

## CHAPTER 1: INTRODUCTION

### Acknowledgements

The present volume represents the final publication of the metalwork from the later Middle Kingdom and Second Intermediate period occupations at Tell el-Dab<sup>a</sup>. The objects published here come from the following excavation areas: A/I, A/II, A/IV, A/V and F/I. Also included are one or two chance metal finds which have come to the attention of the project, and

which seemed of sufficient interest to be worthy of inclusion in the publication. The collection and analysis of the data was undertaken between the years 1984 and 1997, and the manuscript completed during 2001 and 2002 with the aid of a period of research leave funded by the generosity of the Austrian Academy of Sciences, to whom I wish to express my gratitude.

I was able to examine the bulk of the material at

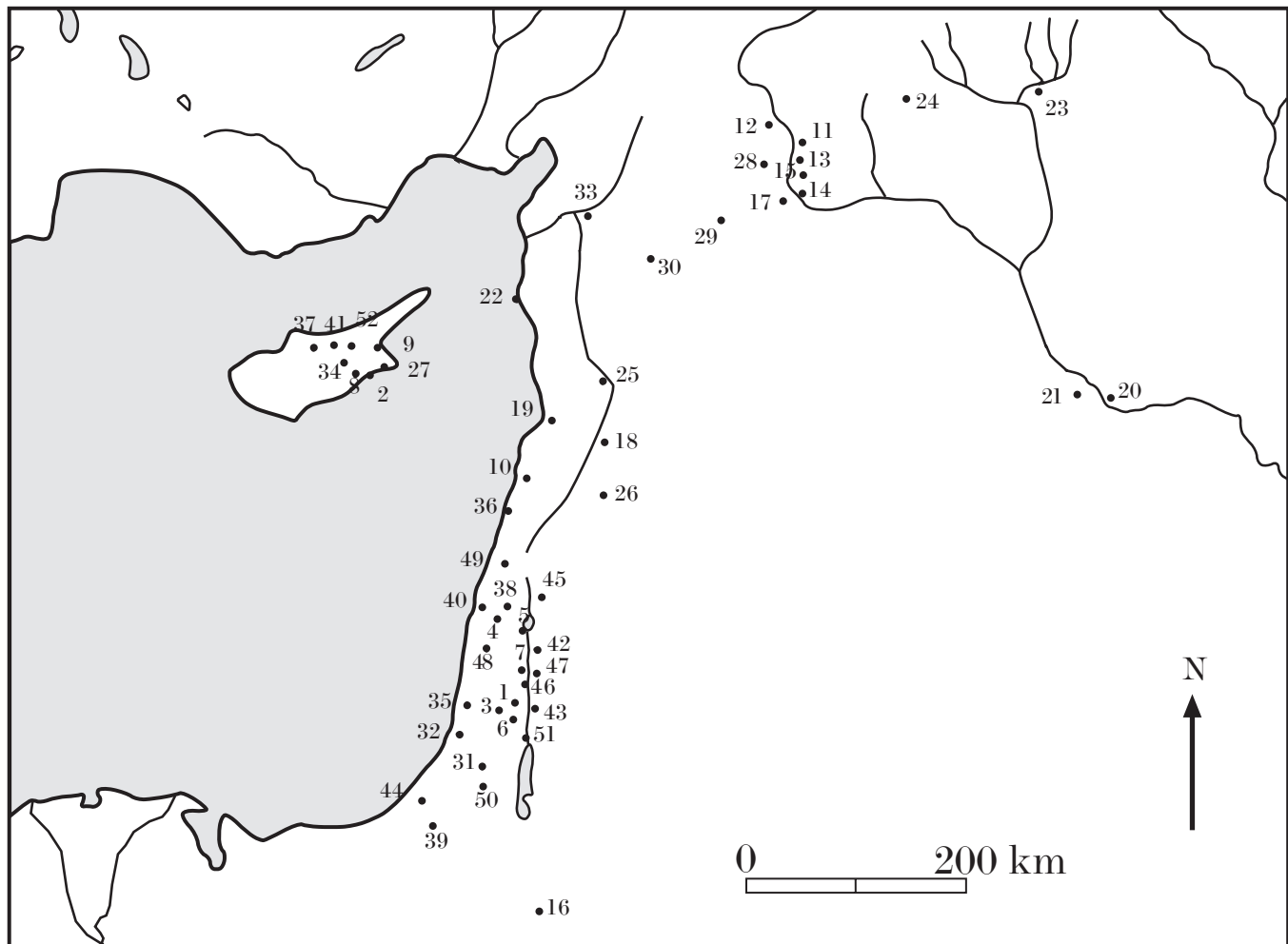


Fig. 1a Map showing sites in the east Mediterranean mentioned in the text: 1. Tell Far<sup>a</sup>ah (N), 2. Klavdia, 3. Shechem, 4. Ga<sup>a</sup>led, 5. Ginosar, 6. el-Gib, 7. Beth Shan, 8. Dhali *Kafkallia*, 9. Ayios Iakovos, 10. Byblos, 11. Tell Ahmar, 12. Jerablus Tahtani, 13. Tell Banat, 14. Halawa/Tawi, 15. Mumbaqat, 16. Faynan, 17. Tell Selenkahiye, 18. Tell et-Tin, 19. Tell Arqa, 20. Baghouz, 21. Mari, 22. Ras Shamra, 23. Tell Brak, 24. Tell Chuera, 25. Hama, 26. Yabrud, 27. Enkomi, 28. Deve Hüyük, 29. Tell Umm el-Marra, 30. Tell Mardikh, 31. Beth Shemesh, 32. Dhahrat el-Humraiya/el-Jisr, 33. Alalakh/Tell al-Judeideh, 34. Leondari *Vounou*, 35. Tell Michal, 36. Kharji/Beirut, 37. Lapithios *Vrysi tou Barba*, 38. Safed, 39. Tell Fara (S), 40. Tell Kabri, 41. Bellapais *Vounou*, 42. Tell esh-Shuna, 43. Tell el-Mazar, 44. Tell el-<sup>a</sup>Ajjul, 45. Tell Dan, 46. Tel Rehov, 47. Pella, 48. Megiddo, 49. Lebe<sup>a</sup>, 50. Lachish, 51. Jericho, 52. Kazaphani

