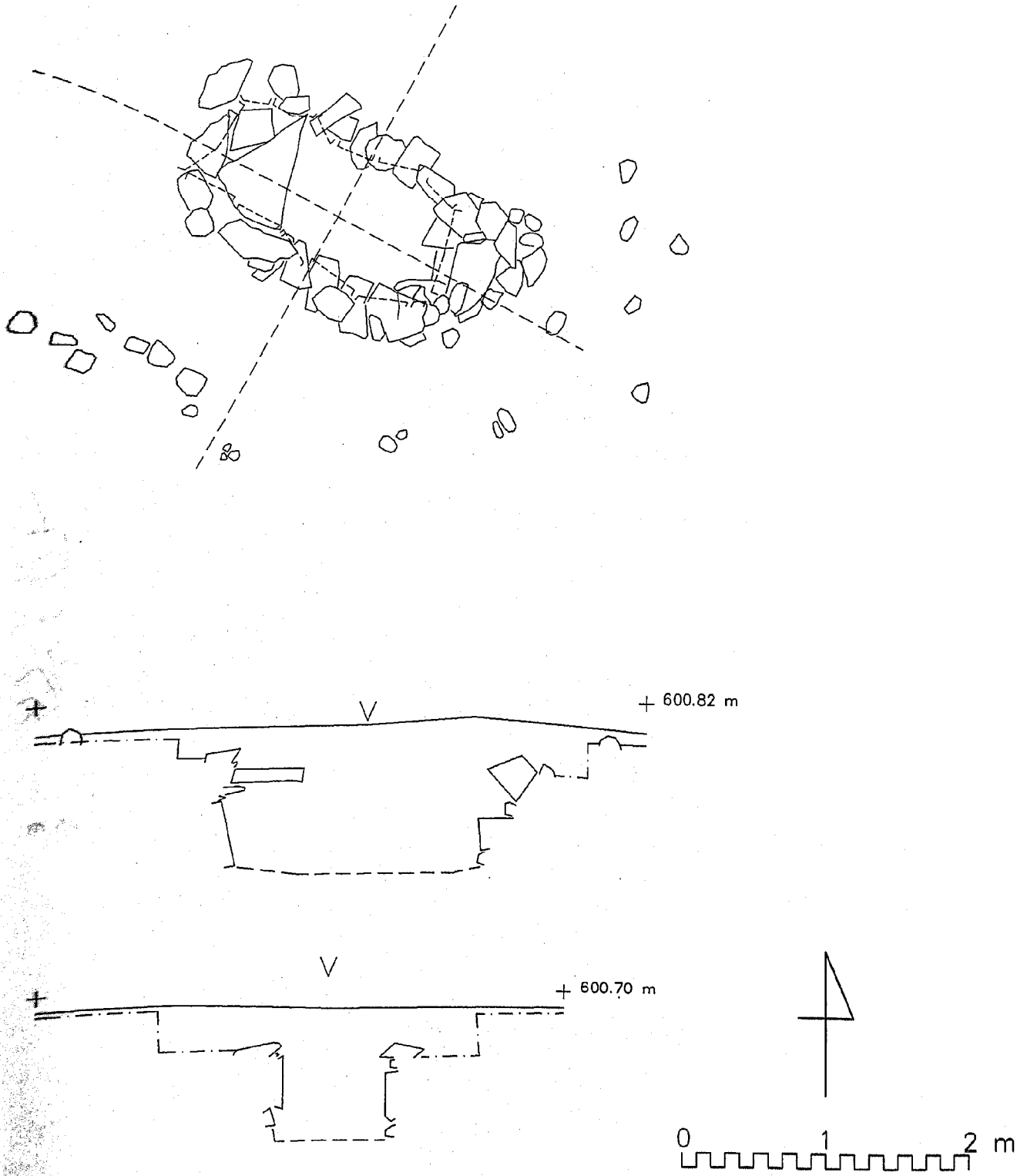


Fig. 14 Grab Fu11

شكل ١٤. القبر Fu11.

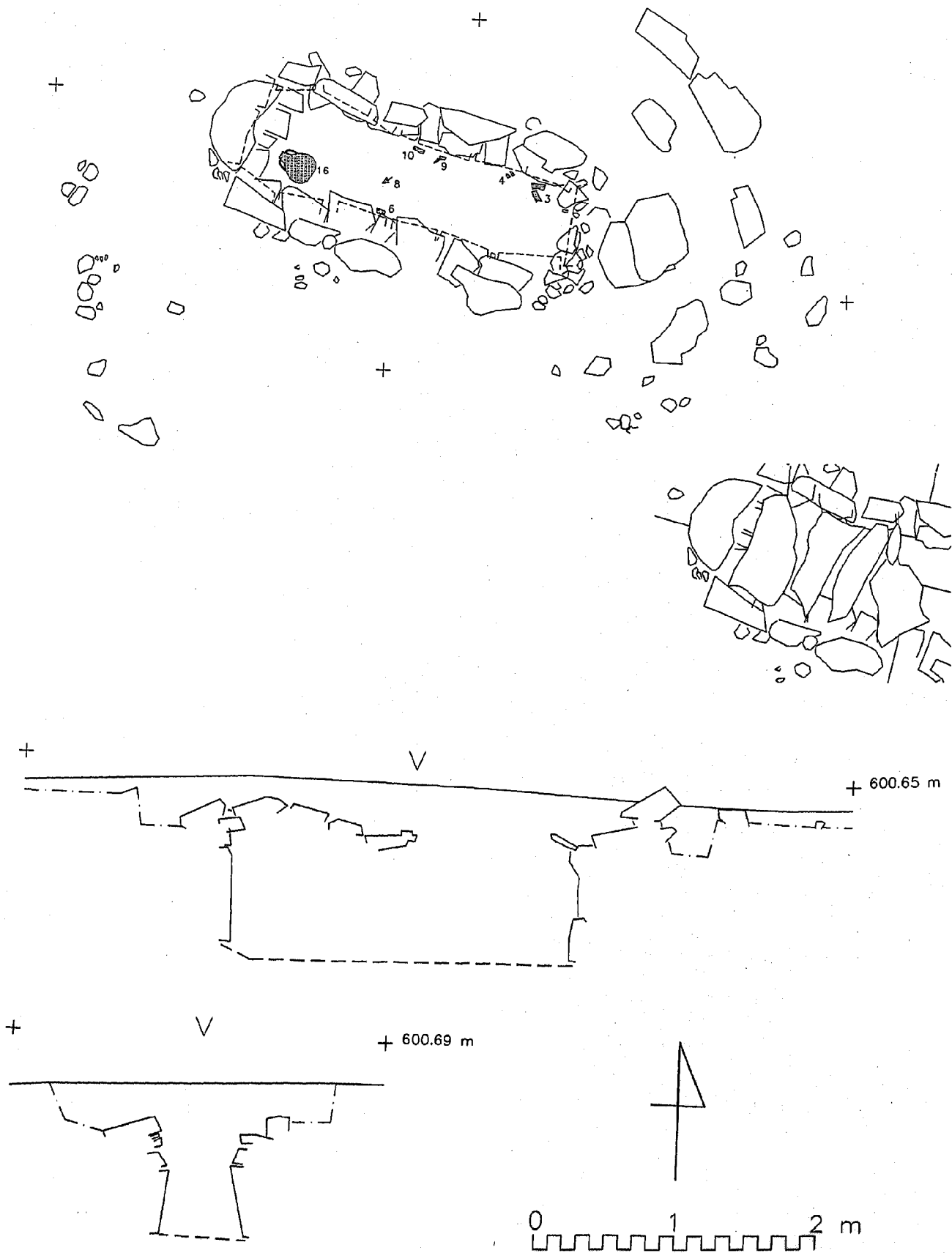


Fig. 15 Grab Fu12

شكل ١٥. القبر Fu12.

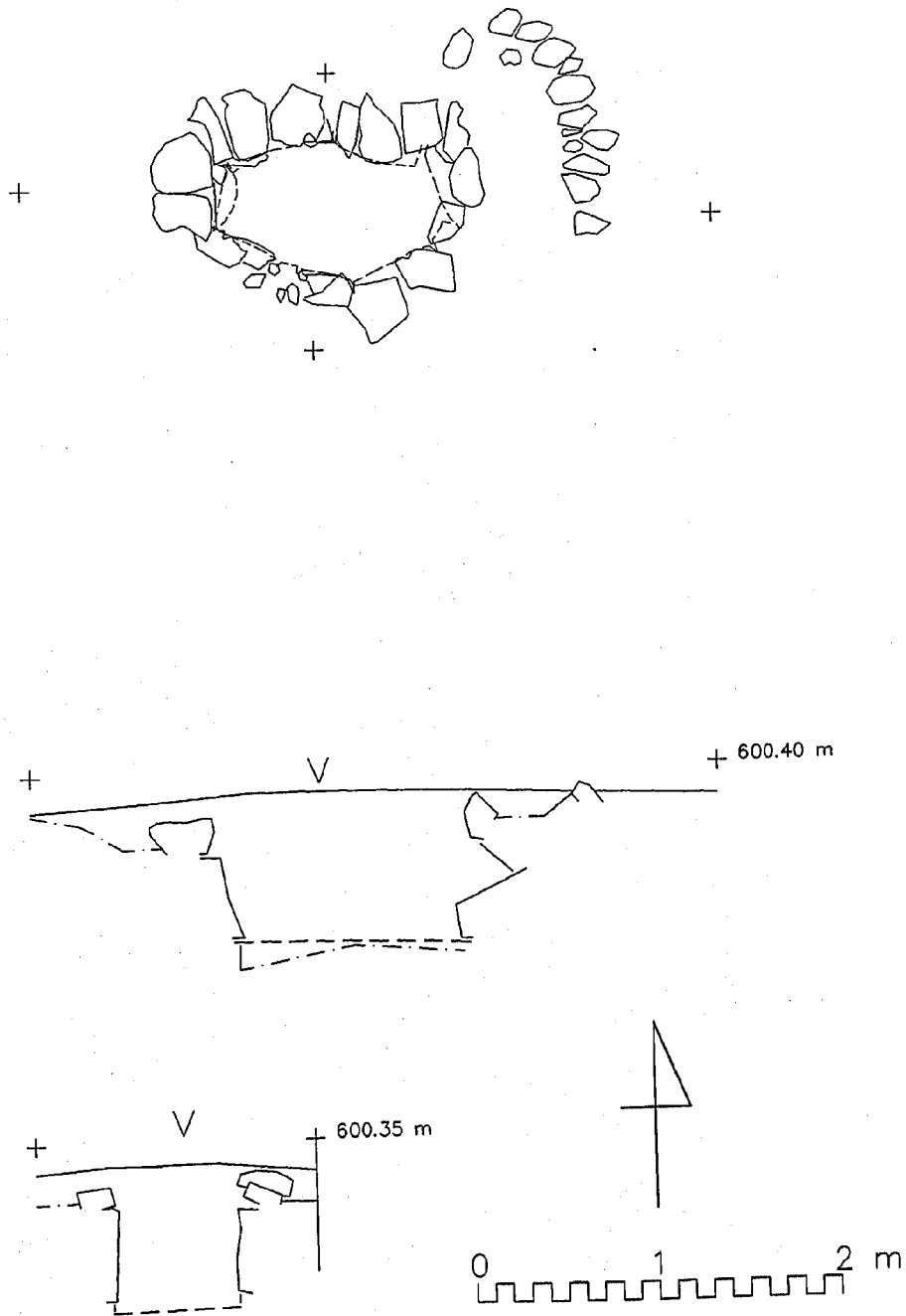


Fig. 16 Grab Fu13  
شكل ١٦. القبر Fu13.

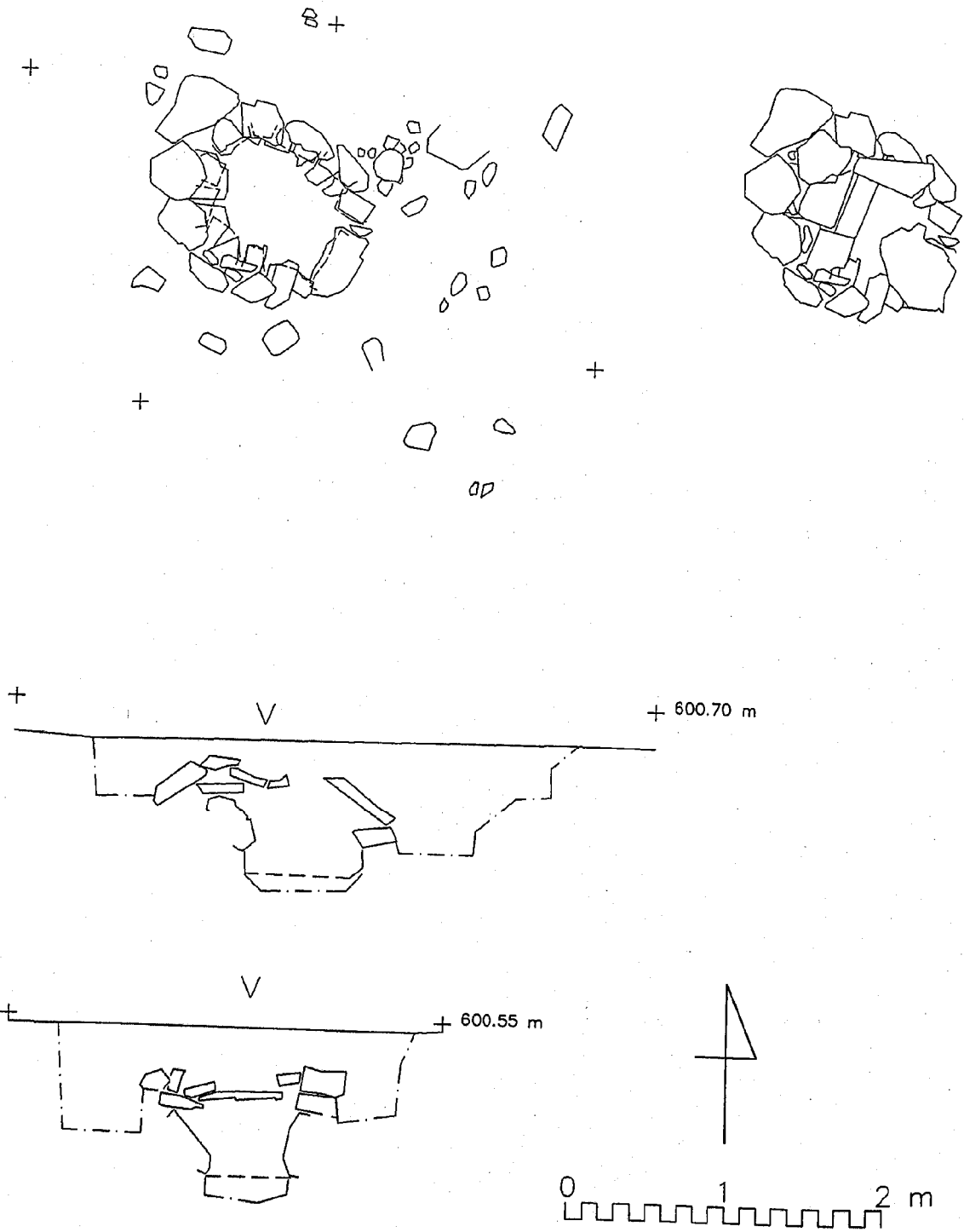


Fig. 17 GrFu14:  
شكل ١٧. القبر Fu14.

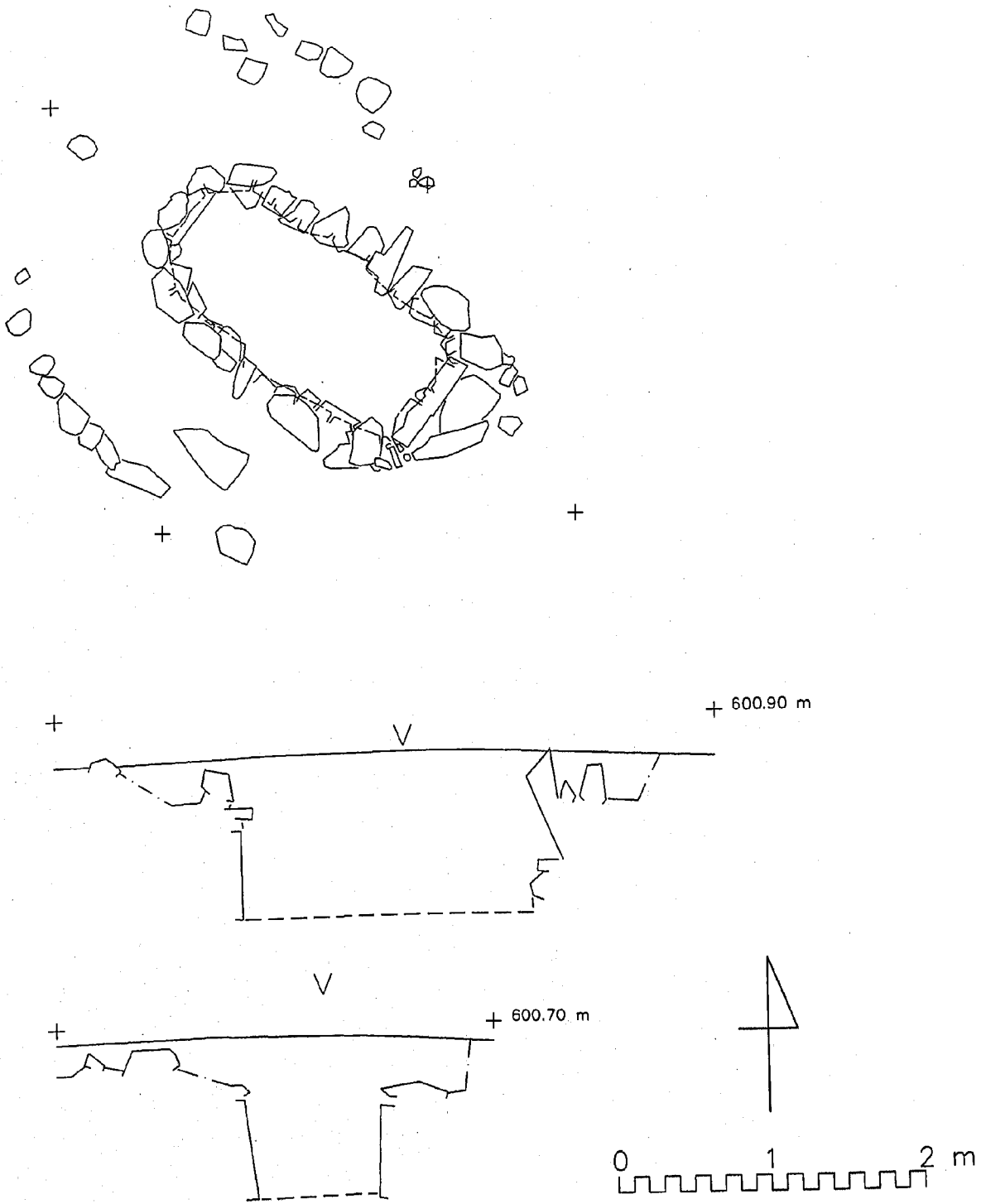


Fig. 18 Grab Fu15

شكل ١٨ . القبر Fu15.

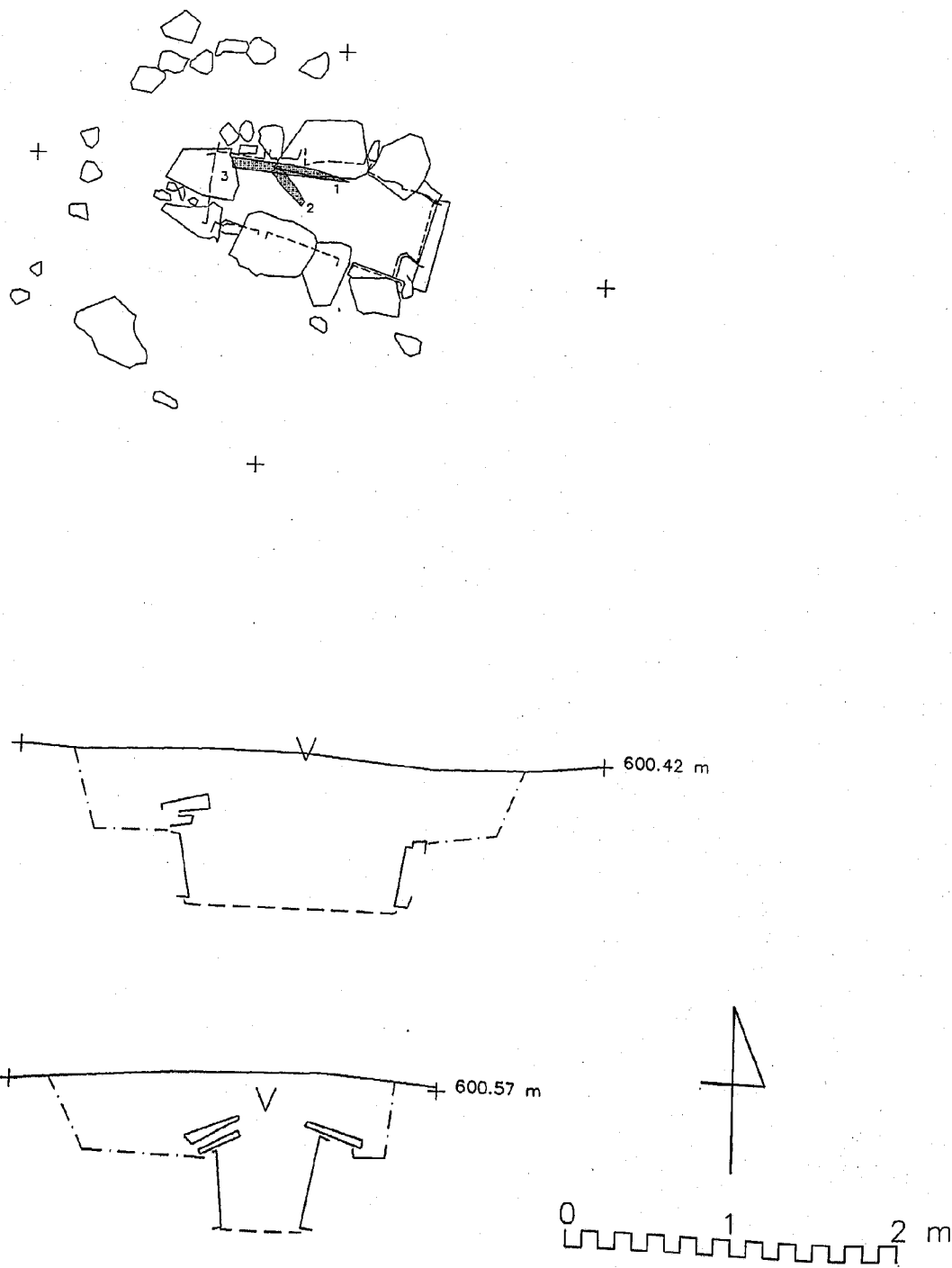


Fig. 19 Grab Ful6

شكل ١٩. القبر Ful6.



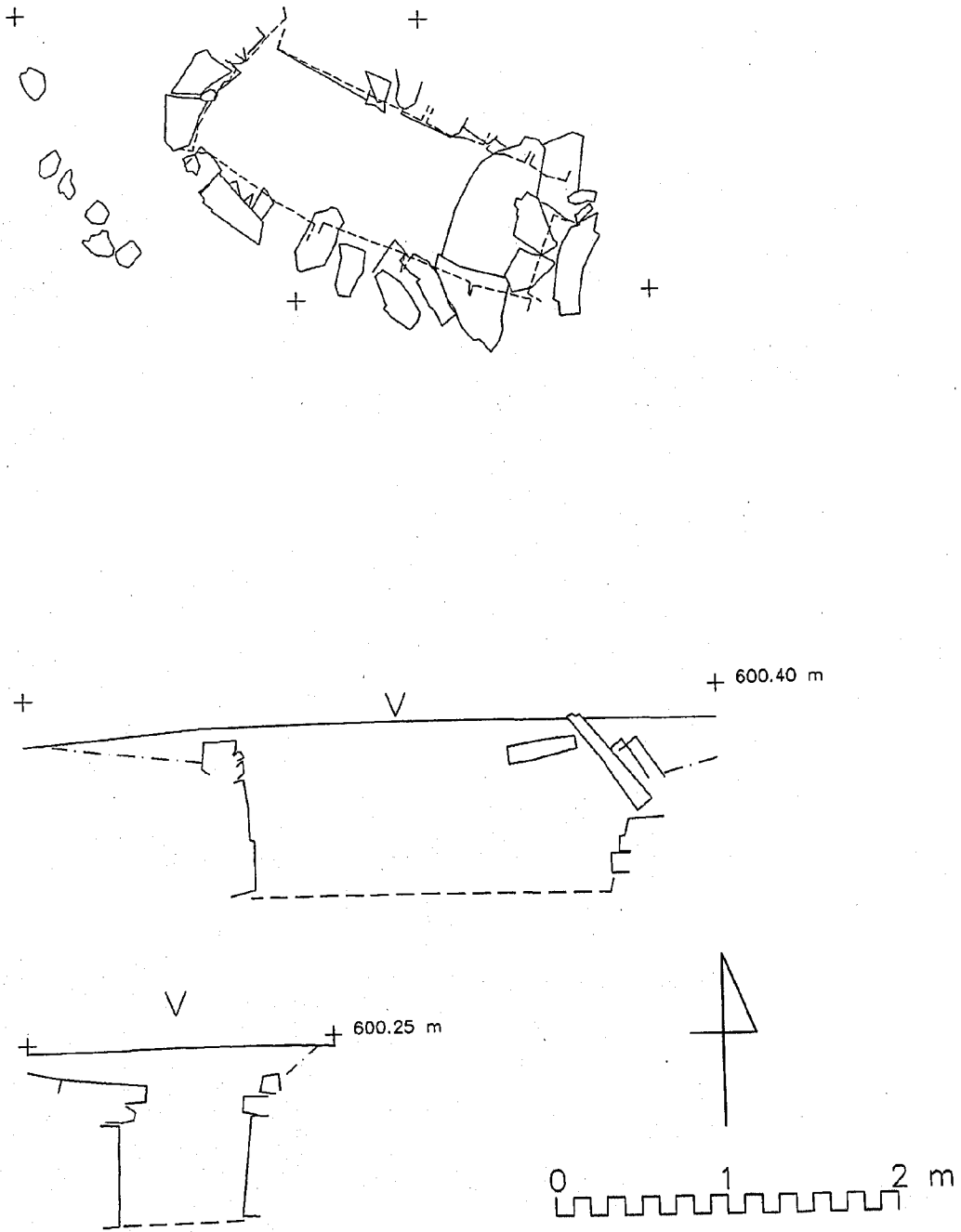


Fig. 20 Grab Fu17  
شكل ٢٠. القبر Fu17.

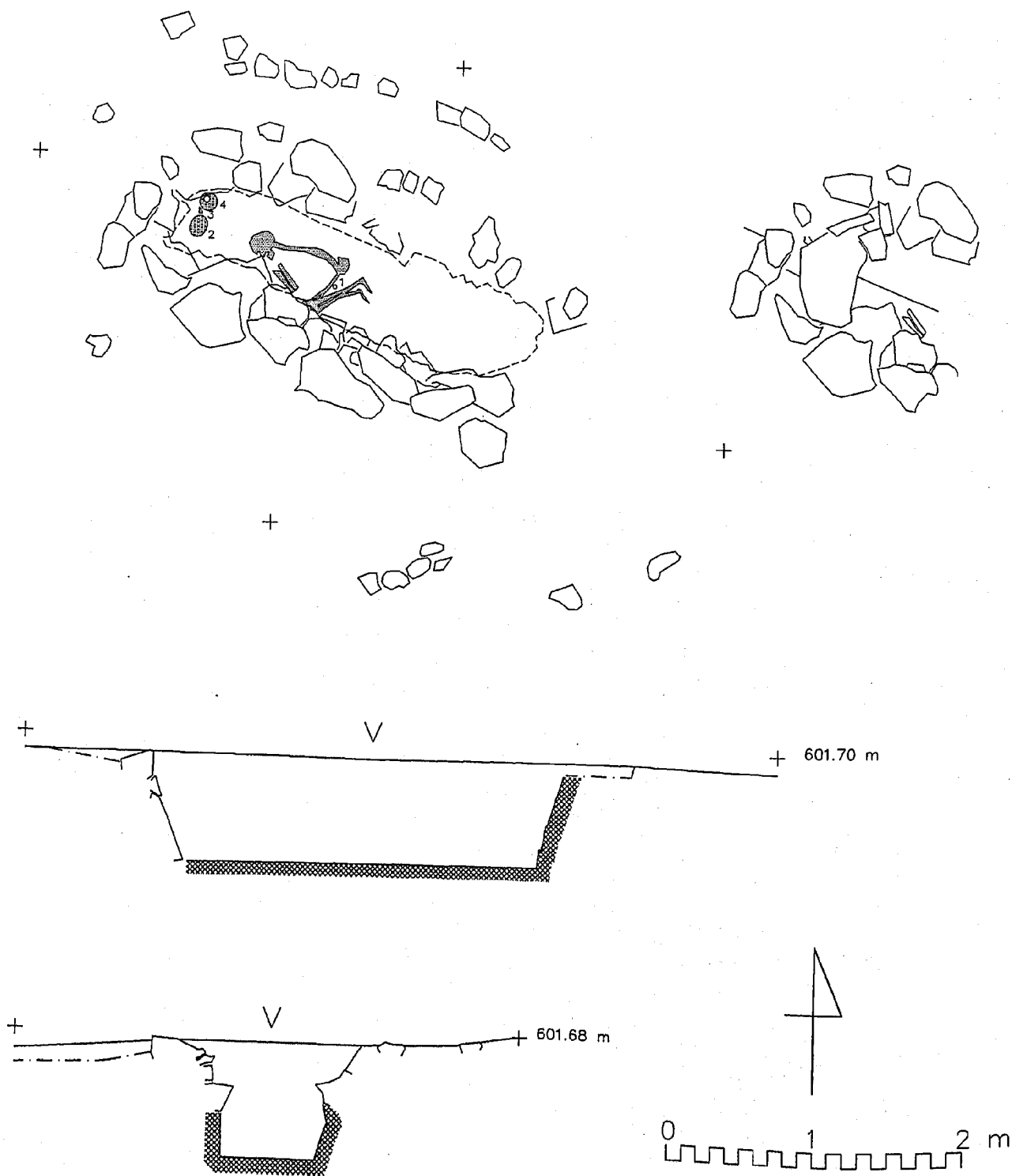


Fig. 21 Grab Fu18  
شكل ٢١. القبر Fu18.

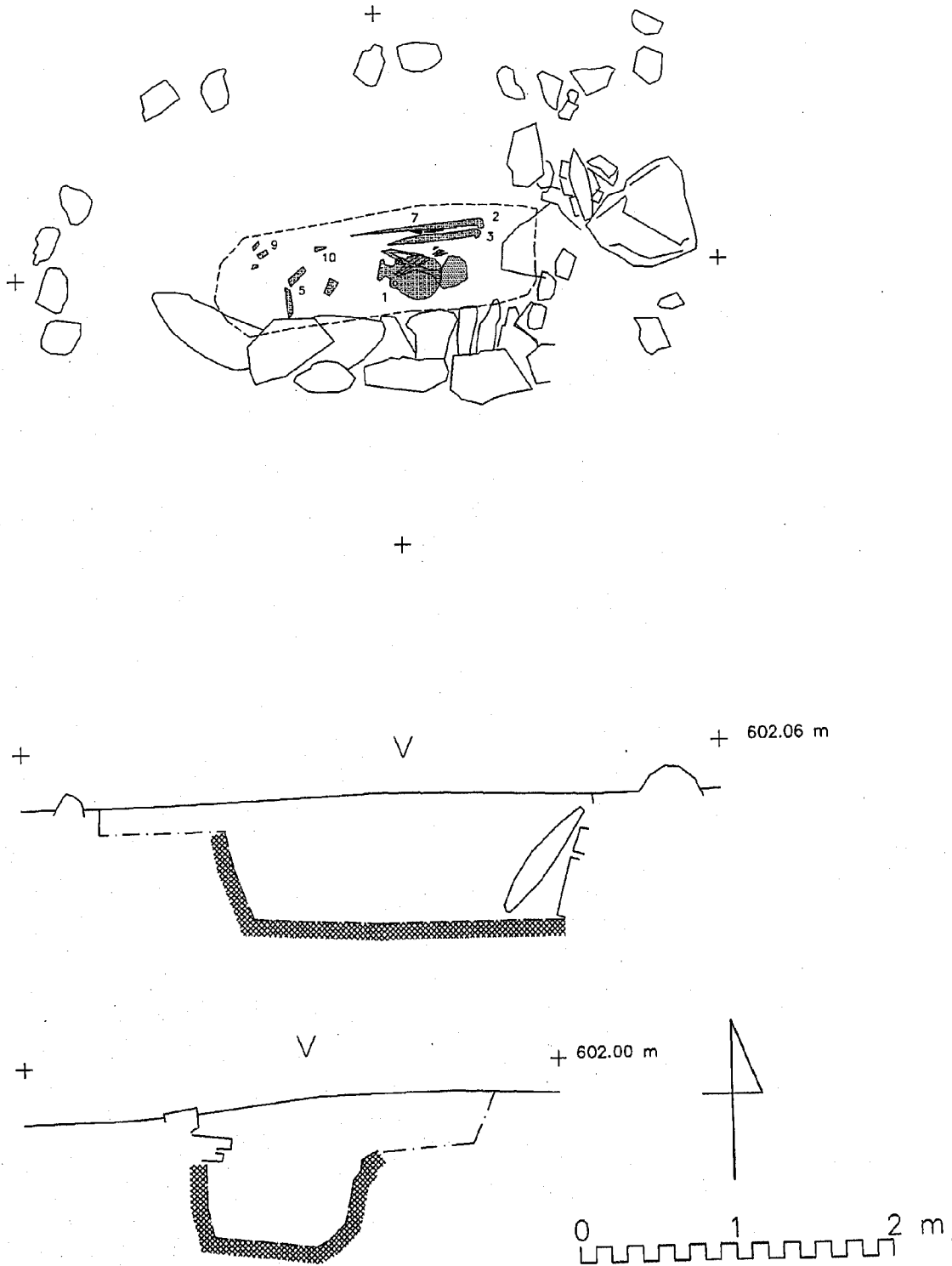


Fig. 22 Grab Fu19  
شكل ٢٢. القبر Fu19.

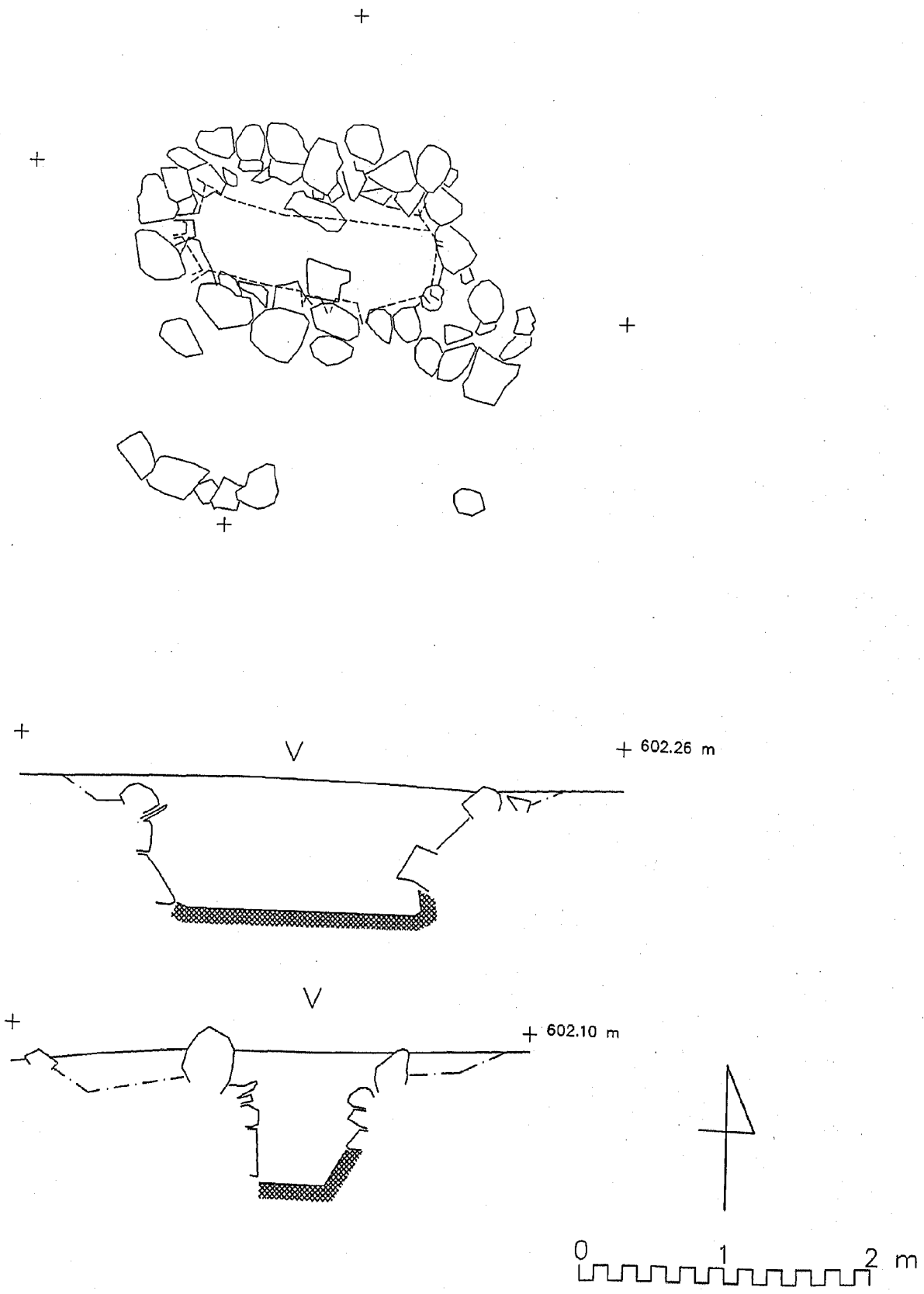


Fig. 23 Grab Fu20

شكل ٢٣. القبر Fu20.