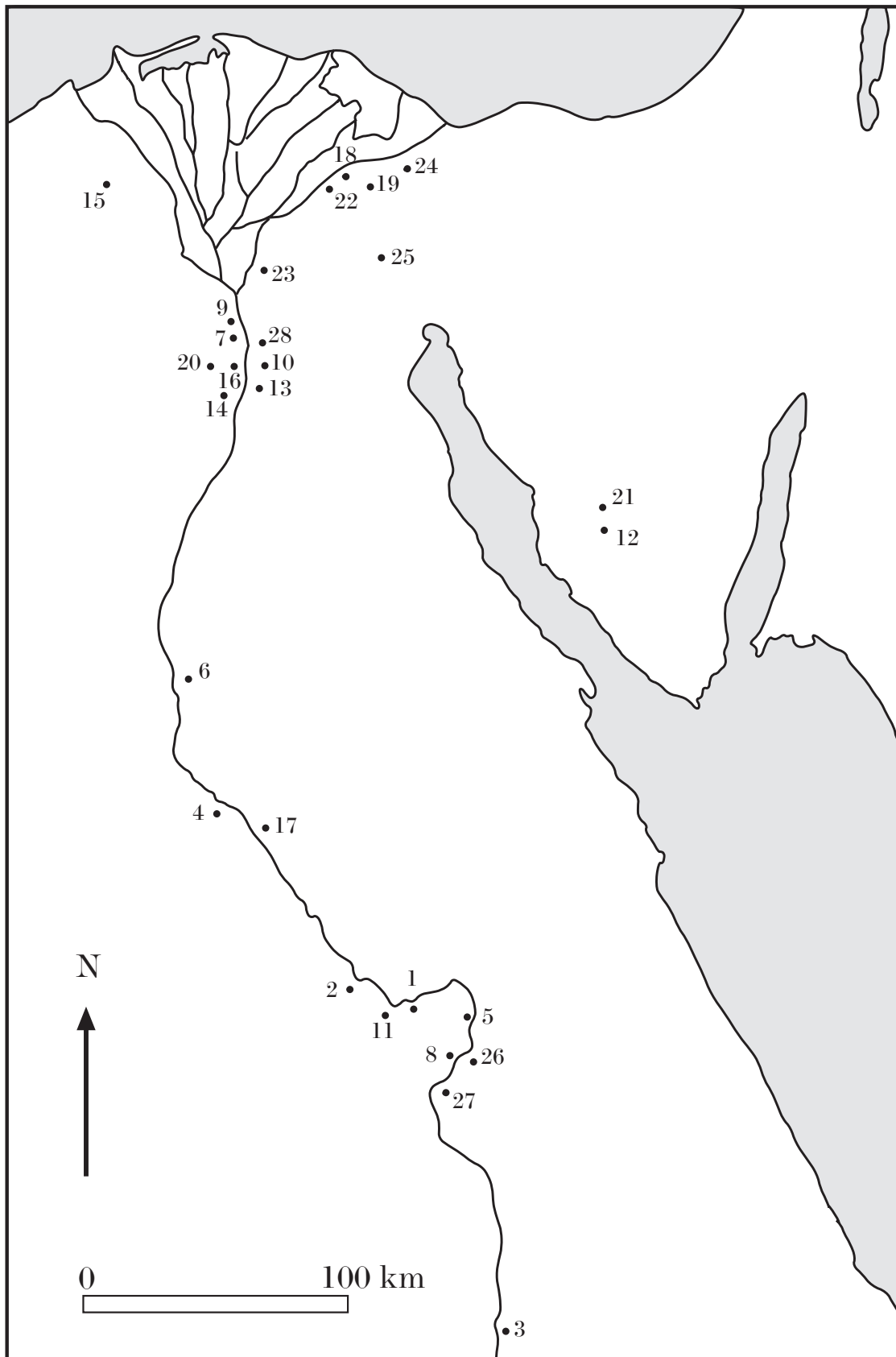


Fig. 1b Map showing Tell el-Dab'a and other sites in Egypt mentioned in the text: 1. Abadiyeh, 2. Abydos, 3. Aswan, 4. Asyut, 5. Ballas, 6. Beni Hasan, 7. Dashur, 8. Dra<sup>c</sup> Abu-n-Nagar, 9. Giza, 10. Helwan, 11. Hu, 12. Jebel Maghara, 13. Kahûn, 14. Lisht, 15. Kom el-Hisn, 16. Memphis, 17. Mostagedda, 18. Qantir, 19. Salhiya, 20. Saqqara, 21. Serabit el-Khadim, 22. Tell el-Dab'a, 23. Tell el-Yahudiyeh, 24. Tell Heboua, 25. Tell el-Maskhuta, 26. Thebes, 27. Tôd, 28. Tura

first hand through visits to the site during the field seasons of 1984, 1990 and 1993, to the Egyptian Museum, Cairo, in 1984 and the Kunsthistorische Museum in Vienna in 1985. I wish to thank all the excavation and museum staff involved for the kindness and support which I have received throughout my work. Some additional material I have seen only through illustrations, and in the descriptions in the site registers. However, this material consisted almost entirely of additional instances of familiar forms. Chemical analyses of drilled samples taken from metal artefacts collected by the author were kindly undertaken by Mr. M.J. Cowell of the Department of Scientific Research of the British Museum. Financial assistance for this project has been provided by the following bodies: the Österreichisches Archäologisches Institut Kairo; the British Institute at Amman for Archaeology and History; the Gerald Avery Wainwright Fund of Oxford University, and the Abercromby Fund of Edinburgh University. The original illustrations which had been drawn by various illustrators over a period spanning more than two decades, were redrawn in a standardized format for the present volume by my wife, Caroline Philip.

My work has been greatly facilitated by other members of the research team who have given generously of their time and knowledge. I owe specific thanks to Drs. Irmgard Hein, Peter János, Robert Schiestl, Irene Forstner-Müller, Karin Kopetzky and above all, to Prof. Manfred Bietak who was kind enough to entrust the publication of this material to a once young research student. I am also grateful for some very helpful comments made by anonymous reviewers. Finally, I wish to thank the staff of the Egyptian Antiquities Service for practical assistance, and the people of Egypt, who have kindly allowed me to work upon a key aspect of their heritage.

The terminology used here divides the Middle Bronze Age (MBA) of the southern Levant into an earlier MB IIA and a later MB IIB/C period. MB IIB/C is not subdivided because the author is not convinced that this division, which is based upon ceramic evidence, can be applied consistently throughout the entire region. These terms are also applied to sites on the Mediterranean littoral where the ceramics frequently resemble those of the southern Levant. For inland Syria a two phase division into MB I and MB II is preferred, these being the terms most generally encountered in the literature. As far as absolute dates are concerned, the so-called Middle Chronology has been used. This is not because