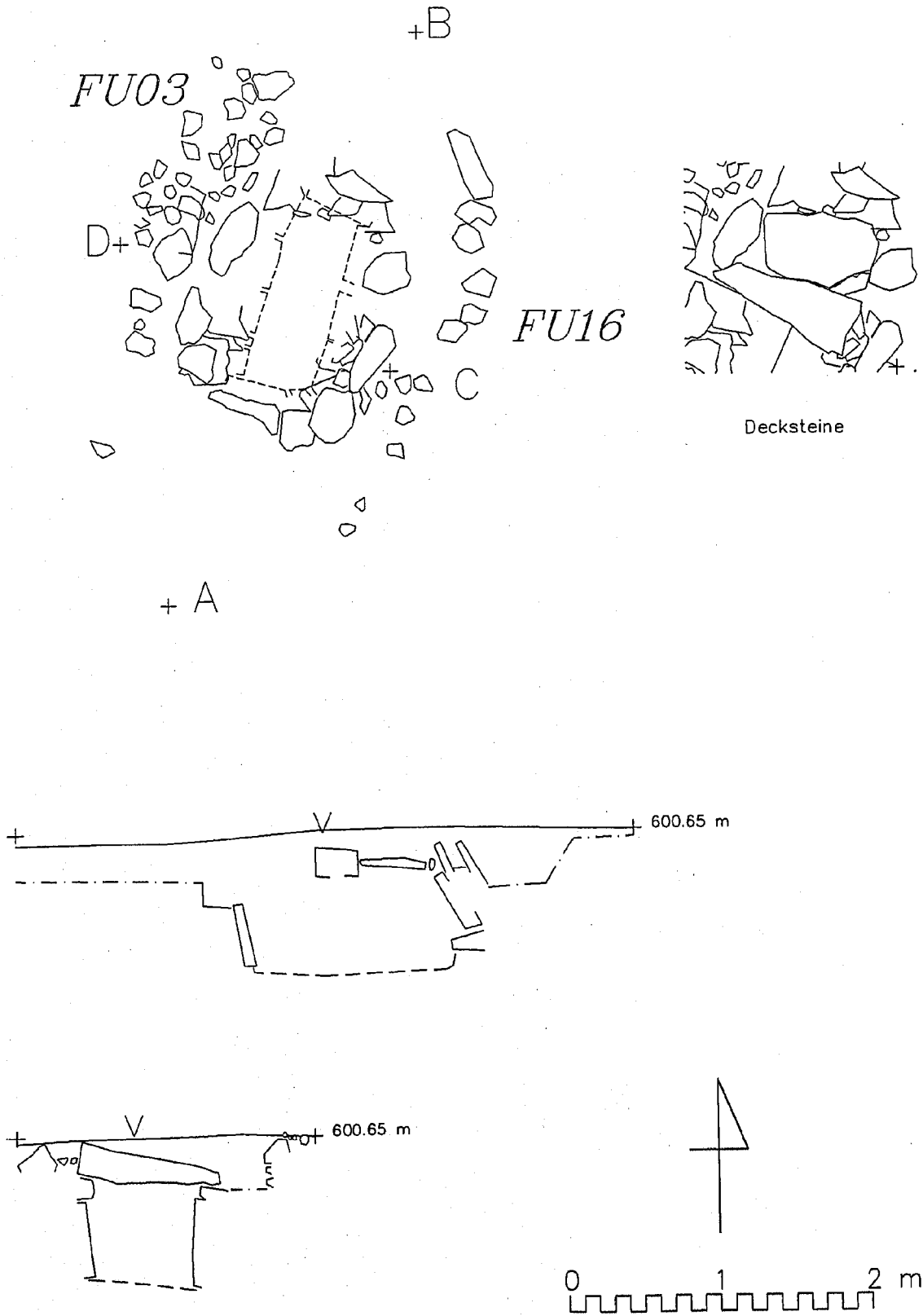


Fig. 24 Grab Fu21  
شكل ٢٤. القبر Fu21.

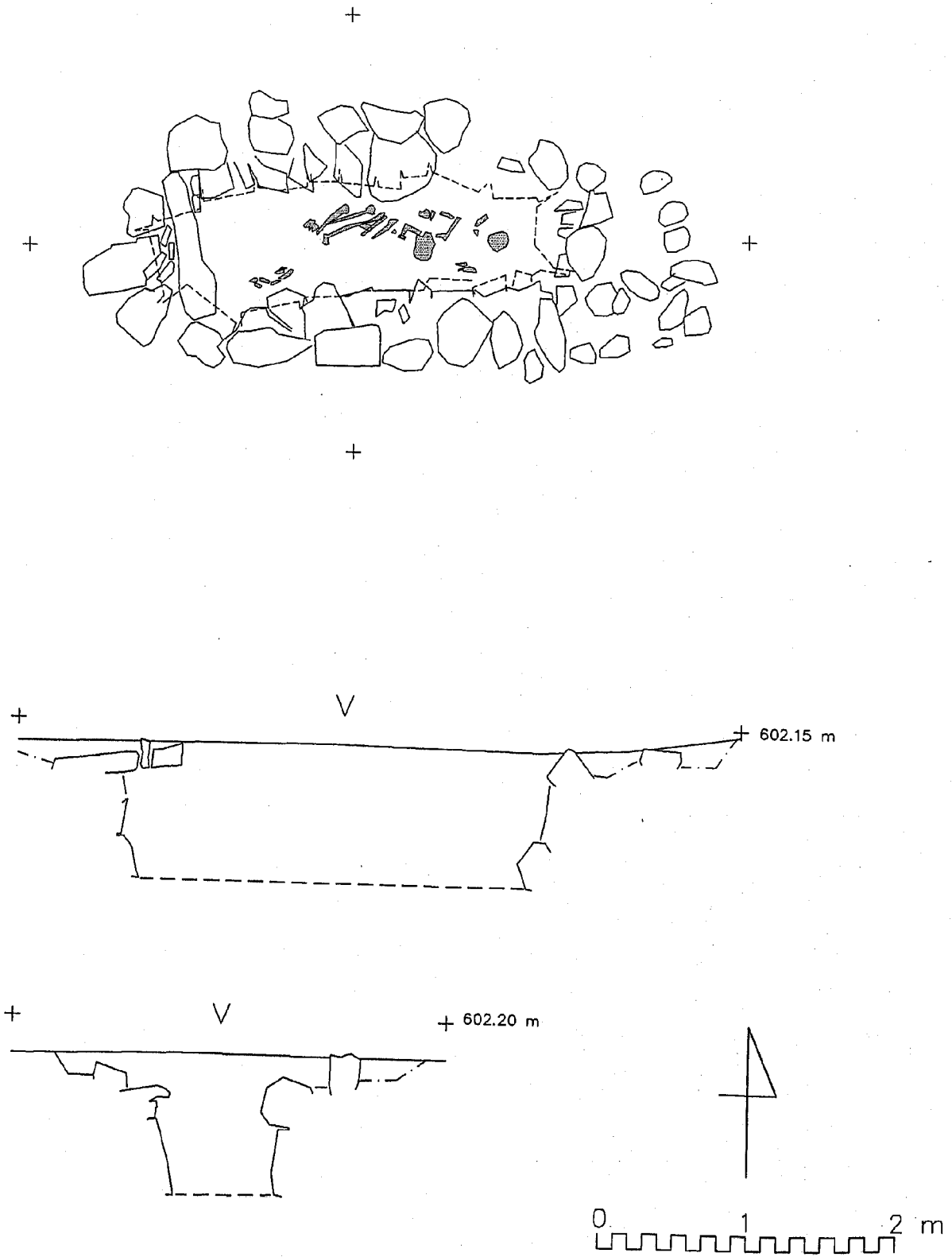


Fig. 25 Grab Fu22  
شكل ٢٥. القبر Fu22.



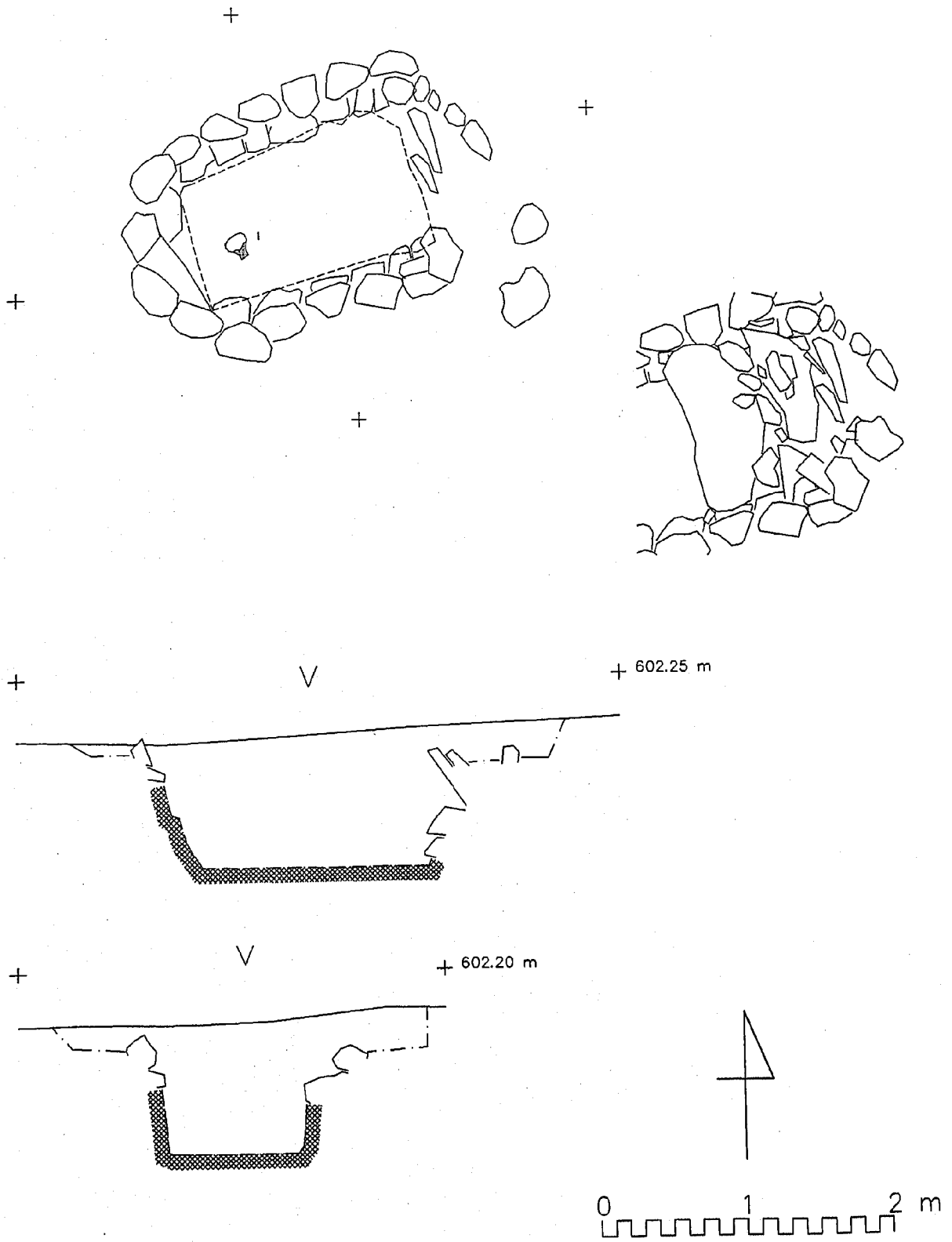


Fig. 26 Grab Fu23  
شكل ٢٦. القبر Fu23.

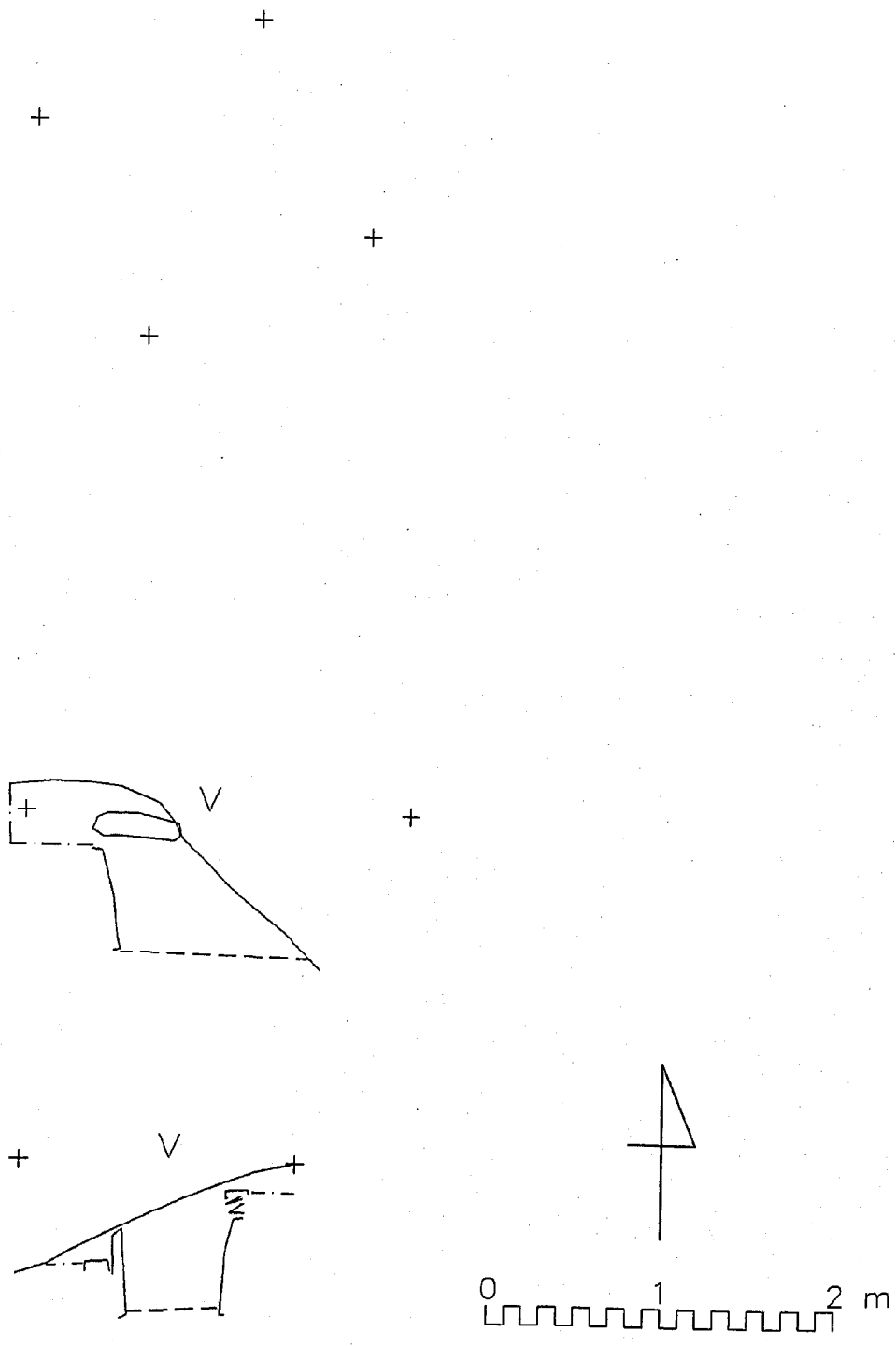


Fig. 27 Grab Mai1

شكل ٢٧.. القبر Mai1.

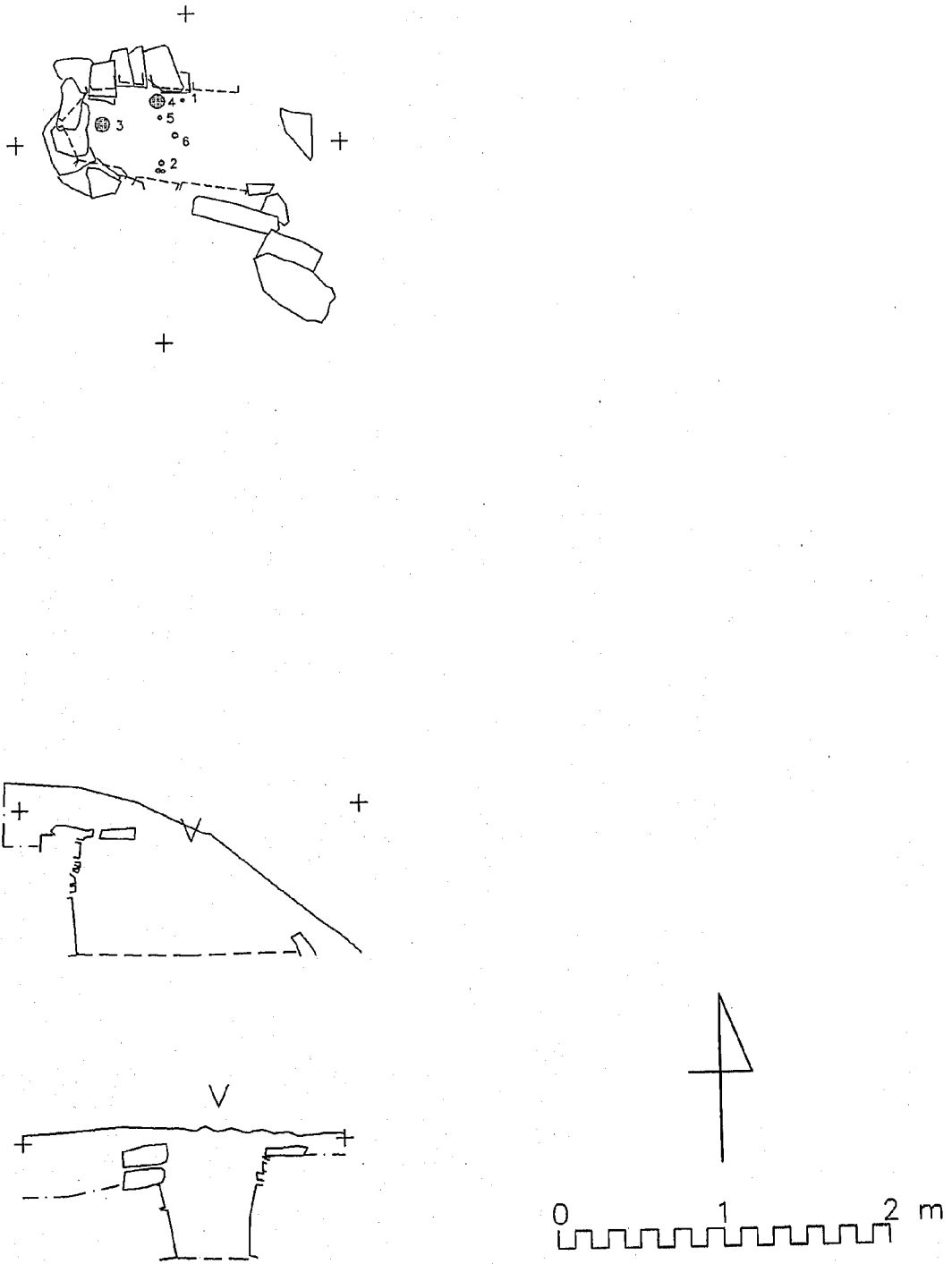


Fig. 28 Grab Mai2  
شكل ٢٨. القبر Mai2.

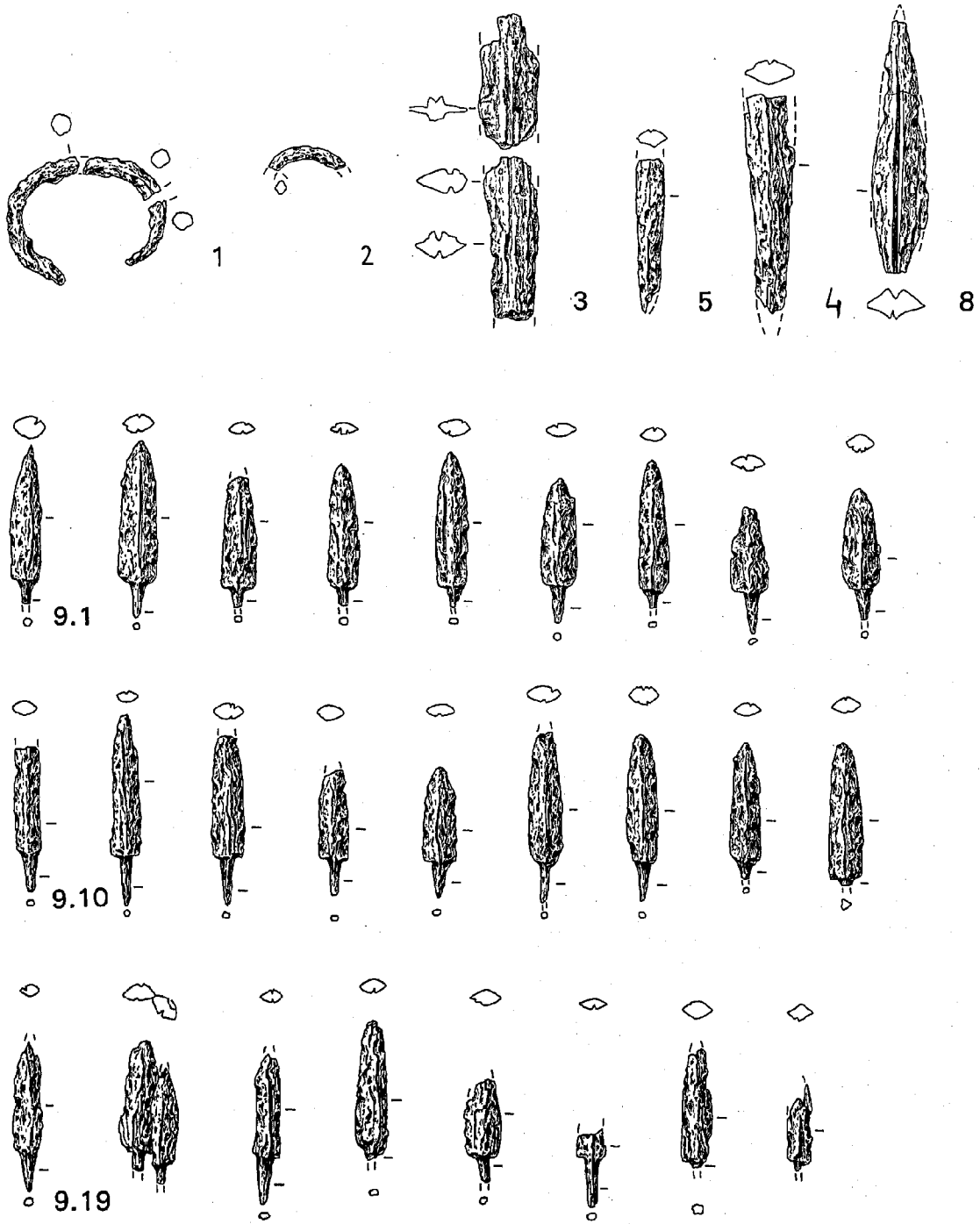


Fig. 29 Grabinventar von Fu02  
شكل ٢٩. محتويات القبر Fu02.

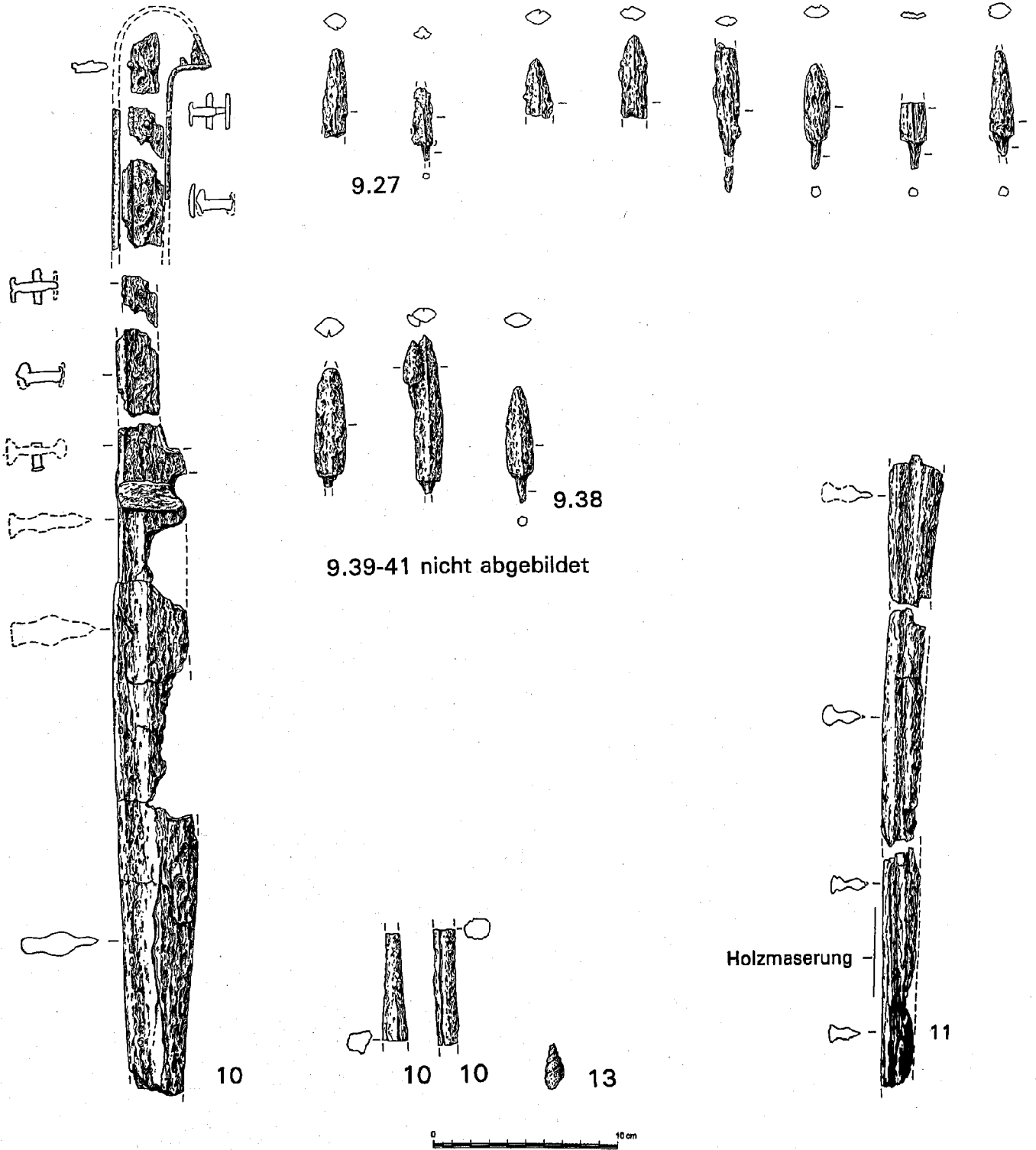
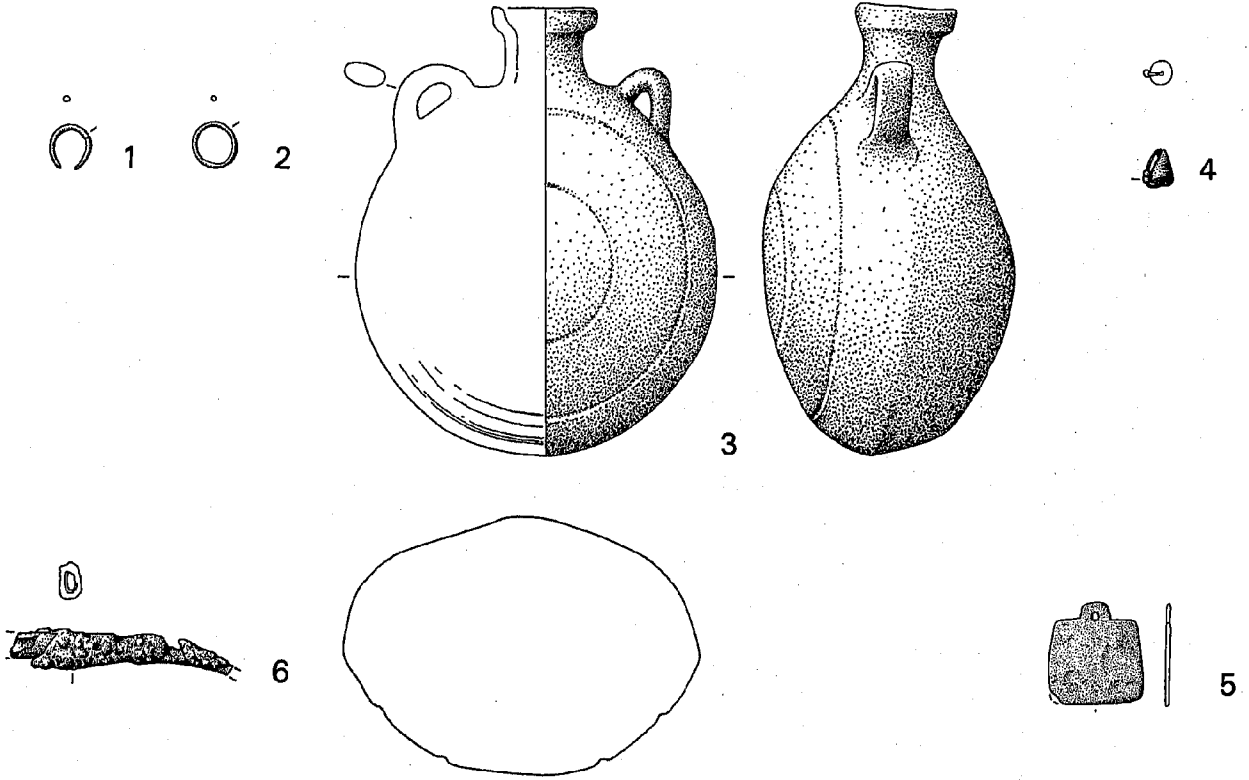


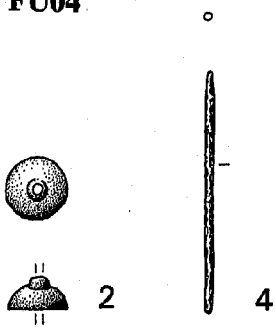
Fig. 30 Grabinventar von Fu02

شكل ٣٠. محتويات القبر Fu02.

FU03



FU04



FU05

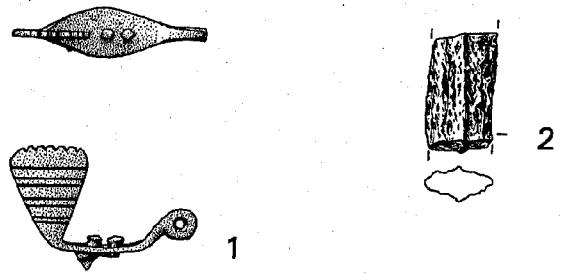
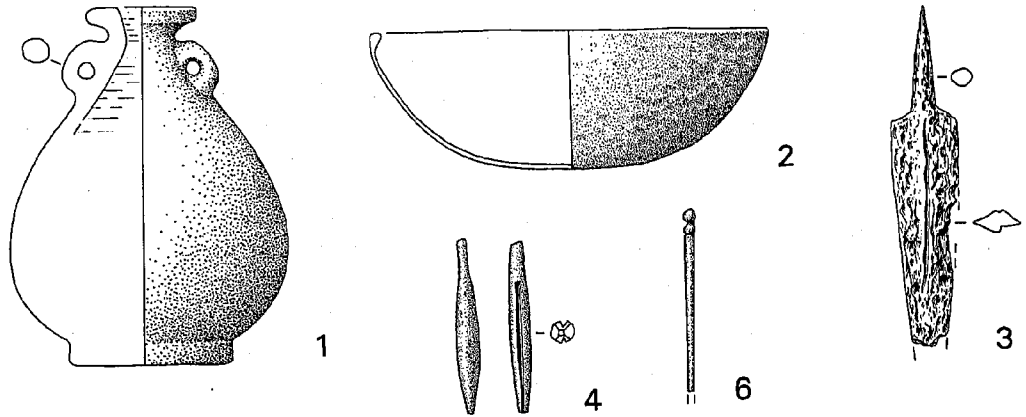
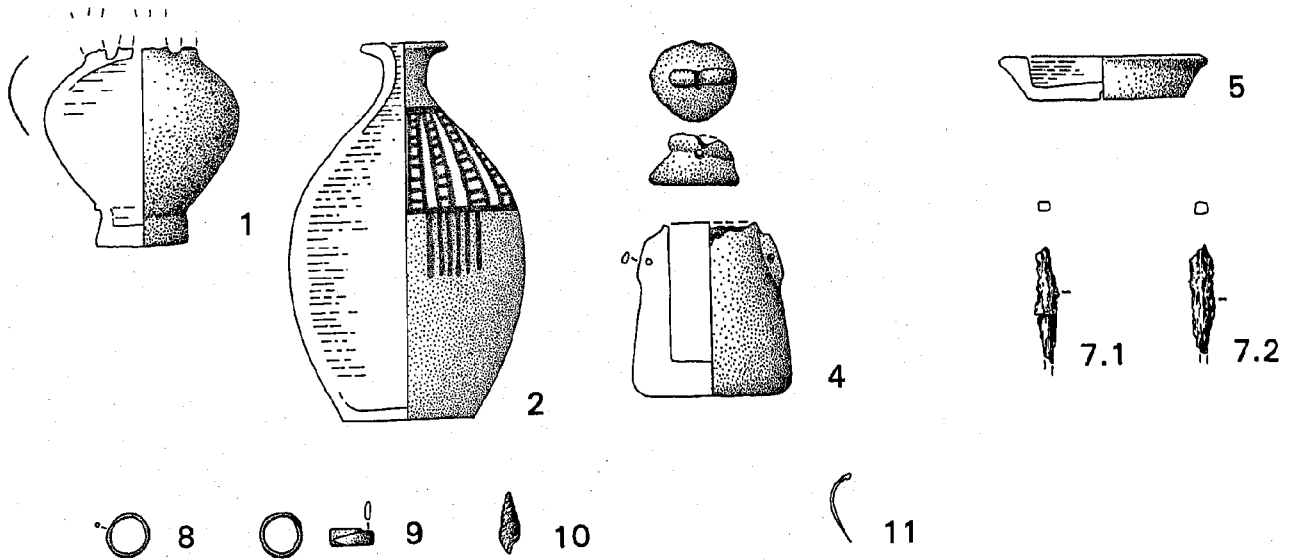


Fig. 31 Grabinventar von Fu03, 04, 05  
 شكل ٣١. محتويات القبر Fu03, 04, 05.