the writer accords it any greater accuracy than the alternatives, but rather because, despite its problems, it remains that most familiar to the widest range of scholars.

## 1.1 THE SITE

### Location

The site of Tell el-Dab<sup>a</sup> in the eastern Nile Delta (Fig. 2a) is now identified with the ancient settlement of Avaris, chief centre of the Fifteenth 'Hyksos' Dynasty. At the present time it is situated in an agricultural landscape, with the remains of ancient settlement mounds visible in only a few places. Work by J. Dorner has established that the site was once located on the navigable Pelusiac branch of the Nile, which would have given the inhabitants ready access to the Mediterranean. To the east of the site lay the Bahr el-Baqar drainage system, through which an opening to the north allowed access to northern Sinai via the famous Way of Horus. Thus both land and sea routes to the Levant came together in the vicinity of Avaris. Geomorphological investigations have revealed that areas of settlement were located on a number of raised sand islands, or 'turtlebacks', which stood above the level of the annual inundation of the Nile.

### Stratigraphy and nomenclature

Before considering the significance of the site, it is appropriate to provide an outline of the stratigraphy, and major phases of activity. Two main stratigraphic sequences are in use in the description of deposits from Tell el-Dab<sup>a</sup>. In Areas A/I–V strata are designated by the use of upper case letters (e.g. E/3), with E/1 being later than E/2. In the case of Area F/I, a local stratigraphic sequence exists, with strata designated by lower case letters (e.g. d/1). The relationship between the sequence in Area F/I and those of Areas A/I–V is explained in Table 1. The sequence as defined in Areas A/I–IV in effect provides the overall stratigraphic framework for the site, and in all discussion within the present volume the chronological position of individual artefacts is given using that nomenclature. However, in the case of catalogue entries for individual artefacts from Area F/I, reference is made to the local stratigraphic sequence. In the case of a catalogue entry for an object from Area A/II, the phrase '*Context*: A/II-p/20 Gr. 3, Str.: E/1–2', means Area A/II, square p/20, Grave 3, which belongs to stratum E/1–2. In the case of objects from Area F/I, the entries also include a reference to the local stratigraphic sequence, which is then correlated with the