FU06



FU07



FU09

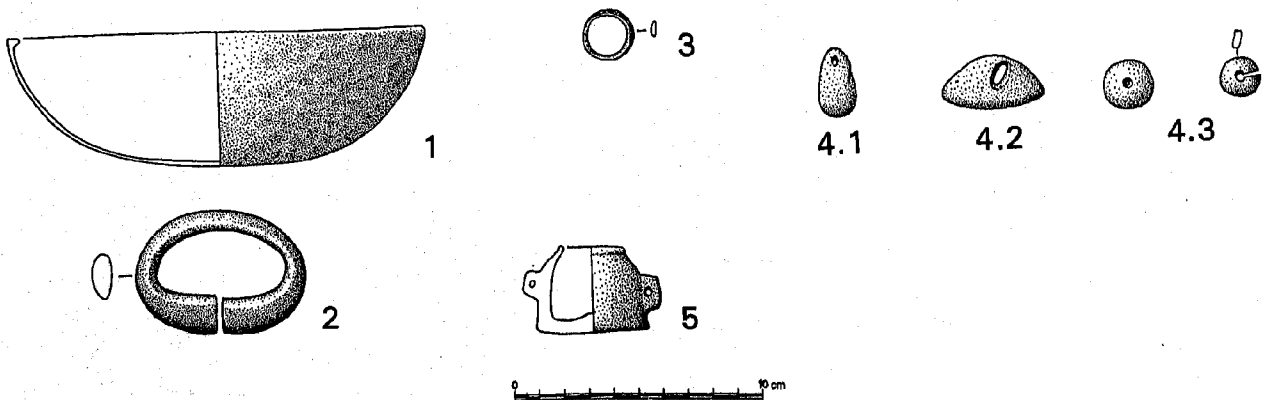


Fig. 32 Grabinventar von Fu06, 07, 09

شكل ٣٢. محتويات القبر 06, 07, 09.Fu



FU09

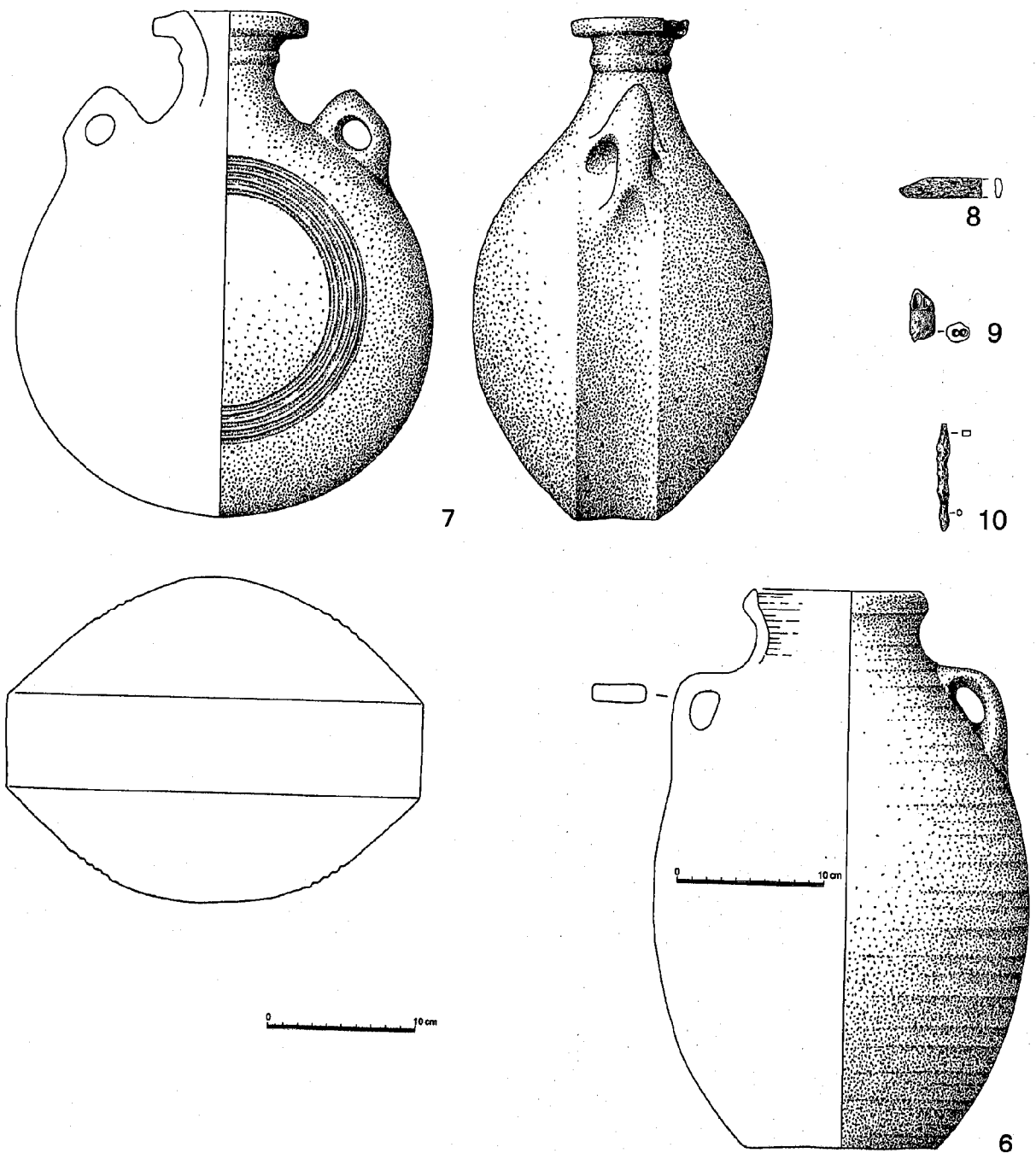


Fig. 33 Grabinventar von Fu09

شكل ٣٣. محتويات القبر Fu09.

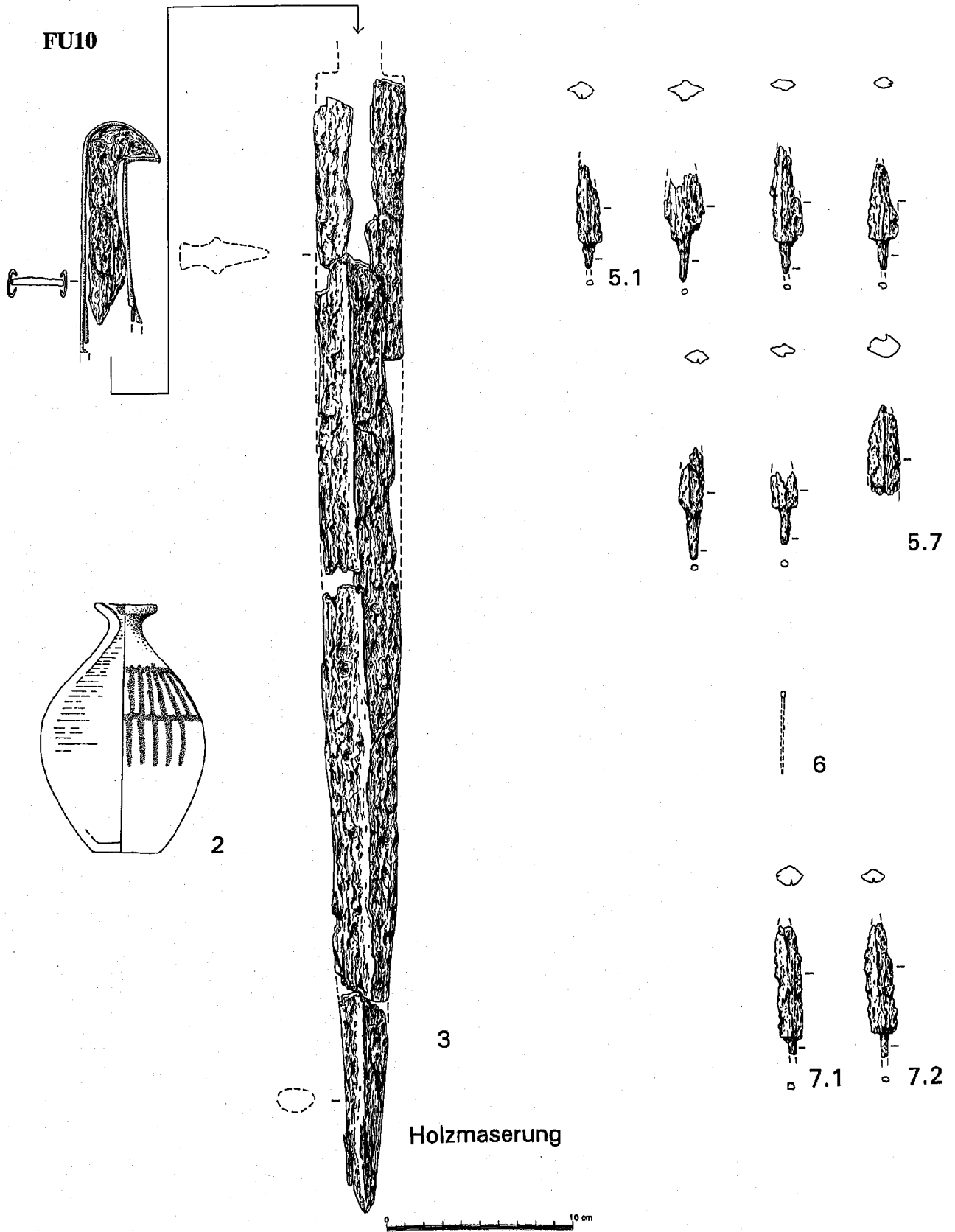


Fig. 34 Grabinventar von Fu10  
شكل ٣٤. محتويات القبر Fu10.

FU12

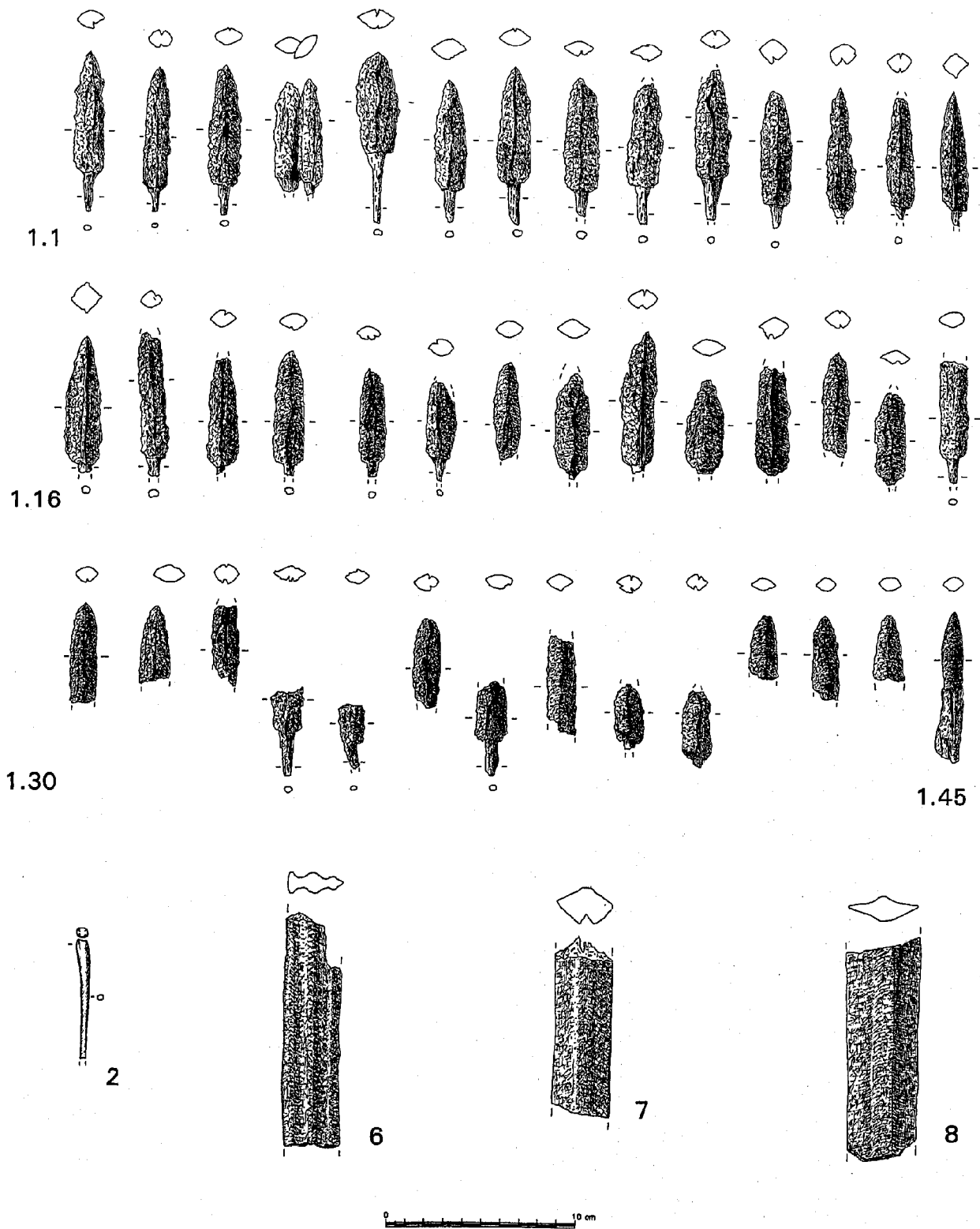


Fig. 35 Grabinventar von Fu12

شكل ٣٥. محتويات القبر Fu12.

FU12

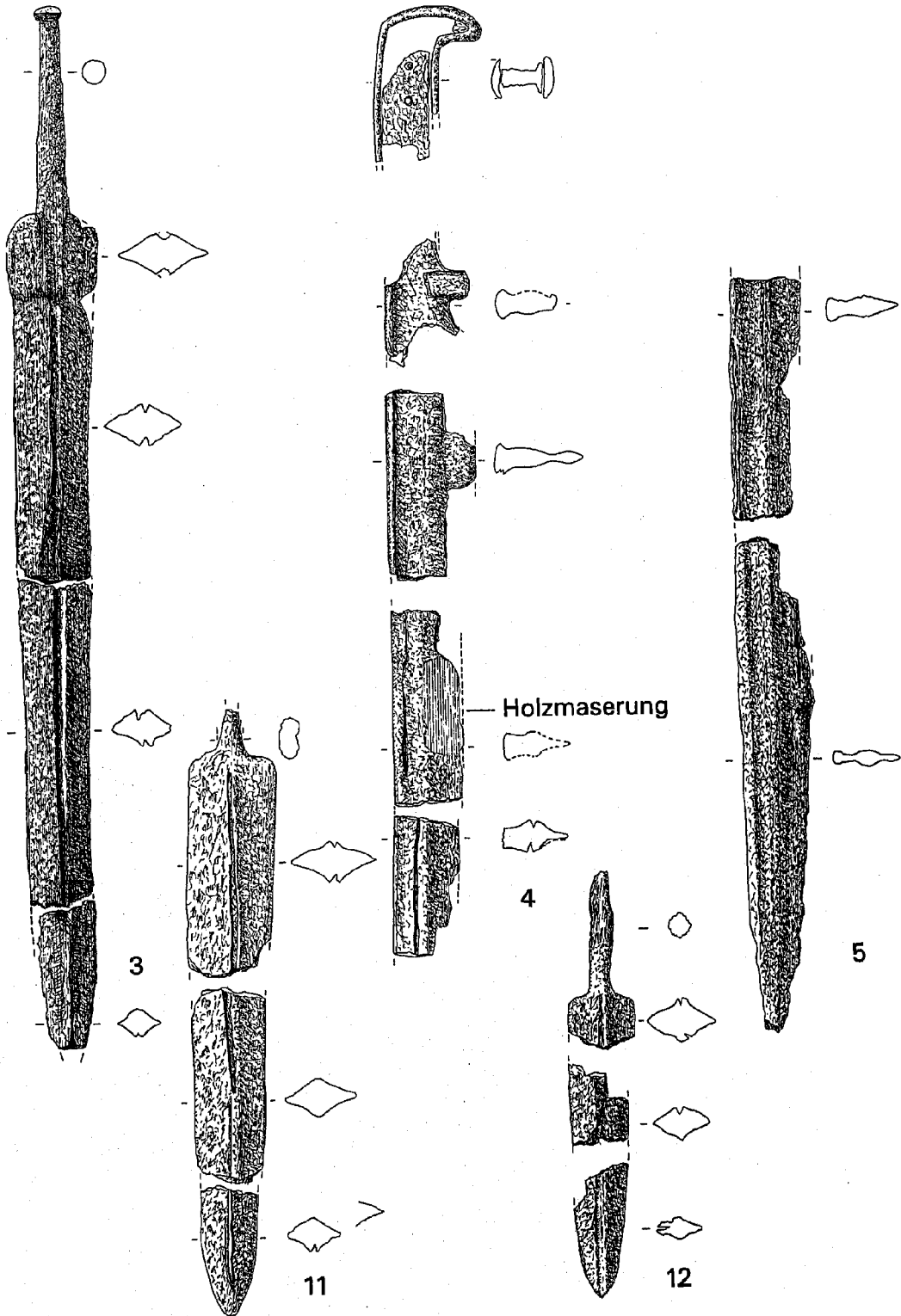


Fig. 36 Grabinventar von Fu12

شكل ٣٦. محتويات القبر Fu12.

FU12

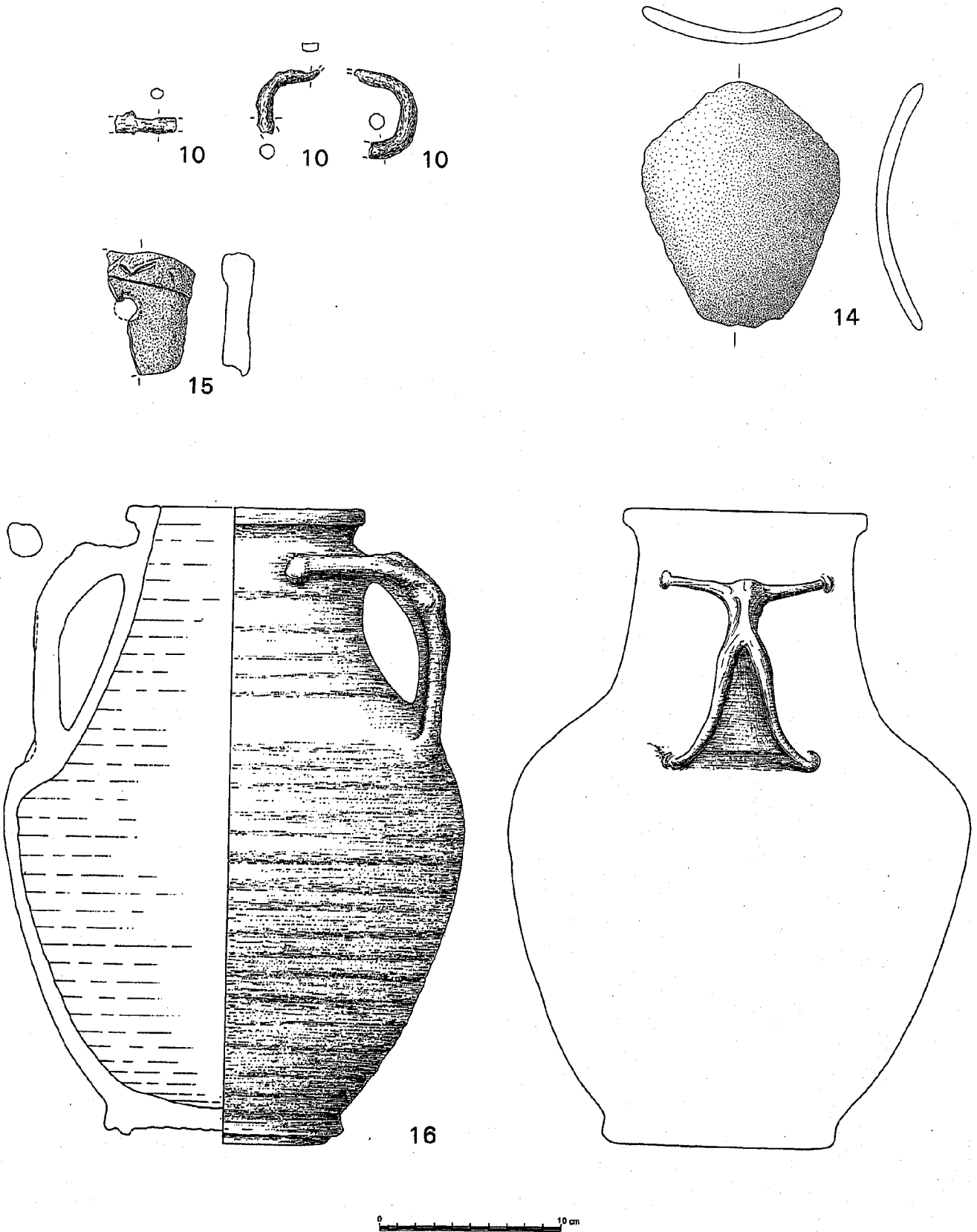
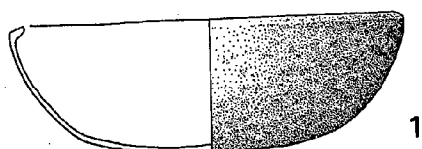


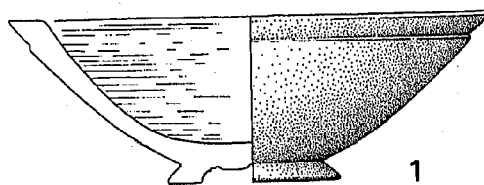
Fig. 37 Grabinventar von Fu12

شكل ٣٧. محتويات القبر Fu12.