Absolute Dates (BC)	Levantine Ceramic Periods	Egyptian Relative Chronology	Area F/I	Area A/I-IV	Area A/V
1500	LB I	hiatus			
1600	MB IIB/C	Hyksos period occupation  (15 <sup>th</sup> Dynasty)		D/2	D/2
				D/3	D/3
			a/2	E/1	E/1
			b/1	E/2	E/2
1700	MB IIA	13 <sup>th</sup> Dynasty occupation	b/2	E/3	unoccupied
b/3			F		
epidemic ? c hiatus			G/1-3		
d/1			G/4		
1800		12 <sup>th</sup> Dynasty occupation	d/2a	H	
1900			d/2b	unoccupied	
2000			hiatus		
	e/1				
	e/2				
	e/3				

Table 1 The stratigraphic sequences in the relevant areas of Tell el-Dab<sup>a</sup>, and their correlation with the general site stratigraphy, i.e. from Areas A/I–IV (Details after BIETAK 2002: fig. 2)

overall site stratigraphy. Thus ‘Context: F/I-p/17 Gr. 14, Str.: d/1 = G/4’, means Area F/I, square p/17, Grave 14, which belongs to local stratum d/1, equivalent to stratum G/4 in the overall sequence.

#### Area F/I (Fig. 2)

This summary draws upon the following published sources in which more detailed discussion can be found (BIETAK 1984, 1991a, 1991b, 1997; CZERNY 1999).

While the earliest settlement at Tell el-Dab<sup>a</sup> dates to the beginning of the Twelfth Dynasty this comes from an area known as ‘Ezbet Rushdi, the material from which is not discussed in the present volume. Area F/I was located towards the centre of the ancient settled area. The earliest occupation there consisted of a planned settlement of Twelfth Dynasty date, which has been published by CZERNY (1999); these are local strata e/1 and e/2–3. This occupation is followed by a

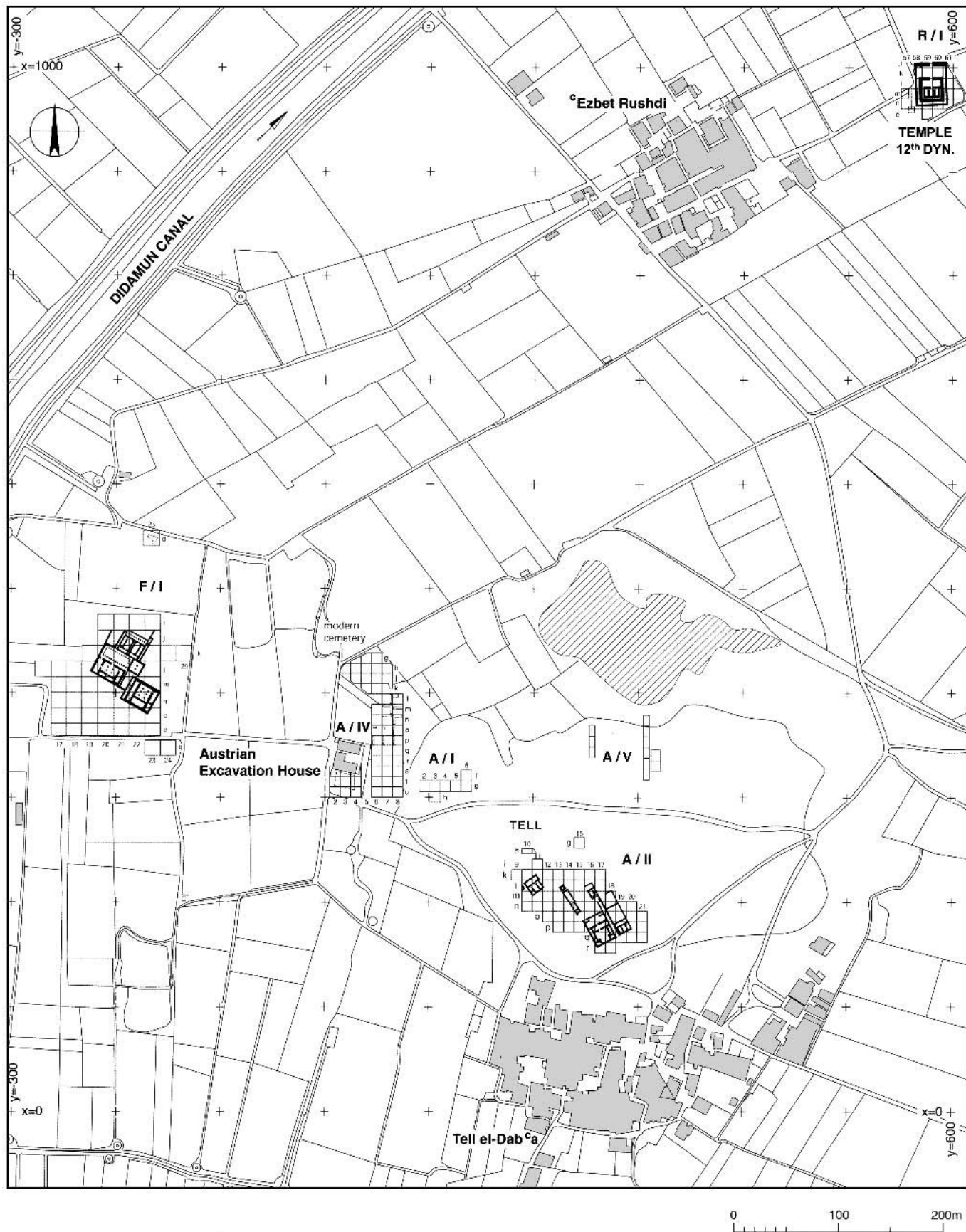


Fig. 2 Plan of the locality of Tell el-Dab'a showing excavation areas  
(after BIETAK 2002, fig. 1)



hiatus. The succeeding phase of occupation, stratum d/2 = H, dates to the late Twelfth Dynasty, and the material recovered reveals strong connections with Syria-Palestine. This includes examples of a so-called house with 'Central Hall' (termed in German *Mittelsaalhaus*), ceramics with clear Levantine connections including examples of Levantine Painted Ware, and a group of burials which, although robbed, still retained sufficient material to indicate that they were once well-equipped, and contained among other things metalwork of distinctly Syro-Palestinian styles. This phase of occupation is succeeded by stratum d/1 = G/4 which features a large public building, interpreted as a palace, with a garden and an associated cemetery. The tombs consist of barrel-vaulted mud brick chambers sunk into the ground. Each tomb had a pair of donkeys buried at the entrance to the chamber. Material recovered points to some connection between the occupants of these tombs and official functions. An initial summary of the burials of strata d/1 and d/2 was published by BIETAK (1991b), with a subsequent treatment by SCHIESTL (2002). The metalwork from stratum H or G/4 contexts comes predominantly from the tombs in Area F/I.

Above the ruins of the palace lay stratum c = G/1–3 consisting mainly of small two-roomed houses surrounded by large rectangular enclosures. Graves were placed either below the floors of the houses or in the associated courtyards. The burials included instances of individuals interred with metal weapons. Small cemeteries also existed, as did graves contained within rectangular structures attached to the houses. A concentration of moulds for casting metal artefacts was found in this stratum (see 4.2.1), although the artefacts were not in primary context and were distributed across several adjacent squares within the excavation area. According to the excavator (BIETAK 1997: 105) this phase of occupation was terminated abruptly, perhaps by an epidemic. This view is supported by indications of hasty interment, very shallow burials and multiple interments with individuals arranged in a haphazard fashion, in some cases without grave offerings. Stratum b/3 = F is characterized by the new, larger 'villa' house-type, examples of which appear to have smaller structures clustered around them. Burials are again placed in the courtyards. Stratum b/2 = E/3 witnessed the enlargement of the villas, which continued in use through the next stratum b/1 = E/2. Subsequent layers in this area have largely been removed by recent agriculture, although there are traces of the foundations of a large mud brick structure, perhaps a temple, in front of which lay large circular offering pits. Very few of

the many metal finds from Area F/I came from strata later than b/1 = E/2.

### Area A/I (Fig. 2)

Area A/I was excavated in the very first seasons of fieldwork, and is located very close to A/IV (see below). It produced only a small number of metal finds, most of those coming from two particular graves. None of the metalwork comes from contexts earlier than stratum E/1–D/3.

### Area A/II (Fig. 2)

This summary draws upon the following published sources in which more detailed discussion can be found (BIETAK 1979; 1991a; 1991b; 1997; 2002). In Area A/II, which lay towards the eastern edge of the ancient settlement, the occupation assigned to stratum H was built upon a sandy turtleback and consisted of huts, open compounds and animal pens. Stratum G/4 is characterised by small rectangular structures, the walls of which are reinforced with pilasters. Few pieces of metalwork came from these strata, and all were from settlement contexts.

The settlement evidence of stratum G/1–3 consisted of small two-room houses, similar to those occurring in the contemporary layers of Area F/I. In contrast to the large quantity of stratum G/1–3 metalwork from Area F/I, a far smaller number came from the equivalent stratum in Area A/II. The houses were replaced in the subsequent stratum F by Temple III, a structure with good parallels in western Asia, and an associated sacred precinct (see BIETAK 1991a). The subsequent stratum E/3 witnessed the construction of Temple II, a so-called broad-room complex, located to the west of Temple III. An additional structure, Temple V, interpreted as a mortuary temple of Egyptian form, also existed in stratum E/3. Burials were located to the east of Temple V, and to the west and south of the main sacred complex, suggesting that the area was strongly associated with mortuary activities. The burials have recently been reviewed by FORSTNER-MÜLLER (2002).