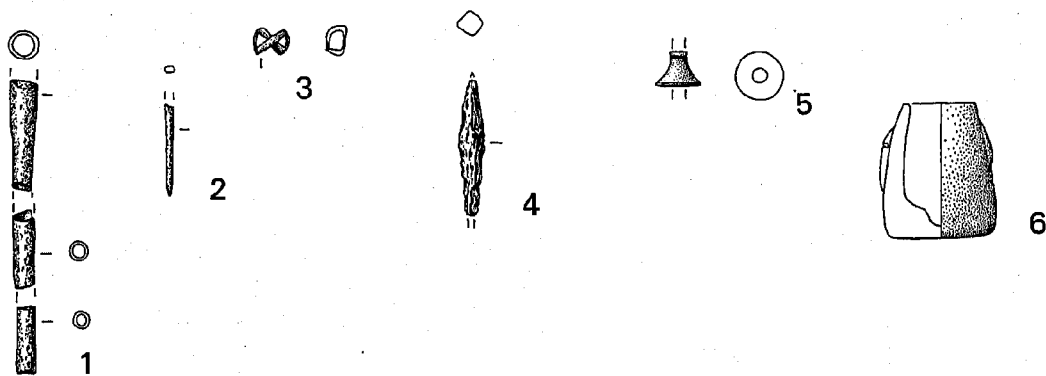
FU11



FU13



FU15



FU16

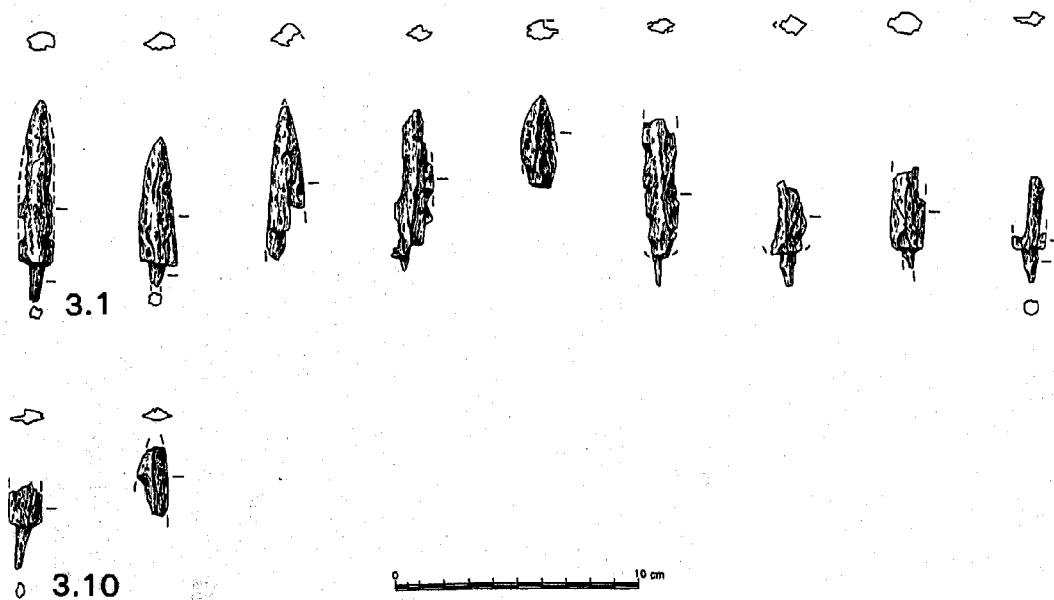


Fig. 38 Grabinventar von Fu11, 13, 15, 16

شكل ٣٨. محتويات القبر Fu11, 13, 15, 16.

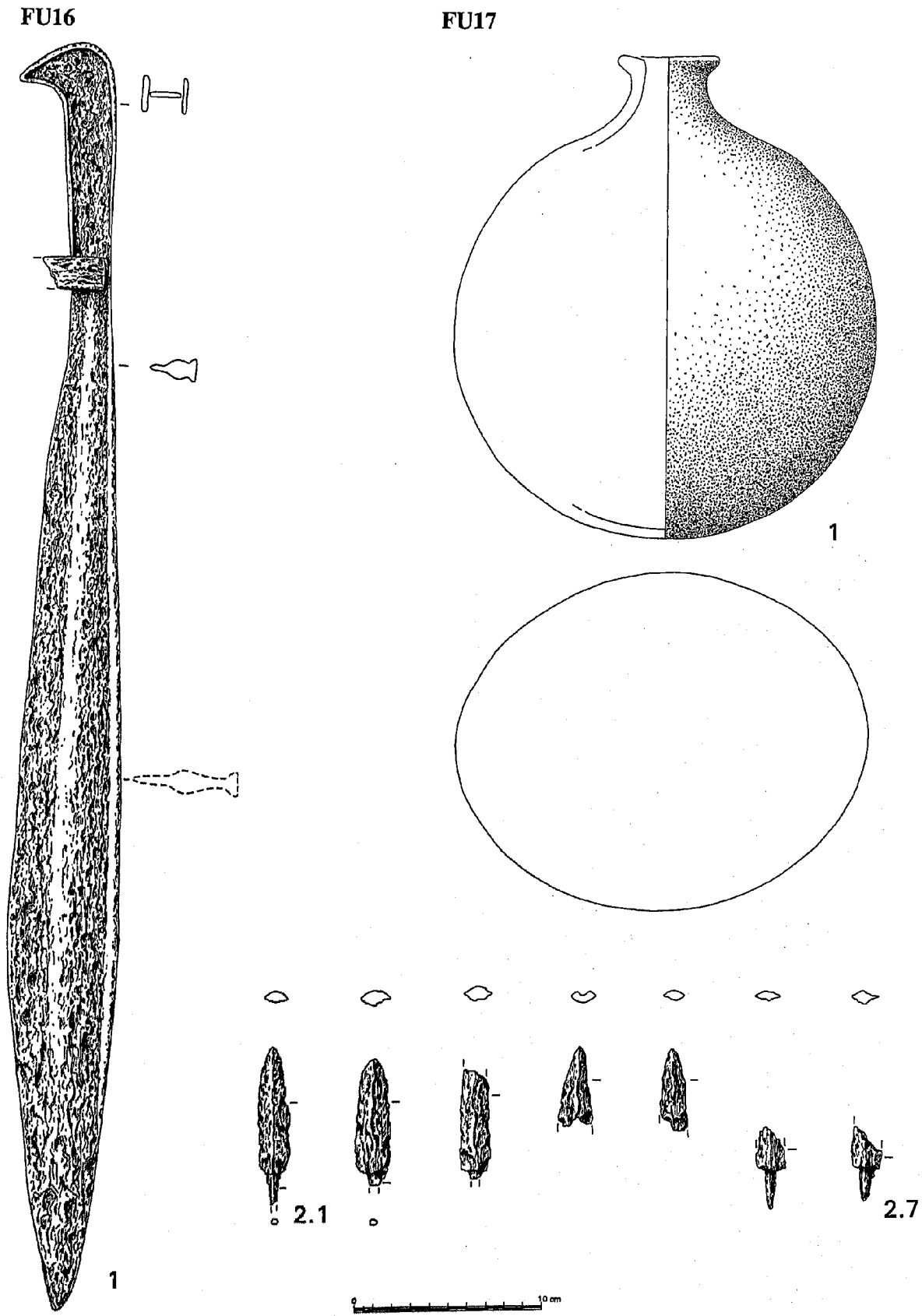


Fig. 39 Grabinventar links von Fu16, rechts von Fu17

شكل ٣٩. محتويات القبر Fu 16, Fu17



FU17

FU18

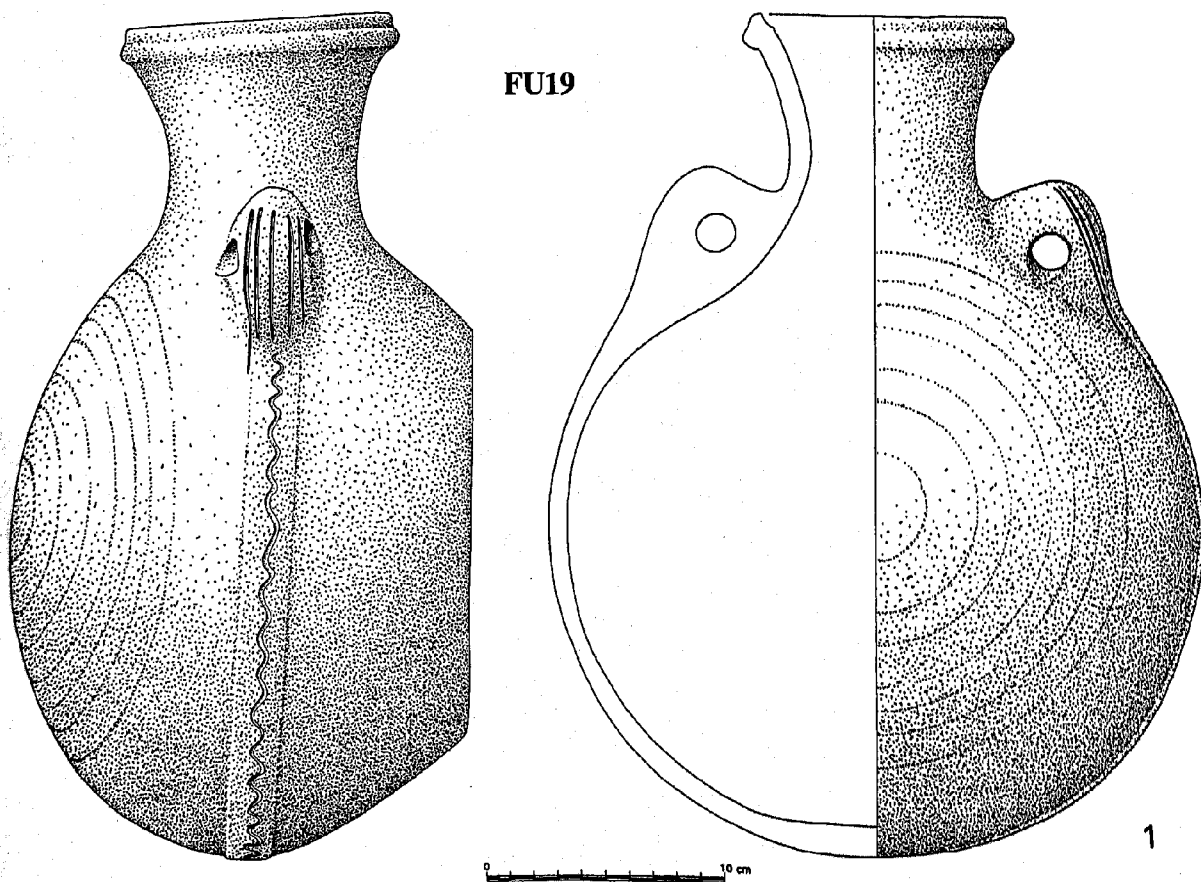
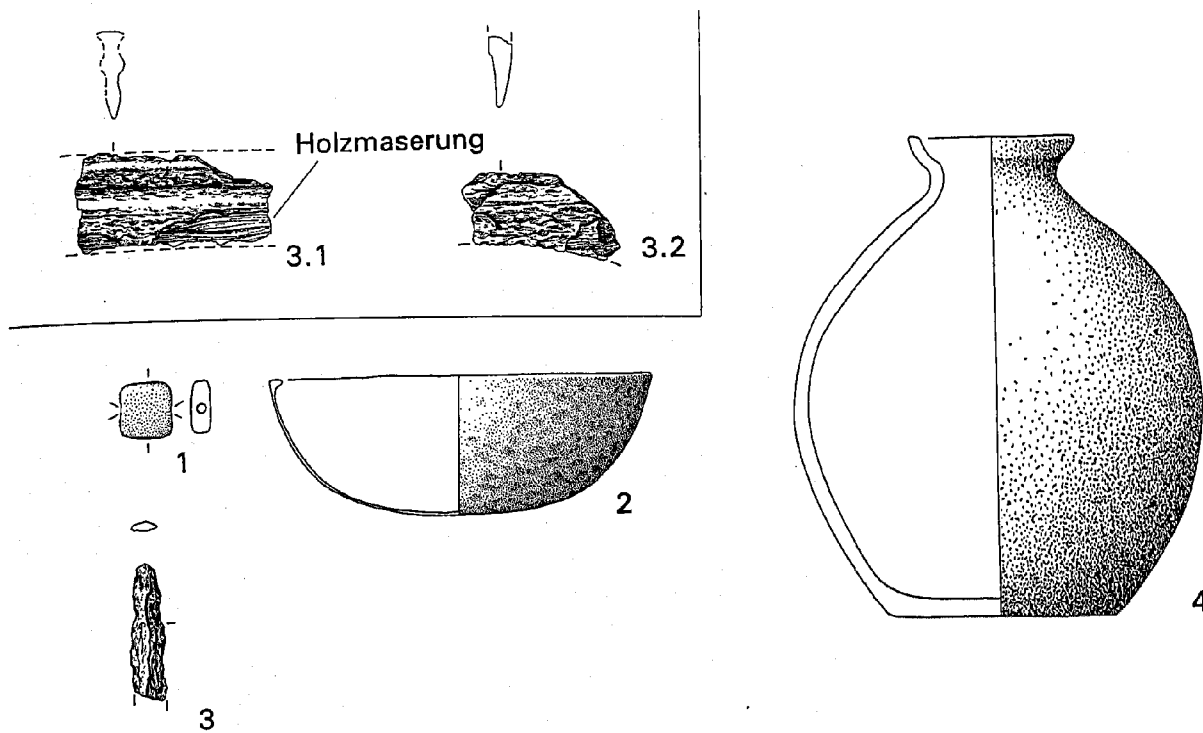


Fig. 40 Grabinventar von Fu17, 18, 19

شكل ٤٠. محتويات القبر Fu17, 18, 19

FU19

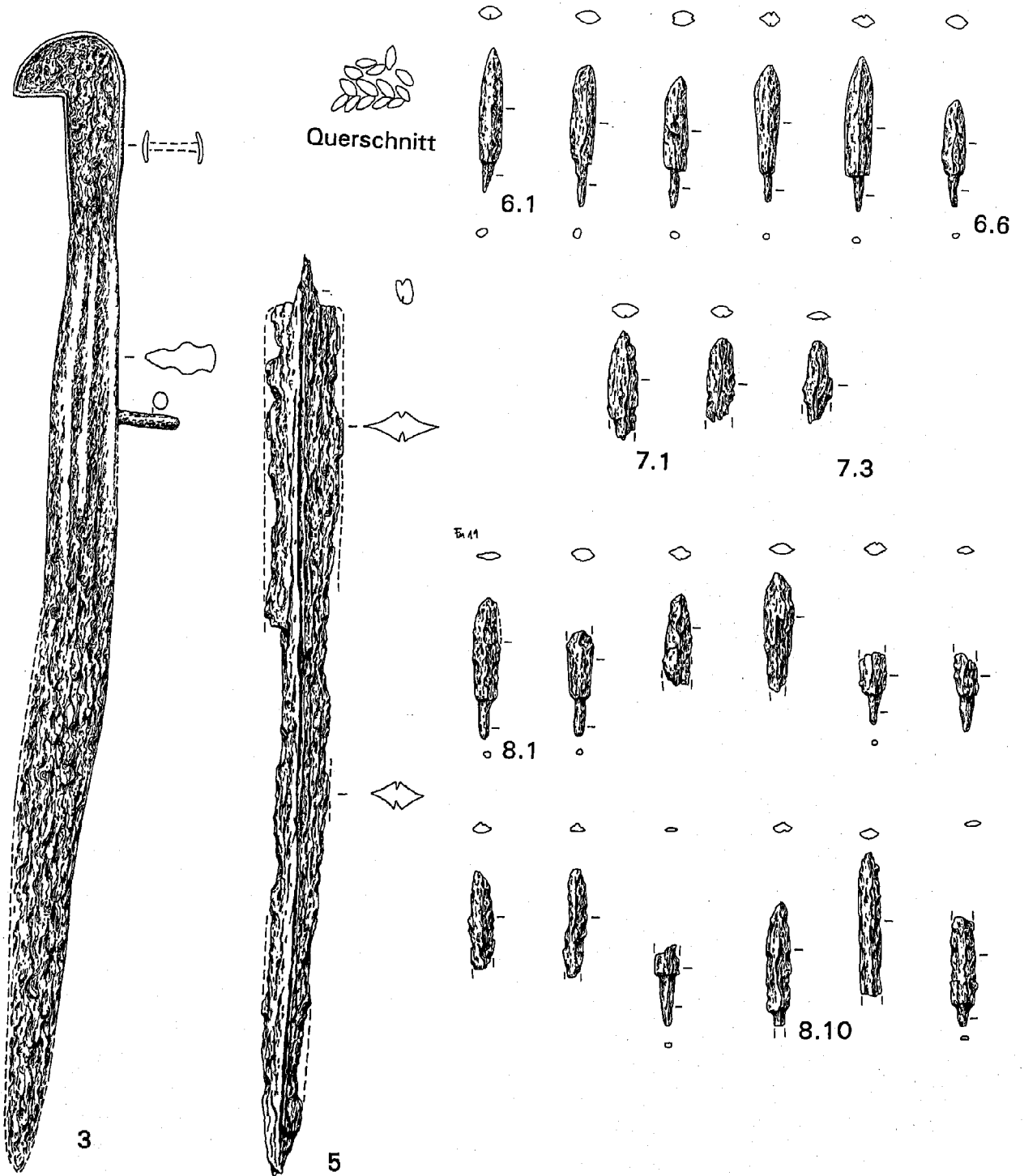
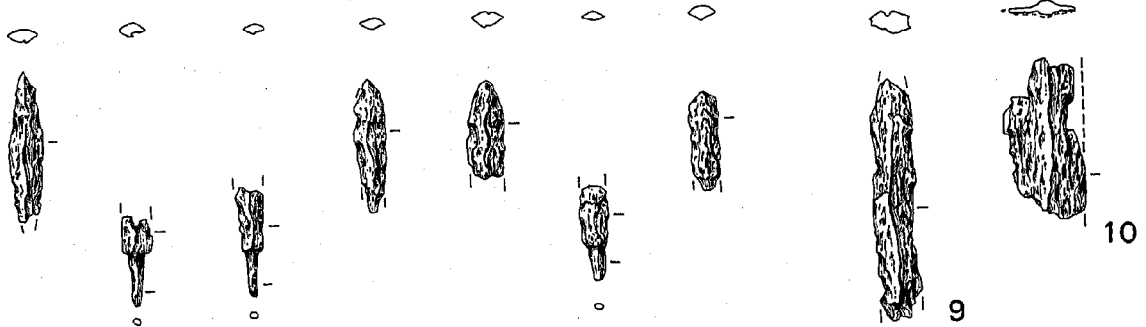


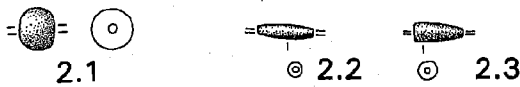
Fig. 41 Grabinventar von Fu19

شكل ٤١. محتويات القبر Fu19.