Stratum E/2 witnessed the continuing development of cemeteries around Temple III, including tombs with donkey offerings in pits, and the reconstruction of Temple I. Stratum E/1 witnessed the reconstruction of Temples III and V and the appearance of domestic structures in the cemetery area, generally small single-room buildings. The earlier burial tradition of interment in rectangular mud brick structures attached to house walls continued, while infants were buried in the houses or courtyards. Temples III and V continued in use in stratum D/3, with large offering pits located in

front of both. These contained charred cattle-bone and broken pottery. The cemeteries west of the temple area were now covered by settlement remains which became increasingly dense. Graves were now placed below house floors. The density of domestic structures further increased with strata D/3 and D/2, leaving little space for courtyards or cemeteries. Single or double chambers were now used for multiple successive burials. Infants were treated differently being interred in jars. The tombs from this latest phase appear to have been thoroughly robbed. There is currently no evidence to indicate continuity of occupation in Area A/II after stratum D/2.

#### **Area A/IV (Fig. 2)**

No detailed account of the excavations in this area of the site has yet been published and this summary draws upon the following sources (BIETAK 1991b, 1997; HEIN 1992). Area A/IV is located approximately midway between Areas A/II and F/I. Excavations revealed the remains of a sacred precinct of New Kingdom date, below which lay an earlier temple precinct, which appeared to be contemporary with stratum D/3 and D/2 in Area A/II. A sequence of deposits of earlier date has also been preserved, including domestic structures and tombs of types familiar from other parts of the site.

#### **Area A/V (Fig. 2)**

As the report on the excavation of Area A/V (HEIN and JÁNOSI 2004) appeared only after completion of the present text, this summary draws upon the following sources in which more detailed discussion can be found (BIETAK 1991b; 1997; HEIN 1992). During stratum E/2 settlement expanded to encompass a turtleback in the north-eastern part of the site. During the period of inundation this area would have been separated from the main tell by water. The material recovered from the area dates mainly to the later strata and consists of three- or four-roomed houses, some of which had courtyards. Interpreted as an area of domestic occupation, stratum E/1 is characterised by houses interspersed with circular silos, a format which continued into the succeeding strata D/3 and D/2, the latter representing the latest occupational phase. Although the area also contained tombs, these had largely been robbed. The density of occupation was noticeably lower than was the case with the later strata in Area A/II.

### **1.2 THE CULTURAL SIGNIFICANCE OF TELL EL-DAB<sup>a</sup>**

Tell el-Dab<sup>a</sup> is the prime representative of the hybrid culture combining both Egyptian and Syro-

Palestinian traits which is visible in the eastern Nile Delta during the first half of the second millennium BC and which is generally associated with the group known as the Hyksos. From initially small foundations dating to the Twelfth Dynasty, Tell el-Dab<sup>a</sup> grew to reach an area of around one square kilometre during the Thirteenth Dynasty, reaching 2.5 square kilometres in extent during the subsequent Hyksos period. It is by far the biggest Middle Bronze Age site in the Nile Delta, and its size and the wide range of material culture present, indicate that it represented one of the major concentrations of population and wealth in the east Mediterranean basin during a period spanning the later nineteenth through to the sixteenth centuries BC.

From stratum H onwards there is clear evidence for strong contact with the communities of the Syro-Palestinian littoral, almost certainly implying a degree of settlement. From strata H through to D/2, the material culture of Tell el-Dab<sup>a</sup> reveals a striking combination of Egyptian and west Asian elements. However, the particular forms involved, and the exact nature of the 'blend', appears to vary over time and according to context, the latter presumably reflecting the varied socio-political structure of the site, and its diverse population. In the opinion of the excavator, stratum H witnessed the appearance in the Delta of population elements from Syria-Palestine. The evidence for this has recently been presented in detail by SCHIESTL (2002). However, while some material – certain ceramic and metal types in particular – indicates connections with the northern part of the east Mediterranean littoral, other aspects are more clearly of Egyptian origin. That said, the presence of cooking pot forms characteristic of MB IIA sites in the southern Levant indicates that the west Asian component of the population drew upon more than one source (BIETAK 1997: 99).

The presence in Area F/I of a palace dated to the Thirteenth Dynasty, and a related series of well-equipped graves suggest that the site had a significant administrative function. The contents of the graves reveal many Levantine traits, while inscribed material from one or two of these tombs suggests that the occupants were of west Asian origin, but were holders of official positions within an Egyptian administration.

The subsequent stratum G/1–3 is interpreted by the excavator as representing a period of significant settlement by a west Asian population element, a point supported by a marked increase in the proportion of Levantine ceramics, and the appearance of cult buildings of west Asian design. The beginning of the period of Hyksos rule is placed by the excavator