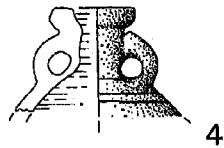
Fu19



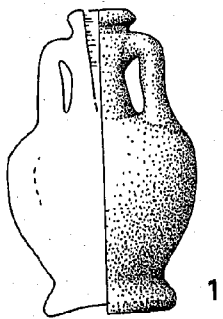
Fu20



3 nicht abgebildet



Fu21



Fu23

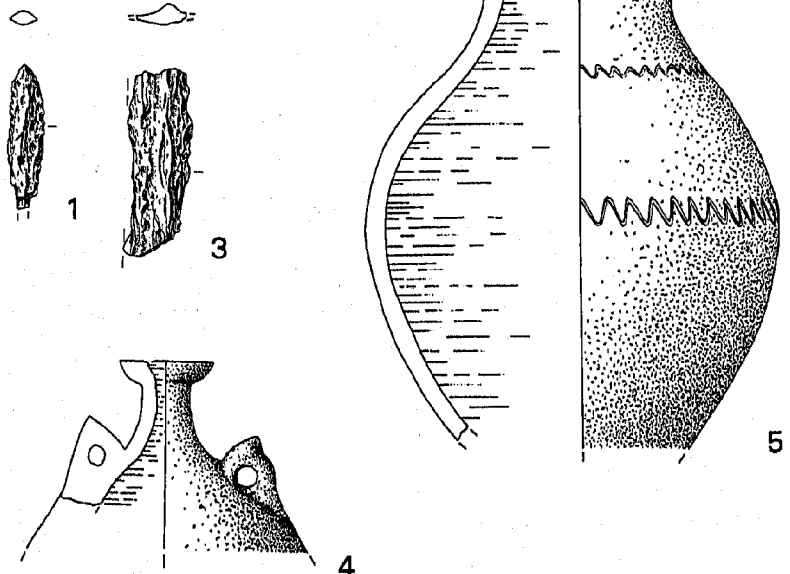


Fig. 42 Grabinventare von Fu19, 20, 21, 23

شكل ٤٢. محتويات القبر Fu19, 20, 21, 23.

Mai1

Mai2

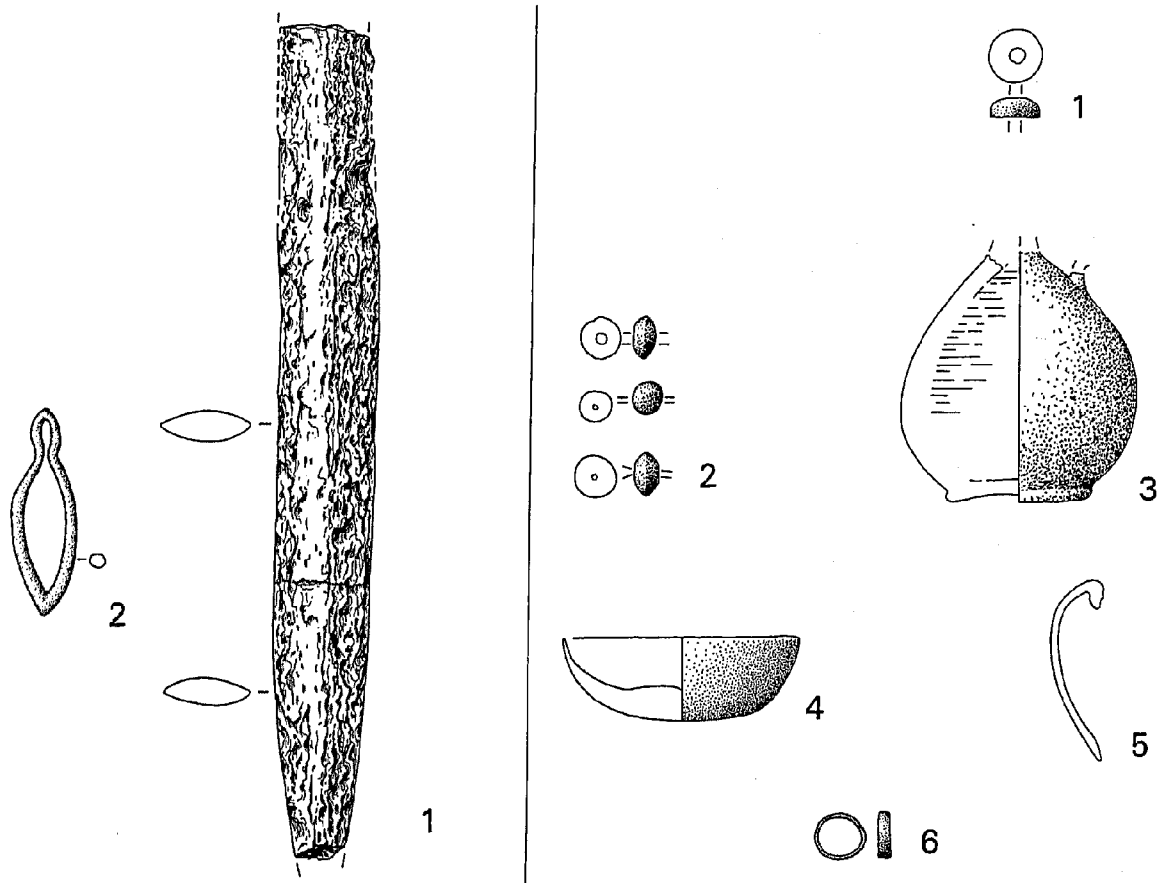


Fig. 43 Grabinventare von Mai1, Mai2  
 شکل ۴۳. محتویات القبر Mai1, Mai2.

# East of 'Ibrā: A *Jāhil* in the Sharqīyah with two Graves<sup>1</sup>

P. Yule – C. Bergoffen

In Islam, a *jāhil* is an unbeliever without law or religion; the word *jāhiliyya* refers to the time of darkness before the coming of Islam.

Paul Yule first heard the story of the demonic *jāhil*, Kebir Keb, in 1993 while conducting an initial study of some recently discovered stone towers located in an area called Shir, in the Sharqīyah province of the Sultanate (Fig. 1). The mysterious ancient structures fire the imagination of the local inhabitants, who attribute their construction to this legendary figure. Unaware of their original function, the villagers refer to the monuments simply as „towers“ (*būrīj* in the local dialect). But archaeologists have recognised the group of some 60 stone towers as tombs comparable to others in the Sultanate. They owe their good state of preservation to what was until recently a relatively inaccessible location, on a remote mountain top. Looming above the desert below, the tallest are preserved to a height of as much as 8 metres (Pl. 1). The bevelling of the facade stones and the regular courses suggest that most date to the Umm an Nar Period (2500-2000 B.C.), but more irregularly built ones may have been built during the preceding Hafit Period (3000-2500 B.C.)<sup>2</sup>

One morning as the archaeological investigation in Shir began, Bakhit b. Muḥammad al Mukhainī, of the nearby village of Jaylah, passed by and stopped for a chat. He related a tale about the origin of the towers which was previously unknown outside the immediate area of the Sharqīyah, but is equal to any of the classical stories of Arabia<sup>3</sup>: It concerned Kebir Keb and the heroic goatherd who killed him. According to Bakhit's first account, the events of the legend took place „before history“. But later, when pressed on how long ago the demon might have lived, he said „perhaps a thousand years ago“, thus contradicting his initial statement about the *jāhil*'s antiquity.

One day, Bakhit related, as the goatherd was looking for some stray goats, he spied a waterfall and a pond in a distant valley. The goatherd hastened to that pleasant spot and, after quenching his thirst with the cool water, promptly fell asleep. Alas! When he awoke, he inadvertently noticed a beautiful jinn bathing in the water, and so offended her modesty. She was enraged and wanted to kill the goatherd, but then she relented because, as she told him, she believed in Allah and, moreover, the young man reminded her of her son. Instead of

killing him, she told him a valuable secret.

If he went to the place of the towers, she said, he would encounter a (demon) *shayṭan*, Kebir Keb, who lived in one of them. The demon, she continued, guarded the towers with his mighty „*katār*“ (sword), the sharp thunderbolt with which he had quarried and dressed the stones for all of the towers. This remarkable weapon hung in the tower in which the *shayṭan* slept. But beware! When his eyes were closed he was wide awake, and only when they were open, did he sleep. Knowing this secret, the goatherd crept into the tower, making sure that the eyes of the demon were open. Stealthily, he removed the sword. But while departing, the blade accidentally struck against the door jamb, awakening the demon. The *shayṭan* jumped up and chased the goatherd down the mountain until he reached a creek. He could not leap over water. The goatherd hid himself in a cave, only emerging after the danger seemed to have passed. Then he returned and beheaded Kebir Keb with the sword. But the demon still did not die. The goatherd, unsure whether a second blow would kill him or revive him to full strength, left well enough alone.

In a version of this story told in Jaylah, it was said that cutting the demon would make him become double. The bisecting of the demon is a key element in the legend, but this did not become clear until years later when the authors visited his two grave sites.

During the 1995 excavations of the towers at Shir, 'Ubaid b. Silaim b. Hadaib al Nahedī, a resident of Mantīqat al Bādū near al Sama'iyah, led Gerd Weisgerber and Paul Yule to a site where Kebir Keb was said to be buried. Unfortunately there was no time to examine the grave in detail because upon our arrival, a sudden rain storm broke out.

<sup>1</sup> We gladly acknowledge the help of Khalifa b. Khamis b. Ḥamed al Rassibī, of the Department, who has accompanied us over the years. R.G. Khoury of Heidelberg translated a transcript of the legend. David Insall discussed the orthography of the personal and place names. We also would like to thank Wolf Martin Domke, Berlin, Kamal Abdurrezha Sultan, Muscat, and the German Mining Museum, Bochum for supporting this project.

<sup>2</sup> A. al Shanfari, 1993, 12-16; P. Yule, 1992, 274-279; P. Yule and G. Weisgerber, 1998, 183-241.

<sup>3</sup> P. Yule, in: G. Popp, 1996, 336. David Insall and Kamal Sultan were among the first outside visitors to the „*būrīj Kibaikib*“ in February 1982.

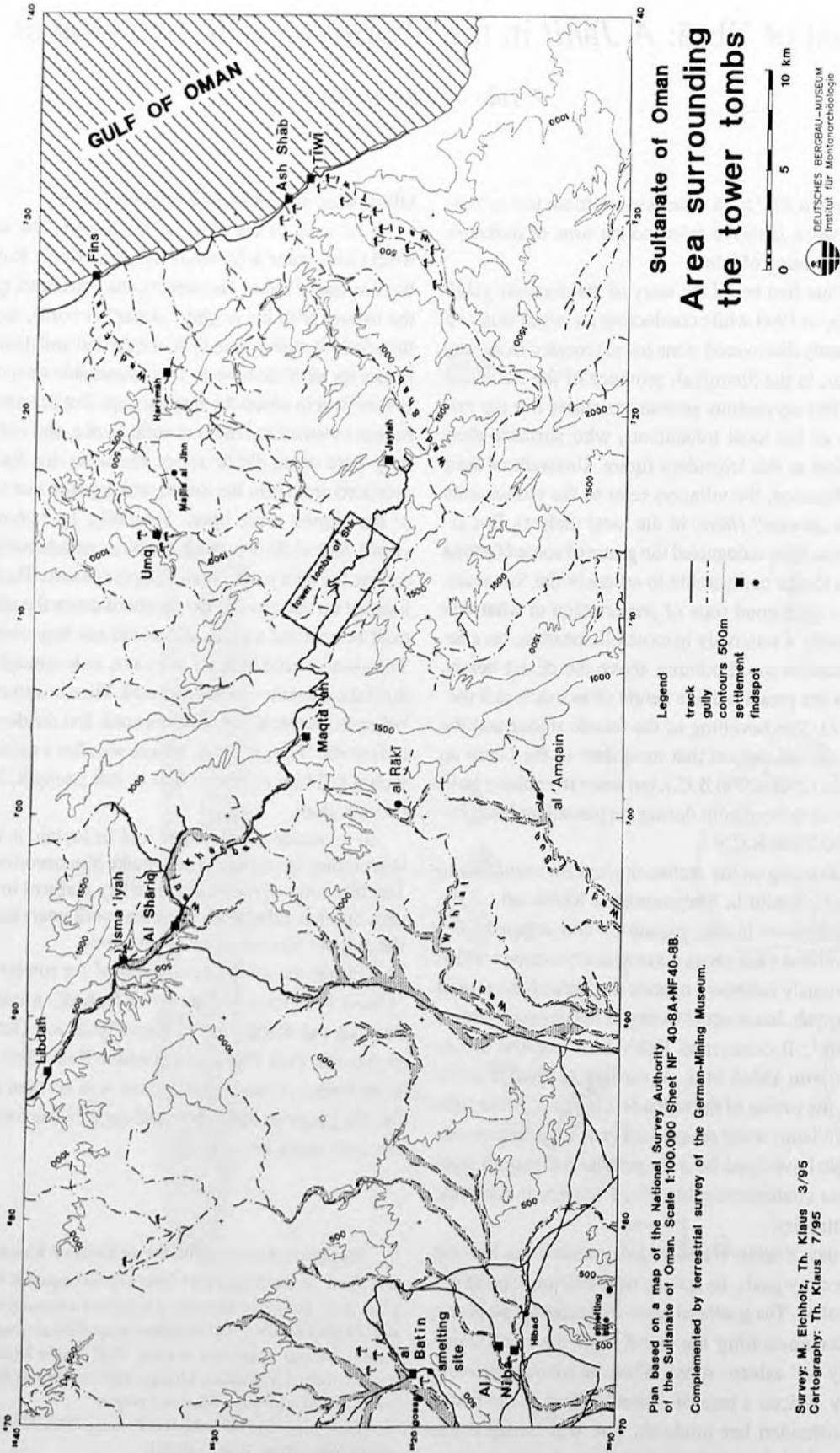


Fig. 1 Map with sites mentioned  
 شكل ١. خريطة تبين المواقع المذكورة.



Pl. 1 Tower tomb at Shir

لوحة ١. برج قبر في شير.

It was not until December 1997 that we had the opportunity to further investigate the story of the demon. The authors looked up 'Ubaid b. Silaim, and proceeded, in the company of his son and a guide, to the grave site. The isolated tomb, locally referred to as „the grave of the *jāhil*“, is situated near the small village of al Rākī in the eponymous wādī. The grave is marked by an elongated oval of large cobbles and measures 4.2 x 1.3 m (Pl. 2, Fig. 2). Most are round wādī stones; some are broken. The oval did not enclose a fill of smaller stones and dirt, as is usually the case for this type of burial. Moreover, as one of the villagers, Nasir b. Muḥammad b. Sa'd al Sa'dī observed, the grave is far too long for a normal Islamic burial. It is also very unusual for either Pre-Islamic or Islamic graves to be isolated.

The burial is situated on flat ground, some 100 metres from a fork in the road to the village of al Rākī, that curves into two clefts flanking a low, conical hill. At the base of this bare outcropping is a small cave just large enough to accommodate a crouching man (Pl. 3). Here we were told, the *jāhil* once lived.

Other local informants, mostly from al Rākī, recounted further conflicting details about the *jāhil* which indicated that there is more than one version to the story. According to Nasir b. Muḥammad, the *jāhil* was a high-

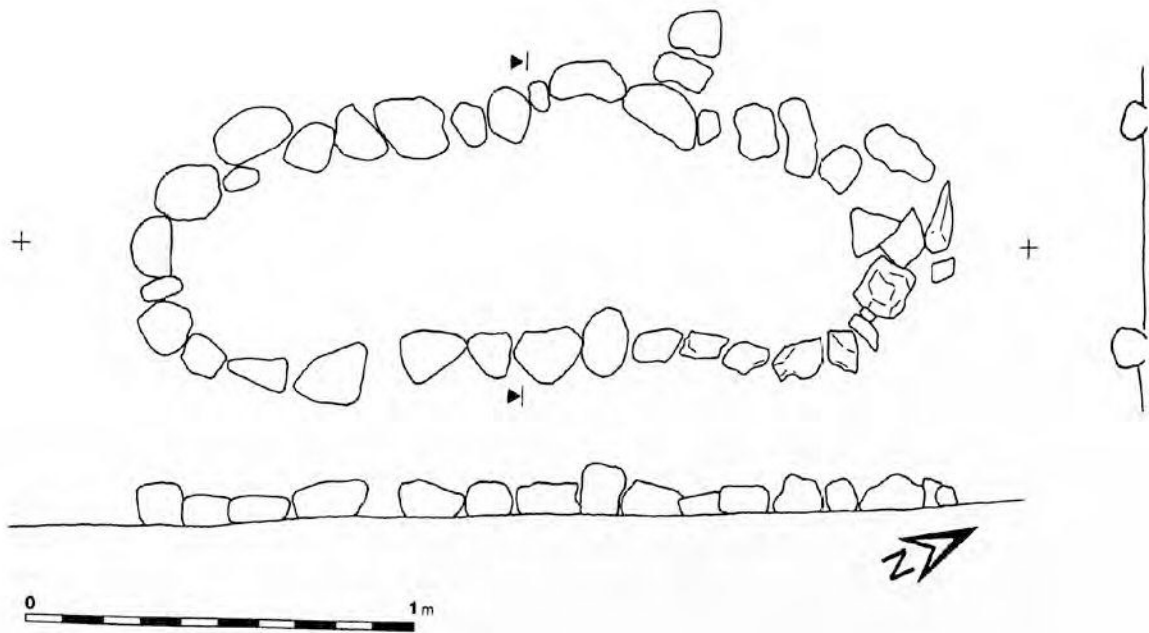
way man, and lived only 175 to 200 years ago (a reason perhaps for the tomb's isolation and the occupant's infamy). He was of gigantic stature and extraordinary appearance. „The arms of the *jāhil* reached all the way to 'Ibrā, and his legs all the way to the Wādī Bānī Khalid so that he could fulfil his needs,“ said another villager. He possessed two swords, had a grave demeanor, and his eyes gleamed. With superhuman strength, he plunged his magic sword into the „ash“ that connected the conical hill to the adjoining ridge and so created a path for the road. And he carved the cave with his sword as well. There was also further information about the heroic goatherd, whom the al Rākīs said came from Shir. The jinn gave him milk from her breast, they explained, and that is how he became strong enough to overwhelm the demon. Most importantly, the *jāhil*'s legs are said to be buried in al Rākī, while the rest of him is buried some five kilometres away near the village of al 'Amqain. However, the villagers from al Rākī claimed that the demon had „no bones“, which raises some interesting questions *vis à vis* the possible contents of his graves.