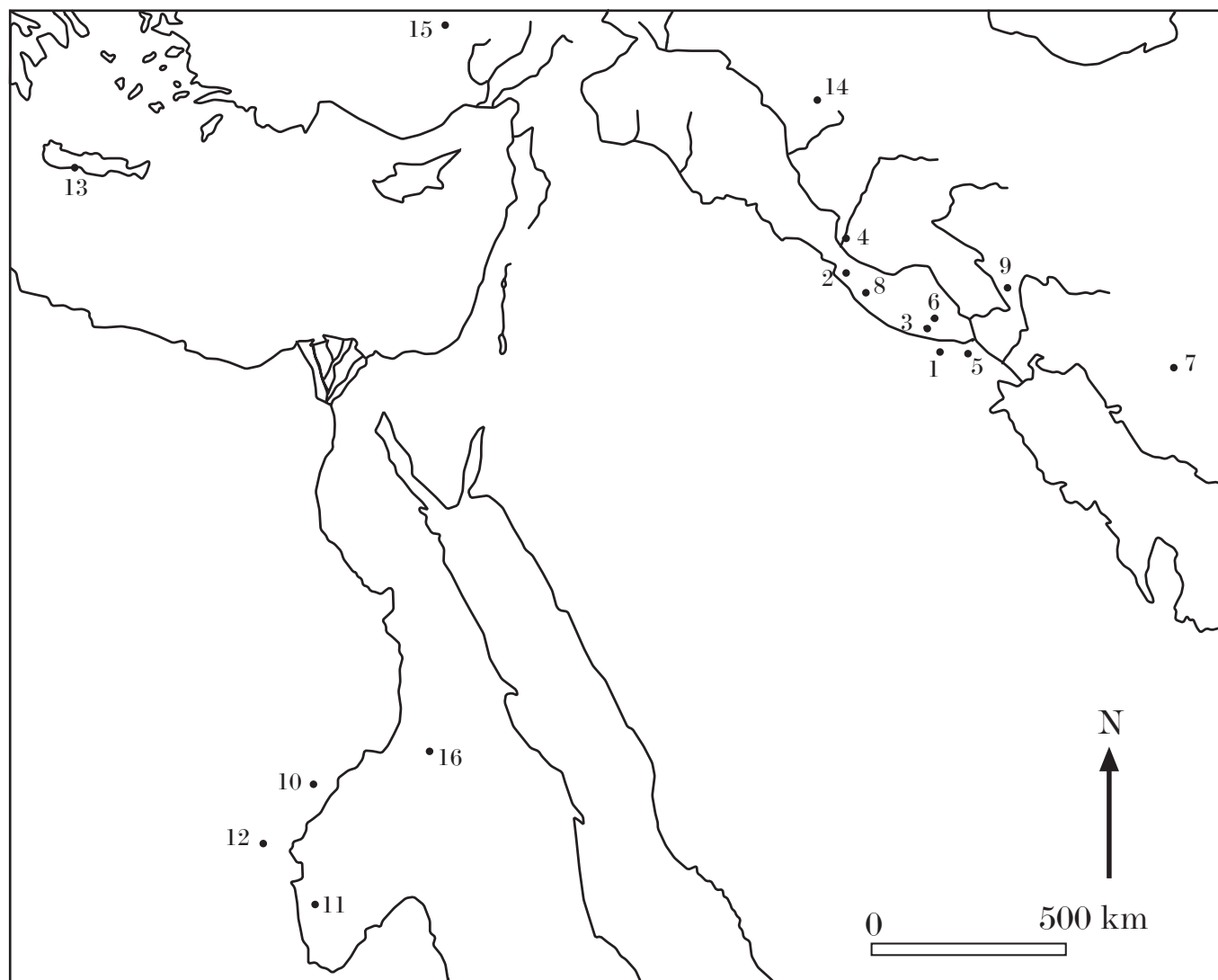


Fig. 3 Map showing other ancient near eastern sites mentioned in the text: 1. Tell al-Ubaid, 2. Tell ed-Der, 3. Tell Sifr, 4. Tell edh-Dhiba'i, 5. Ur, 6. Larsa, 7. Persepolis, 8. Kish, 9. Susa, 10. Buhen, 11. Kerma, 12. Semna, 13. Kommos, 14. Tepe Gawra, 15. Kültepe, 16. Wadi el-Huda

in stratum E/2, and it continues until stratum D/2. This period witnesses the expansion of occupation into Area A/V, increasingly dense settlement in Area A/II, and the development of material culture forms distinctive to the eastern Delta (BIETAK, FORSTNER-MÜLLER and MLINAR 2001). According to historical sources Avaris and the Hyksos polity were destroyed by the Egyptian ruler Ahmose, and this is broadly equated with the apparent abandonment of the site following stratum D/2.

At 'Ezbet Helmi, some five hundred metres north-west of Area F/I an important public building dating to the late Hyksos period has been excavated. This appears to have consisted of a large citadel, although only traces remain below a later New Kingdom structure. The remains of frescoes in Minoan style,

although preserved as fragments in secondary contexts, are believed to have originated in this later building. Material from this part of the site is not dealt with in the present volume.

### 1.3 ORGANIZATION OF THE MATERIAL

The publication of the Tell el-Dab'a project is organized along two cross-cutting directions, the '*Materi-alcomplexe*' and the '*Spezialstudien*' (BIETAK 1991a: 9, Abb.1). The volumes in the former group detail the architecture and stratigraphy of individual excavation areas. Examples include BIETAK's (1991a) study of the cemetery, temple and settlement layers in Area A/II and CZERNY's (1999) account of the Middle Kingdom settlement. Volumes in the second group seek to examine particular categories of material in a



more holistic manner than is generally possible within the stratigraphic accounts of individual areas. It is this second group to which the present volume belongs. As a result, the focus is on the artefacts, their typology, parallels, technology and place within a wider world of symbolic understandings. Although archaeological context is of great importance to analysis, for the purposes of this volume the interest in context is focused upon the manner in which individual, or groups of artefacts, were deposited, with a view to establishing wider patterns. It has not been possible to provide detailed stratigraphic accounts for individual artefacts, nor complete artefact inventories for all those contexts that contained metalwork. Detailed discussion of this nature is more properly the provenance of those volumes dealing with the architecture and stratigraphy of the individual excavation areas.

I have sought to provide a comprehensive coverage of the metalwork from the site. I have examined around ninety-five percent of material at first hand, and have had access to the drawings of a small number of artefacts which, for one reason or another, were not available for study during my visits to the site and Vienna. The excavations at Tell el-Dab'a are continuing, and are therefore constantly producing new material. As a result, in order to produce a text it proved necessary to establish a cut-off point beyond which new material would not be included in the present volume. The date chosen was the point at which the plates for the book took final form. Therefore, no material which was brought to my attention after the summer of 1999 is included. The main loss in this regard is the very interesting group of metal grave artefacts from A/II p/14 Grave 18 published by FORSTNER-MÜLLER (2001), and which includes the first example of a curved-sword from the site. Although these artefacts have not been included in the volume, I have, where appropriate, provided some comments upon their implications for our understanding of the corpus of metalwork from the site.

The volume is organized in the following manner. Chapter 1 provides a brief introduction to the site, and an outline of the way in which the volume is organized through the succeeding chapters.

Chapter 2 contains a catalogue of all relevant material. The key identifier for an individual artefact is its excavation Registration Number. These are used in all the stratigraphic accounts, preliminary reports and summary articles dealing with the site, and therefore provide the main means of access to published (and future) discussion of an object's

archaeological context. For the convenience of the reader, however, catalogue entries have also been given sequential Catalogue Numbers. These are not however used in discussion, as they have no meaning outside this particular volume, and are included simply to assist the reader with the location of the entries for individual artefacts. To assist with this process a concordance of Catalogue Numbers and Registration Numbers is provided in Appendix 2.

There are various ways in which a catalogue of this type might be arranged. As the book is intended to provide an overview of the metalwork and is concerned with detecting patterns occurring in material recovered from a number of different excavation areas, and spanning several centuries of occupation, it was felt that a presentation by site area, or chronological phase, might result in a rather fragmented picture. Given that this is an account of a particular group of artefacts, rather than a detailed stratigraphic account, the decision was made to present the material on a typological basis, divided initially by broad artefact classes, with these subdivided by types within which individual artefacts are listed in order of their Registration Number. The material is arranged in the following order; weapons (axes, daggers, spearheads), knives, belts, head bands, stands, pins, personal items (mirrors, tweezers, rings), miscellaneous components, tools and assorted fragmentary pieces. As well as typological details such as dimensions and descriptive information, the entry for each artefact includes a brief note on its archaeological context and the results of chemical analysis where this has been undertaken. Illustrations are provided of all but the most fragmentary pieces.

Grouping material by type, rather than by material (gold, silver, copper), serves to highlight those instances when artefact types are peculiar to specific metals, and those in which there is a substantial overlap between the forms produced in different media. While this arrangement does cut across contextual unity, by presenting artefacts from, for example, a particular grave, within several different typological sections, a concordance of material by context is provided elsewhere (Appendix 1) to aid contextual analysis.

Although the book is focused upon metalwork from the Middle Kingdom and Second Intermediate Periods, the few metal objects coming from the relevant excavation areas but from later contexts have been included for the sake of completeness, as they do not warrant a separate publication.

Chapter 3, Typology, chronology and comparative analysis, provides a broader discussion of the typological aspects of types, groups of artefacts or indi-

vidual pieces, as appropriate. This includes documentation of the chronological range of each artefact type, the distribution of parallels documented from other locations in the east Mediterranean basin, and comparative discussion of the relationships of particular forms with both the Egyptian and Syro-Palestinian metalworking traditions.

Chapter 4 deals with the metallurgical remains from the site. It covers moulds and crucibles, the metallurgy of the metal artefacts – including data on their chemical composition – and the integration of these results with the typological and contextual evidence. Finally, an attempt is made to set the metal industry from Tell el-Dab<sup>a</sup> in the context of contemporary metallurgical practices in the east Mediterranean basin.

Chapter 5 examines the archaeological contexts

within which the various types of artefact appear. Of necessity this is largely based on the cemetery data, but various trends are identified concerning chronology, age – sex patterning, and the spatial positioning of artefacts within graves. It is also possible to identify various points of contrast between burial practices at Tell el-Dab<sup>a</sup> and those of Egypt generally, and to suggest that the former is indicative of a society, which despite its mixed material culture, drew primarily upon elements of west Asian ideology. For age – sex data, I have drawn on published material (WINKLER and WILFING 1991), and additional unpublished data kindly supplied by Dr. Eike Winkler.

Chapter 6 attempts to use the material to address a number of wider issues of relevance to the development of social and economic units in the east Mediterranean during the earlier second millennium BC.