At al 'Amqain, two elderly al Sa'dī villagers led us to the second grave, located two kilometres north of their village, and we heard the end of the *jāhil*'s story. This grave is also isolated, lying approximately 140 metres



Pl. 2 Grave of the *jāhil*, al Rākī

لوحة ٢. قبر الجاهل في الراكي.

Fig. 2 Grave of the *jāhil*, al Rākī

شكل ٢. قبر الجاهل، الراكي.

Pl. 3 Cave of the *jāhil*, al Rākī

لوحة ٣. كهف الجاهل في الراكي .

south of an Islamic cemetery. The flat strip of barren land in which the cemetery and the *jāhil*'s grave are located is flanked by two sharp outcroppings of fractured ophiolite whose green and red chips cover the ground like a carpet. It is perhaps no accident that the Islamic graves lie on a bed of green, Allah's favourite colour, while the *jāhil*'s grave is located on a tract strewn with red. Measuring 2.7 x 1.7 m, the *jāhil*'s grave at al 'Amqain is much shorter than the one at al Rākī (Pl. 4, Fig. 3). It is marked by large white stones, approximately 20 cm in diameter, enclosing a fill of pebbles and soil.

Taking up the story where the villagers in al Rākī left off, our guides told us that after the goatherd sliced the *jāhil* through the middle, the legs fell down and were brought to burial in al Rākī, but the demon's upper body continued to pursue his assailant. The two ran all the way to al 'Amqain where the goatherd „took another way“ and escaped. Here then the *jāhil*'s torso stopped dead in its tracks and was buried. Unfortunately, the old men did not have any further details to relate. Their grandfathers knew more, they said, but they were of course long gone.

Paradoxically, both of the *jāhil*'s graves are oriented towards the *qibla*, the long axes lying north-northeast by south southwest. Thus, the interred person lies on his right side and his eyes are directed toward Mecca. There were two piles of stones on top of the grave at al 'Amqain

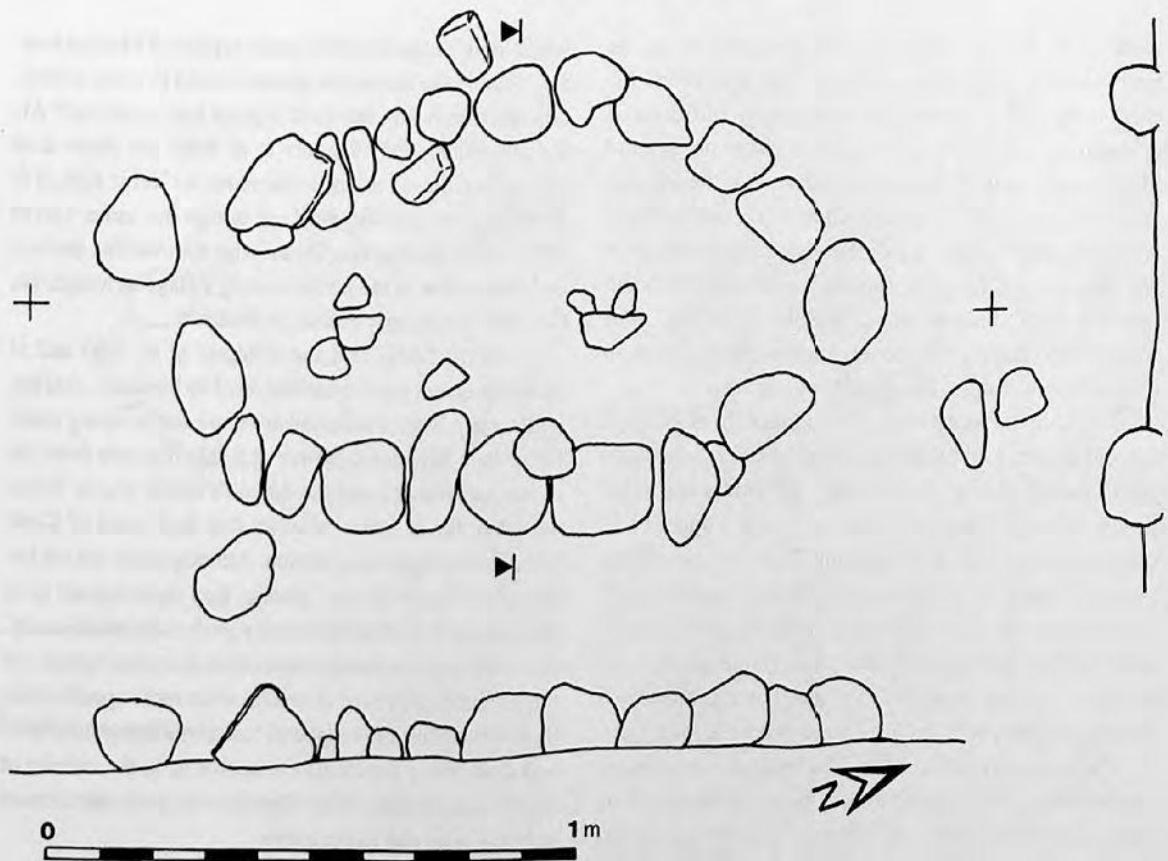
which may be the *ṣawāhid*-stones typical of Muslim burials. Who is the historical person buried in these graves, around whom this fantastic legend has grown up? Although neither the villagers at al Rākī nor those at al 'Amqain claimed to know the name of Kebir Keb, it is likely that he and the *jāhil* are one in the same. David Insall, a local expert on Oman who also studied the legend, notes that in the neighbouring village of Maqta'ah, the *jāhil* is similarly called „Kibaikib“<sup>4</sup>.

It seems likely that the villagers at al Rākī and al 'Amqain do not want to call the devil by his name, *shayṭan*, while the villagers at Jaylah are more forthcoming about Kebir Keb because they live at a safe distance from the scenes of violence and the demon's burial places. When we asked the al Rākīs whether they had heard of Kebir Keb, they dodged the question. Although they did not believe that the grave was Islamic, they did not want us to investigate it. Still the encounter gave us an excellent opportunity to gather more information about the legend, and the accounts we heard at al Rākī were more specific than those from Shir. This suggests that the *jāhil* probably lived and died where the locals claim, that is, in the vicinity of his grave in al Rākī. Older inhabitants in particular claimed to know who was in the grave.

<sup>4</sup> Personal communication 12 May 1997.

Pl. 4 Grave of the *jāhil*, al 'Amqain

لوحة ٤. قبر الجاهل في العمقين.

Fig. 3 Grave of the *jāhil*, al 'Amqain

شكل ٣. قبر الجاهل، العمقين.

What is the significance of this legend, historically? On the strength of the initial descriptions, it seemed that the person in question may have lived during the early medieval period, when Oman was ruled by Persian colonists. Yet after the coming of Islam - first to Ṣuḥār in 631 A.D. - many indigenous people in the region did not convert even up to fairly recent times. At first we suspected that Kebir Keb would be one of the few persons from Oman known by name from that early period. It now appears possible that the *jāhil* lived as late as the 18th century A.D. or later. Whichever the case, the legend of Kebir Keb is very much alive, even among the younger local inhabitants, and his story is told as far away as the town of 'Ibrā.

### Bibliography

**Shanfari, al, A.A.B. 1993**

Tower Tombs of the Eastern Hajar, PDO News No. 1, 12-16

**Yule, P. 1992**

Neue archäologische Entdeckungen am Persisch-Arabischen Golf, *Antike Welt* 23, 274-279

**Yule, P. 1996**

Archäologie des Sultanats Oman, in: G. Popp, Oman, 2. erweiterte, überarbeitete und aktualisierte Auflage (Nürnberg 1996 [1995]) 319-338

**Yule, P. (in press)**

Die Gräberfelder in Samad al Shān (Sultanat Oman) Materialien zu einer Kulturgeschichte

**Yule, P. and Weisgerber, G. 1998**

The Tower Tombs at Shir, Eastern Hajar, Sultanate of Oman, Beiträge zur Allgemeinen und Vergleichenden Archäologie 18 (Bonn) 183-241

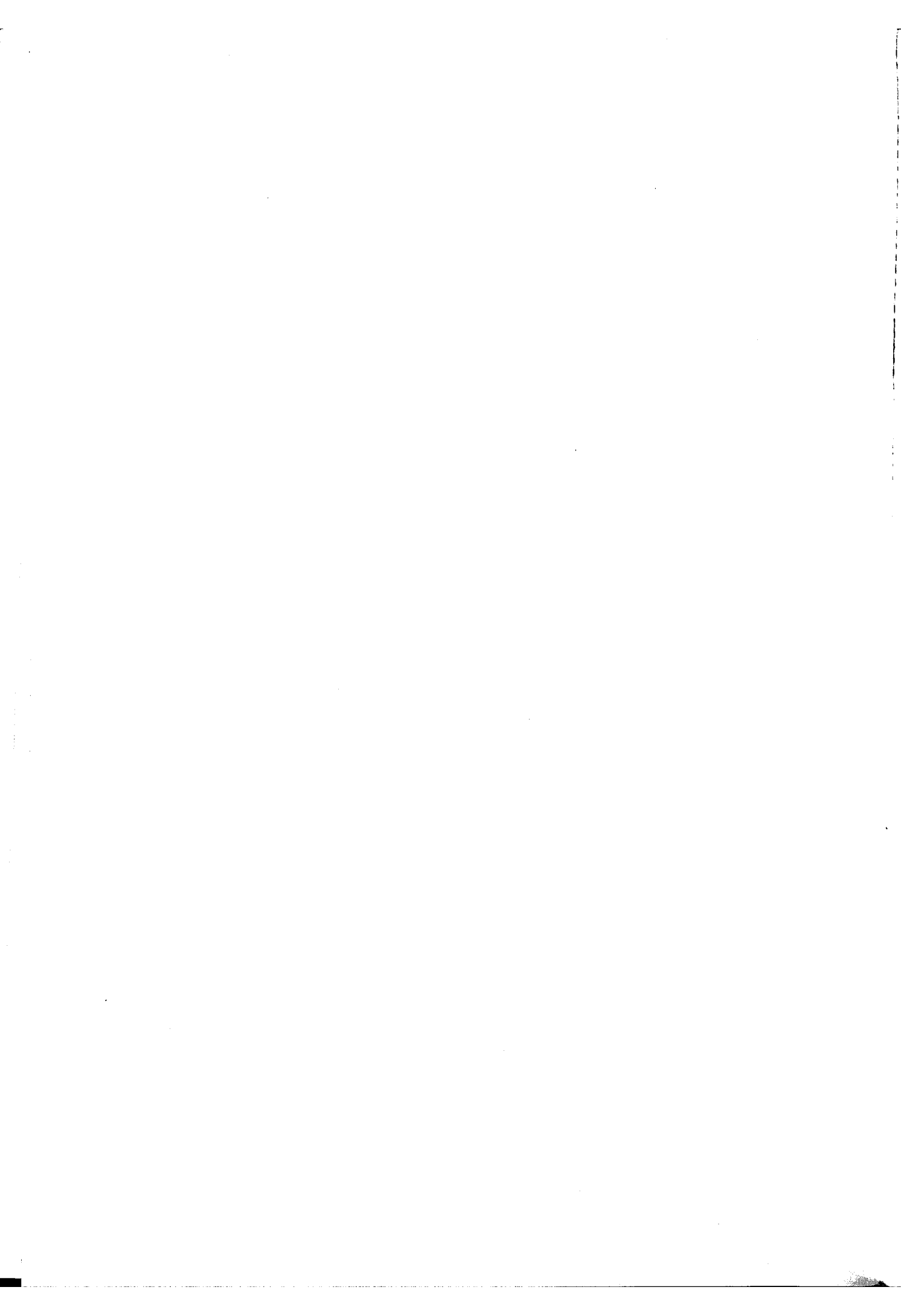
### Abstract

In 1993 during field work on some recently discovered stone towers located in the Shir area of the Sharqiyah province in the Sultanate, P. Yule first heard the story about a demonic *jāhil*, a legendary unbeliever whose name was Kebir Keb. Although the locals attribute their construction to this figure, architectural features date most of the structures to the third millennium B.C. According to the legend, which manifestly is more recent, the demon was cut in two by a goatherd and both parts of his body buried near the villages al Rākī and al 'Amqain respectively. This contribution raises the question as to the historical background of the legend as well as its relationship to a number of archaeological traits within the studied area.

### شرقي إبراهيم: جاهلي في الشرقية مع قبرين

تروي الأسطورة، التي لا شك بحدثة عهدا، بأن راعياً للماعز قطع هذا الشيطان إلى نصفين وأن هذان القسمان دُفنا على التوالي بالقرب من قرى الراكي والعمقاني. هذه القصة تثير التساؤل عن الخلفية التاريخية للأسطورة وكذلك عن علاقتها بعدد من السمات الأثرية في المنطقة التي تجري فيها الدراسة.

في عام ١٩٩٣ وخلال عمل ميداني في بعض الأبراج الحجرية العائدة لعصر ما قبل التاريخ والمكتشفة حديثاً في منطقة شير في إقليم الشرقية في السلطنة سمع ب. يول بادئ الأمر قصة شيطان جاهلي، وهو كافر خرافي يدعى كبير كيب. ورغم أن السكان المحليون ينسبون بناءها لهذا المخلوق، فإن المعاليم المعمارية تقود لتاريخ معظم لأبنية في فترة الألف الثالث ق.م.





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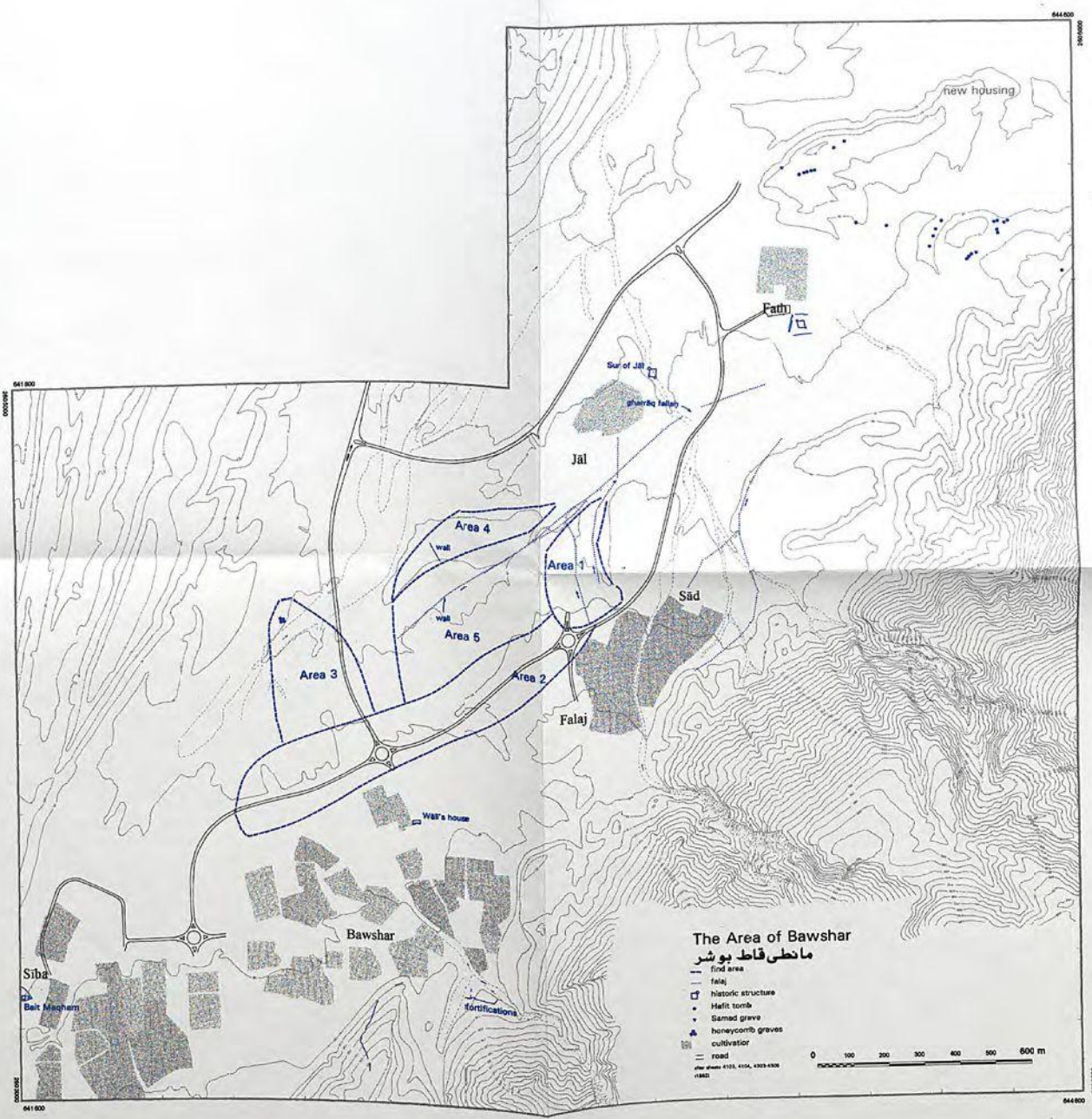
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**The Area of Bawshar**  
**مناطق قاط بوشهر**

- find area
- falaj
- historic structure
- Hafit tomb
- ∇ Samed grave
- ▲ honeycomb graves
- cultivator
- road



